Dieter Haemmerich

List of Publications by Year
in descending order

96	4,327	94269 37	110170 64
papers	citations	h-index	g-index

99	99	99	3617
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mathematical modeling of heat transfer in biological tissues (bioheat transfer). , 2022, , 1-24.		1
2	Extracorporeal Removal of Thermosensitive Liposomal Doxorubicin from Systemic Circulation after Tumor Delivery to Reduce Toxicities. Cancers, 2022, 14, 1322.	1.7	3
3	Computer simulations of an irrigated radiofrequency cardiac ablation catheter and experimental validation by infrared imaging. International Journal of Hyperthermia, 2021, 38, 1149-1163.	1.1	4
4	Externally triggered smart drug delivery system encapsulating idarubicin shows superior kinetics and enhances tumoral drug uptake and response. Theranostics, 2021, 11, 5700-5712.	4.6	16
5	Closed-loop trans-skull ultrasound hyperthermia leads to improved drug delivery from thermosensitive drugs and promotes changes in vascular transport dynamics in brain tumors. Theranostics, 2021, 11, 7276-7293.	4.6	26
6	Drug transport kinetics of intravascular triggered drug delivery systems. Communications Biology, 2021, 4, 920.	2.0	26
7	Untargeted Large Volume Hyperthermia Reduces Tumor Drug Uptake From Thermosensitive Liposomes. IEEE Open Journal of Engineering in Medicine and Biology, 2021, 2, 187-197.	1.7	8
8	Therapeutic Systems and Technologies: State-of-the-Art Applications, Opportunities, and Challenges. IEEE Reviews in Biomedical Engineering, 2020, 13, 325-339.	13.1	25
9	Real-time fluorescence imaging for visualization and drug uptake prediction during drug delivery by thermosensitive liposomes. International Journal of Hyperthermia, 2019, 36, 816-825.	1.1	23
10	Permanent and Transient Electrophysiological Effects During Cardiac Cryoablation Documented by Optical Activation Mapping and Thermal Imaging. IEEE Transactions on Biomedical Engineering, 2019, 66, 1844-1851.	2.5	0
11	Drug release kinetics of temperature sensitive liposomes measured at high-temporal resolution with a millifluidic device. International Journal of Hyperthermia, 2018, 34, 786-794.	1.1	23
12	Localized delivery of therapeutic doxorubicin dose across the canine bloodâ€“brain barrier with hyperthermia and temperature sensitive liposomes. Drug Delivery, 2018, 25, 973-984.	2.5	42
13	A Unified Mathematical Model for Nano-Liposomal Drug Delivery to Solid Tumors. IEEE Transactions on Nanobioscience, 2018, 17, 3-11.	2.2	3
14	In vitro Measurement of Release Kinetics of Temperature Sensitive Liposomes with a Fluorescence Imaging System. , 2018, 2018, 3216-3219.		5
15	Thermosensitive Liposomes for Image-Guided Drug Delivery. Advances in Cancer Research, 2018, 139, 121-146.	1.9	23
16	Non-invasive image-guided targeted drug delivery. Lancet Oncology, The, 2018, 19, 1000-1001.	5.1	9
17	Lesion modeling, characterization, and visualization for image-guided cardiac ablation therapy monitoring. Journal of Medical Imaging, 2018, 5, 1.	0.8	9
18	Technical note: on cardiac ablation lesion visualization for image-guided therapy monitoring. , 2018, 10576, .		0

