

ISSN-1560-604X
Thermology international

Thermology

Volume 15 (2005)
Number 1 (January)

International

Literature survey: Thermology 2004

Published by the

Ludwig Boltzmann Research Institute
for Physical Diagnostics
Austrian Society of Thermology

This journal is indexed in
EMBASE/Excerpta Medica

THERMOLOGY INTERNATIONAL

Volume 15 (2005)

Number 1 (January)

Published by the

**Ludwig Boltzmann Research Institute for Physical Diagnostics
and the Austrian Society of Thermology**

Indexed in

Embase/Excerpta Medica

Editor in Chief

K. Ammer, Wien

Technical/ Industrial Thermography

Section Editor: B. Jones, Derby

Editorial Board

M.Anbar, Buffalo

I.Fujimasa, Tokyo

Y.S.Kim, Seoul

I.Benkő, Budapest

S.Govindan, Wheeling

R.C.Purohit, Auburn

R.Berz, Burgrieden-Rot

J.R.Harding, Newport

O.Rathkolb, Wien

L.de Thibault de Boesinghe, Gent

K.Mabuchi, Tokyo

E.F.J.Ring, Pontypridd

A.DiCarlo, Rom

H.Mayr, Wien

H.Tauchmannova, Piestany

J.-M. Engel, Bad Liebenwerda

A.Jung, Warsaw

B.Wiecek, Lodz

Organ of the American Academy of Thermology

Organ of the European Association of Thermology

Organ der Deutschen Gesellschaft für Thermologie

Organ of the Polish Society of Thermology

Organ der Österreichischen Gesellschaft für Thermologie

Organ of the UK Thermography Association (Thermology Group)

Instruktionen für Autoren

Manuskripte müssen dem Schriftleiter zugesandt werden und dürfen noch nicht veröffentlicht sein.

Die Manuskripte von Übersichts- und Originalarbeiten werden 2 unabhängigen Begutachtern vorgelegt, die über Annahme oder Annahme nach Änderung des Manuskriptes entscheiden.

Mit der Annahme der Arbeit gehen alle Rechte an den Herausgeber über.

Verantwortlicher Schriftleiter:

Prof. DDr. Kurt Ammer

Ludwig Boltzmann Forschungsstelle
für Physikalische Diagnostik,
Hanuschkrankenhaus, Heinrich Collinstraße 30
A-1140 Wien, Österreich,
Tel: (43 1) 914-97-01 Fax: (43 1) 914-92-64
e-mail: KAmmer1950@aol.com

Publiziert werden:

Editorials

Übersichten

Originalien

Berichte

über interessante Publikationen aus dem Gebiet Thermologie
Mitteilungen der Amerikanischen Akademie für Thermologie
der Britischen Assoziation für Thermographie
(Thermologie Gruppe);

der Deutschen Gesellschaft für Thermologie;

der Europäischen Assoziation für Thermologie;

der Polnischen Gesellschaft für Thermologie und

der Österreichischen Gesellschaft für Thermologie

Veranstaltungshinweise

Manuskripte sollen mit den Empfehlungen des Internationalen Komitees der Herausgeber von Medizinischen Zeitschriften (ICMJE) (1,2) im Einklang stehen. Es ist auf eine klare Gliederung der Beiträge vorzugsweise in der Form: Einleitung, Methode, Ergebnisse, Diskussion, Danksagung, Literatur, zu achten. Jeder Arbeit ist eine Kurzfassung in Deutsch und Englisch voranzustellen. Bis zu 5 Schlüsselwörter sollen den Inhalt der Arbeit zusätzlich charakterisieren.

Tabellen und Abbildungen sollen gesondert dem Manuskript beigelegt werden. Legenden werden auf einem Extrablatt beigegeben.

Die Einreichung der Arbeit auf Diskette unter Angabe des verwendeten Systems ist möglich und erwünscht. Ein Ausdruck des Textes ist der Diskette beizulegen.

Literaturangaben sind auf einem gesonderten Blatt erbeten und sind in der Reihenfolge aufzulisten, in der sie im Text genannt werden. Die Literaturzitate werden durch-

nummeriert; im Text werden nur die entsprechenden Nummern angegeben.

Die nachstehende Beispiele basieren auf dem Format der Amerikanischen Nationalbibliothek für Medizin im Index Medicus. (Eine komplette Liste von Beispielen bei 1).

a.) Zeitschriftenzitate

Namen der Verfasser, Vorname(n) (abgekürzt) (die ersten 6 Autoren müssen angeführt werden, mehr als 6 Autoren werden mit "et al" angegeben), vollständiger Titel der Arbeit, abgekürzter Titel der Zeitschrift, Jahr, Band, Seitenzahlen.

Luther B, Kreyer I, Dobi I. Die Anus-praeter- Thermographie als Methode zur Früherkennung vaskulärer Komplikationen nach Dünndarmtransplantation. ThermoMed 1990; 6: 115-17.

b.) Buchzitate

Name der Verfasser, Vorname(n) (abgekürzt), vollständiger Titel der Arbeit, Herausgeber, Titel des Buches, Ort, Verlag, Jahr, Seitenzahlen.

Gautherie M, Haehnel P, Walter JM, Keith L. Long-Term assessment of Breast Cancer Risk by Liquid Crystal Thermal Imaging. In: Gautherie M, Albert E; editors. Biomedical Thermology. New York: Alan R. Liss Publ; 1982. 279-301.

Von Text und Abbildungen werden den Autoren Andrucke zur Korrektur zugesandt. Jeder Autor erhält 20 Sonderdrucke seiner Arbeit kostenlos.

"Thermology international" erscheint 4 mal jährlich. Ein Jahresabonnement kostet 38 €, - ein Einzelheft 12- € plus Porto (4.50 € pro Heft außerhalb Österreichs).

Für Mitglieder der Österreichischen Gesellschaft für Thermologie, der Deutschen Gesellschaft für Thermologie und der Amerikanischen Akademie für Thermologie ist die Zeitschrift im Mitgliedsbeitrag inkludiert.

Literatur

(1) International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. Can. Med Assoc J 1997;156;270-7.

(2) International Committee of Medical Journal Editors. Additional statements from the International Committee of Medical Journal Editors. Can. Med Assoc J 1997;156; 571-4.

Uhlen Verlag Wien,
Ingeborg Machyl, Fachzeitschriftenverlag
Gusenleithnergasse 28a/1, A-1140 Wien
Thermology international
ISSN-1560-604X

Internet: <http://www.uhlen.at/thermology-international>

Contents (INHALTSVERZEICHNIS)

Review (ÜBERSICHT)

<i>K. Ammer</i>	
Thermology 2004- a computer assisted literature search.....	5
(Thermologie 2004- eine Computer gestützte Literatursuche)	

Reports (BERICHTE)

Instruktionen für Autoren.....	2
Instructions for authors.....	4
Correction:	43

News in Thermology (Thermologische Nachrichten)

18th Symposium of the Austrian Society of Thermology.....	38
Website of the Romanian Association of Thermology.....	38
AAT Meeting in Baton Rouge.....	38
6th Course on Medical Thermal Imaging at Glamorgan.....	39

Meetings (VERANSTALTUNGEN)

Veranstaltungskalender.....	40
-----------------------------	----

Instructions for authors

Manuscripts should be mailed to the editor and should not be submitted elsewhere. All manuscripts (i.e. reviews and original articles) will be read by two independent reviewers. With the acceptance of the paper all copyrights are transferred to the publisher.

Editor in Chief

Prof DDr. Kurt Ammer

Ludwig Boltzmann Forschungsstelle für
Physikalische Diagnostik, Hanuschkrankenhaus
Heinrich Collinstraße 30 A-1140 Wien, Österreich,
Phone: (43 1) 914-97-01 Fax:(43 1) 914-92-64
Personal e-mail:KAmmer1950@aol.com

We publish

Editorials

Reviews

Original articles

Reports on thermological publications of interest

Announcements from

The American Academy of Thermology,
The Austrian Society of Thermology
The German Society of Thermology
The Polish Society of Thermology
The UK Thermography Association
The European Association of Thermology

Information and abstracts
from conferences and symposia

Manuscripts should follow the recommendations of the International Committee of Medical Journal editors (ICMJE) (1) and should be organized as follows: Introduction, methods, results, discussion, acknowledgements, references. A short abstract in English and, if possible, German (translation will be offered) should head the manuscript. Following the abstract, up to 5 key-words should characterize the paper.

Tables, Figures and Legends for illustrations should appear each on an extra sheet of paper.

Submission on computer discs with name of the used system is encouraged. A print of the disc content should be enclosed.

References should be numbered consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by Arabic numerals in parentheses. Use the style of the examples below which are based on the formats used by the US National Library of

Medicine in Index Medicus (complete list of examples on (1)).

Standard journal article (List the first six authors followed by "et al" if the number exceeds 6).

Luther B, Kreyer I, Dobi I. Die Anus-praeter-Thermographie als Methode zur Früherkennung vaskulärer Komplikationen nach Dünndarmtransplantation. *ThermoMed* 1990; 6: 115-7.

Chapter in a book

Gautherie M, Haehnel P, Walter JM, Keith L. Long-Term assessment of Breast Cancer Risk by Liquid Crystal Thermal Imaging. In: Gautherie M, Albert E, editors. *Biomedical Thermology*. New York Alan R. Liss Publ; 1982. p. 279-301.

Before publication proof prints will be mailed to the main author for corrections. Each author will receive 20 free copies of the reprint.

The journal "Thermology international" (formerly "European Journal of Thermology") is published four times/year. Annual Subscription rate is 38.- €, a single copy costs 12.- € plus mailing costs (4.50 €/copy; outside Austria).

The journal is supplied free of charge to members of the American Academy of Thermology, the Austrian Society of Thermology and also to members of the German Society of Thermology.

References:

(1) International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. *Can. Med Assoc J* 1997;156:270-7.

(2) International Committee of Medical Journal Editors. Additional statements from the International Committee of Medical Journal Editors. *Can. Med Assoc J* 1997;156: 571-4.

Uhlen Verlag Wien,
Ingeborg Machyl, Fachzeitschriftenverlag
Gusenleithnergasse 28a/1, A-1140 Wien
Thermology international
ISSN-1560-604X

Internet: <http://www.uhlen.at/thermology-international>

Thermology 2004 – a computer-assisted literature survey

Kurt Ammer

Ludwig Boltzmann Research Institute for Physical Diagnostics (Director: Prof. O. Rathkolb, MD), Vienna; Austria
Medical Imaging Group, School of Computing, University of Glamorgan, Pontypridd, U.K.

SUMMARY

This literature survey is based on publications listed in the databases Embase and Medline between 1.1.2004 and 31.12.2004 and matching with one of the following 8 keywords: “thermography”, “thermology”, “thermometry”, “temperature measurement”, “skin temperature”, “core temperature”, “warming” or “cooling”. This has resulted in 2478 references, which is far the highest number of references since this annual literature survey was first published. Thermal imaging was the main subject of 219 papers. Therapeutic hypothermia for patients in a critical state of health was the most discussed temperature related treatment. A high number of publications was related to physics and chemistry

Key words: Temperature measurement, thermography, literature search, Biophysics

THERMOLOGIE 2004- EINE COMPUTER GESTÜTZTE LITERATURÜBERSICHT

Diese Literaturübersicht basiert auf Publikationen, die mit den Schlüsselwörtern “thermography”, “thermology”, “thermometry”, “temperature measurement”, “skin temperature”, “core temperature”, “warming” or “cooling in den Datenbanken Medline und Embase im Zeitraum zwischen 1.1.2004 und 31.12.2004 gefunden wurden. Diese resultierte in 2478 Literaturzitate, der größten Zahl von Zitaten seitdem dieser jährliche Literaturüberblick veröffentlicht wird. Die Thermographie war das Thema von insgesamt 219 Publikationen. Die Hypothermie als Therapie für Patienten in kritischem Gesundheitszustand war die am häufigsten diskutierte Temperatur bezogene Behandlung. Zahlreiche Veröffentlichungen waren Aspekten der Physik und der Chemie gewidmet.

Schlüsselwörter: Temperaturmessung, Thermographie, Literatursuche, Biophysik

Thermology international 2005, 15: 5-37

Introduction

Thermology can be defined as a scientific discipline which is related to all possible aspects of temperature. In that sense, this 2004 literature survey of papers dedicated to thermology, will provide the reader with a broad overview of the current role of temperature measurements in medicine, biology and in basic and applied sciences related to medicine. The database of this report has been constructed from the hits of a search in the medical databases Medline and Embase and articles in the German journal *Thermomed*.

Following the idea of previous surveys, abstracts from conferences in Zakopane, Auburn, Vienna and Teddington have been included in the database of this report.

Methods

A literature search was performed in the medical databases Embase and Medline, using the following key words: “thermography”, “thermology”, “thermal imaging”, “thermometry”, “temperature measurement”, “skin temperature”, “core temperature”, “warming” or “cooling”. The time period selected was between 01. 01.2004 and 31. 12. 2004. The lists of hits in Medline and Embase were checked for doubles and identified double hits were excluded. Articles from the German journal *Thermomed* were added to the database.

The database was analysed to show the origin of authors, the language and the journal and issue number of pub-

lication. Papers were allocated with respect to the topic of the publication into medical and non medical publications. Non medical papers were further classified into basic sciences, applied sciences and biology.

Results

A total of 2789 publications, not previously reviewed, were found from the two databases, which yielded 1553 hits in Medline (143 removed) and 1236 in Embase. *ThermoMed* published in the period of 2003 and 2004, 32 papers. 71 abstracts from 4 conferences on Medical Thermology completed the database with 2478 citations in total. Due to space restrictions only 1400 references will be displayed at the end of this article. However, all references will be included in the database of references for thermal imaging and temperature measurement available at the web site of the Medical Imaging Research Group, School of Computing, University of Glamorgan, at www.medimaging.org. The full list of all references will be also available from the author on request.

219 publications (52 papers less than last year), appeared with the key words “thermography” or “thermal imaging”. Most of all other publications were related to temperature measurement, a small portion to “cooling” or “warming”.

Only 4 percent of all papers of this database were not published in English. German (45 papers) was the next frequently used language for publication, followed by

Table 1
Papers allocated to medical fields

Reference	Field
Anaesthesiology	2,10,14, 17,21, 22, 42,74, 96, 168, 251, 273, 274, 275, 306, 360, 399, 425, 436, 450, 457,459, 572,589,671, 743, 758,813, 843, 844, 871, 899,924,1031, 1057, 1095, 1098, 1122,1130,1144,1154, 1157, 1191, 1205, 1210, 1224 , 1238,1250,1273,1316,1356,1375,1393
Anatomy and Histology	27,34, 170, 388, 403, 927
Andrology and Urology	3, 220, 372, 520, 521, 677, ,678, 708, 713, 917, 995, 1001, 1047,1158,1159,1255,1365,
Angiology	29,37,54, 55,122, 136, 345, 369, 414, 470, 492, 580, 600, 652, 697, 878,879, 911, 1029, 1077,1079, 1118,1119,1162,1315,
Arthritis and Rheumatism	54,55, 152, 194, 353, 387, 551, 769, 830, 926, 1073,1202,1311,
Cancer	30,217, 263, 264, 281, 295, 351,372, 536,537, 574, 822, 919, 1008,1220,1269, 1279,1321,1364,
Cardiovascular Diseases and Cardiovascular Surgery	1,2, 17,19, 21, 42, 52, 98, 156, 174, 186, 242,776, 277, 299,331, 343, 416, 420, 450,451, 476, 482, 487, 519, 597,622,623, 638, 723, 730,758, 759,768,776, 811, 844, 885,1035, 1053, 1054, 1055, 1067,1120,1121, 1123, 1133,1163,1166,1221,1224, 1232,1235,1238, 1290,1320,1374
Chest Diseases, Thoracic Surgery and Tuberculosis	112, 113, 160, 375,540,556, 585,611, 1060, 1068,1170,1203,1262,1284,1285,
Dental Medicine	73, 310, 437, 636, 674,787, 955, 960,1020,1102,1113,1180,1182,1259,1292,1373,
Dermatology and Venereology	12,15,35, 51,96, 158, 17, 177, 191, 194, 227, 341, 367, 369, 396, 409, 418, 472, 473, 474,522, 551, 565, 584, 676, 719, 751, 786, 794, 865, 904,916, 921, 980, 1005,1028, 1056,1064, 1078, 1112, 1177, 1201, 1214, 1245, 1218, 1264, 1279,1318,1324,
Endocrinology and Nephrology	121, 17, 177, 240,241, 248, 329,370, 435, 453, 470, 492,628, 634, 671, 672, 695,782,847, 869,903,969, 981,999,1029,1042,1111,1118,1177,1194,1293, 1363, 1369,
Gastroenterology	73, 235,236, 497, 563, 564, 826, 976,996, 1008, 1094,1139,1188,1300
General Pathology and Histopathology	64,65, 98, 146,289, 552, 797,1072, 1148,1217
General Surgery	26, 149, 316, 360, 436, 486, 595, 611, 837, 867, 943, 1377
Genetics and Microbiology	36, 62, 76,77, 81, 134, 147, 161, 178,233, 284, 293, 312, 318, 320, 330, 354, 371, 381, 440, 449,469, 491,494, 500, 501,504, 527, 547, 548, 594, 617, 657, 658, 661, 673, 685, 698,733, 760, 770, 842, 901,910,936, 937, 944, 950, 965,966, 967, 1021,1037,1048,1059, 1087, 1088, 1093,1109,1176,1192,1211, 1226, 1231, 1247, 1248, 1252, 1265,1277,1281,1298,1319,1328,1339,1342,1349, 1358,
Gerontology and Geriatrics	70, 708, 820, 949
Neurology , Neurosurgery and Neuroscience	17, 53, 55,67, 68,78, 87, 123, 133, 142, 146, 168, 183, 224, 226,253, 257, 261, 272,311,365, 392,411,419, 420, 421,428, 431, 434, 464, 465, 480, 483, 489, 496, 503, 523, 525, 536, 542,569, 583, 634, 639, 640, 645,661,671, 680,700,707,732,741,742, 766,771, 781,813, 838,885, 887, 921,931, 947, 978, 995,1005,1013,1015,1022,1040, 1051,1052, 1053,1054,1099, 1103, 1133, 1140, 1150, 1151, 1152, 1153, 1186, 1187, 1202, 1211, 1235, 1271, 1282,1289,1297, 1313,1330,1327, 1336,1348,1350,1353, 1371,1382,1389,1390,1394,1397,
Obstetrics, Gynaecology and Breast Disease	50,86, 144, 184, 195, 209, 264, 265, 305, 308, 344, 351, 366,369, 423, 478,537, 545,566, 567, 834, 866, 872,883, 884, 906,922,923, 975, 989,1014, 1106,1171,1190,1220,1321,1329,1335,1342,
Occupational Health and Industrial Medicine	28, 120, 392, 475, 479, 528,558,622, 720,722,736, 791, 806, 827, 841, 863, 877, 889, 982, 983,984,1136,1146,
Ophthalmology	8, 144, 179, 683,739, 823, 932, 959,1004, 1007,1302,1367
Orthopedic Surgery	175, 182, 222,422, 484,642, 643, 694, 715, 761, 835, 940,973, 1009, 1382
Otorhinolaryngology	71, 648,666,1253,1254,1389
Pediatrics and Pediatric Surgery	25, 38, 40, 7,78, 83, 128, 237, 307, 357, 377, 394, 395,407, 411, 477, 481, 515, 544, 562, 572, 589, 713, 869, 895, 933,993,994, 1019,1221,1260,1290, 1301,1307,1308,1333,1366,1358,1374
Physical Medicine and Rehabilitation, Sports Medicine	23, 56, 60, 61, 175, 191, 228, 246, 273, 274, 397, 398, 499,538, 628, 664,688,696, 716, 717, 781,788, 812,817, 821, 827, 874, 812, 979, 1016, 1017,1024,1033, 1044, 1065, 1073, 1086, 1105. 1106,1333,1345,1395
Physiology	9,32, 40, 45, 65, 66,68, 75,90, 95,99,100,101, 117, 123, 136, 142, 189, 191, 240, 246, 248, 267, 270, 294, 298, 325, 326,327, 328, 345, 348, 349, 350, 356, 378, 397, 398, 401, 411, 434, 438, 447, 464, 477, 498, 525, 541,549, 559, 562, 590, 602, 647, 688, 696, 697, 707, 717, 724,744, 755, 779,781,784,785, 792, 793, 814, 817, 820,821,829, 838,848, 846, 859, 860, 861, 862, 891,918, 945, 949, 978, 991,1005, 1014, 1016. 1017,1025, 1026, 1030,1039, 1065, 1066, 1082, 1086,1096,1105,1117,1120,1129,1136,1137,1147, 1155, 1171, 1178, 1179, 1181, 1233, 1234,1245,1249,1257,1266,1284,1309,1310,1323,1356,1347,1361,1383,1392
Public Health, Social Medicine and Epidemiology	82, 93,112, 113, 140, 155, 166, 176, 197, 198, 199, 200, 201, 202, 203, 204, 205,206, 207, 208, 211, 212, 236, 249, 314, 356, 368, 375, 404, 407, 465, 467, 471,506, 543,573, 703, 704,714, 735, 750, 785,786, 818, 868, 941, 1061, 1071, 1107,1108,1116,1132,1170,1262,1340
Radiology	122, 224,237, 429, 436, 484, 485, 487, 512,521. 550, 630, 639, 753, 929, 1031,1157,1300,1311,132,1357,1369,1384,1385,1386, 1399
Reproduction	109, 118, 127, 132, 192, 223, 252, 323, 427, 448, 454, 461,462,463,513,514,531, 577, 635, 646, 816, 833, 845, 875, 881, 907, 935,951, 952, 953, 954,1046,1158,1217, 1244, 1296,1334,1360,

Chinese (15 papers), Russian (9 papers), French (7 papers), Japanese (6 papers), Italian (5 papers), Spanish (4 papers), Dutch (2 papers), Polish (2 papers), and Korean; Hungarian, Swedish (each 1 paper).

791 institutes in 58 countries (Australia 40; Austria 20; Azerbaijan 2, Belgium 24; Brazil 19, Bulgaria. 1, Canada. 39, Chile.4, China. 37, Croatia. 2, Cuba. 1, Cyprus. 1, Czech Republic. 4, Denmark.4, Egypt. 3, Finland. 6, France. 30, Germany. 48, Greece. 8, Hungary. 1, India. 16, Indonesia 1, Iran. 3, Ireland 1, Israel. 4, Italy. 21, Japan. 60, Jordan 1, Kazakhstan 1, Lithuania 1, Lebanon 1, Malaysia 1, Mexico 2, Morocco 1, Netherlands 18, New Zealand 3, Norway 1, Pakistan 2, Poland 13, Portugal. 4, Romania 2, Russian Federation 6, Saudi Arabia 2, Singapore 4, Slovakia 2, Slovenia 3, South Africa. 3, South Korea 22, Spain. 25, Sri Lanka 1, Sweden. 7, Switzerland 12, Taiwan 13, Thailand 4, Turkey 12, Ukraine 2, United Arab Emirates 1, United Kingdom 46, United States 167) were involved in temperature measurements.

In total, 972 journals published papers on temperature related matters. Due to included abstracts, the highest number of publications, i.e. 79, were found in Thermology international. 19 journals published 15 or more papers. Top rank was Nature with 53 publications. Next were Physics Review Letter (45 papers), European Journal of Applied Physiology (43 papers). Four journals, Science, Journal of Thermal Biology, Journal of Chemical Physics and International Journal of Systematic and Evolutionary Microbiology had 27 contributions each. On the next ranks were the Journal of Applied Physiology (26 papers), the American Journal of Physiology (25 papers), Physical Review E-Statistical, Nonlinear, and Soft Matter Physics (23 papers), Biomacromolecules (22 papers), International Journal of Hyperthermia (21 papers), Proceedings of the National Academy of Sciences of the United States of America (19 papers), Journal of the American Chemistry Society (19 papers), Cryobiology (18 papers), Ambio (17 papers), Journal of Physiology (16 papers) and Anesthesia & Analgesia with 15 papers.

100 publications reported clinical trials which were performed either in a controlled or randomised controlled study design. 35 papers were dedicated to standardisation and evaluation studies of equipment (57, 58, 59, 60, 69, 80, 85, 303, 390, 415, 441, 474, 495, 516, 519, 524, 616, 714, 720, 769, 777, 825, 836, 840, 853, 904, 926, 1010, 1068, 1162, 1209, 1218, 1222, 1358, 1380). The technology of temperature measuring devices was discussed in 22 papers (31, 54, 56, 216, 352, 362, 368, 399, 409, 451, 539, 601, 623, 624, 660, 666, 767, 801, 1043, 1149, 1370, 1374).

In 54 animal experiments (9, 24, 26, 70, 146, 160, 169, 214, 21, 223, 253, 256, 294, 299, 311, 370, 403, 435, 436, 499, 523, 534, 544, 584, 593, 597, 602, 618, 680, 693, 707, 748, 784, 817, 848, 903, 971, 972, 1001, 1028, 1057, 1103, 1142, 1172, 1222, 1232, 1233, 1255, 1261, 1271, 1282, 1313, 1336, 1359) temperature measurements were performed. 215 review papers were related to medicine, 11 editorials and 65 letters or comments also dealt with temperature measurement.

In total 9238 authors were found. Of these, 654 authors appeared with two papers, 153 authors with three papers.

30 authors published 4 papers and 9 others had 5 contributions to temperature measurement. 12 scientists had six, 2 seven, 12 eight and 5 nine papers. R Berz had 19 citations, K. Ammer 13 and E.F.J. Ring 12 publications. J.W. Smith published 11 and D.S. Moran 10 papers. These high numbers of publications by single authors is the result of including meeting abstracts into the database.

Medical publications

Medline and Embase allocated their listed citations to distinct fields of medicine. For all other sources the appropriate allocations were performed by the author.

Table 1 shows the allocations to fields of medicine.

Neurology, Neurosurgery and Neuroscience and Cardiovascular Diseases and Cardiovascular Surgery were the most frequent allocated specialities of clinical medicine. Anaesthesiology, Dermatology & Venereology and Pediatrics & Pediatric Surgery were the next in frequency of allocation. 125 of 1400 References dealt with Physiology.

Non medical publications

Basic Sciences

The predominant fields were Physics (11, 18, 24, 49, 89, 91, 111, 124, 139, 159, 163, 164, 165, 193, 229, 239, 250, 271, 282, 285, 286, 287, 288, 309, 322, 359, 374, 379, 400, 408, 441, 442, 443, 444, 488, 502, 529, 546, 561, 592, 607, 608, 615, 641, 653, 692, 728, 790, 709, 800, 925, 938, 957, 961, 974, 1041, 1049, 1080, 1097, 1124, 1128, 1161, 1197, 1225, 1227, 1243, 1251, 1258, 1270, 1278, 1288, 1330, 1372, 1378, 1391), Chemistry (4, 18, 33, 44, 48, 91, 105, 116, 129, 138, 139, 150, 185, 187, 188, 218, 219, 232, 244, 247, 269, 280, 297, 321, 346, 354, 361, 380, 389, 391, 410, 455, 517, 575, 596, 605, 614, 621, 670, 675, 681, 682, 684, 687, 689, 691, 709, 710, 711, 748, 756, 763, 773, 786, 789, 805, 821, 832, 873, 880, 886, 898, 900, 905, 915, 928, 948, 963, 968, 970, 987, 992, 998, 1000, 1018, 1034, 1036, 1038, 1074, 1081, 1101, 1115, 1143, 1156, 1160, 1165, 1168, 1175, 1183, 1193, 1198, 1212, 1216, 1123, 1230, 1237, 1240, 1264, 1268, 1270, 1314, 1351, 1352, 1361) and Biochemistry (15, 104, 147, 181, 295, 304, 306, 313, 385, 456, 468, 554, 578, 581, 606, 649, 669, 712, 747, 824, 851, 864, 934, 942, 985, 986, 990, 1032, 1084, 1114, 1125, 1138, 1164, 1189, 1204, 1213, 1228, 1239, 1240, 1304, 1355).

Applied Sciences

Pharmacology and Toxicology had an allocation of 71 papers (4, 5, 13, 32, 88, 96, 108, 110, 119, 130, 154, 163, 173, 180, 213, 214, 253, 255, 262, 317, 378, 416, 460, 530, 532, 553, 570, 576, 582, 593, 599, 600, 612, 613, 618, 628, 655, 667, 668, 719, 743, 748, 757, 780, 817, 858, 888, 892, 893, 962, 971, 972, 997, 1003, 1006, 1023, 1089, 1092, 1100, 1132, 1134, 1142, 1174, 1241, 1249, 1254, 1271, 1295, 1360, 1388, 1400).

57 papers were related to Climatology & Meteorology (6, 43, 63, 107, 151, 167, 245, 260, 290, 292, 296, 315, 332, 333-340, 426, 445, 446, 452, 511, 518, 522, 535, 557, 570, 603, 644, 650, 656, 665, 686, 701, 702, 705, 745, 748, 754, 802, 803, 904, 815, 839, 849, 857, 1012, 1070, 1110, 1126, 1141, 1306, 1326, 1337, 1341, 1354, 1362, 1376, 1379, 1396). Computing and Modeling (20, 221, 409, 509, 561, 568, 629, 630, 682, 909, 1041, 1049, 1085, 1146, 1190, 1215, 1219, 1253, 1266,

1294,1302,1303, 1325,1329, 1131,1332) was the topic 26 publications

Engineering, Bioengineering and Medical Instrumentation (41, 103, 119, 126, 135, 148, 153, 173, 181,187, 222, 228, 234, 244, 266, 279,283,305,324, 347,384, 381, 393,402, 424, 493, 510,524,544,550,571,586,588,609, 619,624, 631,633, 65, 663, 667, 695,726, 737, 738, 752,756, 762,764, 765,772, 786, 795,796,798, 846, 882,902,920,927,946,964,998, 1050, 1058, 1069, 1075, 1091, 1121, 1125, 1184, 1185, 1195, 1198, 1205, 1206, 1208, 1211, 1223, 1226, 1246, 1250, 1252, 1266, 1267, 1269, 1280, 1286, 1287, 1291, 1303, 1318,1387,1392) had 94 hits. Various applications of lasers were discussed in 36 papers (12,29,103, 106, 145, 148, 158, 162, 230,283, 367, 419, 472, 474,721,748,751, 880, 931, 959, 960, 970, 980, 1064, 1078, 1090, 1104, 1123,1128,1182,1214,1215,1261,1367,1398,1399) including laser Doppler imaging (853). Radiofrequencies in the short and microwave range was the topic of 24 papers (19,64, 84, 190, 210,279, 403, 429, 563, 564,610,664, 748, 775,794, 884,917,919,1043, 1047,1167,1188,1266,1279) and 20 papers were published on ultrasound (366, 438, 520, 52, 674, 767,841, 872, 904,909, 929, 930, 940, 1008, 1159, 1168, 1180,1242,1266,1329).

Environmental Health and Pollution Control were addressed in 66 publications (16, 46, 79, 94, 115, 124, 131, 134, 141, 157, 225, 231, 238, 268, 291, 300, 355, 358, 363, 376,382,383,405,417,421, 458, 466, 505, 507, 560, 591, 604,625, 626,638,679,690,725, 727,729,807, 810, 828, 850, 852, 896, 897, 908, 1002, 1027, 1045, 1063, 1085, 1145, 1196, 1199, 1219, 1236, 1250, 1263, 1305, 1311, 1322, 1343,1366,1368)

Biology

Botany and Crop Science (362,439,651,774, 939, 1011, 1200,1265), Zoology (92, 102,118,243, 373, 401, 406, 508, 598, 620, 659, 734,740, 808, 956,977,1076,1169,1172,1299) and Veterinary Medicine (6, 39, 97, 127, 196, 253, 301, 302,319,343,386, 437, 588, 654,693, 706, 731,783, 809, 870, 914, 1062, 1131,1174,1207,1288,1337) were the main fields of application of temperature measurement in bio logy.

Discussion

higher than in last years survey although less databases have been screened. This may be due to the fact that the keywords "cooling" and "warming" have resulted in additional hits in physics, chemistry and climatology. Higher numbers of hits in physiology are probably caused by the key word "core temperature". The keyword "skin temperature" may be the reason for a high number of dermatological publications..

Excluding the databases Science Direkt and Highwire as data sources for this survey, may have resulted in a lower number of papers related to thermal imaging, particularly to applications of thermography outside of medicine and biology. For example, no paper related to non destructive material testing was included in this survey.. Also publications on geology and petrology, a large portion in last years survey, are scarce this year.

The most frequently published topic in clinical medicine was hypothermia in critical health states such as cardiac

arrest, cardiovascular surgery, stroke and liver disease. Similar to last year's survey, cardiovascular medicine, neurology, paediatrics, anaesthesiology remained the main fields of medical temperature measurements.

Thermal imaging based diagnosis of breast disease continued to be an important task., although thermal imaging is still struggling for full scientific acceptance in this technique

The influence of European researcher is increasing in all fields, and the number of of publications from the United States is again reduced compared to previous surveys. 21,2% of institutes researching in temperature related matters are situated in the United States, but 39,2% of all institutes are located in Europe. The remaining research facilities are in Japan, China, India, South Korea, Taiwan and Australia. Research is particularly growing in Australia, China and India. Less than 5% of temperature related research is originated from countries in Africa, South America and the Middle East.

In conclusion, this years' literature survey has demonstrated a high interest in temperature related treatment mainly in hypothermia for patients in a critical state of health. Papers on diagnostic infrared imaging were relatively less published than last year. A high number of publications was related to physics and chemistry. Also in this basic sciences, the effects of cooling of material generated more attention and papers than heating.

References

- 1.Aarnoudse W. Van Den Berg P. Van De Vosse F. Geven M. Rutten M. Van Turnhout M.Fearon W. De Bruyne B. Pijls N. Myocardial Resistance Assessed by Guidewire-Based Pressure-Temperature Measurement: In Vitro Validation. Catheter Cardiovasc Intervent. 2004; 62(1): 56-63.
- 2.Abella BS. Zhao D. Alvarado J. Hamann K. Vanden Hoek TL. Becker LB. Intra-arrest cooling improves outcomes in a murine cardiac arrest model. Circulation. 2004; 109(22): 2786-2791.
- 3.Aboagla EM, Terada T. Effects of egg yolk during the freezing step of cryopreservation on the viability of goat spermatozoa.. Theriogenology. 2004; 62(6):1160-72.
- 4.Abourashed EA. Validation and application of an HPTLC method for the determination of parthenolide in feverfew herbal products. J Planar Chromat - Modern Tlc. 2004; 17(5): 375-378.
- 5.Abraham MH. Martins F. Human skin permeation and partition: General linear free-energy relationship analyses. J Pharm Sci. 2004; 93(6): 1508-1523.
- 6.Accardo C, Dattena M, Pilichi S, Mara L, Chessa B, Cappai P. Effect of recombinant human FSH and LH on in vitro maturation of sheep oocytes; embryo development and viability. Anim Reprod Sci. 2004 Mar;81(1-2):77-86.
- 7.Ackerman AS, Kirkpatrick MP, Stevens DE, Toon OB. The impact of humidity above stratiform clouds on indirect aerosol climate forcing. Nature. 2004; 432(7020):1014-7.
- 8.Acosta MC, Peral A, Luna C, Pintor J, Belmonte C, Gallar J. Tear secretion induced by selective stimulation of corneal and conjunctival sensory nerve fibers. Invest Ophthalmol Vis Sci. 2004; 45(7): 2333-6.
- 9.Adler A. Huang H. Wang Z. Conetta J. Levee E. Zhang X. Hintze TH. Endocardial endothelium in the avascular frog heart: Role for diffusion of NO in control of cardiac O2 consumption. Am J Physiol - Heart Circ Physiol. 2004; 287(156-1): H14-H21.
- 10.Agarwal A, Gupta D. Warming the tracheal tube and kinking. Can J Anaesth. 2004;51(1):96.
- 11.Aguilar G. Vu H. Nelson JS. Influence of angle between the nozzle and skin surface on the heat flux and overall heat extraction during cryogen spray cooling. Phys Med Biol. 2004; 49(10): N147-N153.
- 12.Ahcan U, Zorman P, Recek D, Ralca S, Majaron B. Port wine stain treatment with a dual-wavelength Nd:Yag laser and cryogen spray cooling: a pilot study. Lasers Surg Med. 2004; 34(2): 164-7.

13. Ahijevych K, Garrett BE. Menthol pharmacology and its potential impact on cigarette smoking behavior. *Nicotine Tob Res.* 2004 Feb;6 Suppl 1:S17-28.
14. Ahmadov RS, Mammadov PZ. Prolonged epidural anesthesia in the complex treatment of frostbites during preoperative period. *Azerbaijanski Meditsinski Zhurnal.* 2004; Issue 2: 116-119.
15. Ahmed MR, Gopinath D, Gomathi K, Sehgal PK, Jayakumar R. Alpha-Crystallin-Incorporated Collagen Matrices as an Aid for Dermal Wound Healing. *J BioMed Materials Res Part B-Appl Biomaterials.* 2004; 169(2): 241-248.
16. Ahn Y-H, Bae J-Y, Park S-M, Min K-S. Anaerobic digestion elutriated phased treatment of piggery waste. *Water Sci Technol.* 2004; 49(5-6): 181-189.
17. Ahonen J, Salmenpera M. Brain injury after adult cardiac surgery. *Acta Anaesth Scand.* 2004; 48(1): 4-19.
18. Aichele M, Chong SH, Baschnagel J, Fuchs M. Static properties of a simulated supercooled polymer melt: structure factors, monomer distributions relative to the center of mass, and triple correlation functions. *Phys Rev E Stat Nonlin Soft Matter Phys.* 2004; 69(6 Pt 1):061801.
19. Aidietis A, Rucinskas K, Sirvydis V, Jurkuvenas P, Grebelis A, Marinskis G, Uzdavinyas G. [Radiofrequency modified maze procedure with mitral valve surgery: mid-term follow-up results] *Medicina (Kau-nas).* 2004; 40 Suppl 1:1-6.
20. Aires F, Prigent C, Rossow WB. Neural network uncertainty assessment using Bayesian statistics: a remote sensing application. *Neural Comput.* 2004; 16(11):2415-58.
21. Akata T, Yamaura K, Kandabashi T, Sadamatsu S, Takahashi S. Changes in body temperature during profound hypothermic cardiopulmonary bypass in adult patients undergoing aortic arch reconstruction. *J Anesth.* 2004; 18(2): 73-81.
22. Akata T, Kanna T, Yoshino J, Higashi M, Fukui K, Takahashi S. Reliability of fingertip skin-surface temperature and its related thermal measures as indices of peripheral perfusion in the clinical setting of the operating theatre. *Anaesth Intens Care.* 2004; 32(4): 519-529.
23. Akgun K, Korpinar MA, Kalkan MT, Akarimrak U, Tuzon S, Tuzun F. Temperature changes in superficial and deep tissue layers with respect to time of cold gel pack application in dogs. *Yonsei Med J.* 2004; 45(4): 711-718.
24. Akhmediev N, Soto-Crespo JM. Strongly asymmetric soliton explosions. *Phys Rev E Stat Nonlin Soft Matter Phys.* 2004; 70(3 Pt 2):036613.
25. Aladangady N, Aitchison TC, Beckett C, Holland BM, Kyle BM, Wardrop CAJ. Is it possible to predict the blood volume of a sick pre-term infant? *Arch Dis Child Fetal Neonat Edit.* 2004; 89(4): F344-F347.
26. Alam HB, Chen Z, Honma K, Koustova E, Querol RI, Jaskile A, Inocencio R, Ariaban N, Toruno K, Nadel A, Rhee P. The rate of induction of hypothermic arrest determines the outcome in a Swine model of lethal hemorrhage. *J Trauma.* 2004; 57(5):961-9.
27. Al-Amoudi A, Norlen LP, Dubochet J. Cryo-electron microscopy of vitreous sections of native biological cells and tissues. *J Struct Biol.* 2004; 148(1):131-5.]
28. Alanis J, Segovia A, Navarrete M. Safety conditions for irradiation, transporting, and melting of sintered TeO₂ during the industrial production of 131I. *Health Phys.* 2004; 87(2 Suppl):S34-6.
29. Al-Awami M, Schillinger M, Maca T, Pollanz S, Minar E. Low level laser therapy for treatment of primary and secondary Raynaud's phenomenon. *Vasa.* 2004; 33(1): 25-29.
30. Albrecht M, Hulshof MCEM, Zum Vorde Sive Vording PJ, Van Lanschot JJB, MichelDJ, Crezee H, Fockens P, Van Dijk JDP, Gonzalez Gonzalez D. A feasibility study in oesophageal carcinoma using deep loco-regionally hyperthermia combined with concurrent chemotherapy followed by surgery. *Int J Hyperthermia.* 2004; 20(6): 647-659.
31. Alessandri B, Hoelper BM, Behr R, Kempfski O. Accuracy and stability of temperature probes for intracranial application. *J Neurosci Methods.* 2004; 139(2): 161-165.
32. Alfonsi P, Adam F, Passard A, Guignard B, Sessler DI, Chauvin M. Nefopam, a Non-sedative Benzoxazocine Analgesic, Selectively Reduces the Shivering Threshold in Unanesthetized Subjects. *Anesthesiology.* 2004; 100(1): 37-43.
33. Ali IM. Synthesis and sorption behavior of semicrystalline sodium titanate as a new cation exchanger. *J Radioanal Nucl Chem.* 2004; 260(1): 149-157.
34. Ali NN, Xu X, Brito-Martins M, Poole-Wilson PA, Harding SE, Fuller SJ. Beta-adrenoceptor subtype dependence of chronotropy in mouse embryonic stem cell-derived cardiomyocytes. *Basic Res Cardiol.* 2004; 99(6): 382-391.
35. Ali SN, O'Toole G, Tyler M. Milk bottle burns. *J Burn Care Rehabil.* 2004; 25(5):461-2.
36. Al-Khudary R, Hashwa F, Mroueh M. A novel olive oil degrading thermoactinomyces species with a high extremely thermostable lipase activity. *Enginer Life Sci.* 2004; 4(1): 78-82.
37. Allen J, Oates C P1, Chishti A, Ahmed I, Talbot D, Murray A. Combined thermal imaging and colour duplex ultrasound assessments in renal fistula patients. (abstract). *Thermol int* 2004, 14(4): 144
38. Allen KD. Using biofeedback to make childhood headaches less of a pain. *Pediatr Ann.* 2004 Apr;33(4):241-5.
39. Allen ML, Baker GJ, Freeman DE, Holmes KR, Marretta SM, Scoggins RD, Constable P. In vitro study of heat production during power reduction of equine mandibular teeth. *J Am Vet Med Assoc.* 2004; 224(7):1128-32.
40. Al-Mukhaizeem F, Allen U, Komar L, Naser B, Roy L, Stephens D, Read S, Kim CS, Schuh S. Comparison of temporal artery, rectal and esophageal core temperatures in children: Results of a pilot study. *Paediatrics Child Health.* 2004; 9(7): 461-465.
41. Al-Salaymeh A, Jovanovic J, Durst F. Bi-directional flow sensor with a wide dynamic range for medical applications. *Med Engin Phys.* 2004; 26(8): 623-637.
42. Al-Senani FM, Graffagnino C, Grotta JC, Saiki R, Wood D, Chung W, Palmer G, Collins KA. A prospective, multicenter pilot study to evaluate the feasibility and safety of using the CoolGard System and Icy catheter following cardiac arrest. *Resuscitation.* 2004; 62(2):143-50.
43. Alston TA. Don't have a cow! Fight global warming with CFC. *Nature.* 2004; 430(7003):965.
44. AlSunaidi A, Den Otter WK, Clarke JH. Liquid-crystalline ordering in rod-coil diblock copolymers studied by mesoscale simulations. *Philos Transact A Math Phys Eng Sci.* 2004; 362(1821):1773-81.
45. Alva N, Carbonell T, Palomeque J. A model of deep experimental hypothermia and rewarming in rat. *J Thermal Biol.* 2004; 29(4-5): 259-264.
46. Alvarez JA, Armstrong E, Presas J, Gomez M, Soto M. Performance of a UASB-digester system treating domestic wastewater. *Environ Technol.* 2004; 25(10): 1189-1199.
47. Alvarez-Merino MA, Ribeiro MF, Silva JM, Carrasco-Marin F, Maldonado-Hodar FJ. Activated carbon and tungsten oxide supported on activated carbon catalysts for toluene catalytic combustion. *Environ Sci Technol.* 2004; 38(17): 4664-4670.
48. Alvarez-Munoz D, Saez M, Lara-Martin PA, Gomez-Parra A, Gonzalez-Mazo E. New extraction method for the analysis of linear alkylbenzene sulfonates in marine organisms: Pressurized liquid extraction versus Soxhlet extraction. *J Chromat. A.* 2004; 1052(1-2): 33-38.
49. Al-Zuhair S, Ramachandran KB, Hasan M. Investigation of the specific interfacial area of a palm oil-water system. *J Chem Technol Biotechnol.* 2004; 79(7): 706-710.
50. Amalu WC. The validity of the autonomic stress test in breast thermography procedures (abstract). *Thermol int* 2004, 14(3): 106.
51. Ambler JJS, Sado DM, Zideman DA, Deakin CD. The incidence and severity of cutaneous burns following external DC cardioversion. *Resuscitation.* 2004; 61(3): 281-288.
52. Amir G, Rubinsky B, Horowitz L, Miller L, Leor J, Kassif Y, Mishaly D, Smolinsky AK, Lavee J. Prolonged 24-hour subzero preservation of heterotopically transplanted rat hearts using antifreeze proteins derived from arctic fish. *Ann Thorac Surg.* 2004; 77(5):1648-55.
53. Ammer K. Thermographie der Finger nach mechanischem Provokationstest. *Thermomed* 2003, 18/19: 9-16
54. Ammer K. 17th Thermological Symposium of the Austrian Society of Therm. *Therm Int.* 2004; 14(4): 148-152.
55. Ammer K. Hypothermic changes of skin temperature (abstract). *Thermol int* 2004, 14(2): 78.
56. Ammer K. Temperature effects of thermotherapy determined by infrared measurements. (abstract). *Thermol int* 2004, 14(2): 78.
57. Ammer K. Publications on medical infrared imaging from European countries. (abstract). *Thermol int* 2004, 14(4): 147
58. Ammer K, Ring EF. Repeatability of the standard view both dorsal hands. Results from a training course on Med infrared imaging. *Therm Int.* 2004, 14(3): 99-102.
59. Ammer K. Standardization of recording and measurement in thermal images (abstract). *Thermol int* 2004, 14(3): 109.
60. Ammer K. Temperature effects of thermotherapy determined by infrared measurement. *Physica Medica* 2004; Suppl 1: 64-66
61. Ammer K. Theme issue: Cryotherapy. *Therm Int.* 2004; 14(2): 49-50.
62. Ammer K. Thermology 2003 - A computer-assisted literature survey with a focus on nonmedical applications of thermal imaging. *Thermol Int.* 2004; 14(1): 5-36.
63. Andersen KG, Hansen TB, Knochel S. Growth of heat-treated enterotoxin-positive *Clostridium perfringens* and the implications for safe cooling rates. *J Food Prot.* 2004; 67(1):83-9.

