

Punit Prakash

List of Publications by Year in descending order

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100
papers

1,514
citations

304743

22
h-index

377865

34
g-index

100
all docs

100
docs citations

100
times ranked

1233
citing authors

#	ARTICLE	IF	CITATIONS
1	Microwave ablation. , 2022, , 139-167.		2
2	Extracorporeal Removal of Thermosensitive Liposomal Doxorubicin from Systemic Circulation after Tumor Delivery to Reduce Toxicities. <i>Cancers</i> , 2022, 14, 1322.	3.7	3
3	A Non-Invasive Hydration Monitoring Technique Using Microwave Transmission and Data-Driven Approaches. <i>Sensors</i> , 2022, 22, 2536.	3.8	0
4	System for delivering microwave ablation to subcutaneous tumors in small-animals under high-field MRI thermometry guidance. <i>International Journal of Hyperthermia</i> , 2022, 39, 584-594.	2.5	1
5	Shaping the future of microwave tumor ablation: a new direction in precision and control of device performance. <i>International Journal of Hyperthermia</i> , 2022, 39, 664-674.	2.5	10
6	Fabrication of Solid Microneedle using Multi-slit Diffraction UV Lithography. , 2022, , .		2
7	Broadband Dielectric Properties of <i>Ex Vivo</i> Bovine Liver Tissue Characterized at Ablative Temperatures. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 90-98.	4.2	24
8	Short pulsed microwave ablation: computer modeling and <i>ex vivo</i> experiments. <i>International Journal of Hyperthermia</i> , 2021, 38, 409-420.	2.5	12
9	Influence of injection technique, drug formulation and tumor microenvironment on intratumoral immunotherapy delivery and efficacy. , 2021, 9, e001800.		59
10	Hyperthermia and Tumor Immunity. <i>Cancers</i> , 2021, 13, 2507.	3.7	24
11	Microwave ablation of lung tumors: A probabilistic approach for simulation-based treatment planning. <i>Medical Physics</i> , 2021, 48, 3991-4003.	3.0	11
12	Transcervical microwave ablation in type 2 uterine fibroids via a hysteroscopic approach: analysis of ablation profiles. <i>Biomedical Physics and Engineering Express</i> , 2021, 7, 045014.	1.2	1
13	Temperature-dependent dielectric properties of human uterine fibroids over microwave frequencies. <i>Biomedical Physics and Engineering Express</i> , 2021, 7, 065038.	1.2	5
14	Preclinical Studies in Small Animals for Advanced Drug Delivery Using Hyperthermia and Intravital Microscopy. <i>Cancers</i> , 2021, 13, 5146.	3.7	7
15	A computational model of radiofrequency ablation in the stomach, an emerging therapy for gastric dysrhythmias. , 2021, 2021, 1495-1498.		2
16	Therapeutic Systems and Technologies: State-of-the-Art Applications, Opportunities, and Challenges. <i>IEEE Reviews in Biomedical Engineering</i> , 2020, 13, 325-339.	18.0	25
17	Simulation-based design and characterization of a microwave applicator for MR-guided hyperthermia experimental studies in small animals. <i>Biomedical Physics and Engineering Express</i> , 2020, 6, 015001.	1.2	7
18	How large is the periablational zone after radiofrequency and microwave ablation? Computer-based comparative study of two currently used clinical devices. <i>International Journal of Hyperthermia</i> , 2020, 37, 1131-1138.	2.5	7

