H P Kok

List of Publications by Year
in descending order

105 papers	2,955 citations	159585 30 h-index	189892 50 g-index
106 all docs	106 docs citations	106 times ranked	2194 citing authors

#	Article	IF	Citations
1	The alfa and beta of tumours: a review of parameters of the linear-quadratic model, derived from clinical radiotherapy studies. Radiation Oncology, 2018, 13, 96.	2.7	301
2	Heating technology for malignant tumors: a review. International Journal of Hyperthermia, 2020, 37, 711-741.	2.5	211
3	Current state of the art of regional hyperthermia treatment planning: a review. Radiation Oncology, 2015, 10, 196.	2.7	122
4	Improving locoregional hyperthermia delivery using the 3-D controlled AMC-8 phased array hyperthermia system: A preclinical study. International Journal of Hyperthermia, 2009, 25, 581-592.	2.5	98
5	Cell survival and radiosensitisation: Modulation of the linear and quadratic parameters of the LQ model. International Journal of Oncology, 2013, 42, 1501-1515.	3.3	88
6	Molecular and biological rationale of hyperthermia as radio- and chemosensitizer. Advanced Drug Delivery Reviews, 2020, 163-164, 84-97.	13.7	81
7	Planning, optimisation and evaluation of hyperthermia treatments. International Journal of Hyperthermia, 2017, 33, 593-607.	2.5	77
8	Temperature and thermal dose during radiotherapy and hyperthermia for recurrent breast cancer are related to clinical outcome and thermal toxicity: a systematic review. International Journal of Hyperthermia, 2019, 36, 1023-1038.	2.5	72
9	High-resolution temperature-based optimization for hyperthermia treatment planning. Physics in Medicine and Biology, 2005, 50, 3127-3141.	3.0	69
10	Variation in Clinical Application of Hyperthermic Intraperitoneal Chemotherapy: A Review. Cancers, 2019, 11, 78.	3.7	64
11	Quantifying the Combined Effect of Radiation Therapy and Hyperthermia in Terms of Equivalent Dose Distributions. International Journal of Radiation Oncology Biology Physics, 2014, 88, 739-745.	0.8	60
12	A short time interval between radiotherapy and hyperthermia reduces in-field recurrence and mortality in women with advanced cervical cancer. Radiation Oncology, 2017, 12, 75.	2.7	60
13	Optimization in hyperthermia treatment planning: The impact of tissue perfusion uncertainty. Medical Physics, 2010, 37, 4540-4550.	3.0	58
14	Thermoradiotherapy planning: Integration in routine clinical practice. International Journal of Hyperthermia, 2016, 32, 41-49.	2.5	55
15	Hyperthermia Selectively Targets Human Papillomavirus in Cervical Tumors via p53-Dependent Apoptosis. Cancer Research, 2015, 75, 5120-5129.	0.9	53
16	Uncertainty in hyperthermia treatment planning: the need for robust system design. Physics in Medicine and Biology, 2011, 56, 3233-3250.	3.0	52
17	Online Adaptive Hyperthermia Treatment Planning During Locoregional Heating to Suppress Treatment-Limiting Hot Spots. International Journal of Radiation Oncology Biology Physics, 2017, 99, 1039-1047.	0.8	51
18	Quality assurance guidelines for interstitial hyperthermia. International Journal of Hyperthermia, 2019, 36, 276-293.	2.5	51