- 64.Andersen KK, Azuma N, Barnola JM, Bigler M, Biscaye P, Caillon N, Chappellaz J, Clausen HB, Dahl-Jensen D, Fischer H, Fluckiger J, Fritzsche D, Fujii Y, Goto-Azuma K, Gronvold K, Gundestrup NS, Hansson M, Huber C, Hvidberg CS, Johnsen SJ, Jonell U, Jouzel J, Kipfstuhl S, Landais A, Leuenberger M, Lorrain R, Masson-Delmotte V, Miller H, Motoyama H, Narita H, Popp T, Rasmussen SO, Raynaud D, Rothlisberger R, Ruth U, Samyn D, Schwander J, Shoji H, Siggard-Andersen ML, Steffensen JP, Stocker T, Sveinbjörnsdóttir AE, Svensson A, Takata M, Tison JL, Thorsteinsson T, Watanabe O, Wilhelms F, White JW; North Greenland Ice Core Project members. High-resolution record of Northern Hemisphere climate extending into the last interglacial period. *Nature*. 2004; 431(7005):147-51.
- 65.Anderson CD, Lin WC, Beckham J, Mahadevan-Jansen A, Buttemer CR, Pierce J, Nicoud IB, Wright Pinson C, Chari RS. Fluorescence spectroscopy accurately detects irreversible cell damage during hepatic radiofrequency ablation. *Surgery*. 2004;136(3):524-31.
- 66.Andersson DA, Chase HW, Bevan S. TRPM8 activation by menthol, icilin, and cold is differentially modulated by intracellular pH. *J Neurosci*. 2004 Jun 9;24(23):5364-5369.]
- 67.Ando Y, Obayashi K. [Evaluation of autonomic dysfunction by novel methods] *Rinsho Byori*. 2004; 52(7):587-94.
- 68.Andrews PJ, Harris B, Murray GD. Randomized controlled trial of effects of the airflow through the upper respiratory tract of intubated brain-injured patients on brain temperature and selective brain cooling. *Br J Anaesth*. 2004 Nov 5; Epub ahead of print
- 69.Anglo-Polish Res Group Standardisation of the technique of thermal imaging in Med: issues for the creation of a reference atlas of normal thermograms (abstract). *Thermol int* 2004, 14(2): 77-78.
- 70.Anisimov VN, Arbeev KG, Popovich IG, Zabezhinski MA, Rosenfeld SV, Piskunova TSArbeeva LS, Semenchenko AV, Yashin AI. Body weight is not always a good predictor of longevity in mice. *Experimental Gerontology*. 2004; 39(3): 305-319.
- 71.Aniutin RG, Ivkina SV, Dmitriev NS, Mileshina NA. [Tympnic thermometry in diagnosis of exudative otitis media in children] *Vestn Otorinolaringol*. 2004;(2):33-5.
- 72.72. Anonymous: *Sud Med Ekspert*. 2004;47(3):9-11.
- 73.73. Anonymous [A study of the condition of parodontium in patients with stomach and duodenal ulcer] *Eksp Klin Gastroenterol*. 2004; (3):28-30, 102.
74. Anonymous: *Anesteziol Reanimatol*. 2004 ; (2):13-7.
- 75.75. Anonymous [Restoration of the heart activity in deep hypothermia with the aid of norepinephrine and no warming of the heart] *Ross Fiziol Zh Im I M Sechenova*. 2004; 90(7):902-7.
- 76.76. Anonymous [Structurization of cortical layer of loach yolk cell after wounding as a "minimal" model of morphogenesis] *Ontogenez*. 2004; 35(3):190-7.
- 77.77. Anonymous Do Genes Respond to Global Warming? *PLoS Biol*. 2004 Oct;2(10):e338.
78. Anonymous. Evidence weak for treatment of migraine in children. *Pharmaceutical J*. 2004; 272(7296)499.
79. Anonymous. Heat wave epidemic. *Gimt - Giornale Italiano Delle Malattie del Torace*. 2004; 58(2): 91-94.
80. Anonymous. Infrared tympanic thermometers in general practice. *Med Today*. 2004; 5(9): 8-9.
81. Anonymous. Mammalian somatic cells have a diurnal rhythm. *Reproductive BioMed Online*. 2004; 8(5): 537.
82. Anonymous. National classifying examination: Files from the *Revue du Practicien*. *Revue du Practicien*. 2004; 54(13): 1461-1462.
83. Anonymous. Semantics and semiotics of fever. *Pediatrics Oggi*. 2004; 24(1): 9-18.
84. Anonymous. Rezension des Fachbuches "Karnak durch Mobilfunk" von Reinhold Berz. *Thermomed* 2003,18/19:80-81
85. Anonymous. Satzung der Deutschen Gesellschaft für Thermographie und Regulationsmedizin e.V. 73-75
86. Anonymous: Aktuelle internationale Literatur zum Thema Brustkrebs und Infrarot Imaging. *Thermomed* 2003,18/19:59-64
87. Antonawich FJ, Fiore SM, Welicky LM. Regulation of ischemic cell death by the lipoid acid-palladium complex, PolyMVA, in gerbils. *Experimental Neurology*. 2004; 189(1): 10-15.
88. Anuradha V, Srinivas PV, Madhusudana Rao J. Isolation and synthesis of isodihydropiperlonguminine. *Natural Product Res*. 2004; 18(3): 247-251.
89. Anwar MS, Blazina D, Carteret HA, Duckett SB, Halstead TK, Jones JA, Kozak CM, Taylor RJ. Preparing high purity initial states for nuclear magnetic resonance quantum computing. *Phys Rev Lett*. 2004; 93(4): 040501.
90. Aoki K, Kondo N, Shimomura Y, Yokoi M, Iwanaga K, Harada H, Katsuura T. Sweating responses during activation of the muscle metabolic reflex in humans is altered by time of day. *Acta Physiol Scand*. 2004; 180(1):63-70.
91. Aoki T, Muramatsu M, Nishina A, Sanui K, Ogata N. Thermosensitivity of optically active hydrogels constructed with N-(1)-(1-hydroxymethyl)propylmethacrylamide. *Macromol Biosci*. 2004; 4(10): 943-9.
92. Ar A, Barnea A, Tov YY, Mersten-Katz C. Woodpecker cavity aeration: a predictive model. *Respir Physiol Neurobiol*. 2004; 144 (2-3) 237-249
93. Aransay AM, Testa JM, Morillas-Marquez F, Lucientes J, Ready PD. Distribution of sandfly species in relation to canine leishmaniasis from the Ebro Valley to Valencia, northeastern Spain. *Parasitol Res*. 2004; 94(6):416-20.
94. Araruna Jr JT, Portes VLO, Soares APL, Silva MG, Stel MS, Schramm DU, Tibana SVargas H. Oil spills debris clean up by thermal desorption. *J of Hazardous Materials*. 2004; 110(1-3): 161-171.
95. Arbogast S, Reid MB. Oxidant activity in skeletal muscle fibers is influenced by temperature, CO2 level, and muscle-derived nitric oxide. *Am J Physiol Regul Integr Comp Physiol*. 2004; 287(4): R698-705.
96. Arevalo MI, Escribano E, Calpena A, Domenech J, Queralt J. Rapid skin anesthesia using a new topical amethocaine formulation: a pre-clinical study. *Anesth Analg*. 2004; 98(5):1407-12,
97. Arieli A, Adin G, Bruckental I. The effect of protein intake on performance of cows in hot environmental temperatures. *J Dairy Sci*. 2004; 87(3):620-9.
98. Arlock P, Wohlfart B, Sjöberg T, Steen S. Disastrous physiological effects of saline on the cell membrane demonstrated in cardiac cells. *Scandinavian Cardiovascular J*. 2004; 38(5): 300-306.
99. Armada-da-Silva PA, Woods J, Jones DA. The effect of passive heating and face cooling on perceived exertion during exercise in the heat. *Eur J Appl Physiol*. 2004; 91(5-6):563-71.
100. Arngimsson SA, Pettitt DS, Stueck MG, Jorgensen DK, Cureton KJ. Cooling vest worn during active warm-up improves 5-km run performance in the heat. *J Appl Physiol*. 2004; 96(5):1867-74.
101. Arngimsson SA, Pettitt DS, Borrani F, Skinner KA, Cureton KJ. Hyperthermia and maximal oxygen uptake in men and women. *Eur J of Appl Physiol*. 92(4-5)524-532. 2004.
102. Arnold W, Ruf T, Reimoser S, Tataruch F, Ondersheka K, Schöber F. Nocturnal hypometabolism as an overwintering strategy of red deer (*Cervus elaphus*). *Am J Physiol Regul Integr Comp Physiol*. 2004; 286(1):R174-81.
103. Arraez Roman D, Segura Carretero A, Cruces Blanco C, Fernandez Gutierrez A. Subminute and sensitive determination of the neurotransmitter serotonin in urine by capillary electrophoresis with laser-induced fluorescence detection. *Biomed Chromatography*. 2004; 18(7): 422-426.
104. Arroyo-Reyna A, Tello-Solis SR, Rojo-Dominguez A. Stability parameters for one-step mechanism of irreversible protein denaturation: A method based on nonlinear regression of calorimetric peaks with nonzero Delta Cp. *Analytical Biochemistry*. 2004; 328(2): 123-130.
105. Asakura K, Nagasaka Y, Hidaka M, Hayashi M, Osanai S, Kondopudi DK. Chiral Symmetry-Breaking Transition in Growth Front of Crystal Phase of 1,1'-Binaphthyl in Its Supercooled Melt. 2004; *Chirality*. 16(2): 131-136.
106. Ashkin A. Design for an optical cw atom laser. *Proc Natl Acad Sci U S A*. 2004; 101(33):12108-13.
107. Askeyev OV, Tishin D, Sparks TH, Askeyev IV. The effect of climate on the phenology, acorn crop and radial increment of pedunculate oak (*Quercus robur*) in the middle Volga region, Tatarstan, Russia. *Int J Biometeorol*. 2004; Epub ahead of print
108. Aso Y, Yoshioka S, Kojima S. Molecular mobility-based estimation of the crystallization rates of amorphous nifedipine and phenobarbital in poly(vinylpyrrolidone) solid dispersions. *J Pharm Sci*. 2004; 93(2): 384-91.
109. Atabay EC, Takahashi Y, Katagiri S, Nagano M, Koga A, Kanai Y. Vitrification of bovine oocytes and its application to intergeneric somatic cell nucleus transfer. *Theriogenology*. 2004; 61(1):15-23.]
110. Ataie G, Safarian S, Divsalar A, Saboury AA, Moosavi-Movahedi AA, Ranjbar BCristalli G, Mardanian S. Kinetic and structural analysis of the inhibition of adenosine deaminase by acetaminophen. *J Enzyme Inhib Med Chem*. 2004; 19(1): 71-78.
111. Atkinson A, Barnett S, Gorte RJ, Irvine JT, McEvoy AJ, Mogensen M, Singhal SC, Vohs J. Advanced anodes for high-temperature fuel cells. *Nat Mater*. 2004; 3(1):17-27.
112. Atkinson RW, Strachan DP. Role of outdoor aeroallergens in asthma exacerbations: Epidemiological evidence. *Thorax*. 2004; 59(4): 277-278.
113. Atmani F, Farell G, Lieske JC. Extract from *hirsuta* coats calcium oxalate monohydrate crystals and blocks their adhesion to renal epithelial cells. *J Urology*. 2004; 172(4 I): 1510-1514.

114. Ault A. Report blames global warming for rising asthma. *Lancet*. 2004; 363(9420):1532.
115. Autier V, White D. Examination of cadmium sorption characteristics for a boreal soil near Fairbanks, Alaska. *J Hazard Mater*. 2004; 106(2-3):149-55.
116. Avranas A, Patsikatheodorou E. On the adsorption and condensed film formation of binary mixtures of dodecyl-, tetradecyl-, hexadecyl-, and octadecyl-trimethylammonium bromides at the mercury-electrolyte interface. *Coll Surfaces A-Physicochem Engineer Aspects*. 2004; 250(1-3 spec iss.): 509-518.
117. Awaysda MS, Shao W, Guo F, Zeidel M, Hill WG. ENaC-membrane interactions: regulation of channel activity by membrane order. *J Gen Physiol*. 2004; 123(6):709-27. 2004
118. Axner E, Hermansson U, Linde-Forsberg C. The effect of Equex STM paste and sperm morphology on post-thaw survival of cat epididymal spermatozoa. *Anim Reprod Sci*. 2004; 84(1-2):179-91.
119. Ayala MC, Hernandez YG, Pinheiro JCG, Gonzalez EP. Use of the comet assay to evaluate the effect of temperature on DNA repair of damage induced by H₂O₂ and ultraviolet radiation A in human blood cells. *Acta Farmaceutica Bonaerense*. 2004; 23(3): 277-284.
120. Ayling J. Handle with care. *Emerg Med Serv*. 2004; 33(7):34.
121. Ayoub A, Finlayson M. Effect of cool temperature dialysate on the quality and patients' perception of haemodialysis. *Nephrol Dial Transplant*. 2004 Jan;19(1):190-4.
122. Baarslag HJ, Koopman MMW, Reekers JA, van Beek EJR. Diagnosis and management of deep vein thrombosis of the upper extremity: review. *Eur Radiology*. 2004; 14(7): 1263-1274.
123. Babes A, Zorzon D, Reid G. Two populations of cold-sensitive neurons in rat dorsal root ganglia and their modulation by nerve growth factor. *Eur J Neurosci*. 2004; 20(9):2276-82.
124. Babincova M, Altanerova V, Altaner C, Cicmanec P, Babinec P. In vivo heating of magnetic nanoparticles in alternating magnetic field. *Med Phys*. 2004; 31(8): 2219-2221.
125. Baboukas E, Sciare J, Mihalopoulos N. Spatial, temporal and inter annual variability of methanesulfonate and non-sea-salt sulfate in rain-water in the Southern Indian Ocean (Amsterdam, Crozet and Kerguelen Islands). *J Atmospher Chem*. 2004; 48(1): 35-57.
126. Bacaoanu A. Steam sterilization of the stationary large-scale freeze-dryers (lyophilizers). *Am Pharm Review*. 2004; 7(3): 40-47.
127. Backman T, Bruemmer JE, Graham JK, Squires EL. Pregnancy rates of mares inseminated with semen cooled for 18 hours and then frozen. *J Anim Sci*. 2004; 82(3):690-694.
128. Baddock SA, Galland BC, Beckers MG, Taylor BJ, Bolton DP. Bed-sharing and the infant's thermal environment in the home setting. *Arch Dis Child*. 2004; 89(12):1111-1116.
129. Bae IJ, Standard OC, Roger GJ, Brazil D. Phase and microstructural development in alumina sol-gel coatings on CoCr alloy. *J Mater Sci-Mater Med*. 2004; 15(9): 959-966.
130. Baevsky RH, Nyquist SN, Roy MN, Smithline HA. Antipyretic effectiveness of intravenous ketorolac tromethamine. *J Emerg Med*. 2004; 26(4): 407-410.
131. Baez AP, Padilla HG, Garcia RM, Belmont RD, Torres Mdel C. Measurements of carbonyls in a 13-story building. *Environ Sci Pollut Res Int*. 2004; 11(6):400-4.
132. Bagis H, Sagirkaya H, Mercan HO, Dinnyes A. Vitrification of pronuclear-stage mouse embryos on solid surface (SSV) versus in cryotube: comparison of the effect of equilibration time and different sugars in the vitrification solution. *Mol Reprod Dev*. 2004; 67(2):186-92.
133. Bahrami MH, Rayegani SM, Zare A. Studying nerve conduction velocity and latency of accessory nerve motor potential in normal persons. *Electromyogr Clin Neurophysiol*. 2004; 44(1):11-14.
134. Bai ZH, Zhang HX, Qi HY, Peng XW, Li BJ. Pectinase production by *Aspergillus niger* using wastewater in solid state fermentation for eliciting plant disease resistance. *Bioresource Technol*. 2004; 95(1): 49-52.
135. Bailey CA, Cowan TM, Liu VG, Lemley EC, Chen WR. Optimization of selective hyperthermia. *J Biomed Opt*. 2004; 9(3):648-54.
136. Bailey SR, Eid AH, Mitra S, Flavahan S, Flavahan NA. Rho kinase mediates cold-induced constriction of cutaneous arteries: role of alpha2 C-adrenoceptor translocation. *Circ Res*. 2004; 94(10):1367-74.
137. Baker KB, Tkach JA, Nyenhuis JA, Phillips M, Shellock FG, Gonzalez-Martinez J, Rezai AR. Evaluation of specific absorption rate as a dosimeter of MRI-related implant heating. *J Magn Reson Imaging*. 2004; 20(2):315-20.
138. Bakshi MS, Kaur I, Sood R, Singh J, Singh K, Sachar S, Singh KJ, Kaur G. Mixed micelles of benzyltrimethyltetradecylammonium chloride with tetradecyltrimethylammonium and tetradecyltriphenylphosphonium bromides: A headgroup contribution. *J Coll Interface Sci*. 2004; 271(1): 227-231.
139. Bakshi MS, Kaur A, Miller JD, Paruchuri VK. Sodium dodecyl sulfate-poly(amidoamine) interactions studied by AFM imaging, conductivity, and Kraft temperature measurements. *J Coll Interface Sci*. 2004; 278(2): 472-477.
140. Baldi L, Mizzoni V, Guarino A. [Canine leishmaniasis in Campania: new and old foci] *Parassitologia*. 2004; 46(1-2):217-20.
141. Bamber RN, Seaby RM. The effects of power station entrainment passage on three species of marine planktonic crustacean, *Acartia tonsa* (Copepoda), *Crangon crangon* (Decapoda) and *Homarus gammarus* (Decapoda). *Mar Environ Res*. 2004; 57(4):281-94.
142. Bandell M, Story GM, Hwang SW, Viswanath V, Eid SR, Petrus MJ, Earley TJ, Patapoutian A. Noxious cold ion channel TRPA1 is activated by pungent compounds and bradykinin. *Neuron*. 2004; 41(6): 849-57.
143. Bandrivskyy A, Bernjak A, McClintock P, Stefanovska A. Wavelet phase coherence analysis: Application to skin temperature and blood flow. *Cardiovascular Engin*. 2004. 4(1):89-93.
144. Banerjee S, Cashman P, Yentis SM, Steer PJ. Maternal temperature monitoring during labor: concordance and variability among monitoring sites. *Obstet Gynecol*. 2004; 103(2):287-93.
145. Banh A, Sivak JG. Laser scanning analysis of cold cataract in young and old bovine lenses. *Mol Vis*. 2004; 10:144-7.
146. Barber PA, Hoyte L, Colbourne F, Buchan AM. Temperature-regulated model of focal ischemia in the mouse: A study with histopathological and behavioral outcomes. *Stroke*. 2004; 35(7): 1720-1725.
147. Barbuzzi T, Giuffrida M, Impallomeni G, Carnazza S, Ferreri A, Guglielmino SPP, Ballistreri A. Microbial synthesis of poly(3-hydroxy-alkanoates) by *Pseudomonas aeruginosa* from fatty acids: Identification of higher monomer units and structural characterization. *Biomacromolecules*. 2004; 5(6): 2469-2478.
148. Baren RE, Parrish ME, Shafer KH, Harward CN, Shi Q, Nelson DD, McManus JB, Zahniser MS. Quad quantum cascade laser spectrometer with dual gas cells for the simultaneous analysis of mainstream and sidestream cigarette smoke. *Spectrochim Acta A Mol Biomol Spectrosc*. 2004; 60(14):3437-47.
149. Barie PS, Hydo LJ, Eachempati SR. Causes and consequences of fever complicating critical surgical illness. *Surg Infect (Larchmt)*. 2004; 5(2):145-59.
150. Barmatov EB, Obrascov AA, Pebalk DA, Barmatova MV. Chiral nematic phase in hydrogen-bonded blends of a side-chain smectic polymer with low molar mass dopants. *Colloid Polymer Sci*. 2004; 282(5): 530-534.
151. Barnosky AD, Bell CJ, Emslie SD, Goodwin HT, Mead JJ, Reppening CA, Scott E, Shabel AB. Exceptional record of mid-Pleistocene vertebrates helps differentiate climatic from anthropogenic ecosystem perturbations. *Proc Natl Acad Sci U S A*. 2004; 101(25): 9297-302.
152. Baron R. Mechanistic and clinical aspects of complex regional pain syndrome (CRPS). *Novartis Found Symp*. 2004; 261:220-33; discussion 233-8, 256-61.
153. Barralet JE, Lilley KJ, Grover LM, Farrar DF, Ansell C, Gbureck U. Cements from nanocrystalline hydroxyapatite. *J Mater Sci Mater Med*. 2004; 15(4): 407-411.
154. Barroug A, Kuhn LT, Gerstenfeld LC, Glimcher MJ. Interactions of cisplatin with calcium phosphate nanoparticles: In vitro controlled adsorption and release. *J Orth Res*. 2004; 22(4): 703-708.
155. Bartlett KH, Kennedy SM, Brauer M, Van Netten C, Dill B. Evaluation and determinants of airborne bacterial concentrations in school classrooms. *J Occup Environ Hyg*. 2004; 1(10): 639-647.
156. Bar-Yosef S, Mathew JP, Newman MF, Landolfo KP, Grocott HP; Neurological Outcome Research Group; C A R E Investigators of the Duke Heart Center. Prevention of cerebral hyperthermia during cardiac surgery by limiting on-bypass rewarming in combination with post-bypass body surface warming: a feasibility study. *Anesth Analg*. 2004; 99(3):641-6.
157. Basibuyuk M, Kalat DG. The use of waterworks sludge for the treatment of vegetable oil refinery industry wastewater. *Environ Technol*. 2004; 25(3): 373-380.
158. Basinger B, Aguilar G, Nelson JS. Effect of skin indentation on heat transfer during cryogen spray cooling. *Lasers Surg Med*. 2004; 34(2):155-63.
159. Basko DM, Kravtsov VE. Dynamic localization and the Coulomb blockade in quantum dots under ac pumping. *Phys Rev Lett*. 2004; 93(5):056804.
160. Bast DJ, Yue M, Chen X, Bell D, Dresser L, Saskin R, Mandell LA, Low DE, de Azavedo JC. Novel murine model of pneumococcal pneumonia: use of temperature as a measure of disease severity to compare the efficacies of moxifloxacin and levofloxacin. *Antimicrob Agents Chemother*. 2004; 48(9):3343-8.
161. Battistuzzi FU, Feijao A, Hedges SB. A genomic timescale of prokaryote evolution: insights into the origin of methanogenesis, photosynthesis, and the colonization of land. *BMC Evol Biol*. 2004; 4(1):44.

162. Battle EF Jr, Hobbs LM. Laser-assisted hair removal for darker skin types. *Dermatol Ther.* 2004;17(2):177-83.
163. Baudot A, Odagescu V. Thermal properties of ethylene glycol aqueous solutions. *Cryobiology.* 2004; 48(3):283-94.
164. Baumgardner JE, Lee Y, Osheroff DD, Hrubesh LW, Poco JF. Interfacial pinning in the superfluid 3He A-B transition in aerogel. *Phys Rev Lett.* 2004; 93(5):055301.
165. Baumgardner JE, Osheroff DD. Phase diagram of superfluid 3He in 99.3% porosity aerogel. *Phys Rev Lett.* 2004; 93(15):155301.
166. Bawazir SA. Consumer attitudes towards community pharmacy services in Saudi Arabia. *Int J of Pharmacy Practice.* 2004; 12(2): 83-89.
167. Bay RC, Bramall N, Price PB. Bipolar correlation of volcanism with millennial climate change. *Proc Natl Acad Sci U S A.* 2004 Apr 27;101(17):6341-5.]
168. Bayir H, Marion DW, Puccio AM, Wisniewski SR, Janesko KL, Clark RS, Kochanek PM. Marked gender effect on lipid peroxidation after severe traumatic brain injury in adult patients. *J Neurotrauma.* 2004;21(1):1-8.
169. Bazin JE, Constantin JM, Gindre G. [Laboratory animal anaesthesia: influence of anaesthetic protocols on experimental models] *Ann Fr Anesth Reanim.* 2004; 23(8):811-8.
170. Beckman M. Preheating primes pruners. Gentle warming charges up protein-chopping system in human skin cells. *Sci Aging Knowledge Environ.* 2004; 2004(12):nf32.
171. Beerenhout C, Dejagere T, van der Sande FM, Bekers O, Leunissen KM, Kooman JP. Haemodynamics and electrolyte balance: A comparison between on-line pre-dilution haemofiltration and haemodialysis. *Nephrology Dialysis Transplantation.* 2004; 19(9): 2354-2359.
172. Beerenhout CH, Noris M, Kooman JP, Poratti F, Binda E, Morigi M, Bekers O, VanDer Sande FM, Todeschini M, Macconi D, Leunissen KML, Remuzzi G. Nitric oxide synthetic capacity in relation to dialysate temperature. *Blood Purif* 2004; 22(2): 203-209.
173. Behrendt HJ, Germann T, Gillen C, Hatt H, Jostock R. Characterization of the mouse cold-menthol receptor TRPM8 and vanilloid receptor type-1 VR1 using a fluorometric imaging plate reader (FLIPR) assay. *Br J Pharmacol.* 2004; 141(4):737-45]
174. Bein B, Tonner PH, Puri GD, Murthy SS. Bispectral index monitoring in patients undergoing cardiac surgery under cardiopulmonary bypass: The influence of temperature changes should be reconsidered [7] (multiple letters). *Eur J Anaesth* 2004; 21(4): 330-333.
175. Belanger MJ, Moore DC, Crisco III JJ, Fadale PD, Hulstyn MJ, Ehrlich MG. Knee laxity does not vary with the menstrual cycle, before or after exercise. *Am J of Sports Med.* 2004; 32(5): 1150-1157.
176. Bell DM, Aguilera X, Anderson R, Bitar D, Cetron M, Simone P, Kai CS, Koh BKW, DiGiovanni Jr C, King A, Lai CK-L, Ma PL, Nicoll A, Leese J, Olsen S, Saradet A, Song M, St John R, Courage S, Steffen R, Prasad L, Su I-J, Lai SK, Hall J, Jesuthasan E, Merianos A, Roth C, Hardiman M, Oshitani H. Public health interventions and SARS spread. *Emerg Infect Dis.* 2004; 10(11):1900-1906.
177. Bellien J, Joannides R, Costentin A, Dutheil-Maillochaud B, Jacob M, Kuhn JM, Thuillez C. [Hand skin heating: a new method for the evaluation of conduit artery endothelial function in insulin-dependent diabetic patients] *Arch Mal Coeur Vaiss.* 2004; 97(7-8):744-8.
178. Bell-Sakyi L. Ehrlichia ruminantium grows in cell lines from four ixodid tick genera. *J Comp Pathol.* 2004; 130(4): 285-293.
179. Belmonte C, Acosta MC, Gallar J. Neural basis of sensation in intact and injured corneas. *Exp Eye Res.* 2004; 78(3):513-25.
180. Belostotskii AM, Goren Z, Gottlieb HE. N-inversion-associated conformational dynamics is unusually rapid in morphine alkaloids. *J Natural Prods.* 2004; 67(11): 1842-1849.
181. Belov ME, Anderson GA, Wingerd MA, Udseth HR, Tang K, Prior DC, Swanson KR, Buschbach MA, Strittmatter EF, Moore RJ, Smith RD. An automated high performance capillary liquid chromatography-Fourier transform ion cyclotron resonance mass spectrometer for high-throughput proteomics. *J Am Soc Mass Spectrom.* 2004 ; 15(2):212-32.
182. Bennell K, Hodges P, Mellor R, Bexander C, Souvlis T. The nature of anterior knee pain following injection of hypertonic saline into the infrapatellar fat pad. *J Orth Res.* 2004; 22(1): 116-121.
183. Bensafi M, Brown WM, Khan R, Levenson B, Sobel N. Sniffing human sex-steroid derived compounds modulates mood, memory and autonomic nervous system function in specific behavioral contexts. *Behavioural Brain Res.* 2004. 152(1):11-22.
184. Ben-Yosef R, Vigler N, Inbar M, Vexler A. Hyperthermia combined with radiation therapy in the treatment of local recurrent breast cancer. *Isr Med Assoc J.* 2004; 6(7):392-5.
185. Bera PP, Horny L, Schaefer HF 3rd. Cyclic perfluorocarbon radicals and anions having high global warming potentials (GWPs): structures, electron affinities, and vibrational frequencies. *J Am Chem Soc.* 2004; 126(21):6692-702.
186. Berdat PA, Immer F, Pfammatter JP, Carrel T. Reoperations in adults with congenital heart disease: analysis of early outcome. *Int J Cardiol.* 2004; 93(2-3):239-45.
187. Berezovski M, Krylov SN. Using non equilibrium capillary electrophoresis of equilibrium mixtures for the determination of temperature in capillary electrophoresis. *Anal Chem.* 2004;76(23):7114-7.
188. Berg RW, Kerridge DH. The NaNO(3)/KNO(3) system: the position of the solidus and sub-solidus. *Dalton Trans.* 2004; (15):2224-9.
189. Bergeron MF, Cannon JG, Hall EL, Kutlar A. Erythrocyte sickling during exercise and thermal stress. *Clin J Sport Med.* 2004; 14(6):354-6.
190. Berjano EJ, Hornero F. Thermal-electrical modeling for epicardial atrial radiofrequency ablation. *IEEE Trans Biomed Eng.* 2004; 51(8): 1348-57.
191. Berliner MN, Maurer AI. Effect of different methods of thermotherapy on skin microcirculation. *Am J Phys Med Rehabil.* 2004; 83(4):292-7.
192. Berlinguer F, Leoni G, Bogliolo L, Pintus PP, Rosati I, Ledda S, Naitana S. FSH different regimes affect the developmental capacity and cryotolerance of embryos derived from oocytes collected by ovum pick-up in donor sheep. *Theriogenology.* 2004; 61(7-8):1477-86.
193. Berlinguer CP, Dragulescu-Andrasi A, Sieber A, Galan-Mascaros JR, Gudel H-U, Achim C, Dunbar KR. A charge-transfer-induced spin transition in the discrete cyanide-bridged complex { [Co(tmphen) 2] 3 [Fe(CN) 6] 2 }. *J Am Chem Soc.* 2004; 126(20): 6222-6223.
194. Berry JD, Rowbotham MC, Petersen KL. Complex regional pain syndrome-like symptoms during herpes zoster. *Pain.* 2004; 110(1-2): e1-12.
195. Berz J. Brust-Frühdiagnostik-System MammoVision®. *Thermomed* 2004,19/20: 59-64
196. Berz J. Infrarot-Imaging in der Veterinärmedizin. *Thermomed* 2004,19/20: 65-68
197. Berz R : 50 Jahre Deutsche Gesellschaft für Thermographie und Regulationsmedizin e.V.- Grund zum Feiern? (Editorial). *Thermomed* 2003,18/19: 2-4
198. Berz R Einladung zum Jubiläumskongress 50 Jahre Deutsche Gesellschaft für Thermographie und Regulationsmedizin e.V. *Thermomed* 2004,19/20: 5-6
199. Berz R. Auf nach Bad Nauheim-sonst verpassen Sie was. *Thermomed* 2004,19/20: 7-9
200. Berz R. 20 Jahre ThermoMED. *Thermomed* 2004,19/20: 33-35
201. Berz R. 50 Jahre Deutsche Gesellschaft für Thermographie und Regulationsmedizin e.V. *Thermomed* 2004,19/20: 45-55
202. Berz R. Ein halbes Jahrhundert- und wo stehen wir heute? (Editorial). *Thermomed* 2004,19/20: 2-4
203. Berz R. Einladung zur Mitgliederversammlung 2004. *Thermomed* 2004,19/20: 16
204. Berz R. Internet-Auftritt der Deutschen Gesellschaft für Thermographie e.V. - www.thermomed.de. *Thermomed* 2003,18/19:65-66
205. Berz R. Mitgliederbefragung. *Thermomed* 2003,18/19: 67
206. Berz R. Nachruf Dr. Hippchen. *Thermomed* 2003,18/19:78-79
207. Berz R. Prof Dr. Arno Rost zum 85. Geburtstag. *Thermomed* 2004,19/20: 69-71
208. Berz R. Programm Jubiläumskongress 50 Jahre Deutsche Gesellschaft für Thermographie und Regulationsmedizin e.V. *Thermomed* 2004,19/20: 10-14
209. Berz R. Punktuelle und flächige Brustthermographie. im Kontakt- und Infrarot-Verfahren - eine vergleichende Übersicht. *Thermomed* 2003,18/19: 29-51
210. Berz R. Visualisierung thermischer Effekte von Mobiltelefonen im Gesichtswärmebild. *Thermomed* 2004,19/20: 26-31
211. Berz R. Nachruf Professor Stüttgen. *Thermomed* 2003, 18/19: 75-77
212. Berz R. T. Anmeldung zum Jubiläumskongress 50 Jahre Deutsche Gesellschaft für Thermographie und Regulationsmedizin e.V. *Thermomed* 2004,19/20:15
213. Besbes S, Blecker C, Deroanne C, Drira N-E, Attia H. Date seeds: Chemical composition and characteristic profiles of the lipid fraction. *Food Chem.* 2004; 84(4): 577-584..
214. Betz G, Burgin PJ, Leuenberger H. Power consumption measurement and temperature recording during granulation. *Int J Pharmaceut.* 2004; 272(1-2): 137-149.
215. Bexis S, Phillis BD, Ong J, White JM, Irvine RJ. Baclofen prevents MDMA-induced rise in core body temperature in rats. *Drug Alcohol Depend.* 2004;74(1):89-96.
216. Beyrau F, Brauer A, Seeger T, Leipertz A. Gas-phase temperature measurement in the vaporizing spray of a gasoline direct-injection

- injector by use of pure rotational coherent anti-Stokes Raman scattering. *Opt Lett*. 2004; 29(3):247-9.
217. Bezabeh T, Evelhoch JL, Thompson P, Sloop DJ, Ackerman JJH. Therapeutic efficacy as predicted by quantitative assessment of murine RIF-1 tumour pH and phosphorous metabolite response during hyperthermia: An in vivo ³¹P NMR study. *Int J Hyperthermia*. 2004; 20(4): 335-357.
218. Bezombes JP, Borisenko KB, Hitchcock PB, Lappert MF, Nycz JE, Rankin DW, Robertson HE. Structures of the radical P[N(SiMe₃)₂] (NPri₂), its dimer, cation and chloro derivative. *Dalton Trans*. 2004; (13):1980-8.
219. Bhattacharya K, Conti S, Zanzotto G, Zimmer J. Crystal symmetry and the reversibility of martensitic transformations. *Nature*. 2004; 428(6978):55-9.
220. Bhowmick P, Coad JE, Bhowmick S, Pryor JL, Larson T, De La Rosette J, Bischoff C. In vitro assessment of the efficacy of thermal therapy in human benign prostatic hyperplasia. *Int J Hyperthermia*. 2004; 20(4): 421-439.
221. Bi C, Benham CJ. WebSIDD: Server for predicting stress-induced duplex destabilized (SIDD) sites in superhelical DNA. *Bioinformatics*. 2004; 20(9): 1477-1479.
222. Bickels J, Kollender Y, Merimsky O, Isaakov J, Petyan-Brand R, Meller I. Closed argon-based cryoablation of bone tumours. *J Bone Joint Surg (Br)*. 2004; 86(5): 714-718.
223. Binda MM, Molinas CR, Mailova K, Koninckx PR. Effect of temperature upon adhesion formation in a laparoscopic mouse model. *Hum Reprod*. 2004; 19(11):2626-32.
224. Bingel U, Lorenz J, Glauche V, Knab R, Glascher J, Weiller C, Buchel C. Somatotopic organization of human somatosensory cortices for pain: a single trial fMRI study. *Neuroimage*. 2004; 23(1):224-32.
225. Bird MJ, MacIntosh DL, Williams PL. Occupational exposures during routine activities in coal-fueled power plants. *J Occup Environ Hyg*. 2004; 1(6):403-13.
226. Birmingham CL, Gutierrez E, Jonat L, Beumont P. Randomized Controlled Trial of Warming in Anorexia Nervosa. *Int J Eating Disorders*. 2004; 35(2):234-238.
227. Bishop JF. Burn wound assessment and surgical management. *Crit Care Nurs Clin North Am*. 2004; 16(1):145-77.
228. Bishop S, Draper DO, Knight KL, Feland JB, Eggett D. Human tissue-temperature rise during ultrasound treatments with the aquaflex gelpad. *J Athletic Training*. 2004; 39(2): 126-131.
229. Bismuto E, Nucci R, Febbraio F, Tanfani F, Gentile F, Briante R, Scire ABertoli E, Amodeo P. Effects induced by mono- and divalent cations on protein regions responsible for thermal adaptation in betaglycosidase from *Sulfolobus solfataricus*. *Eur Biophys J*. 2004; 33(1): 38-49.
230. Bjerring P, Christiansen K, Troilius A, Dierickx C. Facial photo rejuvenation using two different intense pulsed light (IPL) wavelength bands. *Lasers Surg Med*. 2004; 34(2):120-6.
231. Blain S, Guillou J, Treguer P, Woerther P, Delauney L, Follenfant E, Gontier O, Hamon M, Leilde B, Masson A, Tartu C, Vuillemin R. High frequency monitoring of the coastal marine environment using the MARELbuoy. *J Environ Monit*. 2004; 6(6): 569-575.
232. Blanchard S, Bill E, Weyhermuller T, Wieghardt K. N,N-coordinated pi radical anions of S-methyl-1-phenyl-isothiosemicarbazide in two five-coordinate ferric complexes [Fe III(L Me*)(2)X] (X = CH₃S-, Cl-). *Inorg Chem*. 2004 43(7):2324-9.
233. Blanchette M, Labourier E, Green RE, Brenner SE, Rio DC. Genome-wide analysis reveals an unexpected function for the Drosophila splicing factor U2AF50 in the nuclear export of intronless mRNAs. *Molecular Cell*. 2004; 14(6): 775-786.
234. Blazina D, Duckett SB, Halstead TK, Kozak CM, Taylor RJ, Anwar MS, Jones JA, Carteret HA. Generation and interrogation of a pure nuclear spin state by parahydrogen-enhanced NMR spectroscopy: a defined initial state for quantum computation. *Magn Reson Chem*. 2004; Epub ahead of print
235. Blocksom JM, Tyburski JG, Sohn RL, Williams M, Harvey E, Steffes CP, Carlin AM, Wilson RF. Prognostic determinants in duodenal injuries. *Am Surg*. 2004; 70(3):248-55;
236. Blum LS, Nahar N. Cultural and social context of dysentery: implications for the introduction of a new vaccine. *J Health Popul Nutr*. 2004; 22(2):159-69.
237. Bluml S, Friedlich P, Erberich S, Wood JC, Seri I, Nelson Jr MD. MR Imaging of Newborns by Using an MR-compatible Incubator with Integrated Radiofrequency Coils: Initial Experience. *Radiology*. 2004; 231(2): 594-601.
238. Boardman GD, Starbuck SM, Hudgins DB, Li X, Kuhn DD. Toxicity of ammonia to three marine fish and three marine invertebrates. *Environ Toxicology*. 2004; 19(2): 134-142.
239. Boca A, Miller R, Birnbaum KM, Boozer AD, McKeever J, Kimble HJ. Observation of the vacuum Rabi spectrum for one trapped atom. *Phys Rev Lett*. 2004 3;93(23):233603.
240. Bocqueraz O, Koulmann N, Guigas B, Jimenez C, Melin B. Fluid-regulatory hormone responses during cycling exercise in acute hypobaric hypoxia. *Med Sci Sports Exerc*. 2004; 36(10):1730-1736.
241. Boggi U, Ferrari M, Vistoli F, Sgambelluri F, Vignali C, Cioni R, Petruzzi P, Del Chiaro M, Berchioli R, Signori S, Coletti L, Gremmo F, Rizzo G, Mosca F. Rescue of kidney and pancreas grafts with complex vascular lesions. *Transplant Proc*. 2004; 36(3):505-8
242. Bohnhorst B, Gill D, Dordelmann M, Peter CS, Poets CF. Bradycardia and desaturation during skin-to-skin care: no relationship to hyperthermia. *J Pediatr*. 2004 ;145(4):499-502.
243. Boily P, Knight FM. Cold-induced fever and peak metabolic rate in the nine-banded armadillo (*Dasypus novemcinctus*). *Physiol Biochem Zool*. 2004; 77(4):651-7.
244. Bonne TB, Ludtke K, Jordan R, Stepanek P, Papadakis CM. Aggregation behavior of amphiphilic poly(2-alkyl-2-oxazoline) diblock copolymers in aqueous solution studied by fluorescence correlation spectroscopy. *Colloid Polymer Sci*. 2004; 282(8): 833-843.
245. Bonnefille R, Potts R, Chalie F, Jolly D, Peyron O. High-resolution vegetation and climate change associated with Pliocene *Australopithecus afarensis*. *Proc Natl Acad Sci U S A*. 2004;101(33):12125-9.
246. Booth JD, Wilsmore BR, MacDonald AD, Zeyl A, Storlien LH, Taylor NAS. Intramuscular temperatures during exercise in the heat following pre-cooling and pre-heating. *J of Thermal Biol*. 2004. 29(7-8 SPEC. ISS.):709-715.
247. Boovanahalli SK, Kim DW, Chi DY. Application of ionic liquid halide nucleophilicity for the cleavage of ethers: a green protocol for the regeneration of phenols from ethers. *J Org Chem*. 2004; 69(10):3340-4.
248. Boquet A, Cruz C, Nesthus T, Detwiler C, Knecht W, Holcomb K. Clockwise and counterclockwise rotating shifts: Effects on temperature and neuroendocrine measures. *Aviat Space Environ Med*. 2004. 75(10): 898-904.
249. Boral D, Chatterjee S, Bhattacharya K. The occurrence and allergenic potential of airborne pollen in West Bengal, India. *Ann Agricult Environ Med*. 2004; 11(1): 45-52.
250. Borden MA, Pu G, Runner GJ, Longo ML. Surface phase behavior and microstructure of lipid/PEG-emulsifier monolayer-coated microbubbles. *Colloids Surf B Biointerfaces*. 2004; 35(3-4):209-23.
251. Bordo DJ, Dorfman MA. Ecstasy overdose: rapid cooling leads to successful outcome. *Am J Emerg Med*. 2004; 22(4):326-7.
252. Borini A, Bonu MA, Cotichio G, Bianchi V, Cattoli M, Flamigni C. Pregnancies and births after oocyte cryopreservation. *Fertil Steril*. 2004; 82(3):601-5.
253. Borowicz KK, Luszczki JJ, Czuczwar SJ. SIB 1893, a selective mGluR5 receptor antagonist, potentiates the anticonvulsant activity of oxcarbazepine against amygdala-kindled convulsions in rats. *Polish J Pharmacol*. 56(4): 459-464. 2004;
254. Bosak JK. Heat stroke in a great Pyrenees dog. *Can Vet J*. 2004;45(6):513-5.
255. Botting R. Antipyretic therapy. *Front Biosci*. 2004; 9:956-66.
256. Bouchentouf M, Benabdallah BF, Tremblay JP. Myoblast survival enhancement and transplantation success improvement by heat-shock treatment in mdx mice. *Transplantation*. 2004; 77(9):1349-56.
257. Bouhours M, Sternberg D, Davoine CS, Ferrer X, Willer JC, Fontaine B, Tabti N. Functional characterization and cold sensitivity of T1313A, a new mutation of the skeletal muscle sodium channel causing paramyotonia congenita in humans. *J Physiol*. 2004; 554(Pt 3):635-47.
258. Boulton AJ. The diabetic foot: from art to science. The 18th Camillo Golgi lecture. *Diabetologia*. 2004; 47(8):1343-53.
259. Bovenzi M, Welsh AJ, Griffin MJ. Acute effects of continuous and intermittent vibration on finger circulation. *Int Arch Occup Environ Health*. 2004 ; 77(4):255-63.
260. Bowen GJ, Beerling DJ, Koch PL, Zachos JC, Quattlebaum T. A humid climate state during the Palaeocene/Eocene thermal maximum. *Nature*. 2004; 432(7016):495-9.
261. Bowsher D, Brooks J, Enevoldson P. Central Representation of Somatic Sensations in the Parietal Operculum (SII) and Insula. *Eur Neurol*. 2004;52(4):211-25.
262. Boyadzhiyev L, Kancheva D, Gourdon C, Metcheva D. Extraction of valeric acids from valerian (*Valeriana officinalis* L.) rhizomes. *Pharmazie*. 2004; 59(9): 727-728.
263. Boyd A, Moloney S. Digital infrared thermol imaging as biofeedback tool: Monitoring chemotherapy response in a young female with breast cancer mediastinal secondaries. *Thermomed* 2003,18/19: 25-28
264. Boyd A, Moloney S. Infrared Imaging for monitoring the spread of metastases: a case study. *Thermomed* 2003,18/19: 5-8

