

# Jie Chen

## List of Publications by Year in descending order

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Version: 2024-02-01

54  
papers

1,371  
citations

516561

16  
h-index

377752

34  
g-index

55  
all docs

55  
docs citations

55  
times ranked

1517  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analytical study of electronic structure in armchair graphene nanoribbons. <i>Physical Review B</i> , 2007, 75, .	1.1	278
2	A Review of Low-Intensity Pulsed Ultrasound for Therapeutic Applications. <i>IEEE Transactions on Biomedical Engineering</i> , 2019, 66, 2704-2718.	2.5	159
3	Secondary Metabolites Profiled in Cannabis Inflorescences, Leaves, Stem Barks, and Roots for Medicinal Purposes. <i>Scientific Reports</i> , 2020, 10, 3309.	1.6	137
4	A probabilistic-based design methodology for nanoscale computation. , 2003, , .		64
5	Simulations of Interdigitated Electrode Interactions with Gold Nanoparticles for Impedance-Based Biosensing Applications. <i>Sensors</i> , 2015, 15, 22192-22208.	2.1	55
6	DNA aptamer-based non-faradaic impedance biosensor for detecting E.Âcoli. <i>Analytica Chimica Acta</i> , 2020, 1107, 135-144.	2.6	50
7	Low-intensity pulsed ultrasound-mediated stimulation of hematopoietic stem/progenitor cell viability, proliferation and differentiation in vitro. <i>Biotechnology Letters</i> , 2012, 34, 1965-1973.	1.1	44
8	Developing Trends in Aptamer-Based Biosensor Devices and Their Applications. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2014, 8, 4-14.	2.7	38
9	Applications of Ultrasound to Enhance Mycophenolic Acid Production. <i>Ultrasound in Medicine and Biology</i> , 2012, 38, 1582-1588.	0.7	33
10	Application of low-intensity pulsed ultrasound to increase bio-ethanol production. <i>Renewable Energy</i> , 2013, 57, 462-468.	4.3	33
11	A Probabilistic-Based Design for Nanoscale Computation. , 2004, , 133-156.		30
12	Design and Implementation of Therapeutic Ultrasound Generating Circuit for Dental Tissue Formation and Tooth-Root Healing. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2010, 4, 49-61.	2.7	29
13	High-Efficiency Charge Pumps for Low-Power On-Chip Applications. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2018, 65, 1143-1153.	3.5	29
14	Design and Implementation of Cost-Effective Probabilistic-Based Noise-Tolerant VLSI Circuits. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2009, 56, 2411-2424.	3.5	27
15	Therapeutic Systems and Technologies: State-of-the-Art Applications, Opportunities, and Challenges. <i>IEEE Reviews in Biomedical Engineering</i> , 2020, 13, 325-339.	13.1	25
16	Algal Cell Response to Pulsed Waved Stimulation and Its Application to Increase Algal Lipid Production. <i>Scientific Reports</i> , 2017, 7, 42003.	1.6	21
17	A Fully Integrated Multistage Cross-Coupled Voltage Multiplier With No Reversion Power Loss in a Standard CMOS Process. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2017, 64, 737-741.	2.2	21
18	An impedimetric biosensor for COVID-19 serology test and modification of sensor performance via dielectrophoresis force. <i>Biosensors and Bioelectronics</i> , 2022, 213, 114476.	5.3	20