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19	A comparison of the heating characteristics of capacitive and radiative superficial hyperthermia. International Journal of Hyperthermia, 2017, 33, 378-386.	2.5	49
20	Integrating Loco-Regional Hyperthermia Into the Current Oncology Practice: SWOT and TOWS Analyses. Frontiers in Oncology, 2020, 10, 819.	2.8	46
21	Hyperthermia treatment planning for cervical cancer patients based on electrical conductivity tissue properties acquired<i>in vivo</i>with EPT at 3 T MRI. International Journal of Hyperthermia, 2016, 32, 558-568.	2.5	44
22	Mathematical modeling of the thermal effects of irreversible electroporation for <i>inÂvitro</i>, <i>inÂvivo</i>, and clinical use: a systematic review. International Journal of Hyperthermia, 2020, 37, 486-505.	2.5	42
23	Thermal modelling using discrete vasculature for thermal therapy: A review. International Journal of Hyperthermia, 2013, 29, 336-345.	2.5	41
24	Toward Online Adaptive Hyperthermia Treatment Planning: Correlation Between Measured and Simulated Specific Absorption Rate Changes Caused by Phase Steering in Patients. International Journal of Radiation Oncology Biology Physics, 2014, 90, 438-445.	0.8	39
25	The Temperature-Dependent Effectiveness of Platinum-Based Drugs Mitomycin-C and 5-FU during Hyperthermic Intraperitoneal Chemotherapy (HIPEC) in Colorectal Cancer Cell Lines. Cells, 2020, 9, 1775.	4.1	38
26	Biological modelling of the radiation dose escalation effect of regional hyperthermia in cervical cancer. Radiation Oncology, 2016, 11, 14.	2.7	37
27	Prospective treatment planning to improve locoregional hyperthermia for oesophageal cancer. International Journal of Hyperthermia, 2006, 22, 375-389.	2.5	36
28	Enhancing the abscopal effect of radiation and immune checkpoint inhibitor therapies with magnetic nanoparticle hyperthermia in a model of metastatic breast cancer. International Journal of Hyperthermia, 2019, 36, 47-63.	2.5	35
29	Measurement and analysis of the impact of time-interval, temperature and radiation dose on tumour cell survival and its application in thermoradiotherapy plan evaluation. International Journal of Hyperthermia, 2018, 34, 30-38.	2.5	34
30	Fast thermal simulations and temperature optimization for hyperthermia treatment planning, including realistic 3D vessel networks. Medical Physics, 2013, 40, 103303.	3.0	32
31	On verification of hyperthermia treatment planning for cervical carcinoma patients. International Journal of Hyperthermia, 2007, 23, 303-314.	2.5	31
32	3D radiobiological evaluation of combined radiotherapy and hyperthermia treatments. International Journal of Hyperthermia, 2017, 33, 160-169.	2.5	31
33	Body Conformal Antennas for Superficial Hyperthermia: The Impact of Bending Contact Flexible Microstrip Applicators on Their Electromagnetic Behavior. IEEE Transactions on Biomedical Engineering, 2009, 56, 2917-2926.	4.2	30
34	Locoregional hyperthermia of deep-seated tumours applied with capacitive and radiative systems: a simulation study. International Journal of Hyperthermia, 2018, 34, 714-730.	2.5	29
35	FDTD simulations to assess the performance of CFMA-434 applicators for superficial hyperthermia. International Journal of Hyperthermia, 2009, 25, 462-476.	2.5	28
36	3D versus 2D steering in patient anatomies: A comparison using hyperthermia treatment planning. International Journal of Hyperthermia, 2011, 27, 74-85.	2.5	26

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37	Hyperthermia Treatment Planning Including Convective Flow in Cerebrospinal Fluid for Brain Tumour Hyperthermia Treatment Using a Novel Dedicated Paediatric Brain Applicator. Cancers, 2019, 11, 1183.	3.7	26
38	Advanced patient-specific hyperthermia treatment planning. International Journal of Hyperthermia, 2020, 37, 992-1007.	2.5	26
39	Deep learningâ€based reconstruction of in vivo pelvis conductivity with a 3D patchâ€based convolutional neural network trained on simulated MR data. Magnetic Resonance in Medicine, 2020, 84, 2772-2787.	3.0	26
40	Thermal dosimetry for bladder hyperthermia treatment. An overview. International Journal of Hyperthermia, 2016, 32, 417-433.	2.5	25
41	Radiosensitization by Hyperthermia: The Effects of Temperature, Sequence, and Time Interval in Cervical Cell Lines. Cancers, 2020, 12, 582.	3.7	25
42	Improved power steering with double and triple ring waveguide systems: The impact of the operating frequency. International Journal of Hyperthermia, 2011, 27, 224-239.	2.5	24
43	Feasibility of on-line temperature-based hyperthermia treatment planning to improve tumour temperatures during locoregional hyperthermia. International Journal of Hyperthermia, 2018, 34, 1082-1091.	2.5	24
44	The effect of time interval between radiotherapy and hyperthermia on planned equivalent radiation dose. International Journal of Hyperthermia, 2018, 34, 901-909.	2.5	23
45	Enhancing synthetic lethality of PARP-inhibitor and cisplatin in BRCA-proficient tumour cells with hyperthermia. Oncotarget, 2017, 8, 28116-28124.	1.8	23
46	Accuracy and precision of electrical permittivity mapping at 3T: the impact of three mapping techniques. Magnetic Resonance in Medicine, 2019, 81, 3628-3642.	3.0	22
47	Predictive value of simulated SAR and temperature for changes in measured temperature after phase-amplitude steering during locoregional hyperthermia treatments. International Journal of Hyperthermia, 2018, 35, 330-339.	2.5	19
48	Simulating drug penetration during hyperthermic intraperitoneal chemotherapy. Drug Delivery, 2021, 28, 145-161.	5.7	19
49	SAR deposition by curved CFMA-434 applicators for superficial hyperthermia: Measurements and simulations. International Journal of Hyperthermia, 2010, 26, 171-184.	2.5	18
50	Enhancing radiosensitisation of BRCA2-proficient and BRCA2-deficient cell lines with hyperthermia and PARP1-<i>i</i>. International Journal of Hyperthermia, 2018, 34, 39-48.	2.5	18
51	ESHO benchmarks for computational modeling and optimization in hyperthermia therapy. International Journal of Hyperthermia, 2021, 38, 1425-1442.	2.5	18
52	Improving hyperthermia treatment planning for the pelvis by accurate fluid modeling. Medical Physics, 2016, 43, 5442-5452.	3.0	17
53	The Impact of the Time Interval Between Radiation and Hyperthermia on Clinical Outcome in Patients With Locally Advanced Cervical Cancer. Frontiers in Oncology, 2019, 9, 412.	2.8	17
54	Hyperthermia Treatment Planning: Clinical Application and Ongoing Developments. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2021, 5, 214-222.	3.4	17