- 265.Boyd A. Can infrared imaging detect early angiogenic/metabolic activity in the breast (abstract). *Thermol int* 2004; 14(3): 106.
- 266.Bozkurt A, Onaral B. Safety assessment of near infrared light emitting diodes for diffuse optical measurements. *Biomed Eng Online*. 2004 Mar 22;3(1):9.]
- 267.Bradshaw WE, Zani PA, Holzapfel CM. Adaptation to temperate climates. *Evolution Int J Org Evolution*. 2004; 58(8):1748-62.
- 268.Braeken L, Van der Bruggen B, Vandecasteele C. Regeneration of brewery waste water using nanofiltration. *Water Res*. 2004; 38(13): 3075-82.
- 269.Braga D, Maini L. Solid-state versus solution preparation of two crystal forms of [HN(CH₂CH₂)₃NH][OOC(CH₂)COOH]₂. Polymorphs or hydrogen bond isomers? *Chem Commun (Camb)*. 2004; (8):976-7.
- 270.Brajkovic D, Ducharme MB. Cheek skin temperature and thermal resistance in active and inactive individuals during exposure to cold wind. *J Thermal Biol*. 2004. 29(7-8 Spec. Iss.):831-837.
- 271.Bras W, Emsley JW, Levine YK, Luckhurst GR, Seddon JM, Timimi BA. Field-induced alignment of a smectic-A phase: a time-resolved x-ray diffraction investigation. *J Chem Phys*. 2004; 121(9): 4397-413.
- 272.Brasil-Neto JP, Carneiro CR. Monophasic negative sympathetic skin responses and autonomic dysfunction in carpal tunnel syndrome [2]. *Muscle & Nerve*. 2004. 29(2):330-331.
- 273.Brauer A, Pacholik L, Perl T, English MJ, Weyland W, Braun U. Conductive heat exchange with a gel-coated circulating water mattress. *Anesth Analg*. 2004; 99(6):1742-6.
- 274.Brauer A, Pacholik L, Perl T, Mielck F, Weyland W, Braun U. [Heat transfer by conductive warming with circulating-water mattresses] *Anesthesiol Intensivmed Notfallmed Schmerzther*. 2004; 39(8):471-6.
- 275.Brauer A, Perl T, Uyanik Z, English MJ, Weyland W, Braun U. Perioperative thermal insulation: minimal clinically important differences? *Br J Anaesth*. 2004; 92(6):836-40.
- 276.Brauer A, Weyland W, Kazmaier S, Trostendorf U, Textor Z, Hellige G, Braun U. Efficacy of postoperative rewarming after cardiac surgery. *Ann Thorac Cardiovasc Surg*. 2004;10(3):171-7.
- 277.Brauer A. Accidental hypothermia: Rewarming with veno-venous bypass or cardiopulmonary bypass. *J Anesthesiol Intensivmed* 2004. 11(1):37-39.
- 278.Braunbeck P, Favero MS. EO sterilisation (multiple letters). *Zentralsterilisation - Central Service*. 2004; 12(4): 268-269.
- 279.Brausi M, Castagnetti G, Gavioli M, Peracchia G, De Luca G, Olmi R. Radio frequency (RF) ablation of renal tumours does not produce complete tumour destruction: Results of a phase II study. *Eur Urology Supplements*. 2004; 3(3): 14-17.
- 280.Brechignac C, Cahuzac P, Kebaili N, Lando A, Masson A, Schmidt M. Synthesis of silver molybdate clusters driven by laser-annealing. *J Chem Phys*. 2004; 121(19):9617-22.
- 281.Breed WP. What is wrong with the 30-year-old practice of scalp cooling for the prevention of chemotherapy-induced hair loss? *Support Care Cancer*. 2004; 12(1):3-5.
- 282.Breese MB, Rana MA, Osipowicz T, Teo EJ. Enhanced planar channeling of MeV protons through thin crystals. *Phys Rev Lett*. 2004; 93(10):105505.
- 283.Brendel T, Brinkmann R. Mid-infrared laser-induced superheating of water and its quantification by an optical temperature probe. *Appl Opt*. 2004; 20;43(9):1856-62.
- 284.Brettar I, Christen R, Hofle MG, Belliella baltica gen. nov., sp. nov., a novel marine bacterium of the Cytophaga- Flavobacterium- Bacteroides group isolated from surface water of the central Baltic Sea. *Int J Syst Evol Microbiol*. 2004; 54(1):65-70.
- 285.Brey JJ, Garcia de Soria MI, Maynar P, Ruiz-Montero MJ. Energy fluctuations in the homogeneous cooling state of granular gases. *Phys Rev E Stat Nonlin Soft Matter Phys*. 2004; 70(1 Pt 1):011302.
- 286.Brey JJ, Ruiz-Montero MJ, Moreno F. Steady-state representation of the homogeneous cooling state of a granular gas. *Phys Rev E Stat Nonlin Soft Matter Phys*. 2004; 69(5 Pt 1):051303.
- 287.Brey JJ, Ruiz-Montero MJ. Simulation study of the Green-Kubo relations for dilute granular gases. *Phys Rev E Stat Nonlin Soft Matter Phys*. 2004; 70(5 Pt 1):051301.
- 288.Brey JJ, Ruiz-Montero MJ. Validity of the Boltzmann equation to describe low-density granular systems. *Phys Rev E Stat Nonlin Soft Matter Phys*. 2004; 69(1 Pt 1):011305.
- 289.Brittig F, Weinkauff P, Karchner H. Ideal cooling process for paraffin-embedded tissues. *Pathol Oncol Res*. 2004;10(3):172-3.
- 290.Broecker WS. Future global warming scenarios. *Science*. 2004; 304(5669):388.
- 291.Bromilow RH. Paraquat and sustainable agriculture. *Pest Manag Sci*. 2004;60(4):340-9.
- 292.Bronnmann S, Luterbacher J, Staehelin J, Svendby TM, Hansen G, Svenoe T. Extreme climate of the global troposphere and stratosphere in 1940-42 related to El Nino. *Nature*. 2004; 431(7011): 971-974.
- 293.Brooks T, Osicki R, Springthorpe V, Sattar S, Filion L, Abrial D, Riffard S. Detection and identification of Legionella species from groundwaters. *J Toxicol Environ Health A*. 2004; 67(20-22):1845-59.
- 294.Brouillette J, Clark RB, Giles WR, Fiset C. Functional properties of K⁺ currents in adult mouse ventricular myocytes. *J Physiol*. 2004; 559(3): 777-798.
- 295.Brown EB, Boucher Y, Nasser S, Jain RK. Measurement of macromolecular diffusion coefficients in human tumors. *Microvasc Res*. 2004; 67(3):231-6.
- 296.Brown KM, Fraser KP, Barnes DK, Peck LS. Links between the structure of an Antarctic shallow-water community and ice-scour frequency. *Oecologia*. 2004, 141(1):121-9.
- 297.Brown MD, Hursthouse MB, Levason W, Ratnani R, Reid G. Synthesis, spectroscopic and structural properties of hexavalent molybdenum complexes with thio- and seleno-ether ligands. *Dalton Trans*. 2004; (16):2487-91.
- 298.Brühwiler PA, Ducas C, Huber R, Bishop PA. Bicycle helmet ventilation and comfort angle dependence. *Eur J Appl Physiol*. 2004; 92(6): 698-701.
- 299.Brundage SI, Zautke NA, Holcomb JB, Spain DA, Lam JC, Mastrangelo MA, Macaitis JM, Tweardy DJ. Interleukin-6 infusion blunts proinflammatory cytokine production without causing systematic toxicity in a swine model of uncontrolled hemorrhagic shock. *J Trauma*. 2004;57(5):970-978;
- 300.Bruno RL, Almeida AF, Nascimento Filho V, Aguiar ML, Gonçalves JAS, Coury JR. Atmospheric particulate matter in the city of São Carlos/SP, Brazil. *Int J Environ Pollut*. 2004; 22(4): 476-489.
- 301.Brunson DB, Hogan KJ. Malignant hyperthermia: A syndrome not a disease. *Vet Clinics of North America - Small Animal Practice*. 34(6 Spec.Iss.): 2004;1419-1433.
- 302.Brzezinska-Slebodzińska E, Sleboziński AB. Changes in thyroxine, 3,3',5-triiodothyronine and 3,3',5'-triiodothyronine content in the thyroid gland and in serum to thyroid tissue iodothyronine ratios during ontogenesis in the fetal pig. *Acta Vet Hung*. 2004;52(4):379-87.
- 303.Bucher W. Regulationsthermographie mit Infrarot-Sensoren. *Thermomom* 2004,19/20: 37-43
- 304.Buck S, Pennfather PS, Xue HY, Grant J, Cheng Y-L, Allen CJ. Engin lipobeads: Properties of the hydrogel core and the lipid bilayershell. *Biomacromolecules*. 2004; 5(6): 2230-2237.
- 305.Buckenmaier SMC, McCalley DV, Euerby MR. Rationalisation of unusual changes in efficiency and retention with temperatures shown for bases in reversed-phase high-performance liquid chromatography at intermediate pH. *J Chromat. A.*. 2004; 1060(1-2 Spec. Iss.): 117-126.
- 306.Buggy DJ, Kerin MJ. Paravertebral analgesia with levobupivacaine increases postoperative flap tissue oxygen tension after immediate latissimus dorsi breast reconstruction compared with intravenous opioid analgesia. *Anesthesiology*. 2004; 100(2):375-80.
- 307.Buisson P, Bach V, Elabbassi EB, Chardon K, Delanaud S, Canarelli J-P, Libert J-P. Assessment of the efficiency of warming devices during neonatal surgery. *Eur J Appl Physiol*. 2004; 92(6): 694-697.
- 308.Bukulmez O, Arici A. Luteal phase defect: Myth or reality. *Obstet Gynec Clin North America*. 2004;31(4): 727-744.
- 309.Buono MJ, Burke S, Endemann S, Graham H, Gressard C, Griswold L, Michalewicz B. The effect of ambient air temperature on whole-body bioelectrical impedance. *Physiol Meas*. 2004;25(1):119-123.
- 310.Burchardt D, Gorski S. Thermographic diagnosis of periodontal area in 16-17 years old healthy adolescents (abstract). *Thermol int* 2004, 14(2): 81.
- 311.Burger R, Bendszus M, Vince GH, Solymosi L, Roosen K. Neurophysiological monitoring, magnetic resonance imaging, and histological assays confirm the beneficial effects of moderate hypothermia after epidural focal mass lesion development in rodents. *Neurosurgery*. 2004; 54(3):701-712.
- 312.Burgner D, D'Amato M, Kwiatkowski DP, Loakes D. Improved allelic differentiation using sequence-specific oligonucleotide hybridization incorporating an additional base-analogue mismatch. *Nucleosides Nucleotides Nucleic Acids*. 2004;23(5): 755-765.
- 313.Burioni R, Cassi D, Cecconi F, Vulpiani A. Topological Thermal Instability and Length of Proteins. *Proteins: Structure, Funct Genet*. 2004;55(3): 529-535.
- 314.Bush GW, Kerry J. Bush and Kerry Offer Their Views on Science. *Science*. 2004 Sep 15; Epub ahead of print
- 315.Bush MB, Silman MR, Urrego DH. 48,000 years of climate and forest change in a biodiversity hot spot. *Science*. 2004; 303(5659):827-9.

316. Busic V, Das-Gupta R. Temperature monitoring in free flap surgery [1]. *Br J Plastic Surg.* 2004; 57(6):588.
317. Buszewicz G, Madro R. Stability of toluene and reduction of acetone to 2-propanol in homogenates of the human liver, brain and lungs. *Forensic Sci Int.* 2004;141(1):63-8.
318. Button DK, Robertson B, Gustafson E, Zhao X. Experimental and theoretical bases of specific affinity, a cytoarchitecture-based formulation of nutrient collection proposed to supercede the Michaelis-Menten paradigm of microbial kinetics. *Appl Environ Microbiol.* 2004; 70(9):5511-21.
319. Butudom P, Barnes DJ, Davis MW, Nielsen BD, Eberhart SW, Schott HC 2nd. Rehydration fluid temperature affects voluntary drinking in horses dehydrated by furosemide administration and endurance exercise. *Vet J.* 2004;167(1):72-80.
320. Buzrul S, Alpas H. Modeling the synergistic effect of high pressure and heat on inactivation kinetics of *Listeria innocua*: A preliminary study. *FEMS Microbiol Letters.* 2004; 238(1): 29-36.
321. Byrnes MJ, Chisholm MH, Dye DF, Hadad CM, Pate BD, Wilson PJ, Zaleski JM. 9,10-Anthracene dicarboxylate bridged complexes with M₂ quadruply bonded dimetal units: [M₂(O₂CtBu)₃]₂(μ-9,10-An(CO)₂)₂], where M = Mo or W. *Dalton Trans.* 2004; (4):523-9.
322. Caggioni M, Rosh A, Barjani S, Mantegazza F, Iannacchione GS, Bellini T. Isotropic to nematic transition of aerosil-disordered liquid crystals. *Phys Rev Lett.* 2004;93(12):127801.
323. Cai XY, Chen GA, Lian Y, Zheng XY, Peng HM. [Influence of cryoprotectant and cooling rate in vitrification method on the spindles of rabbit oocytes.] *Beijing Da Xue Xue Bao.* 2004;36(6):566-70.
324. Cain SF 3rd, Davis GA, Loheide SP 3rd, Butler JJ Jr. Noise in pressure transducer readings produced by variations in solar radiation. *Ground Water.* 2004; 42(6-7):939-44.
325. Caine-Bish NL, Potkanowicz ES, Otterstetter R, Glickman EL. Thermal and metabolic responses of sleep deprivation of humans during acute cold exposure. *Aviat Space Environ Med.* 2004;75(11):964-968.
326. Cairns ML, Burns P, Di Nicolantonio R, McKinley MJ, Mathai ML. Influence of brain angiotensin on thermoregulation and hydromineral balance during pregnancy in rats. *J Appl Physiol.* 2004 Dec 3; Epub ahead of print
327. Cajochen C, Munch M, Kobiak S, Krauchi K, Steiner R, Oelhafen P, Orgul S, Wirz-Justice A. High sensitivity of human melatonin, alertness, thermoregulation and heart rate to short wavelength light. *J Clin Endocrinol Metab.* 2004 Dec 7; Epub ahead of print
328. Calasso M, Parmeggiani PL. Thermogenesis of interscapular brown adipose tissue selectively influences pontine and preoptic-hypothalamic temperatures during sleep in the rat. *Brain Res.* 2004; 1015(1-2): 103-6.
329. Calbet JA, Holst JJ. Gastric emptying, gastric secretion and enterogastric response after administration of milk proteins or their peptide hydrolysates in humans. *Eur J Nutrition.* 2004; 43(3): 127-139.
330. Calik G, Pehlivan N, Ozcelik IS, Calik P, Ozdamar TH. Fermentation and oxygen transfer characteristics in serine alkaline protease production by recombinant *Bacillus subtilis* in molasses-based complex medium. *J Chem Technol Biotechnol.* 2004;79(11): 1243-1250.
331. Calkins H. Catheter ablation of atrial flutter: Do outcomes of catheter ablation with 'large-tip' versus 'cooled-tip' catheters really differ? *J Cardiovasc Electrophysiol.* 2004. 15(10):1131-1132.
332. Callaghan TV, Bjorn LO, Chernov Y, Chapin T, Christensen TR, Huntley B, Ims RA, Johansson M, Jolly D, Jonasson S, Matveyeva N, Panikov N, Oechel W, Shaver G, Elster J, Henttonen H, Laine K, Taulavuori K, Taulavuori E, Zockler C. Biodiversity, distributions and adaptations of Arctic species in the context of environmental change. *Ambio.* 2004 Nov;33(7):404-17.
333. Callaghan TV, Bjorn LO, Chernov Y, Chapin T, Christensen TR, Huntley B, Ims RA, Johansson M, Jolly D, Jonasson S, Matveyeva N, Panikov N, Oechel W, Shaver G. Uncertainties and recommendations. *Ambio.* 2004; 33(7):474-9.
334. Callaghan TV, Bjorn LO, Chernov Y, Chapin T, Christensen TR, Huntley B, Ims RA, Johansson M, Jolly D, Jonasson S, Matveyeva N, Panikov N, Oechel W, Shaver G, Schaphoff S, Sitch S, Zockler C. Synthesis of effects in four Arctic subregions. *Ambio.* 2004; 33(7): 469-73.
335. Callaghan TV, Bjorn LO, Chernov Y, Chapin T, Christensen TR, Huntley B, Ims RA, Johansson M, Jolly D, Jonasson S, Matveyeva N, Panikov N, Oechel W, Shaver G, Schaphoff S, Sitch S. Effects of changes in climate on landscape and regional processes, and feedbacks to the climate system. *Ambio.* 2004; 33(7):459-68.
336. Callaghan TV, Bjorn LO, Chernov Y, Chapin T, Christensen TR, Huntley B, Ims RA, Johansson M, Jolly D, Jonasson S, Matveyeva N, Panikov N, Oechel W, Shaver G. Effects on the function of Arctic ecosystems in the short- and long-term perspectives. *Ambio.* 2004; 33(7):448-58.
337. Callaghan TV, Bjorn LO, Chernov Y, Chapin T, Christensen TR, Huntley B, Ims RA, Johansson M, Jolly D, Jonasson S, Matveyeva N, Panikov N, Oechel W, Shaver G, Henttonen H. Effects on the structure of Arctic ecosystems in the short- and long-term perspectives. *Ambio.* 2004; 33(7):436-47.
338. Callaghan TV, Bjorn LO, Chernov Y, Chapin T, Christensen TR, Huntley B, Ims RA, Johansson M, Jolly D, Jonasson S, Matveyeva N, Panikov N, Oechel W, Shaver G, Elster J, Jonsdottir IS, Laine K, Taulavuori K, Taulavuori E, Zockler C. Responses to projected changes in climate and UV-B at the species level. *Ambio.* 2004; 33(7):418-35.
339. Callaghan TV, Bjorn LO, Chernov Y, Chapin T, Christensen TR, Huntley B, Ims RA, Johansson M, Jolly D, Jonasson S, Matveyeva N, Panikov N, Oechel W, Shaver G. Past changes in Arctic terrestrial ecosystems, climate and UV radiation. *Ambio.* 2004; 33(7):398-403.
340. Callaghan TV, Johansson M, Heal OW, Saelthun NR, Barkved LJ, Bayfield N, Brandt O, Brooker R, Christiansen HH, Forchhammer M, Høye TT, Humlum O, Jarvinen A, Jonasson C, Kohler J, Magnusson B, Møltøfte H, Mortensen L, Neuvonen S, Pearce I, Rasch M, Turner L, Hasholt B, Huhta E, Leskinen E, Nielsen N, Sikkamäki P. Environmental changes in the North Atlantic Region: SCANNET as a collaborative approach for documenting, understanding and predicting changes. *Ambio.* 2004; Spec No 13(13):39-50.
341. Callaway SR, Ratz JL. Surgical pearl: Cryoblast, a modified cryosurgical technique for thick lesions. *J Am Acad Dermatol* 2004; 51(3): 458-459.
342. Camara AK, Riess ML, Kevin LG, Novalija E, Stowe DF. Hypothermia augments reactive oxygen species detected in the guinea pig isolated perfused heart. *Am J Physiol Heart Circ Physiol.* 2004; 286(4): H1289-99.
343. Cambier C, Weirinx M, Clerbaux T, Detry B, Liardet M-P, Marville V, Frans AGustin P. Haemoglobin oxygen affinity and regulating factors of the blood oxygen transport in canine and feline blood. *Res Vet Sci.* 2004; 77(1): 83-88.
344. Campana F, Zervoudis S, Perdureau B, Gez E, Fourquet A, Badiu C, Tsakiris G, Koulaloglou S. Topical superoxide dismutase reduces post-irradiation breast cancer fibrosis. *J Cell Mol Med.* 2004; 8(1): 109-16.
345. Cankar K, FINDERLE Z, Struel M. The role of α1- and α2- adrenoreceptors in gender differences in cutaneous LD flux response to local cooling. *Microvasc Res.* 2004. 68(2):126-131.
346. Cantel S, Desranges S, Martinez J, Fehrentz J-A. Saponification of esters of chiral α-amino acids anchored through their amine function on solid support. *J Peptide Sci.* 2004; 10(6): 326-328.
347. Cao Y, Davidson MR, O'Connor AJ, Stevens GW, Cooper-White JJ. Architecture control of three-dimensional polymeric scaffolds for soft tissue engineering. I. Establishment and validation of numerical models. *J Biomed Mater Res.* 2004 Oct 1;71A(1):81-9.
348. Capp CL, Dorwart WC, Elias NT, Hillman SR, Lancaster SS, Nair RC, Ngo BT, Rendell MS, Smith DM. Post pressure hyperemia in the rat. *Comp Biochem Physiol. A Mol Integr Physiol.* 2004. 137(3):533-546.
349. Caputa M. Selective brain cooling: A multiple regulatory mechanism. *J Thermal Biol.* 2004; 29(7-8 Spec. Iss.):691-702.
350. Cardin S, Pagliassotti MJ, Moore MC, Edgerton DS, Lautz M, Farmer B, Neal DW, Cherrington AD. Vagal cooling and concomitant portal norepinephrine infusion do not reduce net hepatic glucose uptake in conscious dogs. *Am J Physiol Regul Integr Comp Physiol.* 2004; 287(4):R742-8.
351. Carpenter JS, Gilchrist JM, Chen K, Gautam S, Freedman RR. Hot flashes, core body temperature, and metabolic parameters in breast cancer survivors. *Menopause.* 2004;11(4):375-81.
352. Carrillo MA, Kaliyan N, Cannon CA, Morey RV, Wilcke WF. A simple method to adjust cooling rates for supercooling point determination. *Cryo Letters.* 2004; 25(3):155-60.
353. Carsi B, Lopez-Lacomba JL, Sanz J, Marco F, Lopez-Duran L. Cryoprotectant permeation through human articular cartilage. *Osteoarthritis Cartilage.* 2004; 12(10):787-92.
354. Carvalho AS, Santos AM, Neves-Petersen MT, Petersen SB, Aires-Barros MR, e Melo EP. Conformational states of HRP1A induced by thermal unfolding: effect of low molecular weight solutes. *Biopolymers.* 2004;75(2):173-86.
355. Carver AD, Unger DR, Parks CL. Modeling Energy Savings from Urban Shade Trees: An Assessment of the CITYgreen(R) Energy Conservation Module. *Environ Manage.* 2004; Epub ahead of print
356. Caspani ML, Savioli M, Crotti S, Bruzzone P, Gattinoni L. Heat stress: Characteristics, pathophysiology and avoidable mistakes. *Minerva Anestesiologica.* 70(7-8):617-624. 2004.
357. Cassey J, Strezov V, Armstrong P, Forsyth R, Lucas J, Jones B, Farrell P. Influence of control variables on mannequin temperature in a paediatric operating theatre. *Paediatr Anaesth.* 14(2):130-134. 2004.

- 358.Cataldo F, Keheyan Y, Baccaro S. The effect of gamma-irradiation of anthracite coal and oil bitumen. *J Radioanal Nucl Chem*. 2004; 262(2): 443-450.
- 359.Cattuto C, Marconi UM. Ordering phenomena in cooling granular mixtures. *Phys Rev Lett*. 2004; 92(17):174502.
- 360.Cereda M, Maccioli GA. Intraoperative Temperature Monitoring. *Int Anesthesiol Clin*. 2004; 42(2): 41-54.
- 361.Cestari AR, Vieira EFS, Lopes ECN, Da Silva RG. Kinetics and equilibrium parameters of Hg(II) adsorption on silica-dithizone. *J Coll Interface Sci*. 2004;272(2): 271-276.
- 362.Chaerle L, Hagenbeek D, De Bruyne E, Valcke R, Van Der Straeten D. Thermal and chlorophyll-fluorescence imaging distinguish plant-pathogen interactions at an early stage. *Plant Cell Physiol*. 2004; 45(7): 887-96.
- 363.Chakraborty J. The geographic distribution of potential risks posed by industrial toxic emissions in the U.S. *J Environ Sci Health A Tox Hazard Subst Environ Eng*. 2004;39(3):559-75.
- 364.Chakravarti R, Sahai V. Compactin - A review. *Appl Microbiol Biotechnol*. 2004; 64(5): 618-624.
- 365.Chambers KC, Wang Y. Role of the lateral parabrachial nucleus in apomorphine-induced conditioned consumption reduction: cooling lesions and relationship of c-Fos-like immunoreactivity to strength of conditioning. *Behav Neurosci*. 2004; 118(1):199-213.
- 366.Chan AH, Fujimoto VY, Moore DE, Held RT, Paun M, Vaezy S. In vivo feasibility of image-guided transvaginal focused ultrasound therapy for the treatment of intracavitary fibroids. *Fertil Steril*. 2004 Sep;82(3):723-30.
- 367.Chan HH, Lam LK, Wong DS, Kono T, Trendell-Smith N. Use of 1,320 nm Nd:YAG laser for wrinkle reduction and the treatment of atrophic acne scarring in Asians. *Lasers Surg Med*. 2004;34(2):98-103.
- 368.Chan L-S, Cheung GTY, Lauder IJ, Kumana CR. Screening for fever by remote-sensing infrared thermographic camera. *J Travel Med*. 2004; 11(5): 273-279.
- 369.Chandra S, Persad V, Young D, Baskett T. A preliminary study of cutaneous blood flow associated with postpartum use of oral misoprostol. *J Obstet Gynaecol Can*. 2004; 26(12):1073-6.
- 370.Chang I, Mikityansky I, Wray-Cahen D, Pritchard WF, Karanian JW, Wood BJ. Effects of perfusion on radiofrequency ablation in swine kidneys. *Radiology*. 2004; 231(2):500-5.
- 371.Chang YC, Tsai H-F, Karos M, Kwon-Chung KJ. THTA, a thermotolerance gene of *Aspergillus fumigatus*. *Fungal Genetics Biol*. 2004; 41(9): 888-896.
- 372.Chao BH, He X, Bischof JC. Pre-treatment inflammation induced by TNF- α augments cryosurgical injury of human prostate cancer. *Cryobiol*. 2004; 49(1): 10-27.
- 373.Chapman JW, Reynolds DR, Smith AD, Smith ET, Woiwod IP. An aerial netting study of insects migrating at high altitude over England. *Bull Entomol Res*. 2004 ; 94(2):123-36.
- 374.Chapon LC, Blake GR, Gutmann MJ, Park S, Hur N, Radaelli PG, Cheong SW. Structural anomalies and multiferroic behavior in magnetically frustrated TbMn₂O₅. *Phys Rev Lett*. 2004; 93(17):177402.
- 375.Chappard C, Bonneval J, Colson M, Mathern G, Emonot A. Forecast of pollination dates and relation to onset of allergic pathology. *Aerobiologia*. 2004; 20(1): 35-42.
- 376.Charron D, Thomas M, Waltner-Toews D, Aramini J, Edge T, Kent R, Maarouf A, Wilson J. Vulnerability of waterborne diseases to climate change in Canada: a review. *J Toxicol Environ Health A*. 2004; 67 (20-22): 1667-77.
- 377.Chaturvedi D, Vilhekar KY, Chaturvedi P, Bharambe MS. Comparison of axillary temperature with rectal or oral temperature and determination of optimum placement time in children. *Indian Pediatr*. 2004; 41(6): 600-603.
- 378.Cheatham CC, Caine-Bish N, Blegen M, Potkanowicz ES, Glickman EL. Nicotine effects on thermoregulatory responses of men and women during acute cold exposure. *Aviat Space Environ Med*. 2004; 75(7): 589-595.
- 379.Chen FF, Zhang HF, Qin FX, Hu ZQ. Molecular dynamics study of atomic transport properties in rapidly cooling liquid copper. *J Chem Phys*. 2004; 120(4):1826-31.
- 380.Chen L, Xie X, Yu ZW, Quinn PJ. The kinetics and mechanism of the formation of crystalline phase of dipalmitoylphosphatidylethanolamine dispersed in aqueous dimethyl sulfoxide solutions. *Chem Phys Lipids*. 2004; 127(2):153-159.
- 381.Chen S, Dong X. *Acetanaerobacterium elongatum* gen. nov., sp. nov., from paper mill waste water. *Int J Syst Evol Microbiol*. 2004; 54(6):2257-2262.
- 382.Chen TB, Luo W, Gao D, Zhen GD. [Stratification of bulk density and its dynamics in the process of co-composting] *Huan Jing Ke Xue*. 2004; 25(5):143-7.
- 383.Chen TK, Chen JN. Combined membrane bioreactor (MBR) and reverse osmosis (RO) system for thin-film transistor-liquid crystal display TFT-LCD, industrial wastewater recycling. *Water Sci Technol*. 2004;50(2):99-106.
- 384.Chen Y, Zhang GG, Neilly J, Marsh K, Mawhinney D, Sanzgiri YD. Enhancing the bioavailability of ABT-963 using solid dispersion containing Pluronic F-68. *Int J Pharm*. 2004 ; 286(1-2):69-80.
- 385.Chen Y, Jia Z, Schaper A, Kristiansen M, Smith P, Wombacher R, Wendorff JH, Greiner A. Hydrolytic and enzymatic degradation of liquid-crystalline aromatic/aliphatic copolyesters. *Biomacromolecules*. 2004; 5(1): 11-16.
- 386.Cheng HW, Freire R, Pajor EA. Endotoxin stress responses in chickens from different genetic lines. 1. Sickness, behavioral, and physical responses. *Poult Sci*. 2004; 83(5):707-15.
- 387.Cheng SC, Jou IM, Chern TC, Wang PH, Chen WC. The effect of normal saline irrigation at different temperatures on the surface of articular cartilage: an experimental study in the rat. *Arthroscopy*. 2004; 20(1):55-61.
- 388.Cheng X, Wang Y, Hanein Y, Bohringer KF, Ratner BD. Novel cell patterning using microheater-controlled thermoresponsive plasma films. *J Biomed Mater Res A*. 2004; 70(2): 159-168.
- 389.Cheng Y-C, Tsai S-W. Enantioselective esterification of (RS)-2-(4-chlorophenoxy)propionic acid via *Carica papaya* lipase in organic solvents. *Tetrahedron-Asymmetry*. 2004; 15(18): 2917-2920.
- 390.Cherbun N, Brinkman C. Cognition is cool: Can hemispheric activation be assessed by tympanic membrane thermometry? *Brain Cogn*. 2004; 54(3):228-31. 140:
- 391.Cherepanov AV, De Vries S. Microsecond freeze-hyperquenching: development of a new ultrafast micro-mixing and sampling technology and application to enzyme catalysis. *Biochim Biophys Acta*. 2004 12;1656(1):1-31.
- 392.Cherniack M, Brammer AJ, Lundstrom R, Meyer J, Morse TF, Nealy G, Nilsson T, Peterson D, Toppilla E, Warren N, Fu RW, Bruneau H. Segmental nerve conduction velocity in vibration-exposed shipyard workers. *Int Arch Occup Environ Health*. 2004. 7(3) 159-176.
- 393.Chernushevich IV, Thomson BA. Collisional cooling of large ions in electrospray mass spectrometry. *Anal Chem*. 2004; 76(6):1754-60.
- 394.Chernyshev AK. [""TermoSpot"" for the liquid-crystal indication of postoperative hypothermia in newborns] *Anesteziol Reanimatol*. 2004; (1):19-20.
- 395.Chesney ML. Pediatric firearm injuries. *Air Med J*. 2004. 23(6)10-13
- 396.Chess C, Boffa MJ. No need to forego cooling when you need compression. *J Am Acad Dermatol*. 2004;51(4)673.
- 397.Cheung S, Robinson A. The influence of upper-body pre-cooling on repeated sprint performance in moderate ambient temperatures. *J Sports Sci*. 2004; 22(7):605-12.
- 398.Cheung SS, Sleivert GG. Lowering of skin temperature decreases isokinetic maximal force production independent of core temperature. *Eur J Appl Physiol*. 2004; 91(5-6):723-8.
- 399.Childs C, Hadcock J, Ray A, King AT, Protheroe R. Temperature measurement after severe head injury. *Anaesthesia* 2004; 59(2): 192-193.
- 400.Chin C, Bartenstein M, Altmeyer A, Riedl S, Jochim S, Denschlag JH, Grimm R. Observation of the pairing gap in a strongly interacting Fermi gas. *Science*. 2004; 305(5687):1128-30.
- 401.Chin DX, Fraser JA, Usher-Smith JA, Skepper JN, Huang CL. Detubulation abolishes membrane potential stabilization in amphibian skeletal muscle. *J Muscle Res Cell Motil*. 2004;25(4-5):379-387.
- 402.Chin Heng B, Yu H, Chye Ng S. Strategies for the cryopreservation of microencapsulated cells. *Biotechnol Bioeng*. 2004; 85(2):202-13.
- 403.Chin L, Sherar M. Changes in the dielectric properties of rat prostate ex vivo at 915 MHz during heating. *Int J Hyperthermia*. 2004; 20(5): 517-527.
- 404.Chin T, Welsby PD. Malaria in the UK: past, present, and future. *Postgrad Med J*. 2004, 80(949): 663-6.
- 405.Chinwetkitvanich S, Randall CW, Panswad T. Effects of phosphorus limitation and temperature on PHA production in activated sludge. *Water Sci Technol*. 2004;50(8): 135-143.
- 406.Chirase NK, Purdy CW, Avampato JM. Effect of simulated ambient particulate matter exposure on performance, rectal temperature, and leukocytosis of young Spanish goats with or without tiludron phosphate. *J Anim Sci*. 2004; 82(4):1219-26.
- 407.Chng SY, Chia F, Leong KK, Kwang YP, Ma S, Lee BW, Vaithinathan R, Tan CC. Mandatory temperature monitoring in schools during SARS. *Arch Dis Child*. 2004; 89(8): 738-739.
- 408.Choe Y, Kim T, Kim W. Dispersion of functional tetraphenylporphyrin-ligated metal into ultra-thin flexible acrylate films: 1. Preparation of thin films. *Colloids Surf B: Biointerfaces*. 2004; 38(3-4 Spec. Iss.): 155-160.

409. Choi B, Majaron B, Nelson JS. Computational model to evaluate port wine stain depth profiling using pulsed photothermal radiometry. *J Biomed Opt.* 2004; 9(2):299-307.
410. Choi P, Mattice WL. Molecular origin of demixing, prior to crystallization, of atactic polypropylene/isotactic polypropylene blends upon cooling from the melt. *J Chem Phys.* 2004; 121(17):8647-51.
411. Cholewka A, Drzazga Z, Michnik A, Sieron A, Wisniewska B. Temperature Effects of Whole Body Cryotherapy Determined by Thermography. *Therm Int.* 2004; 14(2): 57-63.
412. Chong A. Assessing and managing fever in children. *Med Today.* 2004; 5(7): 18-24.
413. Chong TWH, Castle DJ. Layer upon layer: Thermoregulation in schizophrenia. *Schizophrenia Res.* 2004. 69(2-3):149-157.
414. Choudhary RP, Fuster V, Fayad ZA. Molecular, cellular and functional imaging of atherothrombosis. *Nature Reviews. Drug Discovery.* 2004; 3(11): 913-925.
415. Christ G, Dohm OS, Schule E, Gaupp S, Martin M. Air density correction in ionization dosimetry. *Phys Med Biol.* 2004; 49(10): 2029-2039.
416. Christen S, Delachaux A, Dischl B, Golay S, Liaudet L, Feihl F, Waebler B. Dose-dependent vasodilatory effects of acetylcholine and local warming on skin microcirculation. *J Cardiovasc Pharmacol.* 2004; 44(6):659-64.
417. Christensson M, Welander T. Treatment of municipal wastewater in a hybrid process using a new suspended carrier with large surface area. *Water Sci Technol.* 2004; 49(11-12): 207-214.
418. Chua SH, Ang P, Khoo LS, Goh CL. Nonablative 1450-nm diode laser in the treatment of facial atrophic acne scars in type IV to V Asian skin: a prospective clinical study. *Dermatol Surg.* 2004; 30(10):1287-91.
419. Chuang HH, Neuhauser WM, Julius D. The super-cooling agent icilin reveals a mechanism of coincidence detection by a temperature-sensitive TRP channel. *Neuron.* 2004; 43(6):859-69.
420. Chuang K-S, Liu W-C, Liu J-C. Alteration in cardiovascular function and body surface temperature during percutaneous stereotactic upper thoracic ganglionectomy and sympathectomy in palmar hyperhidrotic patients. *Clin Auton Res.* 2004; 14(4): 259-263.
421. Chun Y, Sheng G, Chiou GT, Xing B. Compositions and sorptive properties of crop residue-derived chars. *Environ Sci Technol.* 2004; 38(17): 4649-4655.
422. Churchill RS, Boorman RS, Fehringer EV, Matsen III FA, Glenoid Cementing may generate Sufficient Heat to Endanger the Surrounding Bone. *Clin Orthop.* 2004; (419):76-79.
423. Cicinelli E, Einer-Jensen N, Barba B, Luisi D, Alfonso R, Tartagni M. Blood to the cornual area of the uterus is mainly supplied from the ovarian artery in the follicular phase and from the uterine artery in the luteal phase. *Hum Reprod.* 2004; 19(4):1003-8. E
424. Cimbala JM, Brenizer JS, Chuang AP, Hanna S, Thomas Conroy C, El-Ganayni AA, Riley DR. Study of a loop heat pipe using neutron radiography. *Appl Radiat Isot.* 2004; 61(4):701-5.
425. Citerio G, Cormio M, Polderman KH. [Moderate hypothermia in traumatic brain injury: results of clinical trials] *Minerva Anestesiol.* 2004; 70(4):213-8.
426. Clark PU, McCabe AM, Mix AC, Weaver AJ. Rapid rise of sea level 19,000 years ago and its global implications. *Science.* 2004; 304(5674): 1141-4.
427. Clarke GN, Liu DY, Baker HW. Improved sperm cryopreservation using cold cryoprotectant. *Reprod Fertil Dev.* 2004; 15(7): 377-81.
428. Clifton GL. Is keeping cool still hot? An update on hypothermia in brain injury. *Curr Opin Crit Care.* 2004; 10(2):116-9.
429. Cline H, Mallozzi R, Li Z, McKinnon G, Barber W. Radiofrequency power deposition utilizing thermal imaging. *Magn Reson Med.* 2004; 51(6):1129-1137.
430. Cockell CS, Cordoba-Jabonero C. Coupling of climate change and biotic UV exposure through changing snow-ice covers in terrestrial habitats. *Photochem Photobiol.* 2004; 79(1):26-31.
431. Cohen L, Smith MJ, Leroux-Hugon V, Paul Broca's thermometric crown. *J Neurol Neurosurg Psychiatr.* 2004; 75(1): 32.
432. Collins CM, Smith MB, Turner R. Model of local temperature changes in brain upon functional activation. *J Appl Physiol.* 2004; 97(6): 2051-2055.
433. Collyer W, Venkatesh R, Vanlangendonck R, Morissey K, Humphrey P, Yan Y, Landman J. Enhanced renal cryoablation with hilar clamping and intrarenal cooling in a porcine model. *Urology.* 2004; 63(6):1209-12.
434. Colman D, Leal Brioschi M, Cimbalista Jr M, Mila Tambara E, Fabricio De Melo MCB, Pimpa-o Blume L. Macroscopic Infrared Analysis of Inhaled Nitrous Oxide Diffusion to Abdominal Cavity in Rats Submitted to Pneumoperitoneum. *Reva Brasil Anestesiol.* 2004; 54(2): 218-228.
435. Comerford EJ, Innes JE, Tarlton JE, Bailey AJ. Investigation of the composition, turnover, and thermal properties of ruptured cranial cruciate ligaments of dogs. *Am J Vet Res.* 2004; 65(8): 1136-1141.
436. Connor CW, Hynynen K. Patterns of thermal deposition in the skull during transcranial focused ultrasound surgery. *IEEE Trans Biomed Eng.* 2004; 51(10):1693-706.
437. Consani RI, Domitti SS, Mesquita MF, Consani S. Effect of packing types on the dimensional accuracy of denture base resin cured by the conventional cycle in relation to post-pressing times. *Braz Dent J.* 2004; 15(1):63-7.
438. Conti B, Tabarean I, Andrei C, Bartfai T. Cytokines and fever. *Front Biosci.* 2004; 9:1433-49. Review.
439. Cook ER, Woodhouse CA, Eakin CM, Meko DM, Stahle DW. Long-term aridity changes in the western United States. *Science.* 2004 Nov 5; 306(5698):1015-8.
440. Cooney RC, de Waard JH, Yakus MA, Rivera I, Chopite M, Toney SR, Morlock GP, Butler WR. *Mycobacterium cosmeticum* sp. nov., a novel rapidly growing species isolated from a cosmetic infection and from a nail salon. *Int J Syst Evol Microbiol.* 2004; 54(6):2385-2391.
441. Cooper RL, Lee SA. Differential scanning calorimetric study of the binding of the water of hydration to deoxyadenosine. *J Biomol Struct Dynamics.* 2004; 22(3): 375-380.
442. Coradin T, Bah S, Livage J. Gelatine/silicate interactions: From nanoparticles to composite gels. *Coll Surfaces B: Biointerfaces.* 2004; 35(1): 53-58.
443. Cordero F, Craciun F, Franco A, Piazza D, Galassi C. Memory of multiple aging stages above the freezing temperature in the Relaxor ferroelectric PLZT. *Phys Rev Lett.* 2004; 93(9):097601.
444. Correa-Calderon A, Armstrong D, Ray D, DeNise S, Enns M, Howison C. Thermoregulatory responses of Holstein and Brown Swiss heat-stressed dairy cows to two different cooling systems. *Int J Bio-meteorol.* 2004; 48(3):142-8.
445. Correge T, Gagan MK, Beck JW, Burr GS, Cabioch G, Le Cornec F. Interdecadal variation in the extent of South Pacific tropical waters during the Younger Dryas event. *Nature.* 2004; 428(6986):927-9.
446. Corvalan CF, Patz JA. Global warming kills trees, and people. *Bull World Health Organ.* 2004; 82(7):481.
447. Coste O, Beaumont M, Batejat D, Van Beers P, Touitou Y. Prolonged mild hypoxia modifies human circadian core body temperature and may be associated with sleep disturbances. *Chronobiol Int.* 2004. 21(3):419-433.
448. Coticchio G, Bonu MA, Borini A, Flamigni C. Oocyte cryopreservation: a biological perspective. *Eur J Obstet Gynecol Reprod Biol.* 2004. 115 Suppl 1:S2-7.
449. Coticone SR, Oldroyd N, Philips H, Foxall P. Development of the AmpFSTR SEfiler PCR amplification kit: A new multiplex containing the highly discriminating ACTBP2 (SE33) locus. *Int J Legal Med.* 2004; 118(4): 224-234.
450. Cottrell JE, Hartung J. Cool it on cooling-at least during aneurysm surgery. *J Neurosurg Anesthesiol.* 2004; 16(2):113-4.
451. Courtney BK, Nakamura M, Tsugita R, Lilly R, Basisht R, Grube E, Honda Y, Yock PG, Fitzgerald PJ. Validation of a thermographic guidewire for endoluminal mapping of atherosclerotic disease: an in vitro study. *Catheter Cardiovasc Interv.* 2004; 62(2):221-9.
452. Cowling SA, Betts RA, Cox PM, Ettwein VJ, Jones CD, Maslin MA, Spall SA. Contrasting simulated past and future responses of the Amazonian forest to atmospheric change. *Philos Trans R Soc Lond B Biol Sci.* 2004; 359(1443):539-47.
453. Crain DS, Spencer CR, Favata MA, Amling CL. Transurethral saline perfusion to obtain renal hypothermia: potential application in laparoscopic partial nephrectomy. *JSL.* 2004; 8(3):217-22.
454. Cremades N, Sousa M, Silva J, Viana P, Sousa S, Oliveira C, Teixeira da Silva J, Barros A. Experimental vitrification of human compacted morulae and early blastocysts using fine diameter plastic micropipettes. *Hum Reprod.* 2004; 19(2):300-5.
455. Croguennec T, Molle D, Mehra R, Bouhallab S. Spectroscopic characterization of heat-induced nonnative beta-lactoglobulin monomers. *Protein Sci.* 2004; 13(5):1340-6.
456. Croll TI, O'Connor AJ, Stevens GW, Cooper-White JJ. Controlled surface modification of poly(lactic-co-glycolic acid) (PLGA) by hydrolysis or aminolysis I: Physical, chemical, and theoretical aspects. *Biomacromolecules.* 2004; 5(2): 463-473.
457. Crowley KL, Shevchenko YO. Anesthetic management of a difficult airway in a patient with epidermolysis bullosa: A case report. *AANA J.* 2004; 72(4): 261-263.
458. Crozier LG. Field transplants reveal summer constraints on a butterfly range expansion. *Oecologia.* 2004; 141(1):148-57.