#	ARTICLE	IF	CITATIONS
19	Polyethylenimine-coated iron oxide magnetic nanoparticles for high efficient gene delivery. Applied Nanoscience (Switzerland), 2018, 8, 811-821.	1.6	18
20	Feedback-Based Low-Power Soft-Error-Tolerant Design for Dual-Modular Redundancy. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2018, 26, 1585-1589.	2.1	18
21	Applications of low-intensity pulsed ultrasound to increase monoclonal antibody production in CHO cells using shake flasks or wavebags. Ultrasonics, 2014, 54, 1439-1447.	2.1	15
22	Using Impedance Measurements to Characterize Surface Modified with Gold Nanoparticles. Sensors, 2017, 17, 2141.	2.1	15
23	Impact of low-intensity pulsed ultrasound on transcription and metabolite compositions in proliferation and functionalization of human adipose-derived mesenchymal stromal cells. Scientific Reports, 2020, 10, 13690.	1.6	15
24	Immuno-impedimetric Biosensor for Onsite Monitoring of Ascospores and Forecasting of Sclerotinia Stem Rot of Canola. Scientific Reports, 2018, 8, 12396.	1.6	14
25	A Miniaturized Low-Intensity Ultrasound Device for Wearable Medical Therapeutic Applications. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1372-1382.	2.7	14
26	Overcoming the sensitivity vs. throughput tradeoff in Coulter counters: A novel side counter design. Biosensors and Bioelectronics, 2020, 168, 112507.	5.3	14
27	Transfection of Difficult-to-Transfect Rat Primary Cortical Neurons with Magnetic Nanoparticles. Journal of Biomedical Nanotechnology, 2018, 14, 1654-1664.	0.5	13
28	Non-invasive Point-of-Care Device To Diagnose Acute Mesenteric Ischemia. ACS Sensors, 2018, 3, 2296-2302.	4.0	12
29	Ultrasound-Enhanced Monoclonal Antibody Production. Ultrasound in Medicine and Biology, 2012, 38, 1949-1957.	0.7	11
30	Recognition of chemical compounds in contaminated water using time-dependent multiple dose cellular responses. Analytica Chimica Acta, 2012, 724, 30-39.	2.6	11
31	Classification of cannabis strains in the Canadian market with discriminant analysis of principal components using genome-wide single nucleotide polymorphisms. PLoS ONE, 2021, 16, e0253387.	1.1	11
32	Selective Single-Cell Sorting Using a Multisectorial Electroactive Nanowell Platform. ACS Nano, 2022, 16, 211-220.	7.3	11
33	A low-voltage charge pump with improved pumping efficiency. , 2017, , .		10
34	Single ascospore detection for the forecasting of <i>Sclerotinia</i> stem rot of canola. Lab on A Chip, 2020, 20, 3644-3652.	3.1	10
35	Design of a Thermoacoustic Sensor for Low Intensity Ultrasound Measurements Based on an Artificial Neural Network. Sensors, 2015, 15, 14788-14808.	2.1	8
36	Exploratory study on neurochemical effects of low-intensity pulsed ultrasound in brains of mice. Medical and Biological Engineering and Computing, 2021, 59, 1099-1110.	1.6	8

#	ARTICLE	IF	CITATIONS
37	Highly Efficient Capture and Quantification of the Airborne Fungal Pathogen <i>Sclerotinia sclerotiorum</i> Employing a Nanoelectrode-Activated Microwell Array. <i>ACS Omega</i> , 2022, 7, 459-468.	1.6	8
38	Impact of Low-Intensity Pulsed Ultrasound on Transcript and Metabolite Abundance in <i>Saccharomyces cerevisiae</i> . <i>Journal of Proteome Research</i> , 2017, 16, 2975-2982.	1.8	7
39	Low-Power Noise-Immune Nanoscale Circuit Design Using Coding-Based Partial MRF Method. <i>IEEE Journal of Solid-State Circuits</i> , 2018, 53, 2389-2398.	3.5	4
40	Microbubble-Enhanced Cell Membrane Permeability in High Gravity Field. <i>Cellular and Molecular Bioengineering</i> , 2013, 6, 266-278.	1.0	3
41	Biomolecule delivery into canola protoplasts by centrifuging cells with microbubbles. <i>FEBS Letters</i> , 2013, 587, 285-290.	1.3	3
42	Area-efficient partial-clique-energy MRF pair design with ultra-low supply voltage. , 2016, , .		3
43	Modeling of the Effect of Cell Deformation Associated with Microbubble Collision in Centrifugation Field. <i>Cellular and Molecular Bioengineering</i> , 2016, 9, 162-174.	1.0	3
44	Impact of low-intensity pulsed ultrasound on the growth of <i>Schizochytrium sp.</i> for omega-3 production. <i>Biotechnology and Bioengineering</i> , 2021, 118, 319-328.	1.7	3
45	Increasing vaccine production using pulsed ultrasound waves. <i>PLoS ONE</i> , 2017, 12, e0187048.	1.1	3
46	Implementation of efficient parallel discrete cosine transform using stochastic logic. , 2016, , .		2
47	Simulations and design of microfabricated interdigitated electrodes for use in a gold nanoparticle enhanced biosensor. , 2016, 2016, 299-302.		2
48	Improved Low-Power Cost-Effective DCT Implementation Based on Markov Random Field and Stochastic Logic. <i>IEEE Transactions on Circuits and Systems for Video Technology</i> , 2020, 30, 3803-3813.	5.6	2
49	Ultrasound-assisted magnetic nanoparticle-based gene delivery. <i>PLoS ONE</i> , 2020, 15, e0239633.	1.1	2
50	Design and Characterization of a Close-Proximity Thermoacoustic Sensor. <i>Ultrasound in Medicine and Biology</i> , 2013, 39, 1613-1622.	0.7	1
51	Low Power Area-Efficient DCT Implementation Based on Markov Random Field-Stochastic Logic. , 2018, , .		1
52	Improving immunoassay detection accuracy of anti-SARS-CoV-2 antibodies through dual modality validation. <i>Biosensors and Bioelectronics: X</i> , 2022, 11, 100176.	0.9	1
53	Study of interactions between cells and microbubbles in high speed centrifugation field for biomolecule delivery. , 2014, 2014, 2932-5.		0
54	Live demonstration: Portable impedance-based biosensor system for metabolomic sensing. , 2016, , .		0