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55	Technical and Clinical Evaluation of the ALBA-4D 70MHz Loco-Regional Hyperthermia System. , 2018, , .		15
56	Locoregional peritoneal hyperthermia to enhance the effectiveness of chemotherapy in patients with peritoneal carcinomatosis: a simulation study comparing different locoregional heating systems. International Journal of Hyperthermia, 2020, 37, 76-88.	2.5	14
57	Preclinical In Vivo-Models to Investigate HIPEC; Current Methodologies and Challenges. Cancers, 2021, 13, 3430.	3.7	14
58	Treatment planning facilitates clinical decision making for hyperthermia treatments. International Journal of Hyperthermia, 2021, 38, 532-551.	2.5	14
59	Sensitizing thermochemotherapy with a PARP1-inhibitor. Oncotarget, 2017, 8, 16303-16312.	1.8	14
60	Enhancement of Radiation Effectiveness in Cervical Cancer Cells by Combining Ionizing Radiation with Hyperthermia and Molecular Targeting Agents. International Journal of Molecular Sciences, 2018, 19, 2420.	4.1	13
61	Comparison of two different 70 MHz applicators for large extremity lesions: Simulation and application. International Journal of Hyperthermia, 2010, 26, 376-388.	2.5	12
62	Response: Commentary: The Impact of the Time Interval Between Radiation and Hyperthermia on Clinical Outcome in Patients With Locally Advanced Cervical Cancer. Frontiers in Oncology, 2020, 10, 528.	2.8	12
63	Relation between body size and temperatures during locoregional hyperthermia of oesophageal cancer patients. International Journal of Hyperthermia, 2008, 24, 663-674.	2.5	11
64	Clinical validation of a novel thermophysical bladder model designed to improve the accuracy of hyperthermia treatment planning in the pelvic region. International Journal of Hyperthermia, 2018, 35, 383-397.	2.5	11
65	Post-operative re-irradiation with hyperthermia in locoregional breast cancer recurrence: Temperature matters. Radiotherapy and Oncology, 2022, 167, 149-157.	0.6	11
66	Theoretical comparison of intraluminal heating techniques. International Journal of Hyperthermia, 2007, 23, 395-411.	2.5	10
67	The impact of the waveguide aperture size of the 3D 70 MHz AMC-8 locoregional hyperthermia system on tumour coverage. Physics in Medicine and Biology, 2010, 55, 4899-4916.	3.0	10
68	Reliability of temperature and SAR measurements at oesophageal tumour locations. International Journal of Hyperthermia, 2006, 22, 545-561.	2.5	8
69	Clinical Feasibility of a High-Resolution Thermal Monitoring Sheet for Superficial Hyperthermia in Breast Cancer Patients. Cancers, 2020, 12, 3644.	3.7	8
70	Demonstration of treatment planning software for hyperthermic intraperitoneal chemotherapy in a rat model. International Journal of Hyperthermia, 2021, 38, 38-54.	2.5	8
71	Two high-resolution thermal monitoring sheets for clinical superficial hyperthermia. Physics in Medicine and Biology, 2020, 65, 175021.	3.0	8
72	Adapt2Heat: treatment planning-assisted locoregional hyperthermia by on-line visualization, optimization and re-optimization of SAR and temperature distributions. International Journal of Hyperthermia, 2022, 39, 265-277.	2.5	8