459. Crozier TA, Kietzmann D, Dobereiner B. Mood change after an-esthesia with remifentanyl or alfentanil. *Eur J Anaesth*. 2004; 21(1): 20-4.
460. Cryan JF, Kelly PH, Chaperon F, Gentsch C, Mombereau C, Lingenhoehl K, Froestl W, Bettler B, Kaupmann K, Spooren WP. Behavioral characterization of the novel GABAB receptor-positive modulator GS39783 (N,N'- dicyclopentyl-2- methylsulfonyl-5- nitro-pyrimidine-4,6-diamine): anxiolytic-like activity without side effects associated with baclofen or benzodiazepines. *J Pharmacol Exp Ther*. 2004; 310(3):952-63.
461. Cuello C, Berthelot F, Martinat-Butte F, Guillouet P, Furstoss V, Boisseau C, Manceau P, Locatelli A, Martinez EA. Transfer of vitrified blastocysts from one or two superovulated Large White Hyperprolific donors to Meishan recipients: reproductive parameters at Day 30 of pregnancy. *Theriogenology*. 2004; 61(5):843-50.
462. Cuello C, Gil MA, Parrilla I, Tornel J, Vazquez JM, Roca J, Berthelot F, Martinat-Butte F, Martinez EA. In vitro development following one-step dilution of OPS-vitrified porcine blastocysts. *Theriogenology*. 2004; 62(6):1144-52.
463. Cuello C, Gil MA, Parrilla I, Tornel J, Vazquez JM, Roca J, Berthelot F, Martinat-Butte F, Martinez EA. Vitrification of porcine embryos at various developmental stages using different ultra-rapid cooling procedures. *Theriogenology*. 2004; 62(1-2):353-61.
464. Cui J, Wilson TE, Crandall CG. Orthostatic challenge does not alter skin sympathetic nerve activity in heat-stressed humans. *Autonom Neurosci-Basic Clin*. 2004; 116(1-2): 54-61.
465. Cui J, Zhang R, Wilson TE, Crandall CG. Spectral analysis of muscle sympathetic nerve activity in heat-stressed humans. *Am J Physiol - Heart Circul Physiol*. 2004; 286(3 55-3):H1101-H1106.
466. Cukrowska EM, Govender K, Viljoen M. Ion mobility based on column leaching of South African gold tailings dam with chemometric evaluation. 2004; *Chemosphere*. 56(1): 39-50.
467. Cunha BA. Smallpox and measles: Historical aspects and Clin differentiation. *Infect Dis Clin North Am*. 2004; 18(1): 79-100.
468. Cuppo F, Reynaers H, Paoletti S, Kremer SP, Martens JA. Non-equilibrium processes of interchain association induced by Cs⁺ ions in kappa-carrageenan aqueous solutions. *Int J Biol Macromol*. 2004 ; 34(1-2):43-7.
469. Curry A. Emerging human protozoan infections in the temperate European climate. *J Submicrosc Cytol Pathol*. 2004; 36(2):105-19.
470. Czupryniak A, Kaluzynska A, Nowicki M, Wiecek B, Bald E, Owczarek D. Raynaud's Phenomenon and Endothelial Dysfunction in End-Stage Renal Disease Patients Treated with Hemodialysis. *Kidney Blood Press Res*. 2004; 23(28(1)):27-31
471. Daar AS. Non-heart-beating donation: ten evidence-based ethical recommendations. *Transplant Proc*. 2004 Sep; 36(7):1885-7.
472. Dahan S, Lagarde JM, Turlier V, Courrech L, Mordon S. Treatment of neck lines and forehead rhytids with a nonablative 1540-nm Er:glass laser: a controlled clinical study combined with the measurement of the thickness and the mechanical properties of the skin. *Dermatol Surg*. 2004 Jun; 30(6):872-880.
473. Dahl MV, Ross AJ, Schlievert PM. Temperature regulates bacterial protein production: possible role in rosacea. *J Am Acad Dermatol*. 2004; 50(2):266-272.
474. Dai T, Pikkula BM, Wang LV, Anvari B. Comparison of human skin opto-thermal response to near-infrared and visible laser irradiations: a theoretical investigation. *Phys Med Biol*. 2004; 49(21): 4861-77.
475. d'Ambrosio FR, Palella BI, Riggio G, Alfano G. [Criteria for assessment of hot environments: WBGT index and PHS (predicted heat strain)] *Med Lav*. 2004; 95(4):255-74.
476. Damian MS, Ellenberg D, Gildemeister R, Lauermann J, Simonis G, Sauter W, Georgi C. Coenzyme Q10 combined with mild hypothermia after cardiac arrest: a preliminary study. *Circulation*. 2004; 110(19):3011-6.
477. Danielsson U. Heat and mass transfer from a baby manikin: Impact of a chemical warfare protective bag. *Eur J Appl Physiol*. 2004; 92(6): 689-693.
478. Davaine A-C, Viseux V, Le Bihan J, Plantin P. Erythematous and cold plaque of the breast. *Ann Dermatol Ven*. 2004; 131(1 1):79-80.
479. Davidson G, Bennett MH. Effect of oxygen flow on inspired oxygen and carbon dioxide concentrations and patient comfort in the Amron oxygen hood. *South Pacific Underwater Med Soc J*. 2004; 34(2): 68-74.
480. Davies LM, MacLellan CL, Corbett DR, Colbourne F. Post-ischemic diazepam does not reduce hippocampal CA1 injury and does not improve hypothermic neuroprotection after forebrain ischemia in gerbils. *Brain Res*. 2004; 1013(2): 223-229.
481. Davies MW, Dunster KR, Cartwright DW. Inspired gas temperature in ventilated neonates. *Pediatr Pulmonol*. 2004 ; 38(1):50-4.
482. d'Avila A, Houghtaling C, Gutierrez P, Vragovic O, Ruskin JN, Josephson ME, Reddy VY. Catheter ablation of ventricular epicardial tissue: a comparison of standard and cooled-tip radiofrequency energy. *Circulation*. 2004 ; 109(19):2363-9.
483. Davis KD, Pope GE, Crawley AP, Mikulis DJ. Perceptual illusion of 'paradoxical heat' engages the insular cortex. *J Neurophysiol*. 2004; 92(2):1248-1251.
484. Davison BL, Cantu RV, Van Woerkom S. The magnetic attraction of lower extremity external fixators in an MRI suite. *J Orthop Trauma*. 2004; 18(1): 24-27.
485. Dazai J, Bock NA, Nieman BJ, Davidson LM, Henkelman RM, Chen XJ. Multiple mouse biological loading and monitoring system for MRI. *Magn Reson Med*. 2004; 52(4): 709-715.
486. De Bree R, Hartley C, Smeele LE, Kuik DJ, Quak JJ, Leemans CR. Evaluation of donor site function and morbidity of the fasciocutaneous radial forearm flap. *Laryngoscope*. 2004; 114(11 1):1973-1976.
487. De Feyter P, Mollet N, Nieman K, Arampatzis A, Cademartiri F, Pattynama P, Serruys P. Noninvasive visualisation of coronary atherosclerosis with multislice computed tomography. *Cardiovasc Radiat Med*. 2004; 5(1): 49-56.
488. De Francesco A, Marconi M, Cinelli S, Onori G, Paciaroni A. Picosecond Internal Dynamics of Lysozyme As Affected by Thermal Unfolding in Nonaqueous environment. *Biophys J*. 2004; 86(1): 480-487.
489. De Georgia MA, Krieger DW, Abou-Chebl A, Devlin TG, Jauss M, Davis SM, Koroshetz WJ, Rordorf G, Warach S. Cooling for acute ischemic brain damage (COOL AID): A feasibility trial of endovascular cooling. *Neurology*. 2004; 63(2): 312-317.
490. De Goes EG, Covas DT, Haddad R, Pela CA, Formigoni CE, Borges JC. Quality control system for blood irradiation using a teletherapy unit. *Vox Sanguinis*. 2004; 86(2): 105-110.
491. De Jong AEI, Rombouts FM, Beumer RR. Behavior of Clostridium perfringens at low temperatures. *Int J Food Microbiol*. 2004; 97(1): 71-80.
492. de Jongh RT, Serne EH, IJzerman RG, de Vries G, Stehouwer CD. Impaired microvascular function in obesity: implications for obesity-associated microangiopathy, hypertension, and insulin resistance. *Circulation*. 2004; 109(21):2529-35.
493. de Koning AJ. Determination of glycerol by gas chromatography using meso-erythritol as internal standard. *Analyst*. 2004; 129(4):352-4.
494. de la Fuente G, Cebrían JA, Fondevila M. A cryopreservation procedure for the rumen protozoan Entodinium caudatum: estimation of its viability by fluorescence microscopy. *Lett Appl Microbiol*. 2004; 38(2):164-8.
495. De Mello AJ, Habgood M, Lancaster NL, Welton T, Wootton RCR. Precise temperature control in microfluidic devices using Joule heating of ionic liquids. *Lab on a Chip*. 2004; 4(5): 417-419.
496. de Swart BJ, van Engelen BG, van de Kerkhof JP, Maassen BA. Myotonia and flaccid dysarthria in patients with adult onset myotonic dystrophy. *J Neurol Neurosurg Psychiatry*. 2004; 75(10):1480-2.
497. Dearden JC, Hellawell GO, Pilling J, Beshardas K, Van Someren N. Does cooling Sengstaken-Blakemore tubes aid insertion? An evidence based approach. *Eur J Gastroenterol Hepatol*. 2004; 16(11):1229-32.
498. Debold EP, Dave H, Fitts RH. Fiber type and temperature dependence of inorganic phosphate: Implications for fatigue. *Am J Physiol - Cell Physiol*. 2004; 287(3 56-3):C673-C681.
499. DeBow SB, McKenna JE, Kolb B, Colbourne F. Immediate constraint-induced movement therapy causes local hyperthermia that exacerbates cerebral cortical injury in rats. *Can J Physiol Pharmacol*. 2004; 82(4):231-7.
500. Decelle B, Tsang A, Storms RK. Cloning, functional expression and characterization of three Phanerochaete chrysosporium endo-1,4- beta-xylanases. *Curr Genetics*. 2004; 46(3): 166-175.
501. DeChaine EG, Martini AP. Historic cycles of fragmentation and expansion in Parnassius smintheus (papilionidae) inferred using mitochondrial DNA. *Evolution Int J Org Evolution*. 2004; 58(1):113-27.
502. Dedova IV, Nikolaeva OP, Mikhailova VV, Dos Remedios CG, Levitsky DI. Two opposite effects of cofilin on the thermal unfolding of F-actin: differential scanning calorimetric study. *Biophys Chem*. 2004; 110(1-2): 119-128.
503. del Brutto OH. [Relationship between body temperature and prognosis, and neuroprotective effect of hypothermia in acute stroke patients] *Rev Neurol*. 2004; 38(11):1050-5.
504. Delalibera I Jr, Humber RA, Hajek AE. Preservation of in vitro cultures of the mite pathogenic fungus Neozygites tanajoae. *Can J Microbiol*. 2004; 50(8):579-86.
505. DeLapp RC, LeBoeuf EJ. Thermal Analysis of Whole Soils and Sediment. *J Environ Quality*. 2004; 33(1): 330-337.
506. Delarozziere JC, Sanmarco JL. [Excess mortality in people over 65 years old during summer heat waves in Marseille. Comparison before and after a preventive campaign] *Presse Med*. 2004; 33(1):13-6.

507. Delgado S, Alvarez M, Rodriguez-Gomez LE, Elmaleh S. Transport of reclaimed wastewater through a long pipe: Inhibition of sulphide production by nitrite from the secondary treatment. *Environ Technol.* 2004; 25(3): 365-371.
508. DeNardo DF, Zubal TE, Hoffman TC. Cloacal evaporative cooling: a previously undescribed means of increasing evaporative water loss at higher temperatures in a desert ectotherm, the Gila monster *Heloderma suspectum*. *J Exp Biol.* 2004; 207(Pt 6):945-53.
509. Deng ZS, Liu J. Mathematical modeling of temperature mapping over skin surface and its implementation in thermal disease diagnostics. *Comput Biol Med.* 2004; 34(6):495-521.
510. Dennerhofer E. What's New in Standardisation: EN 13060 adopted. *Zentralsterilisation - Central Service.* 2004; 12(2): 70+76.
511. Dennis C. Cooling off. *Nature.* 2004; 430(7000):605.
512. Denolin V, Metens T. On the Calculation and Interpretation of Signal Intensity in Echo-Shifted Sequences. *Magn Reson Med.* 2004; 51(1):123-134.
513. Deppe M, Orloff C, Salinas G, Bravo D, Sanchez R. [Effect of temperature incubation and glycerol addition on the acrosome preservation in human spermatozoa] *Rev Invest Clin.* 2004; 56(4):477-82.
514. Devireddy RV, Fahrig B, Godke RA, Leibo SP. Subzero water transport characteristics of boar spermatozoa confirm observed optimal cooling rates. *Mol Reprod Dev.* 2004; 67(4):446-457.
515. Dewar DJ, Fraser JF, Choo KL, Kimble RM. Thermal injuries in three children caused by an electrical warming mattress. *Br J Anaesth.* 2004; 93(4): 586-589.
516. Diakides NA, Diakides M. Infrared imaging in Med worldwide (abstract). *Thermol int* 2004, 14(3): 112.
517. Dian BC, Florio GM, Clarkson JR, Longarte A, Zwier TS. Infrared-induced conformational isomerization and vibrational relaxation dynamics in melatonin and 5-methoxy-N-acetyl tryptophan methyl amide. *J Chem Phys.* 2004; 120(19):9033-46.
518. Dickens GR. Global change: hydrocarbon-driven warming. *Nature.* 2004; 429(6991):513-5.
519. Dickinson T, Riley J, Zabetakis PM. External validation of compliance to perfusion quality indicators. *Perfusion.* 2004; 19(5): 295-299.
520. Diederich CJ, Stafford RJ, Nau WH, Burdette EC, Price RE, Hazle JD. Transurethral ultrasound applicators with directional heating patterns for prostate thermal therapy: in vivo evaluation using magnetic resonance thermometry. *Med Phys.* 2004; 31(2):405-413.
521. Diederich CJ, Nau WH, Ross AB, Tyreus PD, Butts K, Rieke V, Sommer G. Catheter-based ultrasound applicators for selective thermal ablation: Progress towards MRI-guided applications in prostate. *Int J Hyperthermia.* 2004; 20(7): 739-756.
522. Diffey B. Climate change, ozone depletion and the impact on ultraviolet exposure of human skin. *Phys Med Biol.* 2004; 49(1):R1-11.
523. Ding Y, Li J, Luan X, Lai Q, McAllister JP 2nd, Phillis JW, Clark JC, Guthikonda M, Diaz FG. Local saline infusion into ischemic territory induces regional brain cooling and neuroprotection in rats with transient middle cerebral artery occlusion. *Neurosurgery.* 2004; 54(4):956-965.
524. Diring MN; Neurocritical Care Fever Reduction Trial Group. Treatment of fever in the neurologic intensive care unit with a catheter-based heat exchange system. *Crit Care Med.* 2004; 32(2):559-64.
525. Djouhri L, Wrigley D, Thut PD, Gold MS. Spinal nerve injury increases the percentage of cold-responsive DRG neurons. *Neuro-report.* 2004; 15(3):457-60.
526. Dodd D, Hoffman G, Hardy C. Perfluoro-n-butyl iodide: acute toxicity, subchronic toxicity and genotoxicity evaluations. *Int J Toxicol.* 2004; 23(4):249-58.
527. Dogan B, Boor KJ. Short communication: growth characteristics of *Streptococcus uberis* in UHT-treated milk. *J Dairy Sci.* 2004; 87(4): 813-5.
528. Doi T, Saikurai M, Hamada K, Matsumoto K, Yanagisawa K, Kikuchi N, Morimoto T, Greenleaf JE. Plasma volume and blood viscosity during 4 h sitting in a dry Environ: Effect of prehydration. *Aviat Space Environ Med.* 2004; 75(6):500-504.
529. Domokos P, Vukics A, Ritsch H. Anomalous Doppler-effect and polariton-mediated cooling of two-level atoms. *Phys Rev Lett.* 2004 Mar 12; 92(10):103601.
530. Dondas N, Karatas Y, Dikmen A. Characterization of nicotinic cholinergic receptors. *Indian J Pharmacol.* 2004; 36(2): 72-75.
531. Donnez J, Dolmans MM. Livebirth after cryopreserved ovarian tissue autotransplantation (letter). *Lancet.* 2004; 364(9451): 2092-2093.
532. Donny EC, Bigelow GE, Walsh SL. Assessing the initiation of cocaine self-administration in humans during abstinence: Effects of dose, alternative reinforcement, and priming. *Psychopharmacology.* 2004; 172(3): 316-323.
533. Donovan GA, Steenholdt C, McGehee K, Lundquist R. Hypomagnesemia among cows in a confinement-housed dairy herd. *J Am Vet Med Assoc.* 2004; 224(1):96-9, 54.
534. Dooley PC, Howgate ML, Schuijers JA, Grills BL. Early callus of fractured rib of rat contracts and relaxes ex vivo. *J Orth Res.* 2004; 22(5): 1063-1071.
535. Doscher R, Meier HE. Simulated sea surface temperature and heat fluxes in different climates of the Baltic Sea. *Ambio.* 2004; 33(4-5): 242-8.
536. Dougherty PM, Cata JP, Cordella JV, Burton A, Weng HR. Taxol-induced sensory disturbance is characterized by preferential impairment of myelinated fiber function in cancer patients. *Pain.* 2004; 109(1-2): 132-42.
537. Douwes F, Bogovic J, Douwes O, Migeod F, Grote C. Whole-body hyperthermia in combination with platinum-containing drugs in patients with recurrent ovarian cancer. *Int J Clin Oncol.* 2004; 9(2): 85-91.
538. Dover G, Powers ME. Cryotherapy does not impair shoulder joint position sense. *Arch Phys Med Rehabil.* 2004; 85(8):1241-1246.
539. Dreher MR, Elas M, Ichikawa K, Barth ED, Chilkoti A, Rosen GM, Halpern HJ, Dewhirst M. Nitroxide conjugate of a thermally responsive elastin-like polypeptide for noninvasive thermometry. *Med Phys.* 2004; 31(10):2755-62.
540. Drummond M, Magalhaes A, Hespanhol V. Transient fever after fiberoptic bronchoscopy - A prospective study. *Rev Portug Pneumol.* 2004; 10(1): 87-95.
541. Drummond PD, Mirco N. Staring at one side of the face increases blood flow on that side of the face. *Psychophysiology.* 2004; 41(2): 281-7.
542. Drummond PD, Finch PM. Persistence of pain induced by startle and forehead cooling after sympathetic blockade in patients with complex regional pain syndrome. *J Neurol, Neurosurg Psychiatry.* 2004; 75(1): 98-102.
543. D'Souza RM, Becker NG, Hall G, Moodie KB. Does ambient temperature affect foodborne disease? *Epidemiology.* 2004; 15(1): 86-92.
544. Dubois J, Jamaer L, Mees U, Pauwels J, Briens F, Lehaen J, Hendriks M. Ex vivo evaluation of a new neonatal/infant oxygenator: comparison of the Terumo CAPiox Baby RX with Dideco Lilliput 1 and Polystan Safe Micro in the piglet model. *Perfusion.* 2004; 19(5): 315-21.
545. Duerden T. An aura of confusion Part 2: the aided eye-"imaging the aura?" *Complement Ther Nurs Midwifery.* 2004; 10(2):116-23.
546. Dufty JW, Baskaran A, Zogaib L. Gaussian kinetic model for granular gases. *Phys Rev E Stat Nonlin Soft Matter Phys.* 2004; 69(5 Pt 1):051301.
547. Dulger S, Demirbag Z, Belduz AO. *Anoxybacillus ayderensis* sp. nov. and *Anoxybacillus kestanbolensis* sp. nov. *Int J Syst Evol Microbiol.* 2004; 54(5):1499-1503.
548. Dumont F, Marechal PA, Gervais P. Cell size and water permeability as determining factors for cell viability after freezing at different cooling rates. *Appl Environ Microbiol.* 2004; 70(1):268-72.
549. Durand S, Cui J, Williams KD, Crandall CG. Skin surface cooling improves orthostatic tolerance in normothermic individuals. *Am J Physiol Regul Integr Comp Physiol.* 2004; 286(1): R199-R205.
550. Dybek M, Lobodzic W, Iwanicki T, Kawa-Iwanicka A, Markisch S, Zipper W. MOSFET detectors as a tool for dose verification in photon beam radiotherapy. *Reports Pract Oncol Radiother.* 2004; 9(2): 45-50.
551. Dziadzio M, Smith RE, Abraham DJ, Stratton RJ, Gabrielli A, Black CM, Denton CP. Serological assessment of type I collagen burden in scleroderma spectrum disorders: A systematic review. *Clin Exper Rheumatol.* 2004; 22(3): 356-367.
552. Ebertz SL, McGann LE. Cryoinjury in endothelial cell monolayers. *Cryobiol.* 2004; 49(1): 37-44.
553. Echizenya M, Mishima K, Satoh K, Kusanagi H, Sekine A, Ohkubo T, Shimizu T, Hishikawa Y. Enhanced heat loss and age-related hypersensitivity to diazepam. *J Clin Psychopharmacol.* 2004; 24(6):639-646.
554. Eckersall PD. The time is right for acute phase protein assays. *Vet J.* 2004; 168(1): 3-5.
555. Eckert EW, Kraft K. Electromagnetic scalar waves: Fact of fiction? *Focus Alt Complem Ther.* 2004; 9(3): 190-192.
556. Eddy E, Kelly A-M. Is there a relationship between asthma severity and abnormalities on chest X-ray? A pilot study. *Hong Kong J Emerg Med.* 2004; 11(3): 147-151.
557. Edwards M, Richardson AJ. Impact of climate change on marine pelagic phenology and trophic mismatch. *Nature.* 2004; 430(7002): 881-884.
558. Eglin CM, Coles S, Tipton MJ. Physiological responses of firefighter instructors during training exercises. *Ergonomics.* 2004; 47(5): 483-94.
559. Eiken O, Mekjavic IB. Ischaemia in working muscles potentiates the exercise-induced sweating response in man. *Acta Physiol Scand.* 2004; 181(3):305-11.

- 560.Eisentraeger A. Brinkmann C. Michel K. Hahn S. Huettner M. Weber G. Development of automated high-throughput ecotoxicity and genotoxicity test systems and fields of application. *Water Sci Technol*. 2004; 50(5): 109-114.
- 561.El Bakali A. Dagaut P. Pillier L. Desgroux P. Pauwels J-F. Rida A. Meunier P. Experimental and modeling study of the oxidation of natural gas in a premixed flame, shock tube, and jet-stirred reactor. *Combust Flame*. 2004; 137(1-2): 109-128.
- 562.Elabbassi EB. Belghazi K. Delanaud S. Libert J-P. Dry heat loss in incubator: Comparison of two premature newborn sized manikins. *Eur J Appl Physiol*. 2004; 92(6): 679-682.
- 563.Elias D. Baton O. Sideris L. Lasser P. Pocard M. Necrotizing pancreatitis after radiofrequency destruction of pancreatic tumours. *Eur J Surg Oncol*. 2004; 30(1):85-7.
- 564.Elias D. Sideris L. Pocard M. Dromain C. De Baere T. Intraductal cooling of the main bile ducts during radiofrequency ablation prevents biliary stenosis. *J Am Coll Surg*. 2004; 198(5):717-721.
- 565.Elkhayat A. Courderot-Masuyer C. Mac-Mary S. Courau S. Gharbi T. Humbert P. Assessment of spray application of Saint GERVAIS water effects on skin wettability by contact angle measurement comparison with bidistilled water. *Skin Res Technol*. 2004; 10(4): 283-286.
- 566.Elkind-Hirsch K. Cooling off hot flashes: uncoupling of the circadian pattern of core body temperature and hot flash frequency in breast cancer survivors. *Menopause*. 2004; 11(4):369-71.
- 567.Elliott, RL. Breast thermography: historical perspectives, past dilemmas, and future possibilities (abstract). *Thermol int* 2004, 14(3): 103.
- 568.Ellis AM, Post E. Population response to climate change: linear vs. non-linear modeling approaches. *BMC Ecol*. 2004; 4(1):2.
- 569.Elster EL. Treatment of bipolar, seizure, and sleep disorders and migraine headaches utilizing a chiropractic technique. *J Manipul Physiol Ther*. 2004; 27(3):E5.
- 570.Elwell RJ, Volino LR, Frye RF. Stability of cefepime in icodextrin peritoneal dialysis solution. *Ann Pharmacother*. 2004; 38(12):2041-4.
- 571.Emara S. Darwish I. Youssef D. Masujima T. On the perspectives of capillary electrophoresis modes for the determination of morphine in human plasma without sample pretreatment. *BioMed Chromat*. 2004; 18(1): 21-27.
- 572.Emery J, Ho D, MacKeen L, Heon E, Bissonnette B. Pupillary reflex dilation and skin temperature to assess sensory level during combined general and caudal anesthesia in children. *Paediatr Anaesth*. 2004; 14(9):768-73.
- 573.Endoh M, Okuno R, Mukaigawa J, Shimojima Y, Murata I, Morozumi S, Sekine H, Marumo K. [Two nosocomial outbreaks of sepsis caused by *Serratia marcescens*, which occurred in July 1999 and January 2002-Tokyo] *Kansenshogaku Zasshi*. 2004; 78(4):295-304.
- 574.Ener RA, Meglathery SB, Styler M. Extravasation of systemic hemato-oncological therapies. *Ann Oncol*. 2004 ; 15(6):858-62.
- 575.Epand RM, Epand RF, Bain AD, Sayer BG, Hughes DW. Properties of polyunsaturated phosphatidylcholine membranes in the presence and absence of cholesterol. *Magn Reson Chem*. 2004; 42(2): 139-47.
- 576.Ergun H. Frattarelli DAC. Aranda JV. Characterization of the role of physicochemical factors on the hydrolysis of dipyrone. *J Pharm BioMed Analysis*. 2004; 35(3): 479-487.
- 577.Esaki R, Ueda H, Kurome M, Hirakawa K, Tomii R, Yoshioka H, Ushijima H, Kuwayama M, Nagashima H. Cryopreservation of porcine embryos derived from in vitro-matured oocytes. *Biol Reprod*. 2004; 71(2):432-7.
- 578.Esposito G. Vitagliano L. Costanzo P. Borrelli L. Barone R. Pavone L. Izzo P. Zagari A. Salvatore F. Human aldolase A natural mutants: Relationship between flexibility of the C-terminal region and enzyme function. *Biochemical J*. 2004; 380(1): 51-56.
- 579.Esther Renda Vazquez M, Rodriguez Cabarcos M, Fernandez Mallo RO, Sanchez Ibanez J, Segura Iglesias R, Bermudez Gonzalez T, Matheu Capo G, Filgueira Fernandez P, Pertega Diaz S, Andion Nunez C. Functional assessment of human femoral arteries after cryopreservation. *Cryobiology*. 2004; 49(1):83-9.
- 580.Evans DA, Wales DJ, Dian BC, Zwier TS. The dynamics of conformational isomerization in flexible biomolecules. II. Simulating isomerizations in a supersonic free jet with master equation dynamics. *J Chem Phys*. 2004 ; 120(1):148-57.
- 581.Evans RK, Zhu D-M, Casimiro DR, Nawrocki DK, Mach H, Troutman RD, Tang A, Wu S, Chin S, Ahn C, Isopi LA, Williams DM, Xu Z, Shiver JW, Volkin DB. Characterization and biological evaluation of a microparticle adjuvant formulation for plasmid DNA vaccines. *J Pharm Sci*. 2004; 93(7): 1924-1939.
- 582.Evidente VGH. Cooper C. Gwinn-Hardy K. Limb cooling and focal dystonia [1]. *Movement Dis*. 2004; 19(2): 238.
- 583.Evilevitch V, Norrgren K, Greiff L, Wollmer P. Microvascular response in guinea pig skin to histamine challenge with and without application of skin window. *Clin Physiol Funct Imaging*. 2004; 24(5):266-9.
- 584.Faber M. Jahnz-Rozyk K. Kucharczyk A. Targowski T. From Sl. Mamelka B. Evaluation of clinical efficacy and direct costs of azithromycin treatment for exacerbation of chronic obstructive pulmonary disease in hospitalized and outpatients. *Polski Merkuriusz Lekarski*. 2004; 16(Suppl. 1): 96-99.
- 585.Fahy GM, Wolk B, Wu J, Paynter S. Improved vitrification solutions based on the predictability of vitrification solution toxicity. *Cryobiology*. 2004; 48(1):22-35.
- 586.Fahy GM, Wolk B, Wu J, Phan J, Rasch C, Chang A, Zendejas E. Cryopreservation of organs by vitrification: perspectives and recent advances. *Cryobiology*. 2004; 48(2):157-78.
- 587.Fajt VR, Apley MD, Brogden KA, Skogerboe TL, Shostrom VK, Chin Y-L. Effect of danofloxacin and tilimicosin on body temperatures of beef calves with pneumonia experimentally induced by inoculation with *Mannheimia haemolytica*. *Am J Vet Res*. 2004; 65(5): 610-615.
- 588.Fallis WM. A response to 'Temperature measurement after severe head injury', Childs C et al. *Anaesthesia* 2004; 59: 192-3. *Anaesthesia*. 2004; 59(9):928;
- 589.Fan J, Qian X. New functions and applications of Walter, the sweating fabric manikin. *Eur J Appl Physiol*. 2004. 92(6):641-644.
- 590.Fang H, Wenrong H, Yuezhong L. Investigation of isolation and immobilization of a microbial consortium for decoloring of azo dye 4BS. *Water Res*. 2004; 38(16): 3596-3604.
- 591.Fang Y, Nishinari K. Gelation behaviors of schizophyllan-sorbitol aqueous solutions. *Biopolymers*. 2004; 73(1):44-60.
- 592.Fantegrossi WE, Kiessel CL, Leach PT, Van Martin C, Karabenick RL, Chen X, Ohizumi Y, Ullrich T, Rice KC, Woods JH. Nantenine: an antagonist of the behavioral and physiological effects of MDMA in mice. *Psychopharmacology (Berl)*. 2004; 173(3-4):270-7.
- 593.Fanti F, Tortoli E, Hall L, Roberts GD, Kroppenstedt RM, Dodi I, Conti SP, Polonelli L, Chezzi C. *Mycobacterium parmense* sp. nov. *Int J Syst Evol Microbiol*. 2004; 54(4):1123-1127.
- 594.Farley DR, Greenlee SM, Larson DR, Harrington JR. Double-blind, prospective, randomized study of warmed, humidified carbon dioxide insufflation vs standard carbon dioxide for patients undergoing laparoscopic cholecystectomy. *Arch Surg*. 2004; 139(7):739-44;
- 595.Farnworth MV, Cross MJ, Louie J. Rhodium-catalyzed addition of alcohols to terminal enones. *Tetrahedron Letters*. 2004; 45(40): 7441-7443.
- 596.Farstad M, Heltne JK, Rynning SE, Onarheim H, Mongstad A, Eliassen F, Husby P. Can the use of methylprednisolone, vitamin C, or alpha-trinisol prevent cold-induced fluid extravasation during cardiopulmonary bypass in piglets? *J Thorac Cardiovasc Surg*. 2004; 127(2): 525-34.
- 597.Faurie AS, Mitchell D, Laburn HP. Peripartum body temperatures in free-ranging ewes (*Ovis aries*) and their lambs. *J Thermal Biol*. 2004; 29(2): 115-122.
- 598.Faustner A, Schuessler S, Seidl C, Jochum M. Inhibition of sequestration of human B2 bradykinin receptor by phenylarsine oxide or sucrose allows determination of a receptor affinity shift and ligand dissociation in intact cells. *Biol Chem*. 2004; 385(9): 835-843.
- 599.Fazio M, Bardelli M, Fabris B, Macaluso L, Fiammengio F, Vran F, Bossi M, Candido R, Gerloni R, Carretta R. Large-artery hemodynamics after acute alcohol administration in young, healthy volunteers. *Angiology*. 2004; 5(2):139-145.
- 600.Feichtinger J, Schrottner T, Schwaiger M, Kindl P. Characterisation of selected cadmium-zinc-telluride detectors. *Appl Radiat Isot*. 2004; 61(2-3):113-5.
- 601.Feederer C, Perlik V, Blatteis CM. Preoptic alpha 1- and alpha 2-noradrenergic agonists induce, respectively, PGE2-independent and PGE2-dependent hyperthermic responses in guinea pigs. *Am J Physiol Regul Integr Comp Physiol*. 2004; 286(6):R1156-66.
- 602.Felis T, Lohmann G, Kuhnert H, Lorenz SJ, Scholz D, Patzold J, Al-Rousen SA, Al-Moghrabi SM. Increased seasonality in Middle East temperatures during the last interglacial period. *Nature*. 2004; 429(6988): 164-168.
- 603.Feng C, Suzuki K, Zhao S, Sugiura N, Shimada S, Maekawa T. Water disinfection by electrochemical treatment. *Bioresour Technol*. 2004; 94(1):21-5.]
- 604.Feng J, Gao C, Wang B, Shen J. A novel process for inking the stamp with biomacromolecule solution used in reactive microcontact printing. *Colloids Surf B Biointerfaces*. 2004; 1; 36(3-4):177-80.
- 605.Feng L, Yoshie N, Asakawa N, Inoue Y. Comonomer-unit compositions, physical properties and biodegradability of bacterial copolyhydric oxyalkanoates. *Macromolecular Bioscience*. 2004 4(3): 186-198.

- 606.Feng S-S. Mu L. Win KY. Huang G. Nanoparticles of bio-degradable polymers for Clin administration of paclitaxel. *Curr Med Chem*. 2004; 11(4): 413-424.
- 607.Feng Y, Rainteau D, Chachaty C, Yu ZW, Wolf C, Quinn PJ. Characterization of a quasi crystalline phase in codispersions of phosphatidyl- ethanolamine and glucocerebroside. *Biophys J*. 2004; 86(4): 2208-17.
- 608.Fermo I. Germagnoli L. Soldarini A. Dorigatti F. Paroni R. Capillary zone electrophoresis for determination of carbohydrate- deficient transferrin in human serum. *Electrophoresis*. 2004; 25(3): 469-475.
- 609.Fernando HC. De Hoyos A. Litle V. Belani CP. Luketich JD. Radiofrequency ablation: Identification of the ideal patient. *Clin Lung Cancer*. 6(3): 149-153. 2004;
- 610.Ferraro G. Altieri A. D'Andrea F. Alternative Clin uses of the botulinum toxin in plastic and reconstructive surgery: Frey's syndrome. *Chirurgia*. 2004. 17(5)169-171.
- 611.Ferrell WR. Wong BB. Lockhart JC. Ramsay JE. Gender differences in regional cutaneous microcirculatory responses to capsaicin. *Fundam Clin Pharmacology*. 2004; 18(2): 195-200.
- 612.Ferris Wayne G, Connolly GN. Application, function, and effects of menthol in cigarettes: a survey of tobacco industry documents. *Nicotine Tob Res*. 2004;6 Suppl 1:S43-54.
- 613.Ferruti P. Grigolini M. Ranucci E. PHEMA hydrogels obtained by a novel low-heat curing procedure with a potential for in situ preparation. *Macromol Biosci*. 2004; 4(6): 591-600.
- 614.Feulner P, Niedermayer T, Eberle K, Schneider R, Menzel D, Baumer A, Schmich E, Shaporenko A, Tai Y, Zharnikov M. Strong temperature dependence of irradiation effects in organic layers. *Phys Rev Lett*. 2004; 93(17):178302.
- 615.Fikackova H, Ekberg E. Can infrared thermography be a diagnostic tool for arthralgia of the temporomandibular joint? *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 2004; 98(6):643-50.
- 616.Finnegan PM. Brumbley SM. O'Shea MG. Nevalainen H. Bergquist PL. Isolation and characterization of genes encoding thermoactive and thermostable dextranases from two thermotolerant soil bacteria. *Curr Microbiol*. 2004; 49(5): 327-333.
- 617.Fish EW. Faccidomo S. Gupta S. Miczek KA. Anxiolytic-Like Effects of Escitalopram, Citalopram, and R-Citalopram in Maternally Separated Mouse Pups. *J Pharm Exper Therapeut*. 2004; 308(2): 474-480.
- 618.Fleischhack R. Kober P. Kuhne T. Scheel K. Overheating as a result of hygroscopic condensation in steam sterilisation of porous items: A forgotten phenomenon that has many practical implications. *Zentralblatt für Bakteriologie - Central Service*. 2004; 12(4): 241-257.
- 619.Flinn PW, Subramanyam B, Arthur FH. Comparison of aeration and spinosad for suppressing insects in stored wheat. *J Econ Entomol*. 2004; 97(4):1465-73.
- 620.Foffi G, Zaccarelli E, Buldyrev S, Sciortino F, Tartaglia P. Aging in short-ranged attractive colloids: a numerical study. *J Chem Phys*. 2004; 120(18):8824-30.
- 621.Fogarty AL. Armstrong KA. Gordon CJ. Groeller H. Woods BF. Stocks JM. Taylor NAS. Cardiovascular and thermal consequences of protective clothing: A comparison of clothed and unclothed states. *Ergonomics*. 2004; 47(10): 1073-1086.
- 622.Foltan M. Philipp A. Thrum A. Gietl M. Wiesenack Ch. Kobuch R. Birnbaum DE. Schmid F-X. Differentiated assessment of temperature measurements in ECC. *Kardiotechnik*. 2004; 13(1): 3-8.
- 623.626.Fonseca L, Perez-Murano F, Calaza C, Rubio R, Santander J, Figueras E, Gracia I, Cane C, Moreno M, Marco S. Thermal AFM: a thermopile case study. *Ultramicroscopy*. 2004; 101(2-4):153-9.
- 624.Fontaine JP, Pointurier F, Blanchard X, Taffary T. Atmospheric xenon radioactive isotope monitoring. *J Environ Radioact*. 2004; 72(1-2): 129-35.
- 625.Forbes BC, Fresco N, Shvidenko A, Danell K, Chapin FS 3rd. Geographic variations in anthropogenic drivers that influence the vulnerability and resilience of social-ecological systems. *Ambio*. 2004; 33(6):377-82.
- 626.Forrester BJ. Petrofsky JS. Effect of electrode size, shape, and placement during electrical stimulation. *J Appl Res*. 2004.4(2)346-354.
- 627.Fossel ET. Improvement of temperature and flow in feet of subjects with diabetes with use of a transdermal preparation of L-arginine: a pilot study. *Diabetes Care*. 2004; 27(1):284-5.
- 628.Foster KR, Adair ER. Modeling thermal responses in human subjects following extended exposure to radiofrequency energy. *Bio-med Eng Online*. 2004 ; 3(1):4.
- 629.Fournial R, Traore AS, Laurendeau D, Moisan C. An analytic method to predict the thermal map of cryosurgery iceballs in MR images. *IEEE Trans Med Imaging*. 2004; 23(1):122-9.
- 630.Francia F. Palazzo G. Mallardi A. Cordone L. Venturoli G. Probing light-induced conformational transitions in bacterial photo-synthetic reaction centers embedded in trehalose-water amorphous matrices. *Biochim Biophys Acta - Bioenergetics*. 2004;1658(1-2): 50-57.
- 631.Francois R. Cool stratification. *Nature*. 2004. 428(6978)31-32.
- 632.Franken EM, de Boer JC, Barnhoorn JC, Heijmen BJ. Characteristics relevant to portal dosimetry of a cooled CCD camera-based EPID. *Med Phys*. 2004; 31(9):2549-51.
- 633.Freccero C, Svensson H, Bornmyr S, Wollmer P, Sundkvist G. Sympathetic and parasympathetic neuropathy are frequent in both type 1 and type 2 diabetic patients. *Diabetes Care*. 2004 ; 27(12):2936-41.
- 634.Frederickx V, Michiels A, Goossens E, De Block G, Van Steirteghem AC, Tournaye H. Recovery, survival and functional evaluation by transplantation of frozen-thawed mouse germ cells. *Hum Reprod*. 2004; 19(4):948-53.
- 635.Freedman G, Krejci I. Warming up to composites. *Compend Contin Educ Dent*. 2004 May;25(5):371-376;
- 636.Freeman C, Fenner N, Ostle NJ, Kang H, Dowrick DJ, Reynolds B, Lock MA, Sleep D, Hughes S, Hudson J. Export of dissolved organic carbon from peatlands under elevated carbon dioxide levels. *Nature*. 2004; 430(6996):195-8.
- 637.Friberg H, Nielsen N, Karlsson T, Cronberg T, Widner H, Englund E, Ersson A. [Therapeutic hypothermia after cardiac arrest. A cold intravenous fluid, a cooling helmet and a cooling blanket efficiently reduce body temperature] *Lakartidningen*. 2004; 101(30-31):2408-11.
- 638.Fricke ST. Vink R. Chiodo C. Cernak I. Ileva L. Faden AI. Consistent and reproducible slice selection in rodent brain using a novel stereotaxic device for MRI. *J Neurosci Methods*. 2004; 136(1):99-102.
- 639.Friedman MH. Local inflammation as a mediator of migraine and tension-type headache. *Headache*. 2004; 44(8): 767-771.
- 640.Frith L, Friedman N, Sheves M, Cohen Y. The interaction of water molecules with purple membrane suspension using 2H double-quantum filter, 1H and 2H diffusion nuclear magnetic resonance. *Biopolymers*. 2004; 75(1):46-59.
- 641.Frolke JPM. Reeling Brouwer GC. Giannoudis PV. Friction burns within the tibia during reaming (multiple letters) [3]. *J Bone Joint Surg (B)*. 2004; 86(1): 149-150.
- 642.Frost HM. A 2003 update of bone physiology and Wolff's Law for clinicians. *Angle Orthod*. 2004; 74(1):3-15.
- 643.Fu Q, Johanson CM, Warren SG, Seidel DJ. Contribution of stratospheric cooling to satellite-inferred tropospheric temperature trends. *Nature*. 2004;429(6987):55-8.
- 644.Fujimoto A, Matsumura A, Nakamura K, Aoki T, Enomoto T. Chiari malformation type I associated with familial spastic paraplegia: report of a surgically treated case. *Childs Nerv Syst*. 2004; Epub ahead of print
- 645.Fujioka T, Yasuchika K, Nakamura Y, Nakatsuji N, Suemori H. A simple and efficient cryopreservation method for primate embryonic stem cells. *Int J Dev Biol*. 2004; 48(10):1149-54.
- 646.Fujita H. Lu X. Suzuki M. Ishiwata S. Kawai M. The effect of tropomyosin on force and elementary steps of the cross-bridge cycle in reconstituted bovine myocardium. *J Physiol*. 2004; 556(2): 637-649.
- 647.Fujita H. Nagata M. Hoshina H. Nagashima K. Seki Y. Tanaka K. Nishizawa R. Shingaki S. Ohnishi M. Takagi R. Clinical significance and usefulness of quantification of telomerase activity in oral malignant and nonmalignant lesions. *Int J Oral Maxillofac Surg*. 2004; 33(7): 693-699.
- 648.Fujita M. Takikawa Y. Teramachi S. Aoyagi Y. Hiraishi T. Doi Y. Morphology and enzymatic degradation of oriented thin film of ultra-high molecular weight poly[(R)-3-hydroxybutyrate]. *Biomacromolecules*. 2004; 5(5): 1787-1791.
- 649.Fukasawa M. Freeland H. Perkin R. Watanabe T. Uchida H. Nishina A. Bottom water warming in the North Pacific Ocean. *Nature*. 2004; 427(6977): 825-827.
- 650.Fukuda H. Kodama J-I. Kai S. Circadian rhythm formation in plant seedling: Global synchronization and bifurcation as a coupled nonlinear oscillator system. *Biosystems*. 2004;77(1-3): 41-46.
- 651.Furspan PB. Chatterjee S. Freedman RR. Increased Tyrosine Phosphorylation Mediates the Cooling-Induced Contraction and Increased Vascular Reactivity of Raynaud's Disease. *Arthritis Rheum*. 2004; 50(5): 1578-1585.
- 652.Gaines RB. Frysinger GS. Temperature requirements for thermal modulation in comprehensive two-dimensional gas chromatography. *J Separation Sci*. 2004; 27(5-6): 380-388.
- 653.Gajadhar AA, Allen JR. Factors contributing to the public health and economic importance of waterborne zoonotic parasites. *Vet Parasitol*. 2004; 126(1-2):3-14.
- 654.Galal S. El Massik MA. Abdallah OY. Daabis NA. Study of in-vitro release characteristics of carbamazepine extended release solid

matrix filled capsules based on Gelucires. *Drug Develop Indust Pharm.* 2004;30(8): 817-829.

655.Galan C, Garcia-Mozo H, Vazquez L, Ruiz L, De La Guardia CD, Trigo MM. Heat requirement for the onset of the *Olea europaea* L. pollen season in several sites in Andalusia and the effect of the expected future climate change. *Int J Biometeorol.* 2004; Epub ahead of print

656.Gallagher JEG, Baserga SJ. Two-hybrid Mpp10p interaction- defective Imp4 proteins are not interactiondefective in vivo but do confer specific pre-rRNA processing defects in *Saccharomyces cerevisiae*. *Nucleic Acids Res.* 2004; 32(4): 1404-1413.

657.Gallardo-Moreno AM, Gonzalez-Martin ML, Perez-Giraldo C, Bruque JM, Gomez-GarciaAC. The measurement temperature: An important factor relating physicochemical andadhesive properties of yeast cells to biomaterials. *J Coll Interface Sci.* 2004;271(2): 351-358.

658.Galli G, Taylor EW, Wang T. The cardiovascular responses of the freshwater turtle *Trachemys scripta* to warming and cooling. *J Exp Biol.* 2004; 207(Pt 9):1471-8.

659.Gallimore D. Reviewing the effectiveness of tympanic thermo-meters. *Nurs Times.* 2004; 10-16;100 (32): 32-4.

660.Gandjour J, Oehler J, Mohr A, Schellinger PD. [Heat stroke with alpha coma: A case report] *Nervenarzt.* 2004 ; Epub ahead of print

661.Ganguly T, Chatteraj P, Das M, Chanda PK, Mandal NC, Lee CY, Sau S. A point mutation at the C-terminal half of the repressor of temperate mycobacteriophage L1 affects its binding to the operator DNA. *J Biochem Mol Biol.* 2004; 37(6):709-14.

662.Gao H, Tan T, Wang D. Effect of composition on the release kinetics of phosphate controlled release glasses in aqueous medium. *J Control Release.* 2004;96(1): 21-28.

663.Gao W, Jin YN. Physiotherapy technique for tumor: Advances in modifiers of mildthermoradiotherapy. *Zhongguo Linchuang Kangfu.* 2004;8(14): 2720-2721.

664.Gao Y, Drange H, Bentsen M, Johannessen OM. Simulating transport of non-Chernobyl (137)Cs and (90)Sr in the North Atlantic-Arctic region. *J Environ Radioact.* 2004;71(1):1-16.

665.Garcia Callejo FJ, Platero Zamarrero A, Sebastian Gil E, Marco Sanz M, Alpera Lacruz RJ, Martinez Beneyto MP. [Otolologic determining factors on infra-red tympanic thermometry in children] *Acta Otorrinolaringol Esp.* 2004; 55(3):107-13.

666.Garcia DA, Perillo MA. Effects of flunitrazepam on the La-HII phase transition ofphosphatidylethanolamine using merocyanine 540 as a fluorescent indicator. *Colloids Surf B: Biointerfaces.* 2004;37(1-2): 61-69.

667.Garcia-Garcia I, Gonzales-Delgado CA, Valenzuela-Silva C, Hernandez-Bernal FFerrero-Bibilonia J, Soto-Hernandez R, Cervantes-Llano M, Duconge JCorrea-Fernandez A, Olivera-Ruano L, Lopez-Saura P. Bioequivalence of two recombinant interferon a-2b liquid formulations in healthymale volunteers. *Drugs in R & D.* 2004; 5(5): 271-280.

668.Garcia-Ochoa F, Santos VE, Alcon A. Chemical structured kinetic model for xanthan production. *Enzyme Microbiol Technol.* 2004; 35(4): 284-292.

669.Gard MN, Reiter RC, Stevenson CD. Anion radicals of di-trans-[12]annulene and heptalene in a one-pot synthesis from a common fire retardant. *Org Lett.* 2004; 6(3):393-6.

670.Gardenfors F, Nilsson F, Ungerstedt U, Nordstrom C-H. Adverse biochemical and physiological effects of prostacyclin in experimental brain oedema. *Acta Anaesth Scand.* 2004; 48(10): 1316-1321.

671.Garfinkel MR, Connors M, Ostrega D, Jarosz J, Philipson L, Millis JM. Islet isolation under cGMP conditions: replacing the coil. *Transplant Proc.* 2004; 36(4):1031-3.

672.Garrick RC, Sands CJ, Rowell DM, Tait NN, Greenslade P, Sunnucks P. Phylogeography recapitulates topography: very fine-scale local endemism of a saproxylic 'giant' springtail at Tallaganda in the Great Dividing Range of south-east Australia. *Mol Ecol.* 2004; 13(11): 3329-44.