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19	Lyso-thermosensitive liposomal doxorubicin for treatment of bladder cancer. International Journal of Hyperthermia, 2017, 33, 1-8.	1.1	20
20	Introduction to microwave tumour ablation special issue. International Journal of Hyperthermia, 2017, 33, 1-2.	1.1	6
21	Experimental measurement of microwave ablation heating pattern and comparison to computer simulations. International Journal of Hyperthermia, 2017, 33, 74-82.	1.1	40
22	Temperature sensitive liposomes combined with thermal ablation: Effects of duration and timing of heating in mathematical models and in vivo. PLoS ONE, 2017, 12, e0179131.	1.1	32
23	Thermal Therapy Approaches for Treatment of Brain Tumors in Animals and Humans. Critical Reviews in Biomedical Engineering, 2016, 44, 443-457.	0.5	22
24	Body temperature control circuit. , 2016, , .		0
25	Development of a radiofrequency ablation platform in a clinically relevant murine model of hepatocellular cancer. Cancer Biology and Therapy, 2015, 16, 1812-1819.	1.5	9
26	Increased Duration of Heating Boosts Local Drug Deposition during Radiofrequency Ablation in Combination with Thermally Sensitive Liposomes (ThermoDox) in a Porcine Model. PLoS ONE, 2015, 10, e0139752.	1.1	67
27	Review of Temperature Dependence of Thermal Properties, Dielectric Properties, and Perfusion of Biological Tissues at Hyperthermic and Ablation Temperatures. Critical Reviews in Biomedical Engineering, 2014, 42, 467-492.	0.5	255
28	Components of a hyperthermia clinic: Recommendations for staffing, equipment, and treatment monitoring. International Journal of Hyperthermia, 2014, 30, 1-5.	1.1	26
29	Dynamics of tissue shrinkage during ablative temperature exposures. Physiological Measurement, 2014, 35, 55-67.	1.2	69
30	Standardized radiofrequency ablation (sRFA) â‰¥ 45 minutes (m) plus lyso-thermosensitive liposomal doxorubicin (LTLD) for solitary hepatocellular carcinoma (HCC) lesions 3-7 cm: A retrospective analysis of phase III HEAT study.. Journal of Clinical Oncology, 2014, 32, e15143-e15143.	0.8	6
31	Improved intratumoral nanoparticle extravasation and penetration by mild hyperthermia. Journal of Controlled Release, 2013, 167, 130-137.	4.8	165
32	Mild hyperthermia triggered doxorubicin release from optimized stealth thermosensitive liposomes improves intratumoral drug delivery and efficacy. Journal of Controlled Release, 2013, 168, 142-150.	4.8	187
33	Cytotoxicity of hepatocellular carcinoma cells to hyperthermic and ablative temperature exposures: In vitro studies and mathematical modelling. International Journal of Hyperthermia, 2013, 29, 318-323.	1.1	32
34	Non-invasive estimation of thermal tissue properties by high-intensity focused ultrasound. , 2013, , .		0
35	Combination therapy of radiofrequency ablation and bevacizumab monitored with power Doppler ultrasound in a murine model of hepatocellular carcinoma. International Journal of Hyperthermia, 2012, 28, 766-775.	1.1	10
36	Mild hyperthermia with magnetic resonance-guided high-intensity focused ultrasound for applications in drug delivery. International Journal of Hyperthermia, 2012, 28, 320-336.	1.1	119

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37	Targeted drug delivery by high intensity focused ultrasound mediated hyperthermia combined with temperature-sensitive liposomes: Computational modelling and preliminary in vivovalidation. International Journal of Hyperthermia, 2012, 28, 337-348.	1.1	127
38	Comparison of Conventional Chemotherapy, Stealth Liposomes and Temperature-Sensitive Liposomes in a Mathematical Model. PLoS ONE, 2012, 7, e47453.	1.1	82
39	Planning of Image-Guided Interventions in the Liver. IEEE Pulse, 2011, 2, 48-55.	0.1	10
40	Image-Guided Therapies. IEEE Pulse, 2011, 2, 25-27.	0.1	0
41	Biopotential as predictor of ablation zone size during radiofrequency tumor ablation. Scientia Iranica, 2011, 18, 1511-1515.	0.3	1
42	RF Ablation at Low Frequencies for Targeted Tumor Heating: In Vitro and Computational Modeling Results. IEEE Transactions on Biomedical Engineering, 2011, 58, 404-410.	2.5	34
43	Computational modeling of high-intensity focused ultrasound mediated drug delivery. Proceedings of SPIE, 2011, , .	0.8	1
44	Sequential Activation of Ground Pads Reduces Skin Heating During Radiofrequency Tumor Ablation: In Vivo Porcine Results. IEEE Transactions on Biomedical Engineering, 2010, 57, 746-753.	2.5	8
45	Biophysics of Radiofrequency Ablation. Critical Reviews in Biomedical Engineering, 2010, 38, 53-63.	0.5	74
46	Mathematical spatio-temporal model of drug delivery from low temperature sensitive liposomes during radiofrequency tumour ablation. International Journal of Hyperthermia, 2010, 26, 499-513.	1.1	93
47	Estimating the probability that the TaserÂ® directly causes human ventricular fibrillation. Journal of Medical Engineering and Technology, 2010, 34, 178-191.	0.8	16
48	Mathematical modeling of impedance controlled radiofrequency tumor ablation and ex-vivo validation. , 2010, 2010, 1605-8.		11
49	Editorial: Current Trends in Mathematical Modeling of High-Temperature Thermal Therapies. Open Biomedical Engineering Journal, 2010, 4, 1-2.	0.7	1
50	Sequential activation of ground pads reduces skin heating during radiofrequency ablation: Initial in vivo porcine results. , 2009, 2009, 4287-90.		2
51	Probabilistic finite element analysis of radiofrequency liver ablation using the unscented transform. Physics in Medicine and Biology, 2009, 54, 627-640.	1.6	52
52	Electrical conductivity measurement of excised human metastatic liver tumours before and after thermal ablation. Physiological Measurement, 2009, 30, 459-466.	1.2	103
53	Effect of electrode thermal conductivity in cardiac radiofrequency catheter ablation: A computational modeling study. International Journal of Hyperthermia, 2009, 25, 99-107.	1.1	47
54	An electrode array that minimizes blood loss for radiofrequency-assisted hepatic resection. Medical Engineering and Physics, 2008, 30, 454-459.	0.8	4