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19	Smart bed based daytime behavior prediction in Children with autism spectrum disorder - A Pilot Study. Medical Engineering and Physics, 2020, 83, 15-25.	1.7	10
20	Directional Microwave Ablation: Experimental Evaluation of a 2.45-GHz Applicator in Ex Vivo and In Vivo Liver. Journal of Vascular and Interventional Radiology, 2020, 31, 1170-1177.e2.	0.5	17
21	Reducing Sparse Motion Artifacts in MR-Thermometry Using Robust Principal Component Analysis. , 2020, , .		0
22	Bronchoscopically delivered microwave ablation in an <i>in vivo</i> porcine lung model. ERJ Open Research, 2020, 6, 00146-2020.	2.6	15
23	Experimental assessment of microwave ablation computational modeling with MR thermometry. Medical Physics, 2020, 47, 3777-3788.	3.0	14
24	Wearable device for thermotherapies. , 2020, , 179-200.		5
25	Effect of position on transdiaphragmatic pressure and hemodynamic variables in anesthetized horses. Canadian Journal of Veterinary Research, 2020, 84, 205-211.	0.2	0
26	Broadband lung dielectric properties over the ablative temperature range: Experimental measurements and parametric models. Medical Physics, 2019, 46, 4291-4303.	3.0	17
27	Using microwave thermal ablation to develop a subtotal, cortical-sparing approach to the management of primary aldosteronism. International Journal of Hyperthermia, 2019, 36, 904-913.	2.5	11
28	Microwave antennas for thermal ablation of benign adrenal adenomas. Biomedical Physics and Engineering Express, 2019, 5, 025044.	1.2	17
29	Motion Artifact Detection and Reduction in Bed-Based Ballistocardiogram. IEEE Access, 2019, 7, 13693-13703.	4.2	13
30	Design of a Microwave Global Endometrial Ablation Device. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2019, 3, 148-156.	3.4	3
31	An enhanced hybrid MRI thermometry technique for monitoring microwave thermal therapy. , 2019, , .		3
32	Effect of Non-parallel Applicator Insertion on 2.45 GHz Microwave Ablation Zone Size and Shape. , 2019, , 305-314.		1
33	Design and characterisation of a phased antenna array for intact breast hyperthermia. International Journal of Hyperthermia, 2018, 34, 250-260.	2.5	29
34	An integrated platform for small-animal hyperthermia investigations under ultra-high-field MRI guidance. International Journal of Hyperthermia, 2018, 34, 341-351.	2.5	25
35	Antenna Designs for Microwave Tissue Ablation. Critical Reviews in Biomedical Engineering, 2018, 46, 495-521.	0.9	55
36	Evaluation of the Effect of Uterine Fibroids on Microwave Endometrial Ablation Profiles. , 2018, 2018, 3236-3239.		0

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37	A Pilot Study of an Unobtrusive Bed-Based Sleep Quality Monitor for Severely Disabled Autistic Children*. , 2018, 2018, 4343-4346.		3
38	Measurement of Broadband Temperature-Dependent Dielectric Properties of Liver Tissue. , 2018, , .		4
39	Experimental Validation of Computational Models of Microwave Tissue Heating with Magnetic Resonance Thermometry. , 2018, , .		4
40	Flexible microwave ablation applicator for the treatment of pulmonary malignancies. Proceedings of SPIE, 2017, , .	0.8	4
41	Computational modeling of 915 MHz microwave ablation: Comparative assessment of temperatureâ€dependent tissue dielectric models. Medical Physics, 2017, 44, 4859-4868.	3.0	13
42	Investigation of interstitial ultrasound ablation of spinal and paraspinal tumors: A patient-specific and parametric simulation study. AIP Conference Proceedings, 2017, , .	0.4	1
43	Thermal dosimetry analysis combined with patient-specific thermal modeling of clinical interstitial ultrasound hyperthermia integrated within HDR brachytherapy for treatment of locally advanced prostate cancer. AIP Conference Proceedings, 2017, , .	0.4	1
44	Feasibility Assessment of Microwave Ablation for Treating Esophageal Varices. Journal of Medical Devices, Transactions of the ASME, 2017, 11, .	0.7	2
45	Technological requirements for microwave ablation of adrenal masses. , 2017, , .		7
46	Introduction to microwave tumour ablation special issue. International Journal of Hyperthermia, 2017, 33, 1-2.	2.5	6
47	Experimental measurement of microwave ablation heating pattern and comparison to computer simulations. International Journal of Hyperthermia, 2017, 33, 74-82.	2.5	40
48	Analysis of minimally invasive directional antennas for microwave tissue ablation. International Journal of Hyperthermia, 2017, 33, 51-60.	2.5	36
49	Model-based feasibility assessment and evaluation of prostate hyperthermia with a commercial MR-guided endorectal HIFU ablation array. AIP Conference Proceedings, 2017, , .	0.4	1
50	Motion Detection in Bed-Based Ballistocardiogram to Quantify Sleep Quality. , 2017, , .		7
51	MULTILAYERED BROADBAND ANTENNA FOR COMPACT EMBEDDED IMPLANTABLE MEDICAL DEVICES: DESIGN AND CHARACTERIZATION. Progress in Electromagnetics Research, 2017, 159, 1-13.	4.4	10
52	Experimental Investigation of Magnetic Nanoparticle-Enhanced Microwave Hyperthermia. Journal of Functional Biomaterials, 2017, 8, 21.	4.4	16
53	CHAPTER 8. Image-Guided Cancer Thermal Therapies. RSC Smart Materials, 2017, , 195-220.	0.1	2
54	Global microwave endometrial ablation for menorrhagia treatment. Proceedings of SPIE, 2017, , .	0.8	1