673.Garrido AD, Fonseca TS, Alfredo E, Silva-Sousa YT, Sousa-Neto MD. Influence of ultrasound, with and without water spray cooling, on removal of posts cemented with resin or zinc phosphate cements. *J Endod.* 2004; 30(3):173-6.

674.Garzo V, Montanero JM. Diffusion of impurities in a granular gas. *Phys Rev E Stat Nonlin Soft Matter Phys.* 2004; 69(2 Pt 1):021301.

675.Garzon MC, Schweiger E. Cutis marmorata telangiectatica con-genita. *Semin Cutan Med Surg.* 2004; 23(2):99-106.

676.Gat Y, Bachar GN, Zukerman Z, Belenky A, Gorenish M. Physical examination may miss the diagnosis of bilateral varicocele: a comparative study of 4 diagnostic modalities. *J Urol.* 2004; 172(4 Pt 1): 1414-7.

677.Gat Y, Bachar GN, Zukerman Z, Belenky A, Gornish M. Varicocele: a bilateral disease. *Fertil Steril.* 2004; 81(2):424-429.

678.Gauci V, Matthews E, Dise N, Walter B, Koch D, Granberg G, Vile M. Sulfur pollution suppression of the wetland methane source in the 20th and 21st centuries. *Proc Natl Acad Sci U S A.* 2004; 101(34): 12583-7.

679.Gauriau C, Bernard J-F. Posterior Triangular Thalamic Neurons Convey Nociceptive Messages to the Secondary Somatosensory and Insular Cortices in the Rat. *J Neurosci.* 2004; 24(3):752-761.

680.Ge JJ, Hou H, Li Q, Graham MJ, Greiner A, Reneker DH, Harris FW, Cheng SZD. Assembly of well-aligned multiwalled carbon nanotubes in confinedpolyacrylonitrile Environs: Electrospun composite nanofiber sheets. *J Am Chem Soc.* 2004; 126(48): 15754-15761.

681.Gee KL, Sommerfeldt SD. Application of theoretical modeling to multichannel active control of cooling fan noise. *J Acoust Soc Am.* 2004; 115(1):228-36.

682.Geiser MH, Bonvin M, Quibel O. Corneal and retinal temperatures under various ambient conditions: A model andexperimental approach. *Klin Monatsbl Augenheilk.* 2004; 221(5): 311-314.

683.Gemmill WR, Smith MD, Zur Loye HC. Crystal growth, observation, and characterization of the low-temperature structure of the fluorite-related ruthenates:Sm(3)RuO(7) and Eu(3)RuO(7). *Inorg Chem* 2004; 43(14):4254-61.

684.Genevaux P, Keppel F, Schwager F, Langendijk-Genevaux PS, Hartl FU, GeorgopoulosC. In vivo analysis of the overlapping functions of DnaK and trigger factor. *EMBO Reports.* 2004; 5(2): 195-2004;

685.Genner MJ, Sims DW, Wearmouth VJ, Southall EJ, Southward AJ, Henderson PA, Hawkins SJ. Regional climatic warming drives long-term community changes of British marine fish. *Proc R Soc Lond B Biol Sci.* 2004 ; 271(1539):655-61.

686.Gente G, Iovino A, La Mesa C. Supramolecular Ass of a triblock copolymer in water. *J Coll Interface Sci.* 2004; 274(2): 458-464.

687.George K, Whyte G, Stephenson C, Shave R, Dawson E, Edwards B, Gaze D, Collinson P. Postexercise left ventricular function and cTnT in recreational marathon runners. *Med Sci Sports Exerc.* 2004; 36(10):1709-15.

688.George L, Bernhardt PV, Netsch KP, Wentrup C. Imidoylketene dimerization and rearrangement. *Org BiomolChem.*2004; 2(23): 3518-23.

689.Georgiou D, Metallinou C, Aivasidis A, Voudrias E, Gimouho-poulos K. Decolorization of azo-reactive dyes and cotton-textile waste water usinganaerobic digestion and acetate-consuming bacteria. *Biochem Engin J* 2004;. 19(1): 75-79.

690.Georgiou TK, Vamvakaki M, Patrickios CS, Yamasaki EN, Phylactou LA. Nanoscopic cationic methacrylate star homopolymers: Synthesis by group transferpolymerization, characterization and evaluation as transfection reagents. *Biomacromolecules.* 2004;5(6): 2221-2229.

691.Gerbier F, Thywissen JH, Richard S, Hugbart M, Bouyer P, Aspect A. Critical temperature of a trapped, weakly interacting Bose gas. *Phys Rev Lett.* 2004; 23;92(3):0304-05.

692.Gerrits LC, Battin MR, Bennet L, Gonzalez H, Gunn AJ. Epileptiform Activity during Rewarming from Moderate Cerebral Hypothermia in the Near-Term Fetal Sheep. *Pediatr Res.* 2004; Epub ahead of print

693.Gerritsen AE. [Pain after cementation of cast restorations] *Ned Tijdschr Tandheelkd.* 2004; 111(8):311-5.

694.Gettman MT, Blute ML, Chow GK, Neururer R, Bartsch G, Peschel R. Robotic-assisted laparoscopic partial nephrectomy: technique and initial clinical experience with DaVinci robotic system. *Urology.* 2004; 64(5):914-8.

695.Geurts C, Sleivert GG, Cheung SS. Temperature effects on the contractile characteristics and sub-maximal voluntary isometric force production of the first dorsal interosseus muscle. *Eur J Appl Physiol..* 2004; 91(1)41-45.

696.Geurts CL, Sleivert GG, Cheung SS. Effect of cold-induced vasodilatation in the index finger on temperature and contractile characteristics of the first dorsal interosseus muscle during cold-water immersion. *Eur J Appl Physiol.* 2004, Epub ahead of print

697.Ghaly AE, Kamal MA. Submerged yeast fermentation of acid cheese whey for protein production and pollution potential reduction. *Water Res.* 2004; 38(3):631-44.

698.Ghildyal P, Manchanda R. Effects of cooling and ARL 67156 on synaptic ecto-ATPase activity in guinea pig and mouse vas deferens. *Auton Neurosci.* 2004; 115(1-2):28-34.

699.Gibbons C, Freeman R. The evaluation of small fiber function-autonomic and quantitative sensory testing. *Neurol Clin.* 2004; 22(3): 683-702,

700.Gilbreath J. Global warming kills. *Environ Health Perspect.* 2004;112(3):A160.

701.Giles J. Climatologists get real over global warming. *Nature.* 2004; 432(7020):937.

702. Gill CO, Landers C. Proximate sources of bacteria on boneless loins prepared from routinely processed and detained carcasses at a pork packing plant. *Int J Food Microbiol*. 2004; 97(2):171-8.
703. Gill CO, McGinnis JC. Microbiological conditions of mechanically tenderized beef cuts prepared at four retail stores. *Int J Food Microbiol*. 2004;95(1): 95-102.
704. Gillett NP, Santer BD, Weaver AJ. Atmospheric science: stratospheric cooling and the troposphere. *Nature*. 2004 ; 432(7017):572;
705. Gillette RL, Angle C, Smith JW, Pascoe DD, Purohit RC. Thermographic evaluation of the canine athlete (abstract). *Thermol int* 2004; 14(3): 113.
706. Gilmore J, Fedirchuk B. The excitability of lumbar motoneurons in the neonatal rat is increased by a hyperpolarization of their voltage threshold for activation by descending serotonergic fibres. *J Physiol*. 2004; 558(Pt 1):213-24.
707. Ginde AA, Rhee SH, Katz ED. Predictors of outcome in geriatric patients with urinary tract infections. *JEmerg Med*. 2004;27(2): 101-108.
708. Giovambattista N, Angell CA, Sciortino F, Stanley HE. Glass-transition temperature of water: a simulation study. *Phys Rev Lett*. 2004 Jul 23;93(4):047801.
709. Giovambattista N, Stanley HE, Sciortino F. Cooling rate, heating rate, and aging effects in glassy water. *Phys Rev E Stat Nonlin Soft Matter Phys*. 2004; 69(5 Pt 1):050201.
710. Giraudier S, Hellio D, Djabourov M, Larreta-Garde V. Influence of weak and covalent bonds on formation and hydrolysis of gelatin networks. *Biomacromolecules*. 2004; 5(5):1662-6.
711. Girot P, Averty E, Flayoux I, Boschetti E. 2-Mercapto- 5- benzimidazolesulfonic acid: An effective multimodal ligand for the separation of antibodies. *J Chromat B: Analyt Techn BioMed LifeScis*. 2004 ; 808(1): 25-33.
712. Gladh G, Mattsson S, Lindstrom S. Outcome of the bladder cooling test in children with nonneurogenic bladder problems. *J Urol*. 2004; 172(3):1095-8.
713. Gladman AS, Davidson SRH, Easty AC, Joy ML, Sherar MD. Infrared thermographic SAR measurements of interstitial hyperthermia applicators: Errors due to thermal conduction and convection. *Int J Hyperthermia*. 2004; 20(5): 539-555.
714. Glenn RE Jr, Spindler KP, Warren TA, McCarty EC, Secic M. Cryotherapy decreases intraarticular temperature after ACL reconstruction. *Clin Orthop*. 2004 Apr; (421):268-72.
715. Godek SF, Bartolozzi AR. Hydration and core temperature in a football player during preseason: A case study. *Athletic Therapy Today*. 2004. 9(4):64-70.
716. Godek SF, Godek JJ, Bartolozzi AR. Thermal responses in football and cross-country athletes during their respective practices in a hot Environ. *J Athletic Training*. 2004;39(3): 235-240.
717. Goetzl L, Rivers J, Evans T, Citron DR, Richardson BE, Lieberman E, Suresh MS. Prophylactic acetaminophen does not prevent epidural fever in nulliparous women: A double-blind placebo-controlled trial. *J Perinatology*. 2004; 24(8): 471-475.
718. Golay S, Haeberli C, Delachaux A, Liaudet L, Kucera P, Waeber B, Feihl F. Local heating of human skin causes hyperemia without mediation by muscarinic cholinergic receptors or prostanoids. *J Appl Physiol*. 2004; 97(5):1781-1786.
719. Gold JE, Charniack M, Buchholz B. Infrared thermography for examination of skin temperature in the dorsal hand of office workers. *Eur J Appl Physiol*. 2004; 93(1-2):245-51.
720. Goldberg DJ. Nonablative laser technol: Radiofrequency. *Aesthetic Surg J*. 2004;24(2):180-181.
721. Goldoni M, Catalani S, De Palma G, Manini P, Acampa O, Corradi M, Bergonzi R, Apostoli P, Mutti A. Exhaled breath condensate as a suitable matrix to assess lung dose and effects in workers exposed to cobalt and tungsten. *Environ Health Perspect*. 2004; 112(13):1293-8.
722. Goldschmidt H. Heart treatment with infrared thermal sauna cabins. *Tagliche Praxis*. 2004;45(3): 541-542.
723. Golja P, Kacin A, Tipton MJ, Eiken O, Mekjavic IB. Hypoxia increases the cutaneous threshold for the sensation of cold. *Eur J Appl Physiol*. 2004; 92(1-2): 62-68.
724. Golomb D, Barry E, Ryan D, Lawton C, Swett P. Limestone-particle- stabilized macroemulsion of liquid and supercritical carbon dioxide in water for ocean sequestration. *Environ Sci Technol*. 2004; 38(16): 4445-50.
725. Gomes GF, Vargas JV, Filho ED. Utilization of temperature distribution in expiratory speaking flow as a new parameter for speech production analysis. *J Med Eng Technol*. 2004;28(1) :22-31.
726. Gonzalez JM, Jurado V, Laiz L, Zimmermann J, Hermosin B, Saiz-Jimenez C. *Pectinatus portalensis* nov. sp., a relatively fast-growing, coccoidal, novel *Pectinatus* species isolated from a wastewater treatment plant. *Antonie van Leeuwenhoek Int J Gen Mol Microbiol* 2004; 86(3): 241-248.
727. Gonzalez-Perez A, Del Castillo JL, Czapkiewicz J, Rodriguez JR. Thermodynamics of micellization of decyldimethylbenzylammonium bromide in aqueous solution. *Colloids Surf A-Physicochem Engin Aspects*. 2004;232(2-3):183-189.
728. Gonzalez-Perez JA, Gonzalez-Vila FJ, Almendros G, Knicker H. The effect of fire on soil organic matter-a review. *Environ Int*. 2004; 30(6):855-70.
729. Goodman S. "Cooling-off" vs immediate revascularization for patients with acute coronary syndromes. *JAMA*. 2004; 291(6):691-692
730. Goolsby HA, Blanton JR, Cotter PZ, Prien SD. Preliminary trial: motility comparisons of a unique freezing technology (UFI) to liquid nitrogen mist methodology for cryopreservation of porcine spermatozoa. *Reprod Domest Anim*. 2004; 39(5):328-32.
731. Gorbach AM. Local alternated temperature gradients as footprints of cortical functional activation. *J Thermal Biol*. 2004;29(7-8 Spec. Iss.): 589-598.
732. Gordeev MI, Ejov MN. Global warming and variation in the chromosomal composition of Siberian malarial mosquito populations. *Dokl Biol Sci*. 2004; 395:136-9.
733. Gordon CJ. Effect of cage bedding on temperature regulation and metabolism of group-housed female mice. *Comp Med*. 2004; 54(1): 63-8.
734. Gordon CJ, Haley CD, McLennan PL, Tipton MJ, Mekjavic IB, Taylor NAS. An open-loop model for investigating mammalian thermo-sensitivity. *J Thermal Biol*. 2004;29(7-8 Spec. Iss.):703-707.
735. Gordon T. Metalworking fluid-the toxicity of a complex mixture. *J Toxicol Environ Health A*. 2004; 67(3):209-19.
736. Gorenek G, Akyilmaz E, Dincaya E. Immobilization of catalase by entrapping in alginate beads and catalase biosensor preparation for the determination of hydrogen peroxide decomposition. *Artif Cells Blood Subst Immobil Biotechnol*. 2004; 32(3):453-461.
737. Gornushkin IB, Omenetto N, Smith BW, Winefordner JD. Determination of the maximum temperature at the center of an optically thick laser-induced plasma using self-reversed spectral lines. *Appl Spectrosc*. 2004; 58(9):1023-31.
738. Gosalia K, Weiland J, Humayun M, Lazzi G. Thermal elevation in the human eye and head due to the operation of a retinal prosthesis. *IEEE Trans Biomed Eng*. 2004; 51(8):1469-77.
739. Goudkamp JE, Seebacher F, Ahern M, Franklin CE. Physiological thermoregulation in a crustacean? Heart rate hysteresis in the freshwater crayfish *Cherax destructor*. *Comp Biochem Physiol A Mol Integr Physiol*. 2004 ; 138(3):399-403.
740. Govindan S. Complex regional pain syndrome: Update (abstract). *Thermol int* 2004, 14(3): 104.
741. Govindan, S. Chronic pain syndromes, role of central sensitization (abstract). *Thermol int* 2004, 14(3): 105.
742. Gozzoli V, Treggiari MM, Kleger GR, Roux-Lombard P, Fathi M, Pichard C, Romand JA. Randomized trial of the effect of antipyresis by metamizol, propacetamol or external cooling on metabolism, hemodynamics and inflammatory response. *Intensive Care Med*. 2004; 30(3): 401-7.
743. Gradisar M, Lack L. Relationships between the circadian rhythms of finger temperature, core temperature, sleep latency, and subjective sleepiness. *J Biol Rhythms*. 2004; 19(2): 157-63.
744. Graham JM. The biological terraforming of Mars: planetary ecocynthesis as ecological succession on a global scale. *Astrobiology*. 2004; 4(2):168-95.
745. Gravel JF, Luo Q, Boudreau D, Tang XP, Chin SL. Sensing of halocarbons using femtosecond laser-induced fluorescence. *Anal Chem*. 2004; 76(16):4799-805.
746. Gray RE, Seng N, Mackay IR, Rowley MJ. Measurement of antibodies to collagen II by inhibition of collagen fibril formation in vitro. *J Immunol Methods*. 2004; 285(1):55-61.
747. Greene SA, Benson GJ, Tranquilli WJ, Grimm KA. Effect of isoflurane, atracurium, fentanyl, and noxious stimulation on bispectral index in pigs. *Comparative Med*. 54(4): 397-403. 2004;
748. Gregory JM, Huybrechts P, Raper SC. Climatology: threatened loss of the Greenland ice-sheet. *Nature*. 2004 ; 428(6983):616.
749. Greig JE, Carnie JA, Tallis GF, Ryan NJ, Tan AG, Gordon IR, Zwolak B, Leydon JA, Guest CS, Hart WG. An outbreak of Legionnaires' disease at the Melbourne Aquarium, April 2000: investigation and case-control studies. *Med J Aust*. 2004;180(11):566-72.
750. Greve B, Raulin C. Prospective study of port wine stain treatment with dye laser: comparison of two wavelengths (585 nm vs. 595 nm) and two pulse durations (0.5 milliseconds vs. 20 milliseconds). *Lasers Surg Med*. 2004; 34(2):168-73.

751. Grillo MH. The impact of a vocal improvement course in a speech language and hearing science prevention context. *Pro Fono*. 2004; 16(2):159-68.
- 752.756. Grimault S, Lucas T, Quellec S, iette F. Quantitative measurement of temperature by proton resonance frequency shift at low field: a general method to correct non-linear spatial and temporal phase deformations. *J Magn Reson*. 2004; 170(1):79-87.
753. Grimm D. Science weathers the storms. *Science*. 2004; 306(5693): 37-39.
754. Grissom CK, Radwin MI, Scholand MB, Harmston CH, Muetterties MC, Bywater TJ. Hypercapnia increases core temperature cooling rate during snow burial. *J Appl Physiol*. 2004; 96(4): 1365-1370.
755. Gritti F, Guiochon G. Accuracy and precision of adsorption isotherm parameters measured by dynamic HPLC methods. *J Chromat. A.* 2004;1043(2): 159-170.
756. Grobe J, Rowland N, Katovich M. Role of angiotensin II and the subfornical organ in the pharmacological actions of ethanol. *Alcohol Alcohol*. 2004; 39(5):410-7.
757. Grocott HP, Mathew JP, Carver EH, Phillips-Bute B, Landolfo KP, Newman MF. A Randomized Controlled Trial of the Arctic Sun Temperature Management System Versus Conventional Methods for Preventing Hypothermia during Off-Pump Cardiac Surgery. *Anesth Analg*. 2004; 98(2): 298-302.
758. Groom RC, Rassias AJ, Cormack JE, DeFoe GR, DioDato C, Krumholz CK, Forest RJ, Pieroni JW, O'Connor B, Warren CS, Olmstead EM, Ross CS, O'Connor GT; Northern New England Cardiovascular Disease Study Group. Highest core temperature during cardiopulmonary bypass and rate of mediastinitis. *Perfusion*. 2004; 19(2): 119-25.
759. Guan J, Spencer JL, Sampath M, Devenish J. The fate of a genetically modified *Pseudomonas* strain and its transgene during the composting of poultry manure. *Can J Microbiol*. 2004;50(6): 415-421.
760. Guest JD, Vanni S, Silbert L. Mild hypothermia, blood loss and complications in elective spinal surgery. *Spine J*. 2004; 4(2):130-7.
761. Guivarc'h Y, Van Loey A, Zuber F, Hendrickx M. Development characterization and use of a high-performance enzymatic time-temperature integrator for the control of sterilization process' impacts. *Bio-technol BioEngin*. 2004; 88(1): 15-25.
762. Guibal E, Vincent T. Chitosan-supported palladium catalyst. IV. Influence of temperature on nitrophenol degradation and thermodynamic parameters. *J Environ Manag*. 2004 71(1): 15-23;
763. Guillaumon M, Villagrasa M, Eljarrat E, Barcelo D. Development of a liquid chromatography-electrospray mass spectrometric method for the simultaneous analysis of benzoxazolinones and their degradation products. *J Chromat. A.* 2004;1052(1-2): 53-59.
764. Guillaume D, Heinisch S, Rocca JL. Effect of temperature in reversed phase liquid chromatography. *J Chromat. A.* 2004;1052(1-2): 39-51.
765. Guillot A, Collet C, Molinaro C, Dittmar A. Expertise and peripheral autonomic activity during the preparation phase in shooting events. *Percept Mot Skills*. 2004; 98(2):371-81.
766. Guiot C, Cavalli R, Gaglioti P, Danelon D, Musacchio C, Trotta M, Todros T. Temperature monitoring using ultrasound contrast agents: in vitro investigation on thermal stability. *Ultrasonics*. 2004; 42(1-9): 927-30.
767. Gula LJ, Skanes A, Krahn AD, Klein GJ. Novel approach to diagnosis of a wide-complex tachycardia. *J Cardiovasc Electrophysiol*. 2004;15(4):466-9.
768. Gulevich SJ, Conwell TD, Lane J, Lockwood B, Schwettmann RS, Rosenberg N, Goldman LB. Stress infrared telethermography is useful in the diagnoses of complex regional pain syndrome, type I (formerly reflex sympathetic dystrophy) (abstract). *Thermol int* 2004, 14(3): 104-105
769. Gulston M, de Lara C, Jenner T, Davis E, O'Neill P. Processing of clustered DNA damage generates additional double-strand breaks in mammalian cells post-irradiation. *Nucleic Acids Res*. 2004; 32(4): 1602-9.
770. Gundel H, Greiner A, Ceballos-Baumann AO, Ladwig KH, Von Rad M, Forstl H, Jahn T. Alexithymia is no risk factor for exacerbation in spasmodic torticollis patients. *J Psychosom Res*. 2004; 56(6):699-705.
771. Gunduz U. Evaluation of viscosities of aqueous two-phase systems containing protein. *J Chromat B: Analyt Techn BioMed LifeSci*. 2004;807(1): 157-161.
772. Gurisik E, Arica MY, Bektas S, Genc O. Comparison of the heavy metal biosorption capacity of active, heat-inactivated and NaOH-treated *Phanerochaete chrysosporium* biosorbents. *Engin Life Sci*. 2004; 4(1): 86-89.
773. Gusta LV, Wisniewski M, Nesbitt NT, Gusta ML. The effect of water, sugars, and proteins on the pattern of ice nucleation and propagation in acclimated and nonacclimated canola leaves. *Plant Physiol*. 2004; 135(3):1642-53.
774. Gyorgy E, Toricelli P, Socol G, Ilescu M, Mayer I, Mihailescu IN, Bigi A, Werckman J. Biocompatible Mn²⁺-doped carbonated hydroxyapatite thin films grown by pulsed laser deposition. *J Biomed Materials Res Part A*. 2004; 71(2): 353-358.
775. Haas NA, Plumptre K, Justo R, Jalali H, Pohlner P. Postoperative junctional ectopic tachycardia (JET). *Z Kardiol*. 2004; 93(5):371-80.
776. Haber C. Thermal imaging outcome assessments within evidence based practice (abstract). *Thermol int* 2004, 14(3): 112.
777. Hadad E, Rav-Acha M, Heled Y, Epstein Y, Moran DS. Heat stroke : a review of cooling methods. *Sports Med*. 2004; 34(8):501-11
778. Hadad E, Moran DS, Epstein Y. Cooling heat stroke patients by available field measures [2]. *Intensive Care Med*. 2004.30(2)338.
779. Haddjeri N, Faure C, Lucas G, Mnie-Filali O, Chouvet G, Astier B, Renaud B, Blier P, Debonnel G. In-vivo modulation of central 5-hydroxytryptamine (5-HT_{1A}) receptor-mediated responses by the cholinergic system. *Int J Neuropsychopharmacol*. 2004; 1-9
780. Hagobian TA, Jacobs KA, Kiratli BJ, Friedlander AL. Foot Cooling Reduces Exercise-Induced Hyperthermia in Men with Spinal Cord Injury. *Med Sci Sports Exerc*. 2004; 36(3) 411-417.
781. Hahn M, Junger M, Shore AC. The effect of prostaglandin E1 on nailfold capillary blood pressure and red blood cell velocity in humans. *Clin Hemorheol Microcirc*. 2004.31(3)227-234.
782. Halachmi I. Designing the automatic milking farm in a hot climate. *J Dairy Sci*. 2004; 87(3):764-75.
783. Haley CD, Gordon CJ, Taylor NAS, Jenkins AB. Investigating high-amplitude oscillations in rat tail skin blood flow during core heating and cooling. *J Thermal Biol*. 2004. 29(7-8 Spec. Iss.):779-783.
784. Haley CD, Zeyl A, Taylor NAS, Jenkins AB. Novel, high-amplitude blood-flow oscillations in vasodilating human skin. *J Thermal Biol*. 2004; 29(7-8 Spec. Iss.):717-723.
785. Haley JC, Lodge TP. Failure of time-temperature superposition in dilute miscible polymer blends. *Colloid & Polymer Sci* 2004; 282(8): 793-801.
786. Hall A, Girkin JM. A review of potential new diagnostic modalities for caries lesions. *J Dent Res*. 2004;83 Spec No C:C89-94.
787. Hall M, Shurr DG, Zimmerman MB, Saltzman CL. Plantar foot surface temperatures with use of insoles. *Iowa Orthop J*. 2004; 24:72-5.
788. Halldorsson A, Thordarson P, Kristinsson B, Magnusson CD, Haraldsson GG. Lipase-catalysed kinetic resolution of 1-O-alkylglycerols by sequential transesterification. *Tetrahedron-Asymmetry*. 15 - (18): 2893-2899. 2004;
789. Halle B. Biomolecular cryocrystallography: Structural changes during flash-cooling. *Proc Nat Acad Sci USA*. 2004. 101(14) 4793-4798.
790. Halliday SP, Beggs CB. Desiccant cooling at the University of Lincoln: A case study. *Indoor Built Environ*. 2004; 13(4)277-285.
791. Hama F, Legault SR, Rakobowchuk M, Ducharme MB, Weber JM. Effects of carbohydrate availability on sustained shivering II. Relating muscle recruitment to fuel selection. *J Appl Physiol*. 2004; 96(1):41-9.
792. Hama F, Legault SR, Weber JM. Fuel selection during intense shivering in humans: EMG pattern reflects carbohydrate oxidation. *J Physiol*. 2004; 556(Pt 1):305-13.
793. Hamilton MM. Laser treatment of pigmented and vascular lesions in the office. *Facial Plast Surg*. 2004 ; 20(1):63-9.
794. Hammiche A, Bozec L, Pollock HM, German M, Reading M. Progress in near-field photothermal infra-red microspectroscopy. *J Microscopy*. 2004; 213(2): 129-134.
795. Hamsch M, Hoffmann R, Buff W, Binhack M, Klett S. An interrogation unit for passive wireless SAW sensors based on fourier transform. *IEEE Trans Ultrason Ferroelectr Freq Control*. 2004; 51(11): 1449-56.
796. Han B, Bischof JC. Direct cell injury associated with eutectic crystallization during freezing. *Cryobiology*. 2004; 48(1):8-21.
797. Han B, Bischof JC. Thermodynamic Nonequilibrium Phase Change Behavior and Thermal Properties of Biological Solutions for Cryobiology Applications. *J Biomech Engin*. 126(2): 196-203. 2004;
798. Han J, Goncharov V, Kaledin LA, Komissarov AV, Heaven MC. Electronic spectroscopy and ionization potential of UO₂ in the gas phase. *J Chem Phys*. 2004; 120(11):5155-63.
799. Hancox CI, Doret SC, Hummon MT, Luo L, Doyle JM. Magnetic trapping of rare-earth atoms at millikelvin temperatures. *Nature*. 2004; 431(7006): 281-284.
800. Hanneman SK, Jesurum-Urbaitis JT, Bickel DR. Comparison of methods of temperature measurement in swine. *Lab Anim*. 2004; 38(3): 297-306.
801. Hansen J, Nazarenko L. Soot climate forcing via snow and ice albedos. *Proc Natl Acad Sci U S A*. 2004; 101(2):423-8.

- 802.Hansen J, Sato M. Greenhouse gas growth rates. *Proc Natl Acad Sci U S A*. 2004; 101(46):16109-14.
- 803.Hansen J. Defusing the global warming time bomb. *Sci Am*. 2004; 290(3):68-77.
- 804.Harada J, Ogawa K. X-ray diffraction analysis of nonequilibrium states in crystals: observation of an unstable conformer in flash-cooled crystals. *J Am Chem Soc*. 2004;126(11):3539-44.
- 805.Harazin B, Kuprowski J, Harazin-Lechowska A. [Comparison of vibrotactile thresholds in women obtained with two psychophysical measurement methods] *Med Pr*. 2004;55(4):321-8.
- 806.Harig R. Passive remote sensing of pollutant clouds by Fourier-transform infrared spectrometry: signal-to-noise ratio as a function of spectral resolution. *Appl Opt*. 2004; 43(23):4603-10.
- 807.Harjunpaa S, Rouvinen-Watt K. The development of homeothermy in mink (*Mustela vison*). *Comp Biochem Physiol A Mol Integr Physiol*. 2004; 137(2):339-48.
- 808.Harper DL. Restoring credibility to Vet thermographic exams (abstract). *Thermol int* 2004, 14(3): 108.
- 809.Harper LA, Sharpe RR, Parkin TB, De Visscher A, Van Cleemput O, Byers FM. Nitrogen cycling through swine production systems: Ammonia, dinitrogen, and nitrous oxide emissions. *J Environ Quality*. 2004;33(4): 1189-1201.
- 810.Harrington RA. Antithrombotic therapy and the invasive cardiac catheterization management strategy: the intracoronary stenting with antithrombotic regimen cooling-off trial. *Curr Cardiol Rep*. 2004; 6(4): 271.
- 811.Harris J., Smith JW, Pascoe DD. Thermography of skin temperatures following running at different intensities (abstract). *Thermol int* 2004, 14(3): 111-112.
- 812.Harrison BA, Shine TSJ, De Ruyter ML, Murray MJ, Kottenberg-Assemacher EPeters J. Spinal Cord Temperature [8] (multiple letters). *Anesthesiology*. 100(1): 198-199. 2004;
- 813.Hart J, Owens EF Jr. Stability of paraspinal thermal patterns during acclimation. *J Manipul Physiol Ther*. 2004; 27(2):109-17.
- 814.Harte J, Ostling A, Green JL, Kinzig A. Biodiversity conservation: climate change and extinction risk. *Nature*. 2004 Jul 1;430(6995):33
- 815.Hasegawa A, Hamada Y, Mehandjiev T, Koyama K. In vitro growth and maturation as well as fertilization of mouse preantral oocytes from vitrified ovaries. *Fertil Steril*. 2004; 81 Suppl 1:824-30.
- 816.Hasegawa H, Ishiwata T, Saito T, Yazawa T, Aihara Y, Meeusen R. Inhibition of the preoptic area and anterior hypothalamus by tetrodotoxin alters thermoregulatory functions in exercising rats. *J Appl Physiol*. 2004; Epub ahead of print
- 817.Hasegawa T, Hashikawa S-N, Nakamura T, Torii K, Ohta M. Factors determining prognosis in streptococcal toxic shock-like syndrome: Results of a nationwide investigation in Japan. *Microbes Infect*. 2004; 6(12): 1073-1077.
- 818.Haseloh S, Sung YC, Mamak M, Coombs N, Petrov S, Chopra N, Ozin GA. Towards flexible inorganic 'mesomaterials': One-pot low temperature synthesis of mesostructured nanocrystalline titania. *Chem Commun*. 2004;10(13): 1460-1461.
- 819.Hashiguchi N, Tochihara Y, Ohnaka T, Tsuchida C, Otsuki T. Physiological and subjective responses in the elderly when using floor heating and air conditioning systems. *J Physiol Anthropol Appl Human Sci*. 2004;23(6):205-13.
- 820.Hashimoto M, Yamamoto N. Decrease in heart rates by artificial CO₂ hot spring bathing is inhibited by beta1-adrenoceptor blockade in anesthetized rats. *J Appl Physiol*. 2004; 96(1):226-32.
- 821.Hassan M, Little RF, Vogel A, Aleman K, Wyvill K, Yarchoan R, Gandjbakhche AH. Quantitative assessment of tumor vasculature and response to therapy in kaposi's sarcoma using functional noninvasive imaging. *Technol Cancer Res Treat*. 2004; 3(5):451-7.
- 822.Haufschild T, Prunte C, Messerli J, Flammer J. Increased endo-thelin-1 plasma level in young adults with retinal vascular occlusive diseases. *Klin Monatsbl Augenheilkd*. 2004; 221(5):357-9.
- 823.Havea P, Carr AJ, Creamer LK. The roles of disulphide and non-covalent bonding in the functional properties of heat-induced whey protein gels. *J Dairy Res*. 2004; 71(3):330-9.
- 824.Hay AD, Peters TJ, Wilson A, Fahey T. The use of infrared thermometry for the detection of fever. *Br J Gen Pract*. 2004; 54(503):448-50.
- 825.Hay JE. Acute Liver Failure. *Curr Treat Options Gastroenterol*. 2004; 7(6):459-468.
- 826.Hayashi C, Tokura H. The effects of two kinds of mask (with or without exhaust valve) on clothing microclimates inside the mask in participants wearing protective clothing for spraying pesticides. *Int Arch Occup Environ Health*. 2004 Jan;77(1):73-8
- 827.Hayashi K, Honda Y, Ogawa T, Wada H, Kondo N, Nishiyasu T. Effects of brief leg cooling after moderate exercise on cardiorespiratory responses to subsequent exercise in the heat. *Eur J Appl Physiol*. 2004; 92(4-5): 414-420.
- 828.Hayashi M. Temperature-electrical conductivity relation of water for Environmental monitoring and geophysical data inversion. *Environmental Monitoring & Assessment*. 96(1-3): 119-128. 2004;
- 829.Hayden G, Milne HC, Patterson MJ, Nimmo MA. The reproducibility of closed-pouch sweat collection and thermoregulatory responses to exercise-heat stress. *Eur J Appl Physiol*. 2004. 91(5-6): 748-751.
- 830.Hayek SM, Mekhail NA. Complex Regional Pain Syndrome: Re-defining Reflex Sympathetic Dystrophy and Causalgia. *Physician Sports Med*. 2004; 32(5).
- 831.Hayes BT, Merrick MA, Sandrey MA, Cordova ML. Three-MHz ultrasound heats deeper into the tissues than originally theorized. *J Athletic Training*. 2004; 39(3): 230-234.
- 832.He C, Sun J, Deng C, Zhao T, Deng M, Chen X, Jing X. Study of the synthesis, crystallization, and morphology of poly(ethylene glycol)-poly(epsilon-caprolactone) diblock copolymers. *Biomacromolecules*. 2004; 5(5):2042-7.
- 833.He Y, Dong Q, Tiersch TR, Devireddy RV. Variation in the membrane transport properties and predicted optimal rates of freezing for spermatozoa of diploid and tetraploid Pacific oyster, *Crassostrea gigas*. *Biol Reprod*. 2004; 70(5):1428-37.
- 834.Head JF, Elliott RL, Keyserlingk JR, Gavin RJ, Diakides NA. Development and early results of a breast infrared database (MedATR) (abstract). *Thermol int* 2004, 14(3): 104.
- 835.Healy C, Mulhall KJ, Nelligan M, Murray P, Bouchier-Hayes D. Postoperative stiffness and adhesion formation around repaired and immobilized Achilles tenotomies are prevented using a model of heat shock protein induction. *J Surg Res*. 2004; 120(2):225-9.
- 836.Heilmeyer I. Die Regulationsthermographie nach Rost - zwischen Schulmedizin und Naturheilkunde (am Beispiel funktioneller Erkranungsbilder). *Thermomed* 2003,18/19: 52-54
- 837.Heilmeyer I. Postcholecystektomie Syndrom. Prä- und postoperative Abklärung durch Regulationsthermographie nach Prof Rost. *Thermomed* 2003,18/19:55-58
- 838.Heindl S, Struck J, Wellhoner P, Sayk F, Dodt C. Effect of facial cooling and cold air inhalation on sympathetic nerve activity in men. *Respir Physiol Neurobiol*. 2004. 142(1):69-80.
- 839.Heiri O, Tinner W, Lotter AF. Evidence for cooler European summers during periods of changing meltwater flux to the North Atlantic. *Proc Natl Acad Sci U S A*. 2004; 101(43):15285-8.
- 840.Helbing J, Bonacina L, Pietri R, Bredenbeck J, Hamm P, van Mourik F, Chaussard F, Gonzalez-Gonzalez A, Chergui M, Ramos-Alvarez C, Ruiz C, Lopez-Garriga J. Time-resolved visible and infrared study of the cyano complexes of myoglobin and of hemoglobin I from *Lucina pectinata*. *Biophys J*. 2004;87(3):1881-91.
- 841.Heled Y, Epstein Y, Moran DS. Heat strain attenuation while wearing NBC clothing: dry-ice vest compared to water spray. *Aviat Space Environ Med*. 2004; 75(5):391-396.
- 842.Heled Y, Moran DS, Mendel L, Laor A, Pras E, Shapiro Y. Human ACE I/D polymorphism is associated with individual differences in exercise heat tolerance. *J Appl Physiol*. 2004; 97(1):72-6.
- 843.Heled Y, Rav-Acha M, Shani Y, Epstein Y, Moran DS. The "golden hour" for heatstroke treatment. *Mil Med*. 2004; 169(3):184-6.
- 844.Hemmerling TM, Prieto I, Choiniere JL, Basile F, Fortier JD. Ultra-fast-track anesthesia in off-pump coronary artery bypass grafting: a prospective audit comparing opioid-based anesthesia vs thoracic epidural-based anesthesia. *Can J Anaesth*. 2004; 51(2):163-8.
- 845.Heng BC, Kuleshova LL, Bested SM, Liu H, Cao T. The cryopreservation of human embryonic stem cells. *Biotechnol Appl Biochem*. 2004; Epub ahead of print
- 846.Heng BC, Yu YJ, Ng SC. Slow cooling protocols for microcapsule cryopreservation. *J Microencapsul*. 2004; 21(4):455-67.
- 847.Henley DE, Glatthaar C. ADHD: A diabetic hyperglycemic dilemma [3]. *Diabetes Care*. 2004; 27(12): 3020-3021.
- 848.Hennig GW, Hirst GDS, Park KJ, Smith CB, Sanders KM, Ward SM, Smith TK. Propagation of pacemaker activity in the guinea-pig atrium. *J Physiol*. 2004; 556(2): 585-599.
- 849.Henry HA, Cleland EE, Field CB, Vitousek PM. Interactive effects of elevated CO₂, N deposition and climate change on plant litter quality in a California annual grassland. *Oecologia*. 2004; Epub ahead of print
- 850.Heo NH, Park SC, Kang H. Effects of mixture ratio and hydraulic retention time on single-stage anaerobic digestion of food waste and waste activated sludge. *J Environ Sci Health Part A-Toxic/Hazard Subst Environ Engin*. 2004; 39(7): 1739-1756.
- 851.Herenyi L, Szigeti K, Fidy J, Temesvari T, Schlichter J, Friedrich J. Aging dynamics in globular proteins: Summary and analysis of ex-

- perimental results and simulation by a modified trap model. *Eur Biophys J.* 2004; 33(1): 68-75.
- 852.Herrera AG. Testing disinfectants in the food factory: phenol coefficient method. *Methods Mol Biol.* 2004; 268:281-8.
- 853.Herrick AL, Hutchinson C. Vascular imaging. *Best Pract Res Clin Rheumatol.* 2004; 18(6):957-79.
- 854.Herry CL, Frize M. Quantitative assessment of pain-related thermal dysfunction through Clin digital infrared thermal imaging. *Biomed Eng Online.* 2004; 3(1):19.
- 855.Heutlinger G. Inductive warming of intravenous fluids. *Anesthesiology.* 2004; 101(4):1021-1022.
- 856.Hess K, Reinecke M, Clodius L, Schwarz U. Paradoxical focal hyperhidrosis in response to cold after faulty regeneration. *Eur Neurol.* 2004;51(4):241-3
- 857.Hessler AM, Lowe DR, Jones RL, Bird DK. A lower limit for atmospheric carbon dioxide levels 3.2 billion years ago. *Nature.* 2004; 428(6984):736-8.
- 858.Heuberger E, Redhammer S, Buchbauer G. Transdermal absorption of (-)-linalool induces autonomic deactivation but has no impact on ratings of well-being in humans. *Neuropsychopharmacology.* 2004; 29(10):1925-1932.
- 859.Heusch AI, McCarthy PW. Physiological factors that affect the emitted surface temperature (abstract). *Thermol int* 2004, 14(3): 110.
- 860.Heusch AI, McCaffery C. & McCarthy PW. Cooling curves: is time important? (abstract). *Thermol int* 2004, 14(4): 144
- 861.Heusch AI, Ridley I & McCarthy PW. Raynaud's "cold" pro-vo cation test: a fair test? (abstract). *Thermol int* 2004, 14(3): 109-110.
- 862.Heusch AI, McCarthy PW. Somatotype and infrared thermo-graphic imaging. *Therm Int.* 2004; 14(2):51-56.
- 863.Heutelbeck A, Rinnau E, Luthin S, Thiemich J, Forster G, Noring R, Rabente T, Glade T, Warfomeow I, Dunkelberg H, Schulz TG, Hailier E. Allergy testing for fungal allergy in workers handling cooling lubricants fluids in the metal industry. *Zentralbl Arbeitsmed, Arbeitsschutz Ergonomie.* 2004; 54(5):138-145.
- 864.Heyes DJ, Hunter CN. Identification and characterization of the product release steps within the catalytic cycle of protochlorophyllide oxidoreductase. *Biochemistry.* 2004;43(25): 8265-8271.
- 865.Heymann WR. Rosacea subtype-directed therapy. *J Am Acad Derma tol* 2004. 51(1):90-92.
- 866.Hibner M, Magrina JF. New technologies in controlling hemorrhage during pelvic surgery. *Cme J Gynec Oncol.* 2004; 9(1): 41-44.
- 867.Hildebrand F, Giannoudis PV, van Griensven M, Chawda M, Pape HC. Pathophysiological changes and effects of hypothermia on outcome in elective surgery and trauma patients. *Am J Surg.* 2004; 187(3):363-71.
- 868.Hildreth MB, Blunt DS, Oaks JA. Lethal effects of freezing *Echinococcus multilocularis* eggs at ultralow temperatures. *J Parasitol.* 2004; 90(4):841-4.
- 869.Hilgenfeld MS, Simon S, Blowey D, Richmond W, Alon US. Lack of seasonal variations in urinary calcium/creatinine ratio in school-age children. *Pediatric Nephrology.* 2004; 19(10): 1153-1155.
- 870.Hilmann E, Mayer C, Schrader L. Lying behaviour and adreno-cortical response as indicators of the thermal tolerance of pigs of different weights. *Animal Welfare.* 2004; 13(3): 329-335.
- 871.Himmelseher S, Werner C. [Therapeutic hypothermia after traumatic brain injury or subarachnoid hemorrhage Current practices of German anaesthesia departments in intensive care.] *Anaesthesist.* 2004; 53(12):1168-76.
- 872.Hindley J, Gedroyc WM, Regan L, Stewart E, Tempany C, Hynnen K, Macdanold N, Inbar Y, Itzhak Y, Rabinovici J, Kim K, Geschwind JF, Hesley G, Gostout B, Ehrenstein T, Hengst S, Sklair-Levy M, Shushan A, Jolesz F. MRI guidance of focused ultrasound therapy of uterine fibroids: early results. *AJR Am J Roentgenol.* 2004; 183(6): 1713-9.
- 873.Hindmarsh JP, Wilson DI, Johns ML. Measuring self-diffusion in super-cooled liquid droplets with pulsed gradient spin echo (PGSE) techniques. *Colloids Surf A-Physicochem Engineer Aspects.* 2004; 234(1-3) 129-134.
- 874.Hinds T, McEwan I, Perkes J, Dawson E, Ball D, George K. Effects of massage on limb and skin blood flow after quadriceps exercise. *Med Sci Sports Exerc.* 2004. 36(8):1308-1313.
- 875.Hiraoka K, Hiraoka K, Kinutani M, Kinutani K. Blastocoele collapse by micropipetting prior to vitrification gives excellent survival and pregnancy outcomes for human day 5 and 6 expanded blastocysts. *Hum Reprod.* 2004; 19(12):2884-8.
- 876.Hiraoka K, Hiraoka K, Kinutani M, Kinutani K. Case report: successful pregnancy after vitrification of a human blastocyst that had completely escaped from the zona pellucida on day 6. *Hum Reprod.* 2004; 19(4):988-90.
- 877.Hiratai M, Sakakibara H, Toibana N. Medial plantar nerve conduction velocities among patients with vibration syndrome due to rock-drill work. *Ind Health.* 2004; 42(1):24-8.
- 878.Hirschl M, Katzenschlager R, Francesconi C, Kundi M. Low level laser therapy in primary Raynaud's phenomenon-results of a placebo controlled, double blind intervention study. *J Rheumatol.* 2004; 31(12): 2408-12.
- 879.Hirschl M. Raynaud's Phenomenon. *J Kardiologie.* 2004; 11(3): 90-99.
- 880.Hiserodt RD, Adedeji J, John TV, Dewis ML. Identification of monomethyl succinate, monomethyl glutarate, and dimethyl glutarate in nature by high performance liquid chromatography-tandem mass spectrometry. *J Agric Food Chem.* 2004; 52(11):3536-41.
- 881.Hochi S, Terao T, Kamei M, Kato M, Hirabayashi M, Hirao M. Successful vitrification of pronuclear-stage rabbit zygotes by minimum volume cooling procedure. *Theriogenology.* 2004; 61(2-3):267-75.
- 882.Hochman G, Yitzhaky Y, Kopeika NS, Lauber Y, Citroen M, Stern A. Restoration of images captured by a staggered time delay and integration camera in the presence of mechanical vibrations. *Appl Opt.* 2004; 43(22):4345-54.
- 883.Hoekstra PP III. Physics and Physiology of breast Therm (abstract). *Thermol int* 2004, 14(3): 103.
- 884.Hoffken K. [A warming by the German Cancer Society. Risk of breast cancer caused by deoderant sprays containing paraben? (Interview by Christine Vetter)] *MMW Fortschr Med.* 2004; 146(7):13.
- 885.Hoffman GM, Stuth EA, Jaquiss RD, Vandervel PL, Staudt SR, Troshynski TJ, Ghanayem NS, Tweddell JS. Changes in cerebral and somatic oxygenation during stage 1 palliation of hypoplastic left heart syndrome using continuous regional cerebral perfusion. *J Thorac Cardiovasc Surg.* 2004; 127(1):223-33.
- 886.Hofmann A, Pelletier M, Michot L, Stradner A, Schurtenberger P, Kretzschmar R. Characterization of the pores in hydrous ferric oxide aggregates formed by freezing and thawing. *J Colloid Interface Sci.* 2004; 271(1):163-73.
- 887.Hoitsma E, Reulen JPH, De Baets M, Drent M, Spaans F, Faber CG. Small fiber neuropathy: A common and important Clin disorder. *J Neurol Sci.* 2004; 227(1):119-130.
- 888.Hollstein P. Clearly less concomitant diseases with levocetirizine. *Pharmazeutische Zeitung.* 2004; 149(11): 28.
- 889.Holmer I. Cold but comfortable? Application of comfort criteria to cold environments. *Indoor Air.* 2004;14 Suppl 7:27-31.
- 890.Holtzclaw BJ. Shivering in acutely ill vulnerable populations. *AACN Clin Issues.* 2004;15(2):267-79.
- 891.Hom C, Vasquez P, Pozos RS. Peripheral skin temperature effects on muscle oxygen levels. *J Thermal Biol.* 2004;29(7-8 Spec. Iss.) 785-789.
- 892.Hongratanaworakit T, Buchbauer G. Evaluation of the harmonizing effect of ylang-ylang oil on humans after inhalation. *Planta Med.* 2004; 70(7):632-6.
- 893.Hongratanaworakit T, Heuberger E, Buchbauer G. Evaluation of the effects of East Indian sandalwood oil and alpha-santalol on humans after transdermal absorption. *Planta Med.* 2004; 70(1):3-7.
- 894.Hook GJ, Spitz DR, Sim JE, Higashikubo R, Baty JD, Moros EG, Roti Roti JL. Evaluation of parameters of oxidative stress after in vitro exposure to FMCW and CDMA-modulated radiofrequency radiation fields. *Radiation Res.* 2004; 162(5): 497-504.
- 895.Horan M, Ichiba S, Firmin RK, Killer HM, Edwards D, Azzopardi D, Hodge R, Kotecha S, Field D. A pilot investigation of mild hypothermia in neonates receiving extracorporeal membrane oxygenation (ECMO). *J Pediatr.* 2004; 144(3):301-8.
- 896.Hori H, Hayakawa E, Einaga H, Kutsuna S, Koike K, Ibusuki T, Kiatagawa H, Arakawa R. Decomposition of environmentally persistent perfluorooctanoic acid in water by photochemical approaches. *Environ Sci Technol.* 2004; 38(22):6118-24.
- 897.Hornbach MJ, Saffer DM, Holbrook WS. Critically pressured free-gas reservoirs below gas-hydrate provinces. *Nature.* 2004; 427 (6970):142-4.
- 898.Horndl M, Yoshida S, Tokesi K, Burgdorfer J. Comment on "Radiative recombination enhancement of bare ions in storage rings with electron cooling". *Phys Rev Lett.* 2004; 93(20):209301-2.
- 899.Horowitz PE, Delagarza MA, Pulaski JJ, Smith RA. Flow rates and warming efficacy with Hotline and Ranger blood/fluid warmers *Anesth Analg.* 2004; 99(3):788-792.
- 900.Hosseini-Pooya M, Jafarizadeh M. Effect of reader and oven annealing on the glow curve structure and fading of LiF:Mg,Cu,P TL dosimeter. *J Radiolog Protect* 2004; 24(2): 173-178.
- 901.Hothorn M, D'Angelo I, Marquez JA, Greiner S, Scheffzek K. The invertase inhibitor Nt-CIF from tobacco: a highly thermostable four-helix bundle with an unusual N-terminal extension. *J Mol Biol.* 2004; 335(4):987-95.