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55	Contrasting Effects of Convective Flow on Catheter Ablation Lesion Size: Cryo Versus Radiofrequency Energy. PACE - Pacing and Clinical Electrophysiology, 2008, 31, 300-307.	0.5	22
56	Sequential Activation of a Segmented Ground Pad Reduces Skin Heating During Radiofrequency Tumor Ablation: Optimization via Computational Models. IEEE Transactions on Biomedical Engineering, 2008, 55, 1881-1889.	2.5	12
57	Effect of variable heat transfer coefficient on tissue temperature next to a large vessel during radiofrequency tumor ablation. BioMedical Engineering OnLine, 2008, 7, 21.	1.3	49
58	Tumor ablation at low frequencies for preferential tumor heating: Initial ex-vivo tissue studies. , 2008, 2008, 238-41.		2
59	Effects of variation in perfusion rates and of perfusion models in computational models of radio frequency tumor ablation. Medical Physics, 2008, 35, 3462-3470.	1.6	108
60	A surgical device for radiofrequency ablation of large liver tumors. Physiological Measurement, 2008, 29, N59-N70.	1.2	4
61	Sequential activation of multiple grounding pads reduces skin heating during radiofrequency tumor ablation. International Journal of Hyperthermia, 2007, 23, 555-566.	1.1	16
62	Convective Cooling Affects Cardiac Catheter Cryoablation and Radiofrequency Ablation in Opposite Directions. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1499-502.	0.5	6
63	Hepatic Resection but Not Radiofrequency Ablation Results in Tumor Growth and Increased Growth Factor Expression. Annals of Surgery, 2007, 245, 771-776.	2.1	30
64	Current status of liver tumor ablation devices. Expert Review of Medical Devices, 2007, 4, 523-537.	1.4	61
65	Technologies for Guidance of Radiofrequency Ablation in the Multimodality Interventional Suite of the Future. Journal of Vascular and Interventional Radiology, 2007, 18, 9-24.	0.2	151
66	Contribution of Direct Heating, Thermal Conduction and Perfusion During Radiofrequency and Microwave Ablation. Open Biomedical Engineering Journal, 2007, 1, 47-52.	0.7	38
67	Hepatic radiofrequency ablation at low frequencies preferentially heats tumour tissue. International Journal of Hyperthermia, 2006, 22, 563-574.	1.1	40
68	Convective Cooling Effect on Cooled-Tip Catheter Compared to Large-Tip Catheter Radiofrequency Ablation. PACE - Pacing and Clinical Electrophysiology, 2006, 29, 1368-1374.	0.5	26
69	In vitro measurements of temperature-dependent specific heat of liver tissue. Medical Engineering and Physics, 2006, 28, 194-197.	0.8	59
70	Multiple-Electrode Radiofrequency Ablation Creates Confluent Areas of Necrosis: In Vivo Porcine Liver Results. Radiology, 2006, 241, 116-124.	3.6	73
71	Letter by Saul and Haemmerich Regarding Article â€œComparison of Electrode Cooling Between Internal and Open Irrigation in Radiofrequency Ablation Lesion Depth and Incidence of Thrombus and Steam Popâ€• Circulation, 2006, 113, e936; author reply e937.	1.6	0
72	Haemostatic partial nephrectomy using bipolar radiofrequency ablation. BJU International, 2005, 96, 1101-1104.	1.3	20