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55	Compact microwave applicator for thermal therapy of breast cancer: Comparative assessment of arrays operating at 434 and 915 MHz. , 2016, , .		3
56	Physical modeling of microwave ablation zone clinical margin variance. Medical Physics, 2016, 43, 1764-1776.	3.0	41
57	Bed-based instrumentation for unobtrusive sleep quality assessment in severely disabled autistic children. , 2016, 2016, 4909-4912.		11
58	Design projects motivated and informed by the needs of severely disabled autistic children. , 2016, 2016, 3015-3018.		3
59	Magnetic Field Induced Ultrasound from Colloidal Superparamagnetic Nanoparticles. Journal of Physical Chemistry C, 2016, 120, 2386-2391.	3.1	9
60	Sensitivity of microwave ablation models to tissue biophysical properties: A first step toward probabilistic modeling and treatment planning. Medical Physics, 2016, 43, 2649-2661.	3.0	53
61	Microwave ablation at 915 MHz vs 2.45 GHz: A theoretical and experimental investigation. Medical Physics, 2015, 42, 6152-6161.	3.0	63
62	Developing an open platform for evidence-based microwave ablation treatment planning and validation. , 2015, , .		1
63	Design and analysis of a conformal patch antenna for a wearable breast hyperthermia treatment system. , 2015, , .		6
64	Multiple-antenna microwave ablation: analysis of non-parallel antenna implants. Proceedings of SPIE, 2015, , .	0.8	5
65	Nested Helmholtz coil design for producing homogeneous transient rotating magnetic fields. Review of Scientific Instruments, 2015, 86, 034701.	1.3	9
66	Design of a compact antenna with flared groundplane for a wearable breast hyperthermia system. International Journal of Hyperthermia, 2015, 31, 726-736.	2.5	22
67	Development of a fast 3D treatment planning platform for clinical interstitial microwave hyperthermia within free-hand obliquely implanted HDR catheters. , 2015, , .		0
68	A Directional Interstitial Antenna for Microwave Tissue Ablation: Theoretical and Experimental Investigation. IEEE Transactions on Biomedical Engineering, 2015, 62, 2144-2150.	4.2	55
69	A paraeducator glove for counting disabled-child behaviors that incorporates a Bluetooth Low Energy wireless link to a smart phone. , 2014, 2014, 796-9.		2
70	Interstitial ultrasound ablation of vertebral and paraspinal tumours: Parametric and patient-specific simulations. International Journal of Hyperthermia, 2014, 30, 228-244.	2.5	23
71	Model-based feasibility assessment and evaluation of prostate hyperthermia with a commercial MR-guided endorectal HIFU ablation array. Medical Physics, 2014, 41, 033301.	3.0	19
72	Microwave ablation at 915 MHz vs. 2.45 GHz: Single and multiple-antenna considerations. , 2014, , .		3