- 902.Hou J-S. Chen H. Zhao Y-H. Gao Q. Wang F-G. Automatic control system of heat conduction mainly composed of silver needle. *Zhongguo Linchuang Kangfu*. 2004; 8(20):4054-4055.
- 903.Howarth FC. Qureshi A. Singh J. Effects of acidosis on ventricular myocyte shortening and intracellular Ca^{2+} in streptozotocin-induced diabetic rats. *Molecular & Cellular Biochemistry*. 2004; 261(1): 227-233.
- 904.Howell KJ, Visentin M, Lavorato A, Jones CD, Martini G, Smith RE, Denton CP, Zulian F, Black CM, Harper JI, Woo P. Thermography, photography, laser Doppler flowmetry and 20 MHz B-scan ultrasound for the assessment of morphoea activity: a pilot protocol. (abstract). *Thermol int* 2004, 14(4): 144-145
- 905.Howing J, Gustafsson T, Thomas JO. Lithium vanadate $Li(3+x)V_6O_{13}$ at low temperature. *Acta Crystallogr C*. 2004; 60(Pt 7):i66-i68.
- 906.Hu L, Gupta A, Gore JP, Xu LX. Effect of forced convection on the skin thermal expression of breast cancer. *J Biomech Eng*. 2004; 126(2):204-11.
- 907.Huang C, Dong Q, Tiersch TR. Sperm cryopreservation of a live-bearing fish, the platyfish *Xiphophorus couchianus*. *Therio genology*. 2004; 62(6):971-89.
- 908.Huang CH, Bates R, Kronrad GD, Cheng S. Economic Analyses of Sequestering Carbon in Loblolly Pine, Cherrybark Oak, and Northern Red Oak in the United States. *Environ Manage*. 2004 Jan 20;32(2) Epub ahead of print
- 909.Huang J, Holt RG, Cleveland RO, Roy RA. Experimental validation of a tractable numerical model for focused ultrasound heating in flow-through tissue phantoms. *J Acoust Soc Am*. 2004; 116(4 Pt 1):2451-8.
- 910.Huang L. Thermal resistance of *Listeria monocytogenes*, *Salmonella Heidelberg*, and *Escherichia coli* O157:H7 at elevated temperatures. *J Food Prot*. 2004; 67(8):1666-70.
- 911.Huang PP, Li SZ, Han MZ, Xiao ZJ, Yang RC, Qiu LG, Han ZC. Autologous transplantation of peripheral blood stem cells as an effective therapeutic approach for severe arteriosclerosis obliterans of lower extremities. *Thromb Haemost*. 2004; 91(3):606-609.
- 912.Hubbard TJ, Denegar CR. Does Cryotherapy Improve Outcomes With Soft Tissue Injury? *J Athl Train*. 2004 ; 39(3):278-279.
- 913.Hubel A, Carlquist D, Clay M, McCullough J. Liquid storage, shipment, and cryopreservation of cord blood. *Transfusion*. 2004; 44(4): 518-525.
- 914.Hufana-Duran D, Pedro PB, Venturina HV, Hufana RD, Salazar AL, Duran PG, Cruz LC. Post-warming hatching and birth of live calves following transfer of in vitro-derived vitrified water buffalo (*Bubalus bubalis*) embryos. *Theriogenology*. 2004; 61(7-8):1429-39.
- 915.Hugger S, Thomann R, Heinzl T, Thurn-Albrecht T. Semicrystalline morphology in thin films of poly(3-hexylthiophene). *Colloid Polym Sci*. 2004; 282(8): 932-938.
- 916.Hughes-Formella B. New trends in dermatology Clin Res. *Epc - Eur Pharmaceutical Contractor*. Issue 2004; SPRING: 92-95.
- 917.Huidobro C, Bolmsjo M, Larson T, La De Rosette J, Wagrell L, Schelin S, Gorecki T, Mattiasson A. Evaluation of microwave thermotherapy with histopathology, magnetic resonance imaging and temperature mapping. *J Urology*. 2004; 171(2 Pt 1): 672-678.
- 918.Huizenga C, Zhang H, Arens E, Wang D. Skin and core temperature response to partial- and whole-body heating and cooling. *J Thermal Biol*. 2004. 29(7-8 Spec. Iss.):549-558.
- 919.Hulshof MCM, Raaymakers BW, Legendijk JJW, Koot RW, Crezee H, Stalpers LJA, Gonzalez D, Gonzalez D. A feasibility study of interstitial hyperthermia plus external beam radiotherapy in glioblastoma multiforme using the Multi Electrode Current Source (MECS) system. *Int J Hyperthermia*. 2004; 20(5): 451-463.
- 920.Hulteen JC, Schaible SM. Analysis of anions in hydrofluoro ethers by ion chromatography. *J Chromatogr A*. 2004 1039(1-2):119-22.
- 921.Hund M, Rickert S, Kinkelin I, Naumann M, Hamm H. Does wrist nerve block influence the result of botulinum toxin A treatment in palmar hyperhidrosis? *J Am Acad Dermatol*. 2004; 50(1):61-2.
- 922.Hunt V. Application of infrared breast thermography to monitor breast health in Clin practice (abstract). *Thermol int* 2004, 14(3): 104.
- 923.Hunt V. Breast health (abstract). *Thermol int* 2004, 14(3): 112.
- 924.Husser CS, Chamblee B, Brown MJ, Long TR, Wass CT. Inductive warming of intravenous fluids: Overheating of the toroid heating element during rapid infusion. *Anesthesiology*. 2004.101(4): 1019-1021.
- 925.Huxtable S, Cahill DG, Fauconnier V, White JO, Zhao JC. Thermal conductivity imaging at micrometre-scale resolution for combinatorial studies of materials. *Nat Mater*. 2004; 3(5):298-301E
- 926.Huygen FJ, Niehof S, Klein J, Zijlstra FJ. Computer-assisted skin videothermography is a highly sensitive quality tool in the diagnosis and monitoring of complex regional pain syndrome type I. *Eur J Appl Physiol*. 2004; 91(5-6):516-24..
- 927.Hwang EY, Pappas D, Jeevarajan AS, Anderson MM. Evaluation of the paratrend multi-analyte sensor for potential utilization in long-duration automated cell culture monitoring. *BioMed Microdevices*. 2004; 6(3): 241-249.
- 928.Hwang SJ, Iyer RG, Trikalitis PN, Ogden AG, Kanatzidis MG. Cooling of melts: kinetic stabilization and polymorphic transitions in the $KInSn_4$ Se 4 system. *Inorg Chem*. 2004; 43(7):2237-9.
- 929.Hynynen K, Clement GT, McDannold N, Vykhodtseva N, King R, White PJ, Vitek S, Jolesz FA. 500-Element ultrasound phased array system for noninvasive focal surgery of the brain: A preliminary rabbit study with ex vivo human skulls. *Magn Reson Med*. 2004; 52(1): 100-107.
- 930.Hynynen K, MacDannold N. MRI guided and monitored focused ultrasound thermal ablation methods: A review of progress. *Int J Hyperthermia*. 2004; 20(7): 725-737
- 931.Iannetti GD, Leandri M, Truini A, Zambreanu L, Cruccu G, Tracey I. Delta nociceptor response to laser stimuli: selective effect of stimulus duration on skin temperature, brain potentials and pain perception. *Clin Neurophysiol*. 2004; 115(11): 2629-37.
- 932.Ibarra MS, Hsu J, Mirza N, Wu I-H, Ying G-S, Mainster MA, Tolentino MJ. Retinal temperature increase during transpupillary thermotherapy: Effects of pigmentation, subretinal blood, and choroidal blood flow. *Invest Ophthalmol Visual Sci*. 2004; 45(10): 3678-3682.
- 933.Ibe OE, Austin T, Sullivan K, Fabanwo O, Disu E, Costello AM, de L. A comparison of kangaroo mother care and conventional incubator care for thermal regulation of infants <2004;0 g in Nigeria using continuous ambulatory temperature monitoring. *Ann Tropical Paediatrics*. 2004; 24(3): 245-251.
- 934.Ibrahim W, Lee U-S, Chow CK. Endotoxin increases hepatic susceptibility to lipid peroxidation: A possible role of iron. *J Biochem Mol Toxicology*. 18(1): 23-29. 2004;
- 935.Ieropolis S, Masullo P, Santo Mdo E, Sansone G. Effects of extender composition, cooling rate and freezing on the fertilisation viability of spermatozoa of the Pacific oyster (*Crassostrea gigas*). *Cryobiology*. 2004 ; 49(3):250-7.
- 936.Igarashi T, Morisaki H, Goto N. Molecular Characterization of Dextranase from *Streptococcus rattus*. *Microbiol Immunol*. 48(3): 155-162. 2004;
- 937.Ihalamulla RL, Liyanage CPG, Karunaweera ND. A simple device to maintain in vitro cultures of *Leishmania* in tropical countries. *Trans Royal Soc Trop Med Hygiene*. 2004; 98(5):315-317.
- 938.Iinuma Y, Boge O, Gnauk T, Herrmann H. Aerosol-chamber study of the α -pinene/ O_3 reaction: Influence of particle acidity on aerosol yields and products. *Atmospheric Environ*. 38(5): 761-773. 2004;
- 939.Iivonen S, Saranpää P, Sutinen ML, Vapaavuori E. Effects of temperature and nutrient availability on plasma membrane lipid composition in Scots pine roots during growth initiation. *Tree Physiol*. 2004; 24(4):437-46.
- 940.Ikeda Y, Iki M. Precision control and seasonal variations in quantitative ultrasound measurement of the calcaneus. *J Bone Min Metabol* 2004. 22(6):588-593.
- 941.Ikematsu Y. Characteristics of and interventions for fever in Japan. *Int Nurs Rev*. 2004; 51(4):229-39.
- 942.In Jeong S, Kim B-S, Lee YM, Ihn KJ, Kim SH, Kim YH. Morphology of elastic poly(L-lactide-co-epsilon-caprolactone) copolymers and in vitro and in vivo degradation behavior of their scaffolds. *Biomacromolecules*. 2004; 5(4): 1303-1309.
- 943.Inada Y, Tamai S, Kawanishi K, Omokawa S, Akahane M, Shimobayashi M, Tsuruzono M, Takakura Y, Inada M. Free dorsolateral perforator flap transfers for the reconstruction of severely injured digits. *Plast Reconstr Surg*. 2004; 114(2): 411-20.
- 944.Inagaki F, Takai K, Nealson KH, Horikoshi K. *Sulfurovum lithotrophicum* gen. nov., sp. nov., a novel sulfur-oxidizing chemolithoautotroph within the E-Proteobacteria isolated from Okinawa Trough hydrothermal sediments. *Int J Syst Evol Microbiol*. 2004; 54(5): 1477-82.
- 945.Inbar O, Morris N, Epstein Y, Gass G. Comparison of thermoregulatory responses to exercise in dry heat among prepubertal boys, young adults and older males. *Exper Physiol*. 2004; 89(6):691-700.
- 946.Inglezakis VJ, Loizidou MD, Grigoropoulou HP. Studies on the pretreatment of zeolite clinoptilolite in packed beds. *Environ Technol*. 2004; 25(2): 133-139.
- 947.Inoue S. Thoracic outlet syndrome and anaesthetic problems [2]. *Acta Anaesth Scand*. 2004; 48(1): 136.
- 948.Inoue T, Hisatsugu Y, Ishikawa R, Suzuki M. Solid-liquid phase behavior of binary fatty acid mixtures. 2. Mixtures of oleic acid with lauric acid, myristic acid, and palmitic acid. *Chem Phys Lipids*. 2004; 127(2):161-73.
- 949.Inoue Y, Kuwahara T, Araki T. Maturation- and Aging-related Changes in Heat Loss Effector Function. *J Physiol Anthropol Appl Human Sci*. 2004; 23(6):289-94.

- 950.Irmak MK, Korkmaz A, Eroglu O. Selective brain cooling seems to be a mechanism leading to human craniofacial diversity observed in different geographical regions. *Med Hypotheses*. 2004; 63(6):974-979.
- 951.Isachenko E, Isachenko V, Katkov II, Rahimi G, Schondorf T, Mallmann P, Dessole S, Nawroth F. DNA integrity and motility of human spermatozoa after standard slow freezing versus cryoprotectant-free vitrification. *Hum Reprod*. 2004; 19(4):932-9.
- 952.Isachenko V, Isachenko E, Katkov II, Montag M, Dessole S, Nawroth F, Van Der Ven H. Cryoprotectant-free cryopreservation of human spermatozoa by vitrification and freezing in vapor: effect on motility, DNA integrity, and fertilization ability. *Biol Reprod*. 2004; 71(4):1167-73.
- 953.Isachenko V, Montag M, Isachenko E, Zaeva V, Krivokharchenko I, Shafei R, van der Ven H. Aseptic technology of vitrification of human pronuclear oocytes using open-pulled straws. *Hum Reprod*. 2004; Epub ahead of print
- 954.Isachenko V, Selman H, Isachenko E, Montag M, El-Danasouri I, Nawroth F. Effect of cryoprotectants on the ultrastructure of cooled human pronuclear oocytes. *Fertil Steril*. 2004; 81(3):720-2.
- 955.Isgro G, Kleverlaan CJ, Wang H, Feilzer AJ. Thermal dimensional behavior of dental ceramics. *Biomaterials*. 2004; 25(12):2447-53.
- 956.Ishay JS, Pertsis V, Neufeld A, Bergman DJ. Subcuticular microstructure of the hornet's gaster: Its possible function in thermoregulation. *J Nanobiotechnology*. 2004; 2(1):1.
- 957.Ishida N, Naito S, Kano H. Loss of moisture from harvested rice seeds on MRI. *Magn Reson Imaging*. 2004; 22(6):871-875.
- 958.Ishiguro R, Ishikawa O, Yamashita M, Sasaki Y, Fukuda K, Kubota M, Ishimoto H, Packard RE, Takagi T, Ohmi T, Mizusaki T. Vortex formation and annihilation in three textures of rotating superfluid $^3\text{He-A}$. *Phys Rev Lett*. 2004; 93(12):125301.
- 959.Ishihara M, Sato M, Sato S, Arai T, Obara M, Kikuchi M. Assessment of expressions of heat shock protein (HSP 72) and apoptosis after ArF excimer laser ablation of the cornea. *J Biomed Opt*. 2004; 9(1):187-92.
- 960.Ishizaki NT, Matsumoto K, Kimura Y, Wang X, Kinoshita J-I, Okano SM, Jayawardena JA. Thermographical and morphological studies of Er,Cr:YSGG laser irradiation on root canal walls. *PhotoMed Laser Surg*. 2004; 22(4):291-297.
- 961.Islam N, Bulla NA, Islam S. Transport of ions across peritoneal membrane. *Biochim Biophys Acta - Biomembranes*. 2004; 1667(2):174-181.
- 962.Isogai N, Miyasato Y, Asamura S. Prostacyclin analogue (berost) relief of cold intolerance after digital replantation and revascularization. *J Hand Surg [Br]*. 2004; 29(4):406-8.
- 963.Ito T, Yamaguchi T. Osmotic pressure control in response to a specific ion signal at physiological temperature using a molecular recognition ion gating membrane. *J Am Chem Soc*. 2004; 126(20):6202-6203.
- 964.Ittner KP, Bachfischer M, Zimmermann M, Taeger K. Convective air warming is more effective than resistive heating in an experimental model with a water dummy. *Eur J Emerg Med*. 2004; 11(3):151-3.
- 965.Ivanova EP, Gorshkova NM, Bowman JP, Lysenko AM, Zhukova NV, Sergeev AF, Mikhailov VV, Nicolau DV. *Shewanella pacifica* sp. nov., a polyunsaturated fatty acid-producing bacterium isolated from sea water. *Int J Syst Evol Microbiol*. 2004; 54(4):1083-1087.
- 966.Ivanova EP, Gorshkova NM, Zhukova NV, Lysenko AM, Zelepuga EA, Prokofeva NG, Mikhailov VV, Nicolau DV, Christen R. Characterization of *Pseudoalteromonas distincta*-like sea-water isolates and description of *Pseudoalteromonas aliena* sp. nov. *Int J Syst Evol Microbiol*. 2004; 54(5):1431-1437.
- 967.Ivanova EP, Nedashkovskaya OI, Sawabe T, Zhukova NV, Frolova GM, Nicolau DV, Mikhailov VV, Bowman JP. *Shewanella affinis* sp. nov., isolated from marine invertebrates. *Int J Syst Evol Microbiol*. 2004; 54(4):1089-1093.
- 968.Ivanova R, Staneva R, Geppert S, Heck B, Walter B, Gronski W, Stuhn B. Interplay between domain microstructure and nematic order in liquid crystalline/isotropic block copolymers. *Coll Polymer Sci*. 2004; 282(8):810-824.
- 969.Ivarsson R, Obermuller S, Rutter GA, Galvanovskis J, Renstrom E. Temperature-sensitive random insulin granule diffusion is a prerequisite for recruiting granules for release. *Traffic*. 2004; 5(10):750-62.
- 970.Ivleva VB, Elkin YN, Budnik BA, Moyer SC, O'Connor PB, Costello CE. Coupling thin-layer chromatography with vibrational cooling matrix-assisted laser desorption/ionization Fourier transform mass spectrometry for the analysis of ganglioside mixtures. *Anal Chem*. 2004; 76(21):6484-91.
- 971.Ivnitsky JJ, Schafer TV, Malakhovsky VN, Rejniuk VL. Intermediates of Krebs cycle correct the depression of the whole body oxygen consumption and lethal cooling in barbiturate poisoning in rat. *Toxicology*. 2004; 202(3):165-172.
- 972.Jacob JH, Khalil AM, Maslat AO. In vitro cytogenetic testing of an organoselenium compound and its sulfur analogue in cultured rat bone marrow cells. *J Carcinogenesis*. 2004; 3:9p.
- 973.Jafri AA, Green SM, Partington PF, McCaskie AW, Muller SD. Pre-heating of components in cemented total hip arthroplasty. *J Bone Joint Surg [Br]*. 2004; 86(8):1214-1219.
- 974.Jaime M, Correa VF, Harrison N, Batista CD, Kawashima N, Kazuma Y, Jorge GA, Stern R, Heinmaa I, Zvyagin SA, Sasago Y, Uchinokura K. Magnetic-field-induced condensation of triplons in Han Purple pigment $\text{BaCuSi}_2\text{O}_6$. *Phys Rev Lett*. 2004; 93(8):087203.
- 975.Jakubowska T, Wiecek B, Wysocki M, Peszynski-Drewno C. Neural network in classification of breast thermal images (abstract). *Thermol int*. 2004; 14(2):80.
- 976.Jalan R, Olde Damink SW, Deutz NE, Hayes PC, Lee A. Moderate hypothermia in patients with acute liver failure and uncontrolled intracranial hypertension. *Gastroenterology*. 2004; 27(5):1338-46.
- 977.James ER. Parasite cryopreservation by vitrification. *Cryobiology*. 2004; 49(3):201-10.
- 978.Jansky L, Vybiral S. Thermal homeostasis in systemic inflammation: modulation of neuronal mechanisms. *Front Biosci*. 2004; 9:3068-84.
- 979.Janwantanakul P. Different rate of cooling time and magnitude of cooling temperature during icebag treatment with and without damp towel wrap. *Physical Ther Sport*. 2004; 5(3):156-161.
- 980.Jasim ZF, Woo WK, Handley JM. Long-pulsed (6-ms) pulsed dye laser treatment of rosacea-associated telangiectasia using subpurpuric clinical threshold. *Dermatol Surg*. 2004; 30(1):37-40.
- 981.Jaszberenyi M, Bujdosó E, Telegdy G. Behavioral, neuroendocrine and thermoregulatory actions of apelin-13. *Neuroscience*. 2004; 129(3):811-6.
- 982.Jay O, Havenith G. Skin cooling on contact with cold materials: the effect of blood flow during short-term exposures. *Ann Occup Hyg*. 2004; 48(2):129-137.
- 983.Jay O, Havenith G. Finger skin cooling on contact with cold materials: a comparison between male and female responses during short-term exposures. *Eur J Appl Physiol*. 2004; 91(4):373-81.
- 984.Jay O, Havenith G. Finger skin cooling on contact with cold materials: An investigation of male and female responses during short-term exposures with a view on hand and finger size. 2004. *Eur J Appl Physiol*. 93(1-2):1-8.
- 985.Jayawardhana K, Van Walsum GP. Modeling of carbonic acid pretreatment process using ASPEN-Plus. *Appl Biochem Biotechnol*. 2004 Spring;113-116:1087-102.
- 986.Jeffery CJ. Molecular mechanisms for multitasking: Recent crystal structures of moonlighting proteins. *Curr Opin Struct Biol*. 2004; 14(6):663-668.
- 987.Jenniskens P, Stenbaek-Nielsen HC. Meteor wake in high frame-rate images-implications for the chemistry of ablated organic compounds. *Astrobiology*. 2004 Spring; 4(1):95-108.
- 988.Jeong H, Yi H, Sekiguchi Y, Muramatsu M, Kamagata Y, Chun J. *Clostridium jejuense* sp. nov., isolated from soil. *Int J Syst Evol Microbiol*. 2004; 54(5):1465-1468.
- 989.Jeong IS. [Effect of progressive muscle relaxation using biofeedback on perceived stress, stress response, immune response and climacteric symptoms of middle-aged women.] *Tachan Kanho Hakhoe Chi*. 2004; 34(2):213-24.
- 990.Jespersen L, Schon O, Famm K, Winter G. Aggregation-resistant domain antibodies selected on phage by heat denaturation. *Nat Biotechnol*. 2004; 22(9):1161-5.
- 991.Jette FX, Dionne JP, Rose J, Makris A. Effect of thermal manikin surface temperature on the performance of personal cooling systems. *Eur J Appl Physiol*. 2004; 92(6):669-72.
- 992.Jetzi M, Bonnamy A, Signorelli R. Vibrational delocalization in ammonia aerosol particles. *J Chem Phys*. 2004; 120(24):11775-84.
- 993.Jewell D. June Focus. *Br J Gen Pract*. 2004; 54(503):409.
- 994.Jewkes F, Woollard M. The ABC of community emergency care. 6 Assessment and management of paediatric primary survey negative patients. *Emerg Med J*. 2004; 21(5):595-605.
- 995.Jiang C-H, Hermanson O. Cooling of the urinary bladder activates neurons in the dorsal horn of the spinal cord. *Neuroreport*. 2004; 15(2):351-355.
- 996.Jiang T, Lv S-W, Zhang S-W, Li H, Pang Y-H, He W-T. Alterations of liver temperature during hepatic fibrosis. *World Chin J Digestology*. 2004; 12(9):2111-2114.
- 997.Jibry N, Heenan RK, Murdan S. Amphiphilic gels for drug delivery: formulation and characterization. *Pharm Res*. 2004; 21(10):1852-61.
- 998.Jin J, Sioutis I, Tarczy G, Gopalakrishnan S, Bezant A, Miller TA. Dispersed fluorescence spectroscopy of primary and secondary alkoxy radicals. *J Chem Phys*. 2004; 121(23):11780-11797.

- 999.Jin YJ, Li SZ, Zhao ZS, An JJ, Kim RY, Kim YM, Baik JH, Lim SK. Carnitine palmitoyltransferase-I (CPT-1) activity stimulation by cerulinen via sympathetic nervous system activation overrides cerulinen's peripheral effect. *Endocrinology*. 2004; 145(7):3197-204.
- 1000.Johannessen EA, Wang L, Cui L, Tang TB, Ahmadian M, Astaras A, Reid SW, Yam PS, Murray AF, Flynn BW, Beaumont SP, Cumming DR, Cooper JM. Implementation of multichannel sensors for remote bioMed measurements in a microsystems format. *IEEE Trans Biomed Eng*. 2004; 51(3): 525-35.
- 1001.1008.Johannsen M, Jordan A, Scholz R, Koch M, Lein M, Deger S, Roigas J, g K, Loening S. Evaluation of magnetic fluid hyperthermia in a standard rat model of prostate cancer. *J Endourol*. 2004; 18(5): 495-500.
- 1002.Johansson AE, Gustavsson AM, Oquist MG, Svensson BH. Methane emissions from a constructed wetland treating waste water-seasonal and spatial distribution and dependence on edaphic factors. *Water Res*. 2004; 38(18):3960-70.
- 1003.Johnson EA, O'Callaghan JP, Miller DB. Brain concentrations of d-MDMA are increased after stress. *Psychopharmacology (Berl)*. 2004; 173(3-4):278-86.
- 1004.Johnson GJ.The environment and the eye. *Eye*. 2004; 18(12): 1235-50.
- 1005.Johnson JM, Yen TC, Zhao K, Kosiba WA. Sympathetic, Sensory and Non-Neuronal Contributions to the Cutaneous Vascular Response to Local Cooling. *Am J Physiol Heart Circ Physiol*. 2004; Epub ahead of print
- 1006.Johnson Jr W. Final Report on the Safety Assessment of Octoxynol- 1,-3,-5,-6,-7,-8,-9,-10,-11,-12,-13,-16,-20,-25,-30,-33,-40,-70,-9 Carboxylic Acid, Octoxynol-20Carboxylic Acid, Potassium Octoxynol-12 Phosphate, Sodium Octoxynol-2 EthaneSulfonate, Sodium Octoxynol-2 Sulfate, Sodium Octoxynol-6 Sulfate, and Sodium Octoxynol-9 Sulfate. *Int J Toxicol*. 2004;23(Suppl. 1): 59-111.
- 1007.Johnston RL, Tufail A, Lightman S, Luthert PJ, Pavesio CE, Cooling RJ, Charteris D. Retinal and choroidal biopsies are helpful in unclear uveitis of suspected infectious or malignant origin. *Ophthalmology*. 2004; 111(3):522-8.
- 1008.Jolesz FA, Hynynen K, McDannold N, Freundlich D, Kopelman D. Noninvasive thermal ablation of hepatocellular carcinoma by using magneticresonance imaging-guided focused ultrasound. *Gastro enterology*. 2004;127(Suppl.): S242-S247.
- 1009.Jomha NM, Anoop PC, McGann LE. Intramatrix events during cryopreservation of porcine articular cartilage using rapid cooling. 2004; *J Orthop Res*. 22(1): 152-157.
- 1010.Jones CD, Howell KJ. Registration of Clin photography and infrared thermograms. (abstract). *Thermol int* 2004, 14(4): 147
- 1011.Jones HG. Irrigation scheduling: advantages and pitfalls of plant-based methods. *J Exp Bot*. 2004; 55(407):2427-36.
- 1012.Jones JM, Widmann M. Atmospheric science: early peak in Antarctic oscillation index. *Nature*. 2004; 432(7015): 290-1.
- 1013.Jones NG, Slater R, Cadiou H, McNaughton P, McMahon SB. Acid-induced pain and its modulation in humans. *J Neurosci*. 2004. 24(48) 10974-10979.
- 1014.Joo MH, Maehata E, Adachi T, Ishida A, Murai F, Mesaki N. The relationship between exercise-induced oxidative stress and the menstrualcycle. *Eur J Appl Physiol*. 2004; 93(1-2): 82-86.
- 1015.Jorg J, Jock S, Boucsein W, Schafer F. Autonomic dysregulation in conjunction with freezing of patients with idiopathic Parkinson's disease (PD): An ambulatory monitoring study. *Akt Neurol*. 2004; 31(7)338-346.
- 1016.Journey WS, Reardon FD, Jean-Gilles S, Martin CR, Kenny GP. Lower body positive and negative pressure alter thermal and hemodynamic responses after exercise. *Aviat Space Environ Med*. 2004. 75(10)841-849.
- 1017.Journey WS, Reardon FD, Martin CR, Kenny GP. Control of cutaneous vascular conductance and sweating during recovery from dynamic exercise in humans. *J Appl Physiol*. 2004. 96(6) 2207-2212.
- 1018.Juers DH, Matthews BW. The role of solvent transport in cryo-annealing of macromolecular crystals. *Acta Crystallogr D Biol Crystallogr*. 2004 Mar;60(Pt 3):412-21. Epub 2004 Feb 25.
- 1019.Jusot JF, Vanhems P, Benzait F, Berthelot P, Patural H, Teyssier G, Fabry J, Pozzetto B, The Paediatricians Of The Participating Wards. The procedures of hygiene to control hospital-acquired diarrhoea in paediatric wards: a multicentre audit. *J Hosp Infect*. 2004; 57(1):44-51.
- 1020.Justino LM, Tames DR, Demarco FF. In situ and in vitro effects of bleaching with carbamide peroxide on human enamel. *Oper Dent*. 2004; 29(2):219-25.
- 1021.Kaatz GW, Seo SM. Effect of substrate exposure and other growth condition manipulations on norAexpression. *J of Antimicrobial Chemotherapy*. 54(2): 364-369. 2004;
- 1022.Kadohisa M, Rolls ET, Verhagen JV. Orbitofrontal cortex: Neuronal representation of oral temperature and capsaicin addition to taste and texture. *Neurosci*. 2004;127(1): 207-221.
- 1023.Kai M, Yamauchi A, Tominaga K, Koga A, Kai H, Kataoka Y. Soybean isoflavones eliminate nifedipine-induced flushing of tail skin in ovariectomized mice. *J Pharmacol Sci*. 2004; 95(4):476-8.
- 1024.Kaiser DA, Knight KL, Huff JM, Jutte LS, Carlson P. Hot-pack warming in 4- and 8-pack Hydrocollator units. *J Sport Rehabil*. 2004; 13(2): 103-113.
- 1025.Kaiyala KJ, Ramsay DS. Assessment of Heat Production, Heat Loss and Core Temperature During Nitrous Oxide Exposure: A New Paradigm For Studying Drug Effects and Opponent Responses. *Am J Physiol Regul Integr Comp Physiol*. 2004; Epub ahead of print
- 1026.Kakitsuba N. Dynamic changes in sweat rates and evaporation rates through clothing during hot exposure. *J Thermal Biol*. 2004; 29(7-8 Spec. Iss.):739-742.
- 1027.Kaletunc G, Lee J, Alpas H, Bozoglu F. Evaluation of Structural Changes Induced by High Hydrostatic Pressure in *Leuconostoc mesenteroides*. *Appl Environ Microbiol*. 2004; 70(2): 1116-1122.
- 1028.Kalkan T, Demir M, Ahmed AS, Yazar S, Dervisoglu S, Uner HB, Cetinkale O. A dynamic study of the thermal components in electrical injury mechanism for better understanding and management of electric trauma: an animal model. *Burns*. 2004; 30(4):334-40.
- 1029.Kaluzynska A, Czupryniak A, Zwolenik S, Lis M, Wiecek B, Nowicki M. The Raynaud phenomenon and selected markers of endothelial condition inhemodialysed patients. *Pediatrica Polska*. 2004; 79(2): 157-162.
- 1030.Kamijo YI, Lee K, Mack GW. Active cutaneous vasodilation in resting humans during mild heat stress. *J Appl Physiol*. 2004; Epub ahead of print
- 1031.Kampen J, Liess C, Casadio C, Tonner PH, Reuter M, Scholz J. Safety of the Pulsioath for haemodynamic monitoring during magnetic resonanceimaging [5]. *Anaesthesia*. 2004; 59(8): 828-829;.
- 1032.Kan C-W, Doherty EAS, Buchholz BA, Barron AE. Thermoresponsive N,N-dialkylacrylamide copolymer blends as DNA sieving matriceswith a thermally tunable mesh size. *Electrophoresis*. 2004; 25(7-8): 1007-1015.
- 1033.Kanai S, Taniguchi N, Kawamoto M, Endo H, Higashino H. Effect of static magnetic field on pain associated with frozen shoulder. *The Pain Clinic*. 2004; 16(2): 173-179.
- 1034.Kandori K, Ishikawa T. Study on the hydrothermal reaction of FeCl3 solution in the presence ofpoly(vinyl alcohol). *Coll Polymer Sci* 2004;282(10): 1118-1125.
- 1035.Kandzari DE, Chu A, Brodie BR, Stuckey TA, Hermiller JB, Vetrovec GW, Hannan KL, Krucoff MW, Christenson RH, Gibbons RJ, Sigmon KN, Garg J, Hasselblad V, Collins K, Harrington RA, Berger PB, Chronos NA, Hochman JS, Califf RM. Feasibility of endovascular cooling as an adjunct to primary percutaneous coronary intervention (results of the LOWTEMP pilot study). *Am J Cardiol*. 2004; 93(5):636-9.
- 1036.Kanesaka S, Watanabe T, Matsukawa S. Binding effect of Cu(2+) as a trigger on the sol-to-gel and the coil-to-helix transition processes of polysaccharide, gellan gum. *Biomacromolecules*. 2004; 5(3):863-8.
- 1037.Kang SK, Cho KK, Ahn JK, Kang SH, Han KH, Lee HG, Choi YJ. Cloning and expression of thermostable beta-glycosidase gene from *Thermusfiliformis* Wai33 A1 in *Escherichia coli* and enzyme characterization. *J Microbiol Biotechnol*. 2004; 14(3): 584-592.
- 1038.Kanibolotsky AL, Berridge R, Skabara PJ, Perepichka IF, Bradley DDC, Koeberg M. Synthesis and properties of monodisperse oligofluorene-functionalized truxenes:Highly fluorescent star-shaped architectures. *J he Am Chem Soc*. 2004;126(42): 13695-13702.
- 1039.Kao B, Kelly KM, Aguilar G, Hosaka Y, Barr RJ, Nelson JS. Evaluation of cryogen spray cooling exposure on in vitro model human skin. *Lasers Surg Med*. 2004; 34(2):146-54.
- 1040.Kao M-C. Percutaneous CT-guided chemical thoracic sympathectomy for patients with palmar hyperhidrosis after transthoracic endoscopic sympathectomy: Commentary. *Surg Neurol*. 2004. 62(6): 505.
- 1041.Kaplan A, Manor Y, Bekkerman A, Tsipinyuk B, Kolodney E. The dynamics of endohedral complex formation in surface pick-up scattering as probed by kinetic energy distributions: experiment and model calculation for Cs@C(60) (+). *J Chem Phys*. 2004; 120(3): 1572-84.
- 1042.Kapural L, Hayek SM, Stanton-Hicks M, Mekhail N. Decreased Insulin Requirements with Spinal Cord Stimulation in a Patient with Diabetes. *Anesth Anal*. 2004; 98(3): 745-746.
- 1043.Karanasiou IS, Uzunoglu NK, Stergiopoulos S, Wong W. A passive 3D imaging thermograph using microwave radiometry. *ITBM-RBM*. 2004; 25(4): 227-239.

- 1044.Karki A, Karppi P, Ekberg J, Selve J. A thermographic investigation of skin temperature changes in response to thermal washout of the knee in healthy young adults. *Thermol Int*. 2004; 14(4): 137-141.
- 1045.Kartal SN, Imamura Y, Tsuchiya F, Ohsato K. Preliminary evaluation of fungicidal and termiticidal activities of filtrates from biomass slurry fuel production. *Bioresource Technol*. 2004; 95(1): 41-47.
- 1046.Kasai M, Mukaida T. Cryopreservation of animal and human embryos by vitrification. *Reprod Biomed Online*. 2004; 9(2):164-70.
- 1047.Kastner C, Hochreiter W, Huidobro C, Cabezas J, Miller P. Cooled transurethral microwave thermotherapy for intractable chronic prostatitis-results of a pilot study after 1 year. *Urology*. 2004; 64(6):1149-54.
- 1048.Katiyar V, Goel R. Improved plant growth from seed bacterization using siderophore overproducing cold resistant mutant of *Pseudomonas fluorescens*. *J Microbiol Biotechnol*. 2004; 14(4): 653-657.
- 1049.Katkov II, Levine F. Prediction of the glass transition temperature of water solutions: Comparison of different models. *Cryobiol*. 2004; 49(1): 62-82.
- 1050.Kato H, Yoshimura K, Kuroda M, Yoshida A, Hanamoto K, Kawasaki S, Shibuya K, Yamamoto Y, Tsunoda M, Takemoto M, Hiraki Y. Development of a phantom compatible for MRI and hyperthermia using carrageenan gel-relationship between dielectric properties and NaCl concentration. *Int J Hyperthermia*. 2004; 20(5):529-38.
- 1051.Katz LM, Young A, Frank JE, Wang Y, Park K. Neurotensin-induced hypothermia improves neurologic outcome after hypoxic-ischemia. *Crit Care Med*. 2004; 32(3): 806-10.
- 1052.Katz LM, Young AS, Frank JE, Wang Y, Park K. Regulated hypothermia reduces brain oxidative stress after hypoxic-ischemia. *Brain Res*. 2004; 1017(1-2):85-91.
- 1053.Kaukuntla H, Harrington D, Bilkoo I, Clutton-Brock T, Jones T, Bonser RS. Temperature monitoring during cardiopulmonary bypass-do we undercool or overheat the brain? *Eur J Cardiothorac Surg*. 2004; 26(3):580-5.
- 1054.Kaukuntla H, Walker A, Harrington D, Jones T, Bonser RS; Study Group. Differential brain and body temperature during cardiopulmonary bypass-a randomised clinical study. *Eur J Cardiothorac Surg*. 2004; 26(3):571-9.
- 1055.Kaushik RM, Mahajan SK, Rajesh V, Kaushik R. Stress profile in essential hypertension. *Hypertension Res*. 2004; 27(9):619-624.
- 1056.Kavanagh S, Jong AD. Care of burn patients in the hospital. *Burns*. 2004; 30(8): A2-A6.
- 1057.Kawaguchi M, Drummond JC, Cole DJ, Kelly PJ, Spurlock MP, Patel PM. Effect of Isoflurane on Neuronal Apoptosis in Rats Subjected to Focal Cerebral Ischemia. *Anesth Analg*. 2004;98(3): 798-805.
- 1058.Kawano T, Tsuboi N, Tsujii H, Sugiyama T, Asakura Y, Uda T. Stability test and improvement of hydrogen analyzer with trace reduction detector. *J Chromatogr A*. 2004; 1023(1):123-7.
- 1059.Kaye JZ, Marquez MC, Ventosa A, Baross JA. *Halomonas nepentia* sp. nov., *Halomonas sulfidaeris* sp. nov., *Halomonas axialensis* sp. nov. and *Halomonas hydrothermalis* sp. nov.: Halophilic bacteria isolated from deep-sea hydrothermal-vent Environments. *Int J Syst Evol Microbiol*. 2004; 54(2):499-511.
- 1060.Kazui T. Post-operative neuropsychological function unaffected by SjO2 monitoring in DHCA. *Eur J Cardio-Thoracic Surg*. 2004; 25(3): 406-408.
- 1061.Keatinge WR, Donaldson GC. The impact of global warming on health and mortality. *Southern Med J*. 2004; 97(11): 1093-1099.
- 1062.Keener KM, Anderson KE, Curtis PA, Foegeding JB. Determination of cooling rates and carbon dioxide uptake in commercially processed shell eggs using cryogenic carbon dioxide gas. *Poult Sci*. 2004; 83(1):89-94.
- 1063.Keller JM, McClellan-Green P. Effects of organochlorine compounds on cytochrome P450 aromatase activity in an immortal sea turtle cell line. *Marine Environ Res*. 2004;58(2-5): 347-351.
- 1064.Kelly KM, Svaasand LO, Nelson JS. Further investigation of pigmentary changes after alexandrite laser hair removal in conjunction with cryogen spray cooling. *Dermatol Surg*. 2004; 30(4 Pt 1): 581-2.
- 1065.Kenefick RW, Hazzard MP, Mahood NV, Castellani JW. Thirst sensations and AVP responses at rest and during exercise-cold exposure. *Med Sci Sports Exerc*. 2004; 36(9): 1528-1534.
- 1066.Kenefick RW, Mahood NV, Hazzard MP, Quinn TJ, Castellani JW. Hypohydration effects on thermoregulation during moderate exercise in the cold. *Eur J Appl Physiol*. 2004; 92(4-5): 565-570.
- 1067.Kerfoot K. Warming your heart: the energy solution. *Urol Nurs*. 2004; 24(2):136-7.
- 1068.Kerl J, Wenzel M, Kohler D. Thermal imaging of mask leakage during pressure-controlled ventilation (Bipaptherapy). *Somnologie*. 2004; 8(3): 83-86.
- 1069.Kerr C, Ivey P. Particle Deposition in the GE90 Pyrometer Purge Air System. *Particulate Science Technol*. 2004; 22(1): 51-64.
- 1070.Kerr RA. American Geophysical Union meeting. An early start for greenhouse warming? *Science*. 2004; 303(5656): 306.
- 1071.Kerttula A-M, Lyytikäinen O, Salmenlinna S, Vuopio-Varkila J. Changing epidemiology of methicillin-resistant *Staphylococcus aureus* in Finland. *J Hospital Infect*. 2004;58(2): 109-114.
- 1072.Kethesani N, Whiteman C, Malczewski AB, Hirst RG, La Brooy JT. Effect of cryopreservation on the immunogenicity of umbilical cord blood cells. *Transfus Apheresis Sci*. 2004; 30(1):47-54.
- 1073.Khajavi K, Pavelko T, Mishra AK. Compartment syndrome arising from use of an electronic cooling pad. *Am J Sports Med*. 2004; 32(6):1538-41.
- 1074.Khaled AR, Vafai K. Analysis of oscillatory flow disturbances and thermal characteristics inside fluidic cells due to fluid leakage and wall slip conditions. *J Biomech*. 2004; 37(5):721-9.
- 1075.Khanahmadi M, Roostazad R, Safekordi A, Bozorgmehri R, Mitchell DA. Investigating the use of cooling surfaces in solid-state fermentation tray bioreactors: Modelling and experimentation. *J Chem Technol Biotechnol*. 2004; 79(11): 1228-1242.
- 1076.Khandoker AH, Fukazawa K, Dzialowski EM, Burggren WW, Tazawa H. Maturation of the homeothermic response of heart rate to altered ambient temperature in developing chick hatchlings (*Gallus gallus domesticus*). *Am J Physiol Regul Integr Comp Physiol*. 2004; 286(1): R129-37.
- 1077.Kharalkar N, Valvano JW. Analysis of a thermal method for assessing endothelial dysfunction. *Biomed Sci Instrum*. 2004; 40:86-92.
- 1078.Khatiri KA. Diode laser hair removal in patients undergoing isotretinoin therapy. *Dermatol Surg*. 2004; 30(9):1205-7.
- 1079.Kher N, Marsh JD. Pathobiology of atherosclerosis-a brief review. *Semin Thromb Hemost*. 2004; 30(6): 665-72.
- 1080.Khodel VA, Clark JW, Takano M, Zverev MV. Phase transitions in nucleonic matter and neutron-star cooling. *Phys Rev Lett*. 2004 Oct 8;93(15):151101.
- 1081.Khuong T-AV, Zepeda G, Sanrame CN, Dang H, Bartberger MD, Houk KNGarcia-Garibay MA. Crankshaft motion in a highly congested bis(triarylmethyl)peroxide *J Am Chem Soc*. 2004;126(45): 14778-14786.
- 1082.Kichko TI, Reeh PW. Why cooling is beneficial: non-linear temperature-dependency of stimulated iGRP release from isolated rat skin. *Pain*. 2004; 110(1-2): 215-9.
- 1083.Kikkawa Y, Fujita M, Abe H, Doi Y. Effect of water on the surface molecular mobility of poly(lactide) thin film: Anatomic force microscopy study. *Biomacromolecules*. 2004; 5(4): 1187-1193.
- 1084.Kilduff LP, Georgiades E, James N, Minnion RH, Mitchell M, Kingsmore D, Hadjicharalambous M, Pitsiladis YP. The effects of creatine supplementation on cardiovascular, metabolic, and thermoregulatory responses during exercise in the heat in endurance-trained humans. *Int J Sport Nutrition Exercise Metabol*. 2004;14(4) 443-460.
- 1085.Kim D-H, Choi E, Yun Z, Kim S-W. Nitrogen removal from piggy waste with anaerobic pretreatment. *Water Sci Technol*. 2004; 49(5-6): 165-171.
- 1086.Kim HE, Park SJ. The effect of safety hat on thermal responses and working efficiency under a high temperature environment. *J Physiol Anthropol Appl Human Sci*. 2004; 23(5):149-53.
- 1087.Kim H-J, Hyun Y, Park J-Y, Park M-J, Park M-K, Kim MD, Kim H-J, Lee MH, Moon JLee I, Kim J. A genetic link between cold responses and flowering time through FVE in *Arabidopsis thaliana*. *Nature Genetics*. 2004; 36(2): 167-171.
- 1088.Kim J, Cho M, Oh B, Choi S, Yoon J. Control of bacterial growth in water using synthesized inorganic disinfectant. *Chemosphere*. 2004; 55(5):775-80.
- 1089.Kim J-H, Bae YH. Albumin loaded microsphere of amphiphilic poly(ethylene glycol)/poly(a-ester) multiblock copolymer. *Eur J Pharm Sci*. 2004;23(3): 245-251.
- 1090.Kim JM, Kim JC, Park WC, Seo JS, Chang HR. Effect of thermal preconditioning before excimer laser photocoagulation. *J Korean Med Sci*. 2004; 19(3):437-46.
- 1091.Kim KH, Bang SW, Kim SR. Emotion recognition system using short-term monitoring of physiological signals. *Med Biol Engineering Computing*. 2004. 42(3): 419-427.
- 1092.Kim KJ, Chung NS, Park WK. Direct myocardial depressant effect of naloxone: mechanical and electrophysiological actions in vitro. *Acta Anaesth Scand*. 2004; 48(1):102-10.]
- 1093.Kim K-J, Kim K-N, Choi Y-J. Characterization of the arfA gene from *Bacillus stearothermophilus* No. 236 and its protein product, a-L-arabinofuranosidase. *J Microbiol Biotechnol*. 2004; 14(3): 474-482.
- 1094.Kim YI, Hwang YJ, Lee JW, Chun BY, Kawano K, Kitano S. 101 hepatectomies under continuous inflow occlusion following simple in-situ liver cooling in patients with chronic liver diseases. *Hepato-gastroenterology*. 2004; 51(58):1093-8.