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73	Instrument to measure the heat convection coefficient on the endothelial surface of arteries and veins. Medical and Biological Engineering and Computing, 2005, 43, 522-527.	1.6	8
74	Multiple applicator approaches for radiofrequency and microwave ablation. International Journal of Hyperthermia, 2005, 21, 93-106.	1.1	49
75	Effects of the time response of the temperature sensor on thermodilution measurements. Physiological Measurement, 2005, 26, 885-901.	1.2	2
76	Large-Volume Radiofrequency Ablation of ex Vivo Bovine Liver with Multiple Cooled Cluster Electrodes. Radiology, 2005, 234, 563-568.	3.6	64
77	Measurement of temperature-dependent specific heat of biological tissues. Physiological Measurement, 2005, 26, 59-67.	1.2	54
78	Multiple-electrode Radiofrequency Ablation: Simultaneous Production of Separate Zones of Coagulation in an In Vivo Porcine Liver Model. Journal of Vascular and Interventional Radiology, 2005, 16, 1727-1735.	0.2	26
79	Thermal tumour ablation: Devices, clinical applications and future directions. International Journal of Hyperthermia, 2005, 21, 755-760.	1.1	100
80	Automatic control of finite element models for temperature-controlled radiofrequency ablation. BioMedical Engineering OnLine, 2005, 4, 42.	1.3	44
81	Lesion Size Estimator of Cardiac Radiofrequency Ablation at Different Common Locations With Different Tip Temperatures. IEEE Transactions on Biomedical Engineering, 2004, 51, 1859-1864.	2.5	38
82	Hepatic bipolar radiofrequency ablation creates coagulation zones close to blood vessels: A finite element study. Medical and Biological Engineering and Computing, 2003, 41, 317-323.	1.6	108
83	Hepatic radiofrequency ablation with internally cooled probes: effect of coolant temperature on lesion size. IEEE Transactions on Biomedical Engineering, 2003, 50, 493-500.	2.5	136
84	Multiple Probe Radiofrequency Ablation: Pilot Study in an Animal Model. Journal of Vascular and Interventional Radiology, 2003, 14, 1437-1442.	0.2	70
85	Bipolar Radiofrequency Ablation of the Kidney: Comparison with Monopolar Radiofrequency Ablation. Journal of Endourology, 2003, 17, 927-933.	1.1	49
86	In vivoelectrical conductivity of hepatic tumours. Physiological Measurement, 2003, 24, 251-260.	1.2	191
87	Theoretical analysis of the heat convection coefficient in large vessels and the significance for thermal ablative therapies. Physics in Medicine and Biology, 2003, 48, 4125-4134.	1.6	38
88	Three-dimensional finite-element analyses for radio-frequency hepatic tumor ablation. IEEE Transactions on Biomedical Engineering, 2002, 49, 3-9.	2.5	286
89	Modeling bipolar phase-shifted multielectrode catheter ablation. IEEE Transactions on Biomedical Engineering, 2002, 49, 10-17.	2.5	24
90	In-vivo measurement of swine myocardial resistivity. IEEE Transactions on Biomedical Engineering, 2002, 49, 472-483.	2.5	49

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91	Error analysis of tissue resistivity measurement. IEEE Transactions on Biomedical Engineering, 2002, 49, 484-494.	2.5	17
92	Finite-element analysis of hepatic multiple probe radio-frequency ablation. IEEE Transactions on Biomedical Engineering, 2002, 49, 836-842.	2.5	98
93	Mechanical compliance of the endocardium. Journal of Biomechanics, 2002, 35, 1671-1676.	0.9	13
94	Flow effect on lesion formation in RF cardiac catheter ablation. IEEE Transactions on Biomedical Engineering, 2001, 48, 425-433.	2.5	41
95	Hepatic bipolar radio-frequency ablation between separated multiprong electrodes. IEEE Transactions on Biomedical Engineering, 2001, 48, 1145-1152.	2.5	111
96	Thermosensitive Liposomes. , 0, , .		13