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73	Sensors and instrumentation for unobtrusive sleep quality assessment in autistic children. , 2014, 2014, 800-3.		5
74	Pulsed Magnetic Field Induced Fast Drug Release from Magneto Liposomes via Ultrasound Generation. Journal of Physical Chemistry B, 2014, 118, 11715-11722.	2.6	46
75	Approaches for modelling interstitial ultrasound ablation of tumours within or adjacent to bone: Theoretical and experimental evaluations. International Journal of Hyperthermia, 2013, 29, 629-642.	2.5	16
76	Modelling of endoluminal and interstitial ultrasound hyperthermia and thermal ablation: Applications for device design, feedback control and treatment planning. International Journal of Hyperthermia, 2013, 29, 296-307.	2.5	25
77	MR guided thermal therapy of pancreatic tumors with endoluminal, intraluminal and interstitial catheter-based ultrasound devices: preliminary theoretical and experimental investigations. , 2013, 8584, 85840V.		4
78	Interstitial ultrasound ablation of tumors within or adjacent to bone: Contributions of preferential heating at the bone surface. Proceedings of SPIE, 2013, , .	0.8	5
79	Targeted hyperthermia in prostate with an MR-guided endorectal ultrasound phased array: patient specific modeling and preliminary experiments. , 2013, , .		2
80	Applicators for Magnetic Resonanceâ€“Guided Ultrasonic Ablation of Benign Prostatic Hyperplasia. Investigative Radiology, 2013, 48, 387-394.	6.2	19
81	Multiple applicator hepatic ablation with interstitial ultrasound devices: Theoretical and experimental investigation. Medical Physics, 2012, 39, 7338-7349.	3.0	19
82	Considerations for theoretical modelling of thermal ablation with catheter-based ultrasonic sources: Implications for treatment planning, monitoring and control. International Journal of Hyperthermia, 2012, 28, 69-86.	2.5	69
83	Temperature superposition for fast computation of 3D temperature distributions during optimization and planning of interstitial ultrasound hyperthermia treatments. International Journal of Hyperthermia, 2012, 28, 235-249.	2.5	8
84	A Pilot Study of Catheter-Based Ultrasound Hyperthermia with HDR Brachytherapy for Treatment of Locally Advanced Cancer of the Prostate and Cervix. , 2011, , .		3
85	Hepatic ablation with multiple interstitial ultrasound applicators: initial ex vivo and computational studies. Proceedings of SPIE, 2011, , .	0.8	0
86	Fast optimization and planning of clinical interstitial ultrasound hyperthermia using superposition and surrogate models of temperature distributions. Proceedings of SPIE, 2011, , .	0.8	0
87	Implant strategies for endocervical and interstitial ultrasound hyperthermia adjunct to HDR brachytherapy for the treatment of cervical cancer. Physics in Medicine and Biology, 2011, 56, 3967-3984.	3.0	26
88	Catheter-based ultrasound hyperthermia with HDR brachytherapy for treatment of locally advanced cancer of the prostate and cervix. Proceedings of SPIE, 2011, 7901, 790100.	0.8	15
89	The ACUSITT ultrasonic ablator: the first steerable needle with an integrated interventional tool. Proceedings of SPIE, 2010, , .	0.8	25
90	Theoretical Modeling for Hepatic Microwave Ablation~!2009-10-21~!2009-12-30~!2010-02-04~!-. Open Biomedical Engineering Journal, 2010, 4, 27-38.	0.5	30

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91	Development of a 3D patient-specific planning platform for interstitial and transurethral ultrasound thermal therapy. , 2010, , .		0
92	Endocavity Ultrasound Hyperthermia for Locally Advanced Cervical Cancer: Patient-specific Modeling, Experimental Verification, and Combination with HDR Brachytherapy. , 2010, , .		0
93	Theoretical Modeling for Hepatic Microwave Ablation. Open Biomedical Engineering Journal, 2010, 4, 27-38.	0.5	72
94	An Optimal Sliding Choke Antenna for Hepatic Microwave Ablation. IEEE Transactions on Biomedical Engineering, 2009, 56, 2470-2476.	4.2	59
95	Patient specific optimization-based treatment planning for catheter-based ultrasound hyperthermia and thermal ablation. , 2009, , .		1
96	Design optimization of a robust sleeve antenna for hepatic microwave ablation. Physics in Medicine and Biology, 2008, 53, 1057-1069.	3.0	43
97	Design optimization of coaxial antennas for hepatic microwave ablation using genetic algorithms. , 2008, , .		6
98	Current status of liver tumor ablation devices. Expert Review of Medical Devices, 2007, 4, 523-537.	2.8	61
99	Measurement of the specific heat capacity of liver phantom. Physiological Measurement, 2006, 27, N41-N46.	2.1	13
100	Adaptive Whitening in Electromyogram Amplitude Estimation for Epoch-Based Applications. IEEE Transactions on Biomedical Engineering, 2005, 52, 331-334.	4.2	19