1095. Kimme P, Fridrikssen S, Engdahl O, Hillman J, Vegfors M, Sjöberg F. Moderate hypothermia for 359 operations to clip cerebral aneurysms. *Br J Anaesth*. 2004; 93(3):343-7.
1096. Kimura KD, Miyawaki A, Matsumoto K, Mori I. The C. elegans thermosensory neuron AFD responds to warming. *Curr Biol*. 2004; 14(14):1291-5.
1097. Kinnunen J, Rodriguez M, Torma P. Pairing gap and in-gap excitations in trapped fermionic superfluids. *Science*. 2004; 305(5687): 1131-1133.
1098. Kinoshita T, Suzuki M, Shimada Y, Ogawa R. Effect of low-dose ketamine on redistribution hypothermia during spinal anesthesia sedated by propofol. *J Nippon Med Sch*. 2004; 71(2):92-8.
1099. Kirov SA, Petrak LJ, Fiala JC, Harris KM. Dendritic spines disappear with chilling but proliferate excessively upon rewarming of mature hippocampus. *Neuroscience*. 2004; 127(1): 69-80.
1100. Kirton RS, Taberner AJ, Nielsen PMF, Young AA, Loisel DS. Strain softening behaviour in nonviable rat right-ventricular trabeculae in the presence and the absence of butanedione monoxime. *Exper Physiol*. 2004; 89(5): 593-604.
1101. Kishi R, Kihara H, Miura T. Structural observation of heterogeneous poly(N-isopropyl acrylamide-co-acrylic acid) hydrogels in highly hydrated states. *Coll Polymer Sci*. 2004; 283(2): 133-138.
1102. Kitahara K, Kubo F, Takahashi J. Thermal expansion typed investments for casting titanium. *Dent Mater J*. 2004; 23(1):1-7.
1103. Kiyatkin EA, Brown PL. Modulation of physiological brain hyperthermia by Environmental temperature and impaired blood outflow in rats. *Physiol Behavior*. 2004; 83(3): 467-474.
1104. Klappauf BG, Bidel Y, Wilkowski D, Chaneliere T, Kaiser R. Detailed study of an efficient blue laser source by second-harmonic generation in a semimonolithic cavity for the cooling of strontium atoms. *Appl Opt*. 2004; 43(12): 2510-27.
1105. Klass M, Guissard N, Duchateau J. Limiting mechanisms of force production after repetitive dynamic contractions in human triceps surae. *J Appl Physiol*. 2004; 96(4):1516-21.
1106. Klentrou P, Cunliffe M, Slack J, Wilk B, Bar-Or O, De Souza MJ, Pyley M. Temperature regulation during rest and exercise in the cold in premenarcheal and menarcheal girls. *J Appl Physiol*. 2004; 96(4):1393-8.
1107. Klouche K, Avenas S, Amigues L, Ceballos P, Beraud JJ. [Epidemiology and prognosis of hyperosmolar state in the elderly] *Ann Fr Anesth Reanim*. 2004; 23(4):339-43.
1108. Knott JC, Tan S-L, Street AC, Bailey M, Cameron P. Febrile adults presenting to the emergency department: Outcomes and markers of serious illness. *Emergency Med J*. 2004; 21(2): 170-174.
1109. Knox PP, Heinnickel M, Rubin AB. Effect of Low Temperatures on Photochemical Activity of PS1 Reaction Centers from *Synechocystis* sp. Frozen under Illumination. *Biochemistry (Mosc)*. 2004; 69(12): 1399-402.
1110. Knutti R, Flückiger J, Stocker TF, Timmermann A. Strong hemispheric coupling of glacial climate through freshwater discharge and ocean circulation. *Nature*. 2004; 430(7002):851-6.
1111. Ko JB, Cho OK, Kim YO, Yasuda K. Body Metabolism Provides a Foundation for Noninvasive Blood Glucose Monitoring. *Diabetes Care*. 2004; 27(5):1211-1212.
1112. Kobayashi H, Tagami H. Distinct locational differences observable in biophysical functions of the facial skin: With special emphasis on the poor functional properties of the stratum corneum of the perioral region. *Int J Cosmetic Sci*. 2004; 26(2): 91-101.
1113. Kobayashi N, Komiyama O, Kimoto S, Kawara M. Reduction of shrinkage on heat-activated acrylic denture base resin obtaining gradual cooling after processing. *J Oral Rehabil*. 2004; 31(7):710-6.
1114. Kobori Y, Iwata T, Doi Y, Abe H. Synthesis, solid-state structure, and surface properties of end-capped poly(L-lactide). *Biomacromolecules*. 2004; 5(2): 530-536.
1115. Kohara S, Suzuya K, Takeuchi K, Loong CK, Grimsditch M, Weber JK, Tangeman JA, Key TS. Glass formation at the limit of insufficient network formers. *Science*. 2004; 303(5664):1649-52.
1116. Kohl KS, Marcy SM, Blum M, Jones MC, Dagan R, Hansen J, Nalin D, Rothstein E. Fever after immunization: Current concepts and improved future scientific understanding. *Clin Infect Dis*. 2004; 39(3): 389-394.
1117. Koitka A, Legrand-Fernandez MS, Abraham P, Fizanne L, Fromy B, Sigaud-Roussel D, Saumet JL. Low skin temperature impairs the cutaneous vasodilator response to local progressive pressure strain. *Microvasc Res*. 2004; 67(2): 203-6.
1118. Koitka A, Abraham P, Bouhanick B, Sigaud-Roussel D, Demiot C, Saumet JL. Impaired Pressure-Induced Vasodilation at the Foot in Young Adults with Type 1 Diabetes. *Diabetes*. 2004; 53(3):721-725.
1119. Komori R, Harumoto T, Fujisawa H, Takagi Y. A *Paramecium* tetraurelia mutant that has long autogamy immaturity period and short clonal life span. *Mechan Ageing Develop*. 2004; 125(9): 603-613.
1120. Komulainen S, Oja T, Rintamäki H, Virolanmäki H, Keinänen-Kiukkaanniemi S. Blood pressure and thermal responses to whole body cold exposure in mildly hypertensive subjects. *J Thermal Biol*. 2004; 29(7-8 Spec. Iss.): 851-856.
1121. Kondo M, Nesterenko V, Antzelevitch C. Cellular basis for the monophasic action potential. Which electrode is the recording electrode? *Cardiovasc Res*. 2004; 63(4):635-44.
1122. Kondratyev AN. Usage of alpha-2 agonists and opioids in neuro-anesthesia: Twenty years of experience. *Semin Anesth, Perioper Med Pain*. 2004; 23(3): 192-195.
1123. Kono T, Yamaki T, Ercocen AR, Fujiwara O, Nozaki M. Treatment of leg veins with the long pulse dye laser using variable pulse durations and energy fluences. *Lasers Surg Med*. 2004; 35(1):62-7. P
1124. Koratkar N, Modi A, Lass E, Ajayan P. Temperature effects on resistance of aligned multiwalled carbon nanotube films. *J Nanosci Nanotechnol*. 2004; 4(7):744-8.
1125. Korecka L, Bilkova Z, Holecek M, Kralovsky J, Benes M, Lenfeld J, Minc N, Cicala R, Viovy J-L, Przybylski M. Utilization of newly developed immobilized enzyme reactors for preparation and study of immunoglobulin G fragments. *J Chromat B: Analyt Technol Bio Med Life Sci*. 2004; 808(1): 15-24.
1126. Koren I, Kaufman YJ, Remer LA, Martins JV. Measurement of the effect of Amazon smoke on inhibition of cloud formation. *Science*. 2004; 303(5662):1
1127. Korner C. Mountain biodiversity, its causes and function. *Ambio*. 2004; Spec No 13(13):11-7.
1128. Kortschik C, Plessing T, Peters N. Laser optical investigation of turbulent transport of temperature ahead of the preheat zone in a premixed flame. *Combust Flame*. 2004; 136(1-2): 43-50.
1129. Koscheyev VS, Leon GR, Coca A, List N. Enhancing circulation to lower limbs during head-down tilt by warming upper body and thighs. *Aviat Space Environ Med*. 2004; 75(7): 596-602.
1130. Kosinski S. Practical aspects of pre-hospital hypothermia management. *Polski Przegląd Chirurgiczny*. 2004; 76(1): 110-123.
1131. Koslowsky S, Staubach C, Kramer M, Wieler LH. [Risk assessment of blue tongue disease incursion into Germany using geographic information system (GIS)] *Berl Munch Tierarztl Wochenschr*. 2004; 117(5-6):214-25.
1132. Kotapati S, Nicolau DP, Nightingale CH, Kuti JL. Clinical and economic benefits of a meropenem dosage strategy based on pharmacodynamic concepts. *Am J Health-System Pharmacy*. 2004; 61(12): 1264-1270.
1133. Kouchoukos NT, Masetti P. Total aortic arch replacement with a branched graft and limited circulatory arrest of the brain. *J Thoracic Cardiovasc Surg*. 2004; 128(2): 233-237.
1134. Kouri EM, McCarthy EM, Faust AH, Lukas SE. Pretreatment with transdermal nicotine enhances some of ethanol's acute effects in men. *Drug Alcohol Depend*. 2004; 75(1):55-65.
1135. Kovacs MS, Smith JW, Strecker E, Pascoe DD. The efficacy of aluminum weave cooling jackets at reducing thermal load following exercise in a hot environment (abstract). *Thermol Int*. 2004; 14(3): 111.
1136. Kozyreva TV, Gonsales EV, Eliseeva LS. beta-Adrenoreceptor participation in the formation of the thermoregulatory and immune responses under the effect of rapid deep cooling. *J Thermal Biol*. 2004; 29(7-8 SPEC. ISS.):819-824.
1137. Krauchi K, Cajochen C, Wirz-Justice A. Waking up properly: Is there a role of thermoregulation in sleep inertia? *J Sleep Res*. 2004; 13(2): 121-127.
1138. Krell T, Greco F, Engel O, Dubayle J, Dubayle J, Kennel A, Charlotreau B, Brasseur R, Chevalier M, Sodoier R, El Habib R. HIV-1 gp41 and gp160 are hyperthermostable proteins in a mesophilic environment: Characterization of gp41 mutants. *Eur J Biochem*. 2004; 271(8): 1566-1579.
1139. Krenn CG, Hoda R, Nikolic A, Greher M, Plochl W, Chevchik OO, Steltzer H. Assessment of ventricular contractile function during orthotopic liver transplantation. *Transplant Int*. 2004; 17(2): 101-104. 2004; 4.
1140. Krieger DW, Yenari MA. Therapeutic hypothermia for acute ischemic stroke: what do laboratory studies teach us? *Stroke*. 2004; 35(6):1482-9.
1141. Krinner G, Mangerud J, Jakobsson M, Crucifix M, Ritz C, Svendsen JL. Enhanced ice sheet growth in Eurasia owing to adjacent ice-dammed lakes. *Nature*. 2004; 427(6973):429-32.
1142. Krones C, Klosterhalfen B, Fackeldey V, Junge K, Rosch R, Schwab R, Stumpf M, Klinge U, Schumpelick V. Deleterious effect of zinc in a pig model of acute endotoxemia. *J Invest Surg*. 2004; 17(5): 249-56.
1143. Krumper JR, Martin RL, Hay PJ, Yung CM, Veltheer J, Bergman RG. Synthesis and reactivity of the hydrido- and alkylrhodium methylenedene complexes Cp*(PMe3)2(R)Re=CH2 (R = H, CH3). *J Am Chem Soc*. 2004; 126(45):14804-15.

- 1144.Kudoh A, Takase H, Takazawa T. Chronic Treatment with Antipsychotics Enhances Intraoperative Core Hypothermia. *Anesth Analg*. 2004; 98(1):111-115.
- 1145.Kueppers LM, Southon J, Baer P, Harte J. Dead wood biomass and turnover time, measured by radiocarbon, along a subalpine elevation gradient. *Oecologia*. 2004; 141(4):641-51.
- 1146.Kuklane K. The use of footwear insulation values measured on a thermal foot model. *Int J Occup Saf Ergon*. 2004;10(1):79-86.
- 1147.Kuklane K, Sandsund M, Reinertsen RE, Tochiara Y, Fukazawa T, Holmer I. Comparison of thermal manikins of different body shapes and size. *Eur J Appl Physiol*. 2004; 92(6): 683-688.
- 1148.Kuleshova LL, Wang XW, Wu YN, Zhou Y, Yu H. Vitrification of encapsulated hepatocytes with reduced cooling and warming rates. *Cryo Letters*. 2004; 25(4):241-54.
- 1149.Kummer S. Innovative uses of thermal imaging. *Occup Health Saf*. 2004; 73(11):38, 40.
- 1150.Kuno S. [Prevention and treatment of malignant syndrome in patients with Parkinson's disease] *Nippon Rinsho*. 2004; 62(9):1721-4.
- 1151.Kuntzer T, Michel P. Muscle membrane polarisation after provocative tests, and after cooling: the normal CMAP changes to be expected. *Clin Neurophysiol*. 2004; 115(6):1457-63.
- 1152.Kuntzer T. [Electrophysiological testing in muscle channelopathies] *Rev Neurol (Paris)*. 2004; 160(5 Pt 2):S49-54.
- 1153.Kuntzer T, Michel P. Muscle membrane polarisation after provocative tests, and after cooling: The normal CMAP changes to be expected. *Clin Neurophysiol*. 2004. 115(6):1457-1463.
- 1154.Kuo C-P, Wong C-S, Borel CO, Yang C-P, Yeh C-C, Lu C-H, Wu C-T. Cerebrospinal fluid rhinorrhea after thermometer insertion through the nose. *Anesth Analg*. 2004; 99(2): 617-619.
- 1155.Kuo T-C, Lin C-W, Ho F-M. The soreness and numbness effect of acupuncture on skin blood flow. *Am J Chin Med*. 2004; 32(1): 117-129.
- 1156.Kuroiwa K, Shibata T, Takada A, Nemoto N, Kimizuka N. Heat-set gel-like networks of lipophilic Co(II) triazole complexes in organic media and their thermochromic structural transitions. *J Am Chem Soc*. 2004; 126(7):2016-21.
- 1157.Kussman BD, Mulkern RV, Holzman RS. Iatrogenic hyperthermia during cardiac magnetic resonance imaging. *Anesth Analg*. 2004; 99(4): 1053-1055.
- 1158.Lachaud C, Tesarik J, Can~adas ML, Mendoza C. Apoptosis and necrosis in human ejaculated spermatozoa. *Human Reprod*. 2004; 19(3): 607-610.
- 1159.Lafon C, Koszek L, Chesnais S, Theillere Y, Cathignol D. Feasibility of a transurethral ultrasound applicator for coagulation in prostate. *Ultrason Med Biol*. 2004; 30(1): 113-122.
- 1160.Lagorsse S, Magalha~es FD, Mendes A. Carbon molecular sieve membranes: Sorption, kinetic and structural characterization. *J Membrane Sci*. 2004; 241(2): 275-287.
- 1161.Lahaye T, Vogels JM, Gunter KJ, Wang Z, Dalibard J, Guery-Odelin D. Realization of a magnetically guided atomic beam in the collisional regime. *Phys Rev Lett*. 2004; 93(9):093003.
- 1162.Lahl W, Jelonek M, Nagel T. Thermometric study on the perivascular temperature in endovenous laser therapy of varicosis. *Vasomed*. 2004; 16(4): 132.
- 1163.Lahtinen J, Biancari F, Ala-Kokko T, Rainio P, Salmela E, Pokela R, Satta J, Lepojarvi M, Juvonen T. Pulmonary artery blood temperature at admission to the intensive care unit is predictive of outcome after on-pump coronary artery bypass surgery. *Scand Cardiovasc J*. 2004; 38(2): 104-112.
- 1164.Lamarque G, Viton C, Domard A. Comparative study of the second and third heterogeneous deacetylations of α - and β -chitins in a multistep process. *Biomacromolecules*. 2004;5(5): 1899-1907.
- 1165.Laming JM. Relationship between oscillatory thermal instability and dynamical thin-shell overstability of radiative shocks. *Phys Rev E Stat Nonlin Soft Matter Phys*. 2004; 70(5 Pt 2):057402.
- 1166.Lancey RA, Schaefer OP, McCormick MJ. Coronary artery bypass grafting and aortic valve replacement with cold cardioplegia in a patient with cold-induced urticaria. *Ann Allergy Asthma Immunol*. 2004; 92(2):273-5.
- 1167.Land DV. Microwave radiometry technique for medicine and industrial thermometry. (abstract). *Thermol int* 2004, 14(4): 146-147.
- 1168.Landa M, Novak V, Sedlak P, Sittner P. Ultrasonic characterization of Cu-Al-Ni single crystals lattice stability in the vicinity of the phase transition. *Ultrasonics*. 2004; 42(1-9):519-26.
- 1169.Lane JE, Brigham RM, Swanson DL. Daily torpor in free-ranging whip-poor-wills (*Caprimulgus vociferus*). *Physiol Biochem Zool*. 2004; 77(2):297-304.
- 1170.Lang G, Vadasz P, Czebe K, Olah C, Furak J, Papp A, Csekeo A, Klepetko W. [Lung harvesting in Hungary-results of the first two years] *Magy Seb*. 2004; 57(4):195-200.
- 1171.Lang N, Bromiker R, Arad I. The effect of wool vs. cotton head covering and length of stay with the mother following delivery on infant temperature. *Int J Nurs Stud*. 2004; 41(8):843-6.
- 1172.Lannig G, Bock C, Sartoris FJ, Portner HO. Oxygen limitation of thermal tolerance in cod, *Gadus morhua* L., studied by magnetic resonance imaging and on-line venous oxygen monitoring. *Am J Physiol Regul Integr Comp Physiol*. 2004; 287(4):R902-10.
- 1173.Lascelles BD, Robertson SA. Use of thermal threshold response to evaluate the antinociceptive effects of butorphanol in cats. *Am J Vet Res*. 2004; 65(8):1085-9.
- 1174.Latal P, Kissner R, Bohle DS, Koppenol WH. Preventing nitrite contamination in tetramethylammonium peroxydinitrate solutions. *Inorg Chem*. 2004; 43(21):6519-21.
- 1175.Lau SCK, Tsoi MMY, Li X, Plakhotnikova I, Wu M, Wong P-K, Qian P-Y. *Loktanela hongkongensis* sp. nov., a novel member of the α -Proteobacteria originating from marine biofilms in Hong Kong waters. *Int J Syst Evol Microbiol*. 2004; 54(6):2281-2284.
- 1176.Lavery LA, Higgins KR, Lanctot DR, Constantinides GP, Zamorano RG, Armstrong DG, Athanasiou KA, Agrawal CM. Home monitoring of foot skin temperatures to prevent ulceration. *Diabetes Care*. 2004; 27(11): 2642-2647.
- 1177.Layden JD, Malkova D, Nimmo MA. During exercise in the cold increased availability of plasma nonesterified fatty acids does not affect the pattern of substrate oxidation. *Metabolism*. 2004; 53(2): 203-8.
- 1178.Layden JD, Malkova D, Nimmo MA. Fat oxidation after acipimox-induced reduction in plasma nonesterified fatty acids during exercise at 0 degrees C and 20 degrees C. *Metabolism*. 2004; 53(9): 1131-5.
- 1179.Lea SC, Landini G, Walmsley AD. Thermal imaging of ultrasonic scaler tips during tooth instrumentation. *J Clin Periodontol*. 2004; 31(5):370-5.
- 1180.Lebbin P, Hosni M, Gielda T. Design and manufacturing of two thermal observation manikins for automobile applications. *Eur J Appl Physiol*. 2004; 92(6): 622-625.
- 1181.Lee BS, Lin CP, Hung YL, Lan WH. Structural changes of Er:YAG laser-irradiated human dentin. *Photomed Laser Surg*. 2004; 22(4):330-4.
- 1182.Lee C, Yoon J. Temperature dependence of hydroxyl radical formation in the $h\nu/\text{Fe}^{3+}/\text{H}_2\text{O}_2$ and $\text{Fe}^{3+}/\text{H}_2\text{O}$ systems. *Chemosphere*. 2004; 56(10): 923-934.
- 1183.Lee DS, Park SH, Yang H, Chung KH, Yoon TH, Kim SJ, Kim K, Kim YT. Bulk-micromachined submicroliter-volume PCR chip with very rapid thermal response and low power consumption. *Lab Chip*. 2004; 4(4): 401-7. E
- 1184.Lee HM, Chang MB, Wu KY. Abatement of sulfur hexafluoride emissions from the semiconductor manufacturing process by atmospheric-pressure plasmas. *J Air Waste Manag Assoc*. 2004; 54(8):960-70.
- 1185.Lee JC, Callaway JC, Foehring RC. The Effects of Temperature on Calcium transients and Ca^{2+} -dependent Afterhyperpolarizations in Neocortical Pyramidal Neurons. *J Neurophysiol*. 2004; Epub ahead of print
- 1186.Lee JH, Friedland R, Whitehouse PJ, Woo JI. Twenty-four-hour rhythms of sleep-wake cycle and temperature in Alzheimer's disease. *J Neuropsychiatry Clin Neurosci*. 2004; 16(2):192-8.
- 1187.Lee JM, Han JK, Kim SH, Lee JY, Choi SH, Choi BI. Hepatic bipolar radiofrequency ablation using perfused-cooled electrodes: comparative study in the ex vivo bovine liver. *Br J Radiology*. 2004; 77(923): 944-949.
- 1188.Lee JW, Jung MC, Park HD, Park KD, Ryu GH. Synthesis and characterization of thermosensitive chitosan copolymer as a novel biomaterial. *J Biomater Sci, Polymer Edition*. 2004; 15(8): 1065-1079.
- 1189.Lee JW, Lee S-M, Kim KS, Han WT, Yoon G, Pasmanik LA, Ulyanichev IA, Troitsky AV. Experimental investigation of the mammary gland tumour phantom for multifrequency microwave radiothermometry. *Med Biol Engineer Computing*. 2004;42(5): 581-590.
- 1190.Lee L, Leslie K, Kayak E, Myles PS. Intraoperative patient warming using radiant warming or forced-air warming during long operations. *Anaesth Intensive Care*. 2004; 32(3):358-61.
- 1191.Lee SH, Choi J-I, Park SJ, Lee SY, Park BC. Display of bacterial lipase on the *Escherichia coli* cell surface by using FadL as an anchoring motif and use of the enzyme in enantioselective biocatalysis. *Appl Environ Microbiol*. 2004; 70(9): 5074-5080.
- 1192.Lee SJ, Park CR, Chang JY. Molecular aggregation of disklike benzenetricarboxamides containing diacetylenic groups in bulk and organic solvents. *Langmuir*. 2004; 20(22):9513-9.
- 1193.Lee TC, Barshes NR, Brunicardi FC, Alejandro R, Ricordi C, Nguyen L, Goss JA. Procurement of the human pancreas for pancreatic islet transplantation. *Transplantation*. 2004; 78(3):481-3.
- 1194.Lee YG, Chou T-C. Ionic liquid ethanol sensor. *Biosensors & Bioelectronics*. 2004;20(1): 33-40.

- 1195.Lee Y-H, Suhl M-G, Roh H-S, Lee D-H, Chung K-T, Jeong Y-K. Optimal condition for citric acid production from milk factory waste water by using the immobilized cells of *Aspergillus niger*. Korean J Microbiol Biotechnol. 2004; 32(2): 154-157.
- 1196.Lehmann KK, Dokter AM. Evaporative cooling of helium nanodroplets with angular momentum conservation. Phys Rev Lett. 2004 Apr 30;92(17):173401.
- 1197.Lehner AF, Horn J, Flesher JW. Mass spectrometric analysis of 7-sulfoxymethyl-12-methylbenz[a]anthracene and related electrophilic polycyclic aromatic hydrocarbon metabolites. J Mass Spectrom. 2004; 39(11):1366-78.
- 1198.Leigh-Smith S, Watt I, McFadyen A, Grant S. Comparison of carbon monoxide levels during heating of ice and water to boiling point with a camping stove. Wilderness Environ Med. 2004; 15(3):164-70.
- 1199.Leinonen I, Jones HG. Combining thermal and visible imagery for estimating canopy temperature and identifying plant stress. J Exp Bot. 2004; 55(401):1423-1431.
- 1200.Leis S, Drenkhahn S, Schick C, Arnolt C, Schmelz M, Birklein F, Bickel A. Catecholamine release in human skin-a microdialysis study. Exp Neurol. 2004; 188(1):86-93.
- 1201.Leis S, Weber M, Schmelz M, Birklein F. Facilitated neurogenic inflammation in unaffected limbs of patients with complex regional pain syndrome. Neurosci Lett. 2004; 359(3):163-6.
- 1202.Lellouche F, Taille S, Maggiore SM, Qader S, L'Her E, Deye N, Brochard L. Influence of ambient and ventilator output temperatures on performance of heated-wire humidifiers. Am J Respir Critical Care Med. 2004; 170(10):1073-1079.
- 1203.Lemaître F, Viguier M, Cho M-S, Fourneau J-M, Maillere B, Kourilsky P, vanEndert PM, Ferradini L. Detection of low-frequency human antigen-specific CD4+ T cells using MHC class II multimer bead sorting and immunoscope analysis. Eur J Immunology. 2004;34(10): 2941-2949.
- 1204.Lemmens HJ, Brock-Utne JG. Heat and moisture exchange devices: are they doing what they are supposed to do? Anesth Analg. 2004; 98(2): 382-5.
- 1205.Lenzen H-J, Thiele Ch. Online blood-gas analysis during extracorporeal circulation. Kardiotechnik. 2004;13(2): 50-51.
- 1206.Lepage OM, Perron MF, Cadore JL. The mystery of fungal infection in the guttural pouches. Vet J. 2004; 168(1):60-4.
- 1207.Leria F, Marco R, Medina FJ. Structural and antigenic preservation of plant samples by microwave-enhanced fixation, using dedicated hardware, minimizing heat-related effects. Microsc Res Tech. 2004; 65(1-2):86-100.
- 1208.LeRoy PL. New roles of thermal imaging (ti) in monitoring pain management (abstract). Thermol int 2004, 14(3): 105-106.
- 1209.Leslie K, Williams D, Irwin K, Bjorksten AR, Sessler DI. Pethidine and skin warming to prevent shivering during endovascular cooling. Anaesth Intensive Care. 2004; 32(3):362-7.
- 1210.Letowski J, Brousseau R, Masson L. Designing better probes: Effect of probe size, mismatch position and number on hybridization in DNA oligonucleotide microarrays. J Microbiol Methods. 2004; 57(2): 269-278.
- 1211.Lever SD, Papadaki M. Study of condition-dependent decomposition reactions: Part I. The thermal behaviour and decomposition of 2-nitrobenzoyl chloride. J Hazard Materials. 2004; 115(1-3 Spec. Iss.): 91-100.
- 1212.LeVine III H. Alzheimer's beta-peptide oligomer formation at physiologic concentrations. Analytical Biochemistry. 2004; 335(1): 81-90.
- 1213.Levy JL, Elbahr C, Jouve E, Mordon S. Comparison and sequential study of long pulsed Nd:YAG 1,064 nm laser and sclerotherapy in leg telangiectasias treatment. Lasers Surg Med. 2004; 34(3): 273-6.
- 1214.Levy JL, Trelles M, Servant JJ, Agopian L. Non-ablative skin remodeling: an 8-month clinical and 3D in vivo profilometric study with an 810 nm diode laser. J Cosmet Laser Ther. 2004; 6(1):11-5.
- 1215.Lewis WK, Applegate BE, Sztaray J, Sztaray B, Baer T, Bemish RJ, Miller RE. Electron impact ionization in helium nanodroplets: controlling fragmentation by active cooling of molecular ions. J Am Chem Soc. 2004; 126(36):11283-92.
- 1216.Lezcano M, Granja C, Salazar M. The use of flow cytometry in the evaluation of cell viability of cryopreserved sperm of the marine shrimp (*Litopenaeus vannamei*). Cryobiology. 2004; 48(3):349-56.
- 1217.Li B, Majaron B, Viator JA, Milner TE, Chen Z, Zhao Y, Ren H, Nelson JS. Accurate measurement of blood vessel depth in port wine stained human skin in vivo using pulsed photothermal radiometry. J Biomed Opt. 2004; 9(5):961-6.
- 1218.Li C, Cui J, Sun G, Trettin C. Modeling Impacts of Management on Carbon Sequestration and Trace Gas Emissions in Forested Wetland Ecosystems. Environ Manage. 2004; Epub ahead of print
- 1219.Li G, Mitsumori M, Ogura M, Horii N, Kawamura S, Masunaga S-I, Nagata Y, Hiraoka M. Local hyperthermia combined with external irradiation for regional recurrent breast carcinoma. Int J Clin Oncol. 2004; 9(3): 179-183.
- 1220.Li J, Hoschitzky A, Allen ML, Elliott MJ, Redington AN. An analysis of oxygen consumption and oxygen delivery in euthermic infants after cardiopulmonary bypass with modified ultrafiltration. Ann Thorac Surg. 2004; 78(4):1389-96.
- 1221.Li J, Luan X, Lai Q, Clark JC, McAllister JP 2nd, Fessler R, Diaz FG, Ding Y. Long-term neuroprotection induced by regional brain cooling with saline infusion into ischemic territory in rats: a behavioral analysis. Neurol Res. 2004; 26(6):677-83.
- 1222.Li J, Ogasawara A, Otake T, Umemura T, Tsunoda K. A new isoelectric focusing system for fast two-dimensional gel electrophoresis using a low-concentration polyacrylamide gel supported by a loose multifilament string. Analyst Sci. 2004; 20(12):1673-9.
- 1223.Li J, Stokoe J, Konstantinov IE, Edgell D, Cheung MM, Kharbanda RK, Redington AN. Continuous measurement of oxygen consumption during cardiopulmonary bypass: description of the method and in vivo observations. Ann Thorac Surg. 2004; 77(5):1671-7.
- 1224.Li JP, Van Blitterswijk CA, De Groot K. Factors having influence on the rheological properties of Ti6Al4V slurry. J Mater Sci Mater Med. 2004;15(9): 951-958.
- 1225.Li K, Wang H. Simultaneous determination of matrine, sophoridine and oxymatrine in *Sophora flavescens* Ait. by high performance liquid chromatography. BioMed Chromatogr. 18(3): 178-182. 2004;
- 1226.Li M, Gu AZ. Determination of the quasi-saturated vapor pressure of supercritical gases in the adsorption potential theory application. J Coll Interface Sci. 2004; 273(2): 356-361.
- 1227.Li S, Hu J, Liu B. Use of chemically modified PMMA microspheres for enzyme immobilization. Biosystems. 2004; 77(1-3): 25-32.
- 1228.Li X, Kind R, Yuan X, Wolbern I, Hanka W. Rejuvenation of the lithosphere by the Hawaiian plume. Nature. 2004;427(6977): 827-829.
- 1229.Li X-W, Shibata E, Kasai E, Nakamura T. Vapor pressures and enthalpies of sublimation of 17 polychlorinated dibenzo-p-dioxins and five polychlorinated dibenzofurans. Environ Toxicol Chem. 2004; 23(2): 348-354.
- 1230.Li Y, Kurokawa K, Matsuo M, Fukuhara N, Murakami K, Sekimizu K. Identification of temperature-sensitive dnaD mutants of *Staphylococcus aureus* that are defective in chromosomal DNA replication. Mol Gen Genom: MGG. 2004; 271(4): 447-457.
- 1231.Li YJ, Zhang LY, Luo BD, Li YL, Lin N. [Effect of cooling therapy on the heart rate and mean arterial pressure of rats with the second-degree scald burn in hot and humid environment] Di Yi Jun Yi Da Xue Xue Bao. 2004; 24(3):314-6.
- 1232.Li YJ, Zhang LY, Luo BD, Li YL, Lin N. Rectal temperature changes of Wistar rats with second-degree scald burn in hot and humid environment following immediate cooling therapy. Di Yi Jun Yi Da Xue Xue Bao. 2004; 24(2): 152-4.
- 1233.Li Z, Blatteis CM. Fever onset is linked to the appearance of lipopolysaccharide in the liver. J Endotoxin Res. 2004;10(1):39-53.
- 1234.Li Z, Yang L, Summers R, Jackson M, Deslauriers R, Ye J. Is maintenance of cerebral hypothermia the principal mechanism by which retrograde cerebral perfusion provides better brain protection than hypothermic circulatory arrest? A study in a porcine model. J Card Surg. 2004; 19(1):28-35.
- 1235.Li Z, Wu M, Jiao Z, Bao B, Lu S. Extraction of phenol from wastewater by N-octanoylpyrrolidine. J Hazard Mater. 2004; 114(1-3): 111-114.
- 1236.Li ZB, Pu L. BINOL-Salen-catalyzed highly enantioselective alkyne additions to aromatic aldehydes. Org Lett. 2004; 8(6):1065-8.
- 1237.Li ZJ, Yin XM, Ye J. Effects of pH management during deep hypothermic bypass on cerebral oxygenation: alpha-stat versus pH-stat. J Zhejiang Univ Sci. 2004; 5(10):1290-7.
- 1238.Liang HC, Chang Y, Hsu CK, Lee MH, Sung HW. Effects of crosslinking degree of an acellular biological tissue on its tissue regeneration pattern. Biomaterials. 2004; 25(17): 3541-52.
- 1239.Liang H-F, Hong M-H, Ho R-M, Chung C-K, Lin Y-H, Chen C-H, Sung HW. Novel method using a temperature-sensitive polymer (methylcellulose) to thermally gel aqueous alginate as a pH-sensitive hydrogel. Biomacromolecules. 2004; 5(5): 1917-1925.
- 1240.Liang Z-X, Klinman JP. Structural bases of hydrogen tunneling in enzymes: Progress and puzzles. Curr Opin Struct Biol. 2004;14(6): 648-655.
- 1241.Liao X, Scott Wiedmann T. Measurement of process-dependent material properties of pharmaceutical solids by nanoindentation. J Pharm Sci. 2004; 94(1):79-92
- 1242.Liauh C-T, Shih T-C, Huang H-W, Lin W-L. Reconstruction of the temperature field for inverse ultrasound hyperthermia calculations at a muscle/bone interface. Med Physics. 31(2): 208-217. 2004;

- 1243.Liebermann J, Tucker MJ. Vitrifying and warming of human oocytes, embryos, and blastocysts: vitrification procedures as an alternative to conventional cryopreservation. *Methods Mol Biol*. 2004; 254:345-64.
- 1244.Lietava J, Vohnout B, Valent D, Celko J. Comparison of hemodynamics during hyperthermal immersion and exercise testing in apparently healthy females aged 50-60 years. *Ital Heart J*. 2004; 5(7):511-6.
- 1245.Lim J, Sivathanu Y, Ji J, Gore J. Estimating scalars from spectral radiation measurements in a homogeneous hot gaslayer. *Combust Flame*. 2004; 137(1-2): 222-229.
- 1246.Lim J-M, Jang Y-H, Kim H-R, Kim Y-T, Choi T-J, Kim J-K, Nam S-W. Overexpression of arylsulphatase in *E. coli* and its application to desulfatation of agar. *J Microbiol Biotechnol*. 2004; 14(4): 777-782.
- 1247.Lim YS, Bae SM, Kim K. Production of yeast spores from rice wine cake. *Korean J Microbiol Biotechnol*. 2004; 32(2): 184-189.
- 1248.Lin CM, Neeru S, Doufas AG, Liem E, Muneer Shah Y, Wadhwa A, Lenhardt R, Bjorksten A, Taguchi A, Kabon B, Sessler DI, Kurz A. Dantrolene reduces the threshold and gain for shivering. *Anesth Analg*. 2004; 98(5):1318-24.
- 1249.Lin CY, Chou CH. Anaerobic hydrogen production from sucrose using an acid-enriched sewage sludge microflora. *Engineer Life Sci*. 2004; 4(1): 66-70.
- 1250.Lin W, Armfield SW. Long-term behavior of cooling fluid in a rectangular container. *Phys Rev E Stat Nonlin Soft Matter Phys*. 2004; 69(5 Pt 2):056315.
- 1251.Lin Z, Suzow JG, Fontaine JM, Naylor EW. A high throughput beta-globin genotyping method by multiplexed melting temperature analysis. *Mol Gen Metabol*. 2004; 81(3): 237-243.
- 1252.Lindemann J, Keck T, Wiesmiller K, Sander B, Brambs H-J, Rettinger G, Pless D. A numerical simulation of intranasal air temperature during inspiration. *Laryngoscope*. 2004; 114(6): 1037-1041.
- 1253.Lindemann J, Leiacker R, Wiesmiller K, Rettinger G, Keck T. Immediate effect of benzalkonium chloride in decongestant nasal spray on the human nasal mucosal temperature. *Clin Otolaryngol Allied Sci*. 2004; 29(4): 357-361.
- 1254.Lindstrom S, Mazieres L, Jiang C-H. Inhibition of the bladder cooling reflex in the awake state: An experimental study in the cat. *J Urology*. 2004; 172(5 Pt 1): 2051-2053.
- 1255.Lingwood BE, Dunster KR, Healy GN, Colditz PB. Effect of cooling and re-warming on cerebral and whole body electrical impedance. *Physiol Meas*. 2004; 25(2):413-20.
- 1256.Linnane DM, Bracken RM, Brooks S, Cox VM, Ball D. Effects of hyperthermia on the metabolic responses to repeated high-intensity exercise. *Eur J Appl Physiol*. 2004; 93(1-2):159-66.
- 1257.Lipatov Y, Chornaya V, Menzheres G, Todosijchuk T. Heats of adsorption in the mixed polymer systems. *J of Colloid & Interface Science*. 272(2): 281-287. 2004;
- 1258.Lipski M. Root surface temperature rises in vitro during root canal obturation with thermoplasticized gutta-percha on a carrier or by injection. *J Endod*. 2004 Jun;30(6):441-3.
- 1259.Lista G, Pogliani L, Fontana P, Castoldi F, Compagnoni G. Cardiovascular and respiratory status in mechanically ventilated asphyxiated term infants: comparison between hypothermic and control group. *Acta Biomed Ateneo Parmense*. 2004; 75(2):107-13.
- 1260.Litscher G, Nemetz W, Smolle J, Schwarz G, Schikora D, Uranus S. [Histological investigation of the micromorphological effects of the application of a laser needle-results of an animal experiment] *Biomed Tech (Berl)*. 2004; 49(1-2):2-5.
- 1261.Liu CC, Chang RE, Chang WC. Limitations of forehead infrared body temperature detection for fever screening for severe acute respiratory syndrome. *Infect Control Hosp Epidemiol*. 2004; 25(12):1109-11.
- 1262.Liu CW, Wu CY. Evaluation of methane emissions from Taiwanese paddies. *Sci Total Environ*. 2004; 333(1-3):195-207.
- 1263.Liu F, Jia D-M, Wu X-H, Hou T-W, Wu C-R, You C-J, Wang Y-J. Effect of processing conditions on mechanical properties of poly (D, L-lactide) and MDI chain-extending poly (D, L-lactide) /hydroxyapatite composite. *Zhongguo Linchuang Kangfu*. 2004; 8(11): 2166-2168.
- 1264.Liu H, Hou C, Xu Y, Huang A, Chen X. [Study on the distributive regulation of *Legionella pneumophila* in different water] *Wei Sheng Yan Jiu*. 2004; 33(4):416-9.
- 1265.Liu H-L, Chen Y-Y, Yen J-Y, Lin W-L. Pilot point temperature regulation for thermal lesion control during ultrasound thermal therapy. *Med Biolog Engin Comput*. 2004; 42(2): 178-188.
- 1266.Liu J, Lu Y. Accelerated color change of gold nanoparticles assembled by DNAzymes for simple and fast colorimetric Pb²⁺ detection. *J Am Chem Soc*. 2004; 126(39):12298-305.
- 1267.Liu J, Wang C, Messow U. Adsorption kinetics at air/solution interface studied by maximum bubble pressure method. *Colloid Polymer Sci*. 2004; 283(2): 139-144.
- 1268.Liu J, Zhou Y, Yu T, Gui L, Deng Z, Lv Y. Minimally invasive probe system capable of performing both cryosurgery and hyperthermia treatment on target tumor in deep tissues. *Min Invas Ther Allied Technol: MITAT*. 2004; 13(1): 47-57.
- 1269.Liu J-Q, Xu Z-L, Zhou K-G. Study on new method of the preparation of pure ammonium metatungstate (AMT) using a coupling process of neutralization-nanofiltration-crystallization. *J Membr Sci*. 2004; 240(1-2): 1-9.
- 1270.Liu Y, Barks JD, Xu G, Silverstein FS. Topiramate extends the therapeutic window for hypothermia-mediated neuroprotection after stroke in neonatal rats. *Stroke*. 2004; 35(6):1460-5.
- 1271.Liu Z, Muldrew K, Wan RG, Elliott JA. Retardation of ice growth in glass capillaries: measurement of the critical capillary radius. *Phys Rev E Stat Nonlin Soft Matter Phys*. 2004; 69(2 Pt 1):021611.
- 1272.Livingstone H, Lyons G, Reynolds F. Epidural test dose: What works? [4] (multiple letters). *Int J Obstetric Anesthesia*. 2004; 13(2): 128-129.
- 1273.Ljubojevic S, Lipozencic J, Pustisek N. Erythromelalgia. *Acta Dermatoven Croat*. 2004; 12(2):99-105.
- 1274.Llorens I, Penuelas J, Estiarte M, Bruna P. Contrasting growth changes in two dominant species of a Mediterranean shrubland submitted to experimental drought and warming. *Ann Bot (Lond)*. 2004; 94(6): 843-53.
- 1275.Lobo SM, Afzal KS, Ahmed M, Kruskal JB, Lenkinski RE, Goldberg SN. Radiofrequency ablation: modeling the enhanced temperature response to adjuvant NaCl pretreatment. *Radiology*. 2004; 230(1): 175-82.
- 1276.Locke IC, Carpenter BG. Functional characteristics of the streptococcal deoxyribonuclease/streptodornase, a protein with DNase activity present in the medicament *Varidase*. *Enzyme Microbiol Technol*. 2004; 35(1): 67-73.
- 1277.Loftus TH, Ido T, Ludlow AD, Boyd MM, Ye J. Narrow line cooling: finite photon recoil dynamics. *Phys Rev Lett*. 2004; 93(7): 073003.
- 1278.Logani MK, Bhanushali A, Anga A, Majmundar A, Szabo I, Ziskin MC. Combined millimeter wave and cyclophosphamide therapy of an experimental murine melanoma. *Bioelectromagnetics*. 2004 25(7): 516-523.
- 1279.Loidl M, Leblanc E, Bouchard J, Branger T, Coron N, Leblanc J, de Marillac P, Rotzinger H, Daniyarov T, Linck M, Fleischmann A, Enss C. High-energy resolution X-ray, gamma and electron spectroscopy with cryogenic detectors. *Appl Radiat Isot*. 2004; 60(2-4):363-8.
- 1280.Loisy F, Atmar RL, Cohen J, Bosch A, Le Guyader FS. Rotavirus VLP2/6: A new tool for tracking rotavirus in the marine Environ. *Res in Microbiol*. 2004; 155(7): 575-578.
- 1281.Lomber SG, Payne BR. Cerebral areas mediating visual redirection of gaze: cooling deactivation of 15 loci in the cat. *J Comp Neurol*. 2004; 474(2):190-208.
- 1282.Louchev OA, Kanda H, Rosen A, Bolton K. Thermal physics in carbon nanotube growth kinetics. *J Chem Phys*. 2004; 121(1):446-56.
- 1283.Louie D, Pare PD. Physiological changes at altitude in non asthmatic and asthmatic subjects. *Can Respir J*. 2004; 11(3):197-9.
- 1284.Louie SW-S. The effects of guided imagery relaxation in people with COPD. *Occup Ther Int*. 2004; 11(3): 145-159.
- 1285.Loukidou MX, Karapantsios TD, Zouboulis AI, Matis KA. Diffusion kinetic study of cadmium(II) biosorption by *Aeromonas caviae*. *J Chem Technol Biotechnol*. 2004; 79(7): 711-719.
- 1286.Louvel D, Angotzi C, Aucher S, Blanchin M-D, Bonenfant J-C, Chevalere CD, Roguet C, Dybiak R, Imbernon C, Laux P, Lebranchu C, Sepulchre C. Procedure for the calibration of volumetric instruments. *S.T.P. Pharma Pratiques*. 2004; 14(1): 23-55.
- 1287.Lowe AD. Alimentary lymphosarcoma in a 4-year-old Labrador retriever. *Can Vet J*. 2004; 45(7): 610-612.
- 1288.Lownie SP, Menkis AH, Craen RA, Mezon B, MacDonald J, Steinman DA. Extracorporeal femoral to carotid artery perfusion in selective brain cooling for a giant aneurysm. Case report. *J Neurosurg*. 2004; 100(2): 343-7.
- 1289.Lozano S, Mossad E. Cerebral function monitors during pediatric cardiac surgery: Can they make difference ?. *J Cardiothoracic Vasc Anesth*. 2004; 18(5): 645-656.
- 1290.Lu H, Gaudet S, Schmidt MA, Jensen KF. A microfabricated device for subcellular organelle sorting. *Anal Chem*. 2004; 76(19): 5705-12.
- 1291.Lu H, Stansbury JW, Dickens SH, Eichmiller FC, Bowman CN. Probing the origins and control of shrinkage stress in dental resin composites. II. Novel method of simultaneous measurement of polymerization shrinkage stress and conversion. *J Biomed Mater Res*. 2004; 71B(1): 206-13.