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73	On estimation of the temperature maximum in intraluminal or intracavitary hyperthermia. International Journal of Hyperthermia, 2005, 21, 287-304.	2.5	7
74	A flexible 70â€‰MHz phase-controlled double waveguide system for hyperthermia treatment of superficial tumours with deep infiltration. International Journal of Hyperthermia, 2017, 33, 1-14.	2.5	7
75	A Four-Inflow Construction to Ensure Thermal Stability and Uniformity during Hyperthermic Intraperitoneal Chemotherapy (HIPEC) in Rats. Cancers, 2020, 12, 3516.	3.7	7
76	Modelling Curved Contact Flexible Microstrip Applicators for Patient-Specific Superficial Hyperthermia Treatment Planning. Cancers, 2020, 12, 656.	3.7	7
77	Experimental validation of a thermophysical fluid model for use in a hyperthermia treatment planning system. International Journal of Heat and Mass Transfer, 2020, 152, 119495.	4.8	6
78	Dedicated 70 MHz RF systems for hyperthermia of challenging tumor locations. International Journal of Microwave and Wireless Technologies, 2020, 12, 839-847.	1.9	5
79	Artefacts in intracavitary temperature measurements during regional hyperthermia. Physics in Medicine and Biology, 2007, 52, 5157-5171.	3.0	4
80	Acceleration of high resolution temperature based optimization for hyperthermia treatment planning using element grouping. Medical Physics, 2009, 36, 3795-3805.	3.0	4
81	Loco-regional Hyperthermia Delivery: Patient-specific set-up Procedures for Treatment Optimisation. , 2020, , .		4
82	HyCHEED System for Maintaining Stable Temperature Control during Preclinical Irreversible Electroporation Experiments at Clinically Relevant Temperature and Pulse Settings. Sensors, 2020, 20, 6227.	3.8	4
83	Novel tools for stepping source brachytherapy treatment planning: Enhanced geometrical optimization and interactive inverse planning. Medical Physics, 2015, 42, 348-353.	3.0	3
84	Analysis of enhancement at small and large radiation doses for effectiveness of inactivation in cultured cells by combining two agents with radiation. International Journal of Radiation Biology, 2016, 92, 521-526.	1.8	3
85	Progress and future directions in hyperthermia treatment planning. , 2017, , .		3
86	The effect of air pockets in the urinary bladder on the temperature distribution during loco-regional hyperthermia treatment of bladder cancer patients. International Journal of Hyperthermia, 2018, 35, 441-449.	2.5	3
87	Hyperthermia treatment planning: clinical application and ongoing research. , 2020, , .		3
88	Thermodynamic profiling during irreversible electroporation in porcine liver and pancreas: a case study series. Journal of Clinical and Translational Research, 2020, 5, 109-132.	0.3	3
89	Improving Prediction of the Potential Distribution Induced by Cylindrical Electrodes within a Homogeneous Rectangular Grid during Irreversible Electroporation. Applied Sciences (Switzerland), 2022, 12, 1471.	2.5	3
90	A 70 MHz double waveguide set-up for hyperthermia of deep superficial tumors. , 2016, , .		2

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91	Development of electrical properties tomography for hyperthermia treatment planning. , 2017, , .		2
92	RF Heating of Pancreatic Tumours Guided by Hyperthermia Treatment Planning and Limited Thermometry. , 2018, , .		2
93	Effect of gastrointestinal gas on the temperature distribution in pancreatic cancer hyperthermia treatment planning. International Journal of Hyperthermia, 2021, 38, 229-240.	2.5	2
94	Fast Adaptive Temperature-Based Re-Optimization Strategies for On-Line Hot Spot Suppression during Locoregional Hyperthermia. Cancers, 2022, 14, 133.	3.7	2
95	Development of a 70 MHz unit for hyperthermia treatment of deep seated breast tumors. , 2016, , .		1
96	Clinical use of a waveguide hyperthermia system for superficial tumors with deep infiltration. , 2017, , .		1
97	Hyperthermia of deep seated pelvic tumors with a phased array of eight versus four 70 MHz waveguides. , 2017, , .		1
98	Reâ€'irradiation plus hyperthermia for recurrent pediatric sarcoma; a simulation study to investigate feasibility. International Journal of Oncology, 2018, 54, 209-218.	3.3	1
99	Adaptive Treatment Planning for Locoregional Hyperthermia: A Necessary Tool for Optimizing Treatment Quality. , 2018, , .		1
100	Combining 70MHz and 434MHz or wIRA Hyperthermia Applicators for Optimal Coverage of Semi-Deep Tumour Sites. , 2019, , .		1
101	Combined Use of wIRA and Microwave or Radiofrequency Hyperthermia. , 2022, , 97-106.		1
102	Non-Invasive Imaging and Scoring of Peritoneal Metastases in Small Preclinical Animal Models Using Ultrasound: A Preliminary Trial. Biomedicines, 2022, 10, 1610.	3.2	1
103	A mixed frequency approach to optimize locoregional RF hyperthermia. , 2015, , .		0
104	Development of a 27.12 MHz CC-LCF intraluminal applicator for hyperthermia of the esophagus. , 2015, , .		0
105	Design and use of phased array RF systems for loco-regional hyperthermia of deep seated tumors. , 2018, , .		0