

# Sundeep Singh

## List of Publications by Year in descending order

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36  
papers

386  
citations

932766  
10  
h-index

794141  
19  
g-index

37  
all docs

37  
docs citations

37  
times ranked

203  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal ablation of biological tissues in disease treatment: A review of computational models and future directions. <i>Electromagnetic Biology and Medicine</i> , 2020, 39, 49-88.	0.7	63
2	Temperature-controlled radiofrequency ablation of different tissues using two-compartment models. <i>International Journal of Hyperthermia</i> , 2017, 33, 122-134.	1.1	52
3	Effect of different breast density compositions on thermal damage of breast tumor during radiofrequency ablation. <i>Applied Thermal Engineering</i> , 2017, 125, 443-451.	3.0	30
4	Thermal analysis of induced damage to the healthy cell during RFA of breast tumor. <i>Journal of Thermal Biology</i> , 2016, 58, 80-90.	1.1	29
5	Parametric sensitivity analysis of critical factors affecting the thermal damage during RFA of breast tumor. <i>International Journal of Thermal Sciences</i> , 2018, 124, 366-374.	2.6	25
6	Sensitivity analysis of critical parameters affecting the efficacy of microwave ablation using Taguchi method. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , 2019, 29, e21581.	0.8	24
7	Numerical study to establish relationship between coagulation volume and target tip temperature during temperature-controlled radiofrequency ablation. <i>Electromagnetic Biology and Medicine</i> , 2018, 37, 13-22.	0.7	21
8	Coupled thermo-electro-mechanical models for thermal ablation of biological tissues and heat relaxation time effects. <i>Physics in Medicine and Biology</i> , 2019, 64, 245008.	1.6	19
9	Biological cells and coupled electro-mechanical effects: The role of organelles, microtubules, and nonlocal contributions. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 110, 103859.	1.5	18
10	Domain Heterogeneity in Radiofrequency Therapies for Pain Relief: A Computational Study with Coupled Models. <i>Bioengineering</i> , 2020, 7, 35.	1.6	15
11	Numerical investigation of convective cooling in minimizing skin burns during radiofrequency ablation of breast tumor. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2018, 43, 1.	0.8	9
12	Quantification of Thermal Injury to the Healthy Tissue Due to Imperfect Electrode Placements During Radiofrequency Ablation of Breast Tumor. <i>Journal of Engineering and Science in Medical Diagnostics and Therapy</i> , 2018, 1, .	0.3	8
13	Three-Phase-Lag Bio-Heat Transfer Model of Cardiac Ablation. <i>Fluids</i> , 2022, 7, 180.	0.8	8
14	A Neuron-Glial Model of Exosomal Release in the Onset and Progression of Alzheimer's Disease. <i>Frontiers in Computational Neuroscience</i> , 2021, 15, 653097.	1.2	7
15	Radiofrequency Ablation for Treating Chronic Pain of Bones: Effects of Nerve Locations. <i>Lecture Notes in Computer Science</i> , 2019, , 418-429.	1.0	6
16	Mathematical and computational models of RNA nanoclusters and their applications in data-driven environments. <i>Molecular Simulation</i> , 2020, 46, 1094-1115.	0.9	6
17	Fluid-Structure Interaction and Non-Fourier Effects in Coupled Electro-Thermo-Mechanical Models for Cardiac Ablation. <i>Fluids</i> , 2021, 6, 294.	0.8	6
18	Computational Modeling of Cardiac Ablation Incorporating Electrothermomechanical Interactions. <i>Journal of Engineering and Science in Medical Diagnostics and Therapy</i> , 2020, 3, .	0.3	6

#	ARTICLE	IF	CITATIONS
19	THERMAL CHARACTERIZATION USING FOURIER AND NON-FOURIER CONDUCTION DURING RADIOFREQUENCY ABLATION OF BREAST TUMOR. <i>Multiphase Science and Technology</i> , 2018, 30, 207-219.	0.2	5
20	Atomistic to continuum model for studying mechanical properties of RNA nanotubes. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2020, 23, 396-407.	0.9	5
21	Computational Analysis of Pulsed Radiofrequency Ablation in Treating Chronic Pain. <i>Lecture Notes in Computer Science</i> , 2019, , 436-450.	1.0	4
22	Analysis of Photosynthetic Systems and Their Applications with Mathematical and Computational Models. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 6821.	1.3	4
23	Coupled Electro-mechanical Behavior of Microtubules. <i>Lecture Notes in Computer Science</i> , 2020, , 75-86.	1.0	3
24	Coupled Multiphysics Modelling of Sensors for Chemical, Biomedical, and Environmental Applications with Focus on Smart Materials and Low-Dimensional Nanostructures. <i>Chemosensors</i> , 2022, 10, 157.	1.8	3
25	CFD based analysis of 3D printed nasopharyngeal swabs for COVID-19 diagnostics. <i>Computer Methods and Programs in Biomedicine</i> , 2022, 223, 106977.	2.6	3
26	An in Vitro Phantom Study to Quantify the Efficacy of Multi-tine Electrode in Attaining Large Size Coagulation Volume During RFA. <i>IFMBE Proceedings</i> , 2019, , 663-668.	0.2	1
27	Analysis of Cortical Spreading Depression in Brain with Multiscale Mathematical Models. <i>Springer Proceedings in Mathematics and Statistics</i> , 2021, , 197-207.	0.1	1
28	Auxeticity in biosystems: an exemplification of its effects on the mechanobiology of heterogeneous living cells. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2022, 25, 521-535.	0.9	1
29	Computational Model of Radiofrequency Ablation of Cardiac Tissues Incorporating Thermo-Electro-Mechanical Interactions. , 2020, , .		1
30	Mathematical Modeling of Coupled Electro-thermal Response of Nerve Tissues Subjected to Radiofrequency Fields. <i>Springer Proceedings in Mathematics and Statistics</i> , 2021, , 621-632.	0.1	0
31	THERMAL CHARACTERIZATION USING FOURIER AND NON-FOURIER CONDUCTION DURING RADIOFREQUENCY ABLATION OF BREAST TUMOR. , 2017, , .		0
32	THERMAL CHARACTERIZATION USING FOURIER AND NON-FOURIER CONDUCTION DURING RADIOFREQUENCY ABLATION OF BREAST TUMOR. , 2017, , .		0
33	EFFECT OF HETEROGENEOUS BLOOD PERFUSION DURING RFA OF BREAST TUMOR. , 2018, , .		0
34	A NUMERICAL STUDY ON NON-INVASIVE RF-ASSISTED HYPERTHERMIA OF DEEP-SEATED TUMOR. , 2018, , .		0
35	Comparison of Ablation Volume Produced With Multi-Tine Dry Type and Wet Type Electrodes During Radio Frequency Ablation: An In Vitro Study. , 2018, , .		0
36	Effects of Heterogeneous Surroundings on the Efficacy of Continuous Radiofrequency for Pain Relief. , 2019, , .		0