- 1292.Lu H, Wang YY, Guo MZ, Wang CL. [Effect of kidney-warming and astringent therapy on plasma endothelin and interleukin-2 receptor in patients with nephrotic syndrome] *Zhong Xi Yi Jie He Xue Bao*. 2004; 2(1):17-9.
- 1293.Lu Q, Wu H, Yu R, Shen G. The lifetime of CFC substitutes studied by a network trained with chaotic mapping modified genetic algorithm and DFT calculations. *SAR QSAR Environ Res*. 2004; 15(4): 279-92.
- 1294.Lu X, Pikal MJ. Freeze-drying of mannitol-trehalose-sodium chloride-based formulations: the impact of annealing on dry layer resistance to mass transfer and cake structure. *Pharm Dev Technol*. 2004;9(1):85-95.
- 1295.Lu Y, Tang YM, Liu LJ, Xie E, Xue ZM, Xu P. [The study of sperm cryopreservation in kunmin (KM) mouse] *Shi Yan Sheng Wu Xue Bao*. 2004; 37(1):59-62.
- 1296.Luan X, Li J, McAllister JP 2nd, Diaz FG, Clark JC, Fessler RD, Ding Y. Regional brain cooling induced by vascular saline infusion into ischemic territory reduces brain inflammation in stroke. *Acta Neuropathol (Berl)*. 2004; 107(3):227-34.
- 1297.Lucchetti D, Fabrizio L, Guandalini E, Podesta E, Marvasi L, Zaghini A, Coni E. Long depletion time of enrofloxacin in rainbow trout (*Oncorhynchus mykiss*). *Antimicrob Agent Chemother*. 2004; 48(10): 3912-3917.
- 1298.Lucci CM, Kacinskis MA, Rumpf R, Bao SN. Effects of lowered temperatures and media on short-term preservation of zebu (*Bos indicus*) preantral ovarian follicles. *Theriogenology*. 2004; 61(2-3): 461-72.
- 1299.Ludescher B, Machann J, Graf H, Wietek B, Subke J, Claussen CD, Schick F. [Observation and control of hepatic specimens with MRI and MRS] *Rofo*. 2004; 176(4):597-604.
- 1300.Ludington-Hoe SM, Anderson GC, Swinth JY, Thompson C, Hadeed AJ. Randomized controlled trial of kangaroo care: cardiorespiratory and thermal effects on healthy preterm infants. *Neonatal Netw*. 2004; 23(3):39-48.
- 1301.Lund BJ. Computer model to investigate the effect of eye movements on retinal heating during long-duration fixation on a laser source. *J Biomed Opt*. 2004; 9(5):1093-102.
- 1302.Lung DC, Stahovich TF, Rabin Y. Computerized planning for multiprobe cryosurgery using a force-field analogy. *Comput Methods Biomech Biomed Engin*. 2004; 7(2):101-10.
- 1303.Lunin VV, Li Y, Linhardt RJ, Miyazono H, Kyogashima M, Kaneko T, Bell AW, Cygler M. High-resolution crystal structure of *Arthrobacter aureus* chondroitin AC lyase: an enzyme-substrate complex defines the catalytic mechanism. *J Mol Biol*. 2004 ; 337(2): 367-86.
- 1304.Luo W, Chen TB, Gao D, Zheng GD. [Stratification of volatile solid content and its dynamics in the process of co-composting] *Huan Jing Ke Xue*. 2004; 25(3):155-9.
- 1305.Luterbacher J, Dietrich D, Koplaki E, Grosjean M, Wanner H. European seasonal and annual temperature variability, trends, and extremes since 1500. *Science*. 2004; 303(5663):1499-503.
- 1306.Lyon A. *Appl Physiology: Temperature control in newborn infant*. *Current Paediatrics*. 2004; 14(2): 137-144.
- 1307.Maayan-Metzger A, Yosipovitch G, Hadad E, Sirota L. Effect of radiant warmer on transepidermal water loss (TEWL) and skin hydration in preterm infants. *J Perinatol*. 2004 24(6):372-375.
- 1308.Mack GW. Hypothalamic control of body temperature: insights from the past. *Am J Physiol Regul Integr Comp Physiol*. 2004; 287(5): R1012-3.
- 1309.Mack GW. Hypothalamic control of body temperature: Insights from the past. *J Appl Physiol*. 2004; 97(5): 1593-1594.
- 1310.Mack MC, Schuur EA, Bret-Harte MS, Shaver GR, Chapin FS. Ecosystem carbon storage in arctic tundra reduced by long-term nutrient fertilization. *Nature*. 2004; 431(7007):440-3.
- 1311.MacK MG, Vogl TJ. MR-guided ablation of head and neck tumors. *Neuroimaging Clin North America*. 2004; 14(4): 853-859.
- 1312.MacLellan CL, Girgis J, Colbourne F. Delayed onset of prolonged hypothermia improves outcome after intracerebral hemorrhage in rats. *J Cereb Blood Flow Metab*. 2004; 24(4):432-40.
- 1313.Maclennan JE, Muller D, Shao RF, Coleman D, Dyer DJ, Walba DM, Clark NA. Field control of the surface electroclinic effect in chiral smectic-A liquid crystals. *Phys Rev E Stat Nonlin Soft Matter Phys*. 2004; 69(6 Pt 1):061716.
- 1314.Madjid M, Zarrabi A, Litovsky S, Willerson JT, Casscells W. Finding vulnerable atherosclerotic plaques: is it worth the effort? *Arterioscler Thromb Vasc Biol*. 2004; 24(10):1775-82.
- 1315.Maerck O, Brauer A, Weyland W, Braun U. Warming Efficacy and Blood Daming of Blood and Infusion Warmers. *Anesthesiologie, Intensivmed Notfallmed Schmerzther*. 2004; 39(3) 138-146.
- 1316.Magnette J, Kienzler JL, Alekxandrova I, Savaluny E, Khemis A, Amal S, Trabelsi M, Cesarini JP. The efficacy and safety of low-dose diclofenac sodium 0.1% gel for the symptomatic relief of pain and erythema associated with superficial natural sunburn. *Eur J Dermatol*. 2004; 14(4):238-46.
- 1317.Mahaut S, Godefroit JL, Roy O, Cattiaux G. Application of phased array techniques to coarse grain components inspection. *Ultrasonics*. 2004; 42(1-9):791-6.
- 1318.Maheshwari G, Jannat R, McCormick L, Hsu D. Thermal inactivation of adenovirus type 5. 2004; *J Virol Methods*. 118(2): 141-145.
- 1319.Mahmud E, Keramati S. Highlights of the 2004;3 transcatheter cardiovascular therapeutics annual meeting: Clin implications. *J Am Coll Cardiol*. 2004 43(4): 684-690;
- 1320.Mahon MM, deSouza NM, Dina R, Souter WP, McIndoe GA, Williams AD, Cox JJ. Preinvasive and invasive cervical cancer: An ex vivo proton magic angle spinning magnetic resonance spectroscopy study. *NMR Biomed*. 2004; 17(3): 144-153.
- 1321.Mahramanlioglu M, Guclu K. Equilibrium, kinetic and mass transfer studies and column operations for the removal of arsenic(III) from aqueous solutions using acid treated spent bleaching earth. *Environ Technol*. 2004; 25(9): 1067-1076.
- 1322.Makinen TM, Paakkonen T, Palinkas LA, Rintamaki H, Leppaluoto J, Hassi J. Seasonal changes in thermal responses of urban residents to cold exposure. *Comp Biochem Physiol A Mol Integr Physiol*. 2004; 139(2): 229-38.
- 1323.Makino T, Hirai S, Ohyama T, Ikeda T, Kaneko Y, Ichimura S. A case of skin ulcer with necrosis of muscle due to the compartmental syndrome after sclerotherapy for leg varicose vein and warming with a magnetism warming machine. *Nishinohon J Dermatol*. 2004; 66(4): 332-335.
- 1324.Malek J, Rosina J, Samcova E, Kurzova A, Starec M. Density and spread of commonly used intrathecal agents in a cerebrospinal fluid model. *Cesk Slov Neurol Neurochir*. 2004; 67(5): 354-358.
- 1325.Malhi Y, Wright J. Spatial patterns and recent trends in the climate of tropical rainforest regions. *Philos Trans R Soc Lond B Biol Sci*. 2004; 359(1443): 311-29.
- 1326.Malhotra S, Hall AJ, Lomber SG. Cortical control of sound localization in the cat: Unilateral cooling deactivation of 19 cerebral areas. *J Neurophysiol*. 2004; 92(3): 1625-1643.
- 1327.Malik A, Phuong K, Kakii K. Stability of bacterial coaggregates in extreme Environments. *J Environ Sci Health Part A-Toxic/Hazard Subst Environ Engineer*. 2004;39(6): 1423-1434.
- 1328.Malinen M, Huttunen T, Hynynen K, Kaipio JP. Simulation study for thermal dose optimization in ultrasound surgery of the breast. *Med Phys*. 2004; 31(5):1296-307.
- 1329.Malkin AJ, Thorne RE. Growth and disorder of macromolecular crystals: insights from atomic force microscopy and X-ray diffraction studies. *Methods*. 2004; 34(3): 273-99.
- 1330.Mall G, Eckl M, Sinicina I, Peschel O, Hubig M. Temperature-based death time estimation with only partially known environmental conditions. *Int J Legal Med*. 2004; Epub ahead of print
- 1331.Mall G, Hubig M, Buttner A, Eisenmenger W. Simulating irradiation power density on body surface in postmortem cooling. *Leg Med (Tokyo)*. 2004; 6(2):131-40.
- 1332.Maltais D, Unnithan V, Wilk B, Bar-Or O. Responses of Children with Cerebral Palsy to Arm-Crank Exercise in the Heat. *Med Sci Sports Exerc*. 2004; 36(2):191-197.
- 1333.Mandelbaum J, Anastasiou O, Levy R, Guerin JF, de Larouziere V, Antoine JM. Effects of cryopreservation on the meiotic spindle of human oocytes. *Eur J Obstet Gynecol Reprod Biol*. 2004; 113 Suppl 1:S17-23.
- 1334.Manish M, From evaluation to treatment: five new developments for management of breast cancer in the 21st century (abstract). *Thermol int* 2004, 14(3): 103.
- 1335.Mansikka H, Zhao C, Sheth RN, Sora I, Uhl G, Raja SN. Nerve injury induces a tonic bilateral mu-opioid receptor-mediated inhibitory effect on mechanical allodynia in mice. *Anesthesiology*. 2004; 100(4): 912-21.
- 1336.Mantero Saenz FJ, Galvan Ramirez Y. Climatology of the Jaraba Spas. *Anal Real Acad Naci Farmacia*. 2004; 70(Spec. Iss):543-558.
- 1337.Marcella KL. The integration of thermography into an ambulatory equine practice (abstract). *Thermol int* 2004, 14(3): 106-107.
- 1338.Marciano-Cabral F. Introductory remarks: bacterial endosymbionts or pathogens of free-living amoebae 1. *J Eukaryot Microbiol*. 2004; 51(5):497-501.
- 1339.Marcy SM, Kohl KS, Dagan R, Nalin D, Blum M, Jones MC, Hansen J, Labadie J, Lee L, Martin BL, O'Brien K, Rothstein E, Vermeer P. Fever as an adverse event following immunization: Case

definition and guidelines of data collection, analysis, and presentation. *Vaccine*. 2004; 22(5-6): 551-556.

1340.Maria SF, Russell LM, Gilles MK, Myneni SC. Organic aerosol growth mechanisms and their climate-forcing implications. *Science*. 2004; 306(5703):1921-4.

1341.Mariante RM, Lopes LC, Benchimol M. *Tritrichomonas foetus* pseudocysts adhere to vaginal epithelial cells in a contact-dependent manner. *Parasitol Res*. 2004; 92(4):303-12.

1342.Marin-Cruz J, Garcia-Figueroa E, Miranda-Hernandez M, Gonzalez I. Electrochemical treatments for selective growth of different calcium carbonate allotropic forms on carbon steel. *Water Res*. 2004; 38(1):173-83.

1343.Marini P, Guiot C, Baiotto B, Gabriele P. PC-aided assessment of the thermal performances of a MW applicator for oncological hyperthermia. *Comput Biol Med*. 2004; 34(1):3-13.

1344.Marino FE, Lambert MI, Noakes TD. Superior performance of African runners in warm humid but not in cool environmental conditions. *J Appl Physiol*. 2004; 96(1):124-30.

1345.Marino FE. Anticipatory regulation and avoidance of catastrophe during exercise-induced hyperthermia. *Comp Biochem Physiol B Biochem Mol Biol*. 2004; 139(4):561-9.

1346.Marino FE, Kay D, Serwach N. Exercise time to fatigue and the critical limiting temperature: Effect of hydration. *J Thermal Biol*. 2004; 29(1):21-29.

1347.Marion DW. Controlled normothermia in neurologic intensive care. *Critical Care Med*. 2004; 32(2 SUPPL.): S43-S45.

1348.Markarian SA, Bonora S, Bagarman KA, Arakelyan VB. Glass-forming property of the system diethyl sulphoxide/water and its cryoprotective action on *Escherichia coli* survival. *Cryobiology*. 2004; 49(1): 1-9.

1349.Marks PW, Zukerberg LR. Case 30-2004;4: A 37-year-old woman with paresthesias of the arms and legs. *New Engl J ed*. 2004; 351: 13.

1350.Marongiu B, Porcedda APS, Casu R, Pierucci P. Chemical composition of the oil and supercritical CO₂ extract of *Schinus molle* L. *Flavour Fragrance J*. 2004; 19(6): 554-558.

1351.Marotta E, Paradisi C, Scorrano G. An atmospheric pressure chemical ionization study of the positive and negative ion chemistry of the hydrofluorocarbons 1,1-difluoroethane (HFC-152a) and 1,1,1,2-tetrafluoroethane (HFC-134a) and of perfluoro-n-hexane (FC-72) in air plasma at atmospheric pressure. *J Mass Spectrom*. 2004; 39(7): 791-801.

1352.Marque P, Nicolas G, Simonetta-Moreau M, Pierrot-Deseilligny E, Marchand-Pauvert V. Group II excitations from plantar foot muscles to human leg and thigh motoneurons. *Exp Brain Res*. 2004; Epub ahead of print

1353.Marra PP, Francis CM, Mulvihill RS, Moore FR. The influence of climate on the timing and rate of spring bird migration. *Oecologia*. 2004; Epub ahead of print

1354.Marshall CB, Cuerrier D, Dourdin N, Davies PL. A novel anti-freeze protein in fish. *Medecine/Sciences*. 2004; 20(8-9): 746-747.

1355.Marshall J, Berkenbosch JW, Russo P, Tobias JD. Preliminary experience with nesiritide in the pediatric population. *J Intensive Care Med*. 2004; 19(3):164-70.

1356.Martin RW, Zilm KW. Variable temperature system using vortex tube cooling and fiber optic temperature measurement for low temperature magic angle spinning NMR. *J Magn Reson*. 2004; 168(2):202-9.

1357.Martin SA, Kline AM. Can there be a standard for temperature measurement in the pediatric intensive care unit? *AACN Clin Issues*. 2004;15(2):254-66.

1358.Martinez-Canovas MJ, Bejar V, Martinez-Checa F, Quesada E. *Halomonas anticariensis* sp. nov., from Fuente de Piedra, a saline-wetland/wildfowl reserve in Malaga, southern Spain. *Int J Syst Evol Microbiol*. 2004; 54(4):1329-1332.

1359.Martinez-Gonzalez D, Bonilla-Jaime H, Morales-Otal A, Henriksen SJ, Velazquez-Moctezuma J, Prospero-Garcia O. Oleamide and anandamide effects on food intake and sexual behavior of rats. *Neurosci Lett*. 2004;364(1): 1-6.

1360.Martinez-Madrid B, Dolmans MM, Van Langendonck A, Defrere S, Donnez J. Freeze-thawing intact human ovary with its vascular pedicle with a passive cooling device. *Fertil Steril*. 2004; 82(5):1390-4.

1361..Martinez-Pinna J, Tolhurst G, Gurung IS, Vandenberg JL, Mahaut-Smith MP. Sensitivity limits for voltage control of P2Y receptor-evoked Ca²⁺ mobilization in the rat megakaryocyte. *J Physiol*. 2004; 555(1): 61-70.

1362.Martrat B, Grimalt JO, Lopez-Martinez C, Cacho I, Sierro FJ, Flores JA, Zahn R, Canals M, Curtis JH, Hodell DA. Abrupt temperature changes in the Western Mediterranean over the past 250,000 years. *Science*. 2004; 306(5702):1762-5.

1363.Maruyama M, Kenmochi T, Sakamoto K, Arita S, Iwashita C, Kashiwabara H. Simplified method for cryopreservation of islets using

hydroxyethyl starch and dimethyl sulfoxide as cryoprotectants. *Transplant Proc*. 2004; 36(4):1133-4.

1364.Massey CS. A multicentre study to determine the efficacy and patient acceptability of the Paxman Scalp Cooler to prevent hair loss in patients receiving chemotherapy. *Eur J Oncol Nurs*. 2004; 8(2):121-30.

1365.Master VA, Shinohara K, Carroll PR. Ferromagnetic thermal ablation of locally recurrent prostate cancer: Prostate-specific antigen results and immediate/intermediate morbidities. *J Urology*. 2004; 172(6 Pt 1): 2197-2202.

1366.Masuda J, Fukuyama J, Tonoike M, Yamaguchi M. Cryogenic trapping for determination of odor concentration. *Water Sci Technol*. 2004;50(4): 121-124.

1367..Maswadi SM, Dodd SJ, Gao JH, Glickman RD. Temperature mapping of laser-induced hyperthermia in an ocular phantom using magnetic resonance thermography. *J Biomed Opt*. 2004 ; 9(4):711-8.

1368.Mathew S, Madamwar D.Decolorization of ranocid fast blue dye by bacterial consortium SV5. *Appl Biochem Biotechnol*. 2004; 118(1-3): 371-381.

1369.Matsuda T, Nakagawa M, Oguchi N, Yanishi M, Fukui S, Kawa G, Muguruma K. Retroperitoneoscopic partial nephrectomy with transient occlusion of renal artery for treatment of small renal tumors. *Urology*. 2004; 64(1): 26-30.

1370.Matsui T, Hagsawa K, Ishizuka T, Takase B, Ishihara M, Kikuchi M. A Novel method to prevent secondary exposure of medical and rescue personnel to toxic materials under biochemical hazard conditions using microwave radar and infrared thermography. *IEEE Trans Biomed Eng*. 2004; 51(12): 2184-8.

1371.Matthews DB, Silvers JR. The use of acute ethanol administration as a tool to investigate multiple memory systems. *Neurobiol Learn Mem*. 2004; 82(3):299-308.

1372.Maunz P, Puppe T, Schuster I, Syassen N, Pinkse PWH, Rempe G. Cavity cooling of a single atom. *Nature*. 2004; 428(6978):50-52.

1373.Maurer P, Bekes K, Gernhardt CR, Schaller HG, Schubert J. Tensile bond strength of different adhesive systems between bone and composite compared: an in vitro study. *J Craniomaxillofac Surg*. 2004; 32(2):85-9.

1374.Maxton FJ, Justin I, Gillies D. Estimating core temperature in infants and children after cardiac surgery: a comparison of six methods. *J Adv Nurs*. 2004; 45(2):214-22.

1375.Mayer SA, Kowalski RG, Presciutti M, Ostapovich ND, McGann E, Fitzsimmons BF, Yavagal DR, Du YE, Naidech AM, Janjua NA, Claassen J, Kreiter KT, Parra A, Commichau C. Clinical trial of a novel surface cooling system for fever control in neurocritical care patients. *Crit Care Med*. 2004; 32(12): 2508-2515.

1376.Mazhitova G, Karstkarel N, Oberman N, Romanovsky V, Kuhry P. Permafrost and infrastructure in the usa Basin (Northeast European Russia): possible impacts of global warming. *Ambio*. 2004; 33(6): 289-94.

1377.McAlister V. Maimonides's cooling period and organ retrieval. *Can J Surg*. 2004;47(1):8-9.

1378.McBride C, Vega C, Sanz E, Abascal JL. Formation of high density amorphous ice by decompression of ice VII and ice VIII at 135 K. *J Chem Phys*. 2004; 121(23):11907-11911.

1379.McCabe GJ, Palecki MA, Betancourt JL. Pacific and Atlantic Ocean influences on multidecadal drought frequency in the United States. *Proc Natl Acad Sci U S A*. 2004 Mar 23;101(12):4136-41.

1380.McCahon P. Medical infrared imaging - recognizing factors contributing to a disease state (abstract). *Thermol int* 2004, 14(3): 112.

1381.McCallum JE, Kuniyoshi CY, Foote CS. Characterization of 5-hydroxy-8-oxo-7,8-dihydroguanosine in the photosensitized oxidation of 8-oxo-7,8-dihydroguanosine and its rearrangement to spiroiminodihydantoin. *J Am Chem Soc*. 2004; 126(51):16777-82.

1382.McCarty EC, Warren RF, Deng XH, Craig EV, Potter H. Temperature along the axillary nerve during radiofrequency-induced thermal capsular shrinkage. *Am J Sports Med*. 2004; 32(4):909-14.

1383.McCullough L, Arora S. Diagnosis and treatment of hypothermia. *Am Fam Physician*. 2004; 70(12):2325-32.

1384.McDannold N, Fossheim SL, Rasmussen H, Martin H, Vykhotseva N, Hynnen K. Heat-activated liposomal MR contrast agent: initial in vivo results in rabbit liver and kidney. *Radiology*. 2004 ; 230(3):743-52.

1385.McDannold N, King RL, Hynnen K. MRI monitoring of heating produced by ultrasound absorption in the skull: in vivo study in pigs. *Magn Reson Med*. 2004; 51(5):1061-5.

1386.McDannold N, Vykhotseva N, Jolesz FA, Hynnen K. MRI investigation of the threshold for thermally induced blood-brain barrier disruption and brain tissue damage in the rabbit brain. *Magn Reson Med*. 2004; 51(5):913-23.

1387. McDonald M, Lochhead S, Chopra R, Bronskill MJ. Multimodality tissue-mimicking phantom for thermal therapy. *Phys Med Biol*. 2004; 49(13): 2767-2778.
1388. McFee RB, Caraccio TR, McGuigan MA, Reynolds SA, Bellanger P. Dying to be thin: a dinitrophenol related fatality. *Vet Hum Toxicol*. 2004; 6(5):251-4.
1389. McGinty D, Metes A, Alam MN, Megirian D, Stewart D, Szymusiak R. Preoptic hypothalamic warming suppresses laryngeal dilator activity during sleep. *Am J Physiol Regul Integr Comp Physiol*. 2004; 86(6): 1129-37.
1390. McIlvoy L. Comparison of brain temperature to core temperature: a review of the literature. *J Neurosci Nurs*. 2004; 36(1):23-31.
1391. McKeever J, Buck JR, Boozer AD, Kimble HJ. Determination of the number of atoms trapped in an optical cavity. *Phys Rev Lett*. 2004; 93(14):143601.
1392. McKenzie JE, Osgood DW. Validation of a new telemetric core temperature monitor. *J Thermal Biol* 2004; 29(7-8 Spec. Iss.): 605-611.
1393. McLeod GA. Density of spinal anaesthetic solutions of bupivacaine, levobupivacaine, and ropivacaine with and without dextrose. *Br J Anaesth*. 2004; 92(4): 547-551.
1394. McMahon CM, Brown DJ, Patuzzi RB. Transient focal cooling at the round window and cochlear nucleus shows round window CAP originates from cochlear neurones alone. *Hear Res*. 2004; 190(1-2): 75-86.
1395. McManus A, Stevenson M, Finch CF, Elliott B, Hamer P, Lower A, Bulsara M. Incidence and risk factors for injury in non-elite Australian Football. *J Sci Med Sport*. 2004; 7(3):384-91.
1396. McManus JF, Francois R, Gherardi JM, Keigwin LD, Brown-Leger S. Collapse and rapid resumption of Atlantic meridional circulation linked to deglacial climate changes. *Nature*. 2004; 428(6985):834-7.
1397. McMullan S, Simpson DA, Lumb BM. A reliable method for the preferential activation of C- or A-fibre heat nociceptors. *J Neurosci Methods*. 2004; 138(1-2):133-9.
1398. McNichols RJ, Gowda A, Kangasniemi M, Bankson JA, Price RE, Hazle JD. MR thermometry-based feedback control of laser interstitial thermal therapy at 980 nm. *Lasers Surg Med*. 2004;34(1):48-55.
1399. 1. McNichols RJ, Kangasniemi M, Gowda A, Bankson JA, Price RE, Hazle JD. Technical developments for cerebral thermal treatment: water-cooled diffusing laser fibre tips and temperature-sensitive MRI using intersecting image planes. *Int J Hyperthermia*. 2004; 20(1):45-56.
1400. McQuade MS, Van Nostrand V, Schariter J, Kanike JD, Forsyth RJ. Stability and compatibility of reconstituted ertapenem with commonly used i.v infusion and coinfusion solutions. *Am J Health- System Pharm*. 2004; 61(1): 38-45

Address for correspondence

Prof Kurt Ammer MD, Ph.D

Ludwig Boltzmann Research Institute for Physical Diagnostics,
Hanuschkrankenhaus, Heinrich Collinstr. 30, A-1140 Vienna,
Austria, email: lbphys@a1.net

(Manuscript received on 10.01.2005, revision accepted on 20.01.2005)

Citations

Please cite this paper as

Ammer K. Thermology 2004- a computer-assisted literature search. *Thermology international* 2005, 15(1): 5-37

This paper was cited by

1. Ammer K. Thermology 2005- a computer assisted literature search. *Thermology international* 2006, 16. 16-36
2. Berz R, Sauer H - Infrarot Regulations Imaging - innovative Funktionsdiagnostik für Früherkennung, Prävention und Problemfälle. *Erfahrungsheilkunde*, 2006 55: 241-250
3. Fernández DAG. Contribuciones A Las Técnicas No Destructivas Para Evaluación Y Prueba De Procesos Y Materiales Basadas En Radiaciones Infrarrojas. Thesis, Universidad de Cantabria, Santander, 2006
4. Mikulska D, Maleszka R, Parafiniuk M. Próba Zastosowania Termografii Jako Metody Diagnostycznej w Dermatologii Na Podstawie Badań Prowadzonych W Latach 2001–2005 (The Usefulness of Thermography As A Diagnostic Method In Dermatology On The Basis Of Clinical Trials In 2001–2005) *Annals of the Pomeranian Medical University* 2006, 52, 3, 91–97
5. Mikulska D. Dermatoscopy and thermal imaging: A comparative investigation of melanocytic nevi of the skin. *Thermology International* 18 (3) 101-106
6. Mikulska D. Współczesne Możliwości Zastosowania termografii Wizyjnej W Diagnostyce Medycznej (Contemporary Applications Of Infrared Imaging In Medical Diagnostics) *Annals of the Pomeranian Medical University* 2006, 52, 1, 35–40
7. Mikulska D. Próba Zastosowania Termografii W Diagnostyce Znamion Melanocytowych Skóry (Thermographic Examination of Cutaneous Melanocytic Nevi) *Annales Academiae Medicae Stetinensis* 2009, 55, 1, 31–38
8. Schmidt-Burbach Jan. Thermografische Ermittlung physiologischer Wärmeprofile und pedografische Untersuchungen an den Extremitäten sowie Haltungsanalysen beim Asiatischen Elefanten (*Elephas maximus*) in menschlicher Obhut. Inaugural Dissertation zur Erlangung des Grades eines Doctor medicinae veterinariae (Dr. med. vet.) durch die Veterinärmedizinische Fakultät der Universität Leipzig, Leipzig 2009
9. Vargas Aparicio, Jorge Humberto. Analisis de falla superficial en cuerpos solidos mediante el metodo de termografia. Thesis, Instituto Politecnico Nacional, Mexico, 2010

News in Thermology

8th Symposium of the Austrian Society of Thermology

The Austrian Society of Thermology will return to the SAS Radisson Hotel for the 18th Thermological Symposium in October 2005. As the Ludwig Boltzmann Institute for Physical Diagnostics will cease all research activities by the end 2005, this will be the perfect opportunity to summarize the research achievements made by this institution in the field of thermology. The Austrian Society of Thermology and the European Association of Thermology will continue with some of the activities of the Boltzmann Institute for Physical Diagnostics, particularly in the publication of Thermology international.

The main theme of the symposium will be "Advances in Thermal Imaging and Temperature Related Therapy", but contributions to any other topic are welcomed.

Deadline for Abstracts is September 15, 2005. For further information, please contact

Prof Dr Kurt Ammer PhD,

Ludwig Boltzmann Forschungsinstitut für Physikalische Diagnostik, Hanuschkrankenhaus, Heinrich Collinstr.30, A-1170 Wien, Austria

Tel: +43 1 914 97 01 Fax: +43 1 914 92 64, Email: lbfphys@a1.net or KAmmer1959@aol.com

Papers from United Kingdom, Poland, Slovakia, Germany, Italy and Hungary are expected. It is hoped that a new co-operation with the German Society for Hyperthermia might generate increased interest in temperature dependent treatment. An update on current developments in therapeutic hyperthermia will be presented at the symposium..

Webpage of the Romanian Society of Thermography (SRT)

The Romanian Society of Thermology has launched a webpage, which contains much useful information. The history of the SRT and educational activities are provided. The name of the Board members, Romanian providers for thermographic investigation and also the statutes of the society are available. A meeting schedule and a long list of links to other thermology societies and organisations is provided. All but one page is written in English, with only the information for members and the announcement of the next conference of the SRT in October 2005 being in Romanian. The email address of the headquarter of the society provides the opportunity for exchange of ideas and contact with the thermographic colleagues in Romania.

31st Annual Meeting of the American Academy of Thermology (AAT)

The main theme of this years AAT meeting is "Recent Advances in Infrared Imaging and Clinical Applications"

and will be held from June 29th Wednesday to July 1st Friday, 2005 at Sheraton Baton Rouge Convention Center Hotel, in Baton Rouge, Louisiana. Programme Chairman is the current President of the AAT, Robert L. Elliott MD., PhD, supported by a board of distinguished experts such as Gerald Goldberg MD., Timothy D. Conwell, DC, FACO, Philip Hoekstra PhD, David Pascoe, PhD., Jim Walsmith, D.V.M.. And Ram Purohit, PhD., D.V.M.

The meeting is intended for physicians, clinicians, and healthcare professionals interested in the science and/or application of infrared imaging (thermology) in clinical medicine and veterinary medicine, dentistry, and podiatry. The speakers are nationally and internationally recognized and will address methodology, quality assurance, applications in diagnosis and research. CPT coding and reimbursement will be discussed.

The recent advances in both infrared cameras as well as software will be presented. Correlation of infrared imaging (thermal) to physiology and pathology will be addressed. Applications in breast thermology, complex regional pain syndrome and other clinical applications will be presented. Attendees are welcome to bring interesting cases for review and discussion.

Accreditation: CME credits will be given by the American Academy of Thermology and is applicable for certification and recertification.

Location/Accommodation: Ask for American Academy of Thermology Special Rate

Sheraton Baton Rouge Convention Center Hotel

102 France St., Baton Rouge, LA 70802
Phone/225-242-2600, Fax/225-242-2601

Sheraton Hotel Reservations

Worldwide 888-627-8567, Local 225-242-2600

Deadline: May 30, 2005

Delta, American, Continental and Northwest fly into **Baton Rouge**. It is a 10-15 minute drive from the airport to the hotel (Government St. Exit). There is also a complimentary shuttle van from the airport.

Registration Information: The registration includes continuing education certificates of credit, as well as attendance at all sessions, daily continental breakfasts and breaks, the Welcome Reception and course materials.

Registration Fees: (Non-refundable)

Physician Member\$	300.00
Physician Non-Member\$	350.00
Technologist Member\$	150.00
Technologist Non-Member\$	200.00

Deadline: April 7, 2005

(After this date, add additional late fee of \$50.00)

To Register: Complete the registration form (page 71) and return it with the registration fee (made payable to AAT) to:

Robert L. Elliott, M.D.,PhD.

17050 Medical Center Drive, Plaza II, 4th Floor
Baton Rouge, LA 70816

Abstract Submitting Guidelines

Topics: Breast Cancer, Chronic Pain, Treatment Monitoring, Drug Trials, Research, Headache, CPT and others

Abstract to include objective, methods, results and conclusions. Not more than 300 words.

Submit in Word. Bring presentation in CD form. LED projector will be available.

E-mail abstracts to Drs. Elliott, Hoekstra and Govindan.

Elliott – relliott@ehhbrestca.com

Hoekstra – Philiphoekstra@hotmail.com

Govindan – GovindanA@cs.com

Course on Thermal Imaging in Medicine at Glamorgan University UK

The 6th course in the series, on Thermal Imaging in Medicine, theory & practice is planned at the University of Glamorgan from 29th June to 1st July 2005. The faculty of this 3 day course will include Prof Dr Francis Ring, Prof Dr Kurt Ammer, Dr.Peter Plassmann and Dr. Rod Thomas. This course is recognized by the University of Glamorgan, and leads to a certificate for infra- red imaging techniques in medicine.

The fee is £ 350.-, includes a CD of archived thermographic publications and a hardback book "The Thermal Image in Medicine and Biology".-

Application forms are available on the website www.medimaging.org or from Prof.Francis Ring, Medical Imaging Research Group, School of Computing, University of Glamorgan, Pontypridd CF371DL, UK, email: efring@glam.ac.uk.

Details of other materials can also be found on the above website including A Casebook of Infrared Imaging in Clinical Medicine, and a sample of the medical software for thermal imaging CTHERM.

Veranstaltungen (Meetings)

March 18-20, 2005

8th Congress of the Polish Association of Thermology in Zakopane

Venue: Hotel Hyrny

Congress fee. 100.- Euro

Information: Prof A Jung

Klinika Pediatrii I Nefrologii Dzieciecej
W.I.M. 00909 Warsaw ul.Szaserow 128

Tel +48 22 6817 2316 Fax 48 22 6816 763

Email: ajung@wim.mil.pl

March 28 - April 1, 2005

Infrared Technology and Applications XXXI (OR34), Part of SPIE's International Defense and Security Symposium

Venue: Gaylord Palms Resort and Convention Center, Orlando, FL, USA

Conference Chairs: Bjørn F. Andresen,
ElOp Electrooptics Industries Ltd. (Israel);
Gabor F. Fulop, Maxtech. International, Inc.

Website: <http://spie.org/events/dss>

June 22-24, 2005

14th International Conference on Thermal Engineering and Thermogrammetry (THERMO) Budapest, Hungary

Programme Chairman: Dr. I. Benkő
BME, DoBSE, Hungary (EAT, HST, President of TE & TGM)

Information:

Dr. Imre BENKŐ, H-1112 Budapest, Cirmos u. 1, 6/38, Hungary

Phone/fax: +361-310-0999.

E-mail: ibenko@freestart.hu

June 29 - July 1, 2005

32th Annual Meeting of the American Academy of Thermology (AAT) in Baton Rouge, Louisiana, USA.

Conference president: Dr. Robert Elliott, president AAT

Venue: Sheraton Baton Rouge Convention Center Hotel
Baton Rouge, LA

Registration Information: The registration includes continuing education certificates of credit, as well as attendance at all sessions, daily continental breakfasts and breaks, the Welcome Reception and course materials.

Registration Fees: (Non-refundable)

Physician Member	\$ 300.00
Physician Non-Member	\$ 350.00
Technologist Member	\$ 150.00
Technologist Non-Member	\$ 200.00

Deadline: April 7, 2005
(After this date, add additional late fee of \$50.00)

PRELIMINARY PROGRAM

Wednesday, June 29

7 p.m. – 9 p.m. Reception

Thursday, June 30.

8:30 a.m. Opening Remarks:
Robert Elliott, M.D., PhD., President

9:00 – 11:00 Invited Speakers
11:00 – Noon Presentations: Dr. LeRoy and others

Noon – 1:00 p.m. Lunch

1:00 – 2:00 p.m. Executive Committee Meeting

2:00 – 4:00 p.m. Presentations – Drs. Elliott, Hoekstra, Amala and others

4:00 – 5:00 p.m. Discussion –
AAT and other Thermography societies
Drs. Elliott, Hoekstra, Conwell, Amala, Haber

Friday, July 1

8:30 – 10:30 a.m. Abstract Presentations

10:30 – 11:00 Presentation on
CPT coding and reimbursement
Drs. Govindan, Conwell, Pascoe and Haber

11:00 – Noon Presentation –
Dr. Schwartz on Indication for Thermal Imaging

Noon – 1 p.m. Lunch

1:00 – 2:00 p.m. Committee Chairman – Dr. Schwartz
Discussion on AAT position for Indications on testing
Drs. Herrick,
Conwell, Loder, Hoekstra, Diakides and Goldberg

2:00 – 4:00 p.m. ABT exam
for MD, DO, DVM, PhD, DC and technologists
Chairman: Richard Herrick, M.D.

4:00 – 5:00 p.m. Membership Business Meeting

American Academy of Thermology Registration Form

[Return to TOC](#)

Name_____

(print name & degree as you wish to appear on badge)

Summary of Enclosed Payments

Social Security #_____

Registration Fee \$_____

Degree_____Specialty_____

Social Activities

Occupation_____

____Yes, I will attend the Welcome Reception NC

Hospital or Organization_____

_____ # Guest Ticket @ \$25 \$_____

__Home or __Business Address (including department)

Total Amount \$_____

Method of Payment:

_____Check _____Credit Card

City_____State_____Zip_____

Total Amount \$_____

Day Phone ()_____Fax _____

Credit Card

__Visa_____Exp date_____

__MasterCard_____Exp date_____

E-Mail address_____

Card #_____

Name as it appears on card

Signature_____

June 29- July 1, 2005

6th Course on Thermal Imaging In Medicine, Theory & Practice at the University of Glamorgan, Pontypridd CF371DL, UK

Information:

Prof. Francis Ring, Medical Imaging Research Group
School of Computing, University of Glamorgan,
Pontypridd CF371DL, UK, email: efring@glam.ac.uk.

Website: www.medimaging.org or from

October 6-8, 2005

Annual Conference of the Romanian Society of thermography in Campina, Romania

Theme: Imaging osteo-articular pathologies

Information:

Website: srt.ro

October 22, 2005

18th Thermological Symposium of the Austrian Society of Thermology and the Ludwig Boltzmann Research Institute for Physical Diagnostics

Venue: SAS Radisson Hotel, Vienna

Main theme. Advances in Thermal Imaging and Temperature Related Therapy

Deadline for abstracts: September 15, 2005

Information: Prof Dr Kurt Ammer PhD

Ludwig Boltzmann Forschungsstelle für Physikalische Diagnostik, Hanuschkrankenhaus, Heinrich Collinstr.30 A-1170 Wien

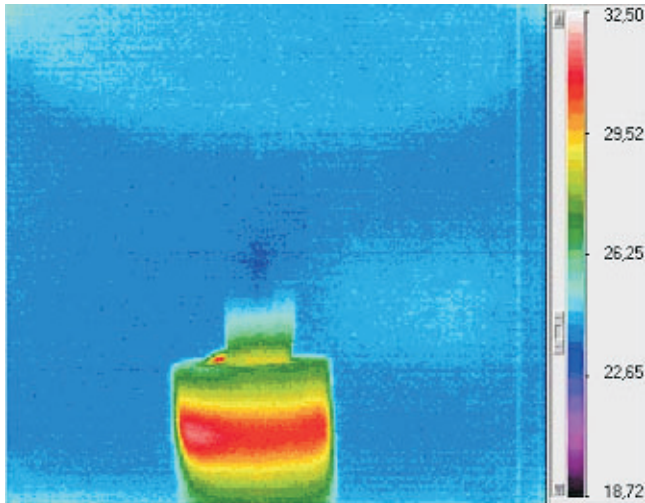
Tel: +43 1 914 97 01 Fax: +43 1 914 92 64

Email: Lbfphys@a1.net

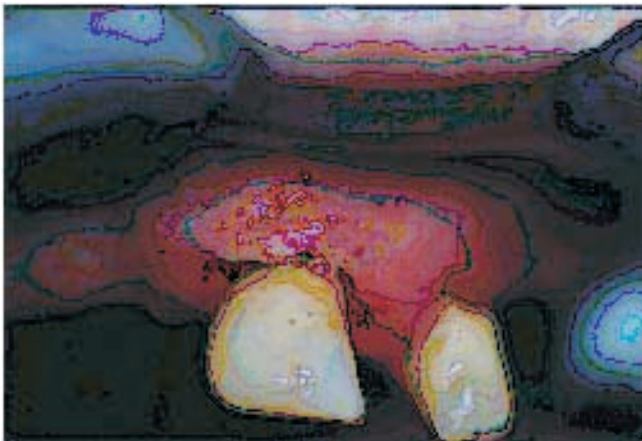
Correction

In the article by S Zmuda et al. on Infrared thermographic analysis of temperature distribution on the surface of human tooth during Nd:YAG laser irradiation- in vivo study. Thermology international 2004, 14: 131-136 a layout error occurred

The image below appeared as Fig 1 C and 3A



However, the correct image for figure 1 C (Operation site after laser curettage) is shown below.



We regret this error.

Thermology international

Dr. Kurt Ammer
Österreichische Gesellschaft für Thermologie

Hernalser Hauptstr.209/14
A-1170 Wien
Österreich

This journal is a combined publication of the Ludwig Boltzmann Research Institute for Physical Diagnostics and the Austrian Society of Thermology. It serves as the official publication organ of the European Association of Thermology (EAT), the American Academy of Thermology, the German Society of Thermology, the UK Thermography Association (Thermology Group) and the Austrian Society of Thermology. An advisory board is drawn from a panel of international experts in the field. The publications are peer-reviewed.

ISSN -1560-604X
Thermology
international

[return to TOC](#)

Please begin my subscription to
THERMOLOGY INTERNATIONAL

Name

Address

City

State

Zip

Signature

Date

I am a registered member of the
☐ Hungarian Society of Thermology
☐ UK Thermography Association
☐ Italian Association of Thermology
☐ Polish Society of Thermology
☐ Deutsche Gesellschaft für Thermographie

For members of the societies mentioned above the subscription rate for 4 issues/year is 32.-€ mailing costs included. All other subscribers have to pay 38.- € + 18 € for mailing outside Austria, in total 56 € (US \$ 68.-)

Payment should be sent (without any charges for the European Association of Thermology) to the following bank account: Bank Austria-Creditanstalt, Vienna, Austria, IBAN=AT62 1200 0009 6502 3054 / BIC=BKAUATWW

Thermology international

Dr. Kurt Ammer
Österreichische Gesellschaft für Thermologie

Hernalser Hauptstr.209/14
A-1170 Wien
Österreich

Diese Zeitschrift ist eine gemeinsame Publikation der Ludwig Boltzmann Forschungsstelle für Physikalische Diagnostik und der Österreichischen Gesellschaft für Thermologie.

Sie dient als offizielles Publikationsorgan der Europäischen Assoziation für Thermologie (EAT), der Amerikanischen Akademie für Thermologie, der Deutschen Gesellschaft für Thermologie, der Britischen Thermographie Assoziation (Thermologie Gruppe) und der Österreichischen Gesellschaft für Thermologie.

Hochangesehene Thermologen sind Mitglieder des wissenschaftlichen Beirates dieses vidierten Fachblattes.

ISSN -1560-604X
Thermology
international

Ich bestelle ein Abonnement der
THERMOLOGY INTERNATIONAL

Name

Adresse

Ort

Staat

PLZ

Unterschrift

Datum

Ich bin Mitglied der
☐ Ungarischen Gesellschaft für Thermologie
☐ UK Thermography Association
☐ Italian Association of Thermology
☐ Polish Society of Thermology
☐ Deutschen Gesellschaft für Thermographie

Für Mitglieder der oben erwähnten Gesellschaften beträgt der Abonnementpreis für 4 Ausgaben inklusive Versandkosten 32.-€ . Für alle anderen beträgt der Preis 38.- € + 18 € Versandkosten außerhalb Österreichs, somit einen Gesamtpreis von 56.- €.

Die Bezahlung wird spesenfrei für den Empfänger auf das folgende Bankkonto der Europäischen Assoziation für Thermologie erbeten:

Bank Austria-Creditanstalt, Wien, Österreich,
Bankleitzahl: 12000, Kontonummer: 965023054
IBAN=AT62 1200 0009 6502 3054 / BIC=BKAUATWW