Jie Chen

List of Publications by Citations

53 papers	854 citations	15 h-index	28 g-index
55 ext. papers	1,106 ext. citations	4.7 avg, IF	4.27 L-index

#	Paper	IF	Citations
53	Analytical study of electronic structure in armchair graphene nanoribbons. *Physical Review B*, **2007**, 75,	3.3	229
52	A Review of Low-Intensity Pulsed Ultrasound for Therapeutic Applications. *IEEE Transactions on Biomedical Engineering*, **2019**, 66, 2704-2718	5	63
51	A probabilistic-based design methodology for nanoscale computation **2003**,		60
50	Secondary Metabolites Profiled in Cannabis Inflorescences, Leaves, Stem Barks, and Roots for Medicinal Purposes. *Scientific Reports*, **2020**, 10, 3309	4.9	55
49	Low-intensity pulsed ultrasound-mediated stimulation of hematopoietic stem/progenitor cell viability, proliferation and differentiation in vitro. *Biotechnology Letters*, **2012**, 34, 1965-73	3	37
48	Simulations of Interdigitated Electrode Interactions with Gold Nanoparticles for Impedance-Based Biosensing Applications. *Sensors*, **2015**, 15, 22192-208	3.8	36
47	Applications of ultrasound to enhance mycophenolic acid production. *Ultrasound in Medicine and Biology*, **2012**, 38, 1582-8	3.5	30
46	Developing trends in aptamer-based biosensor devices and their applications. *IEEE Transactions on Biomedical Circuits and Systems*, **2014**, 8, 4-14	5.1	29
45	Application of low-intensity pulsed ultrasound to increase bio-ethanol production. *Renewable Energy*, **2013**, 57, 462-468	8.1	27
44	Design and Implementation of Cost-Effective Probabilistic-Based Noise-Tolerant VLSI Circuits. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2009**, 56, 2411-2424	3.9	20
43	A Probabilistic-Based Design for Nanoscale Computation **2004**, 133-156		20
42	Algal Cell Response to Pulsed Waved Stimulation and Its Application to Increase Algal Lipid Production. *Scientific Reports*, **2017**, 7, 42003	4.9	19
41	DNA aptamer-based non-faradaic impedance biosensor for detecting E.coli. *Analytica Chimica Acta*, **2020**, 1107, 135-144	6.6	19
40	Design and implementation of therapeutic ultrasound generating circuit for dental tissue formation and tooth-root healing. *IEEE Transactions on Biomedical Circuits and Systems*, **2010**, 4, 49-61	5.1	18
39	A Fully Integrated Multistage Cross-Coupled Voltage Multiplier With No Reversion Power Loss in a Standard CMOS Process. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2017**, 64, 737-741	3.5	15
38	Polyethylenimine-coated iron oxide magnetic nanoparticles for high efficient gene delivery. *Applied Nanoscience (Switzerland)*, **2018**, 8, 811-821	3.3	14
37	High-Efficiency Charge Pumps for Low-Power On-Chip Applications. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2018**, 65, 1143-1153	3.9	14

36	Applications of low-intensity pulsed ultrasound to increase monoclonal antibody production in CHO cells using shake flasks or wavebags. *Ultrasonics*, **2014**, 54, 1439-47	3.5	13
35	Therapeutic Systems and Technologies: State-of-the-Art Applications, Opportunities, and Challenges. *IEEE Reviews in Biomedical Engineering*, **2020**, 13, 325-339	6.4	13
34	Immuno-impedimetric Biosensor for Onsite Monitoring of Ascospores and Forecasting of Sclerotinia Stem Rot of Canola. *Scientific Reports*, **2018**, 8, 12396	4.9	11
33	Ultrasound-enhanced monoclonal antibody production. *Ultrasound in Medicine and Biology*, **2012**, 38, 1949-57	3.5	10
32	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	2.6	9
31	Recognition of chemical compounds in contaminated water using time-dependent multiple dose cellular responses. *Analytica Chimica Acta*, **2012**, 724, 30-9	6.6	9
30	Transfection of Difficult-to-Transfect Rat Primary Cortical Neurons with Magnetic Nanoparticles. *Journal of Biomedical Nanotechnology*, **2018**, 14, 1654-1664	4	8
29	Design of a Thermoacoustic Sensor for Low Intensity Ultrasound Measurements Based on an Artificial Neural Network. *Sensors*, **2015**, 15, 14788-808	3.8	7
28	Overcoming the sensitivity vs. throughput tradeoff in Coulter counters: A novel side counter design. *Biosensors and Bioelectronics*, **2020**, 168, 112507	11.8	6
27	Impact of Low-Intensity Pulsed Ultrasound on Transcript and Metabolite Abundance in Saccharomyces cerevisiae. *Journal of Proteome Research*, **2017**, 16, 2975-2982	5.6	5
26	A Miniaturized Low-Intensity Ultrasound Device for Wearable Medical Therapeutic Applications. *IEEE Transactions on Biomedical Circuits and Systems*, **2019**, 13, 1372-1382	5.1	5
25	Using Impedance Measurements to Characterize Surface Modified with Gold Nanoparticles. *Sensors* , **2017**, 17,	3.8	5
24	A low-voltage charge pump with improved pumping efficiency **2017**,		5
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	4.9	5
22	Non-invasive Point-of-Care Device To Diagnose Acute Mesenteric Ischemia. *ACS Sensors*, **2018**, 3, 2296-2302	9.2	5
21	Single ascospore detection for the forecasting of stem rot of canola. *Lab on A Chip*, **2020**, 20, 3644-3652	7.2	4
20	Microbubble-Enhanced Cell Membrane Permeability in High Gravity Field. *Cellular and Molecular Bioengineering*, **2013**, 6, 266-278	3.9	3
19	Biomolecule delivery into canola protoplasts by centrifuging cells with microbubbles. *FEBS Letters*, **2013**, 587, 285-90	3.8	3

18	Low-Power Noise-Immune Nanoscale Circuit Design Using Coding-Based Partial MRF Method. *IEEE Journal of Solid-State Circuits*, **2018**, 53, 2389-2398	5.5	3
17	Implementation of efficient parallel discrete cosine transform using stochastic logic **2016**,		2
16	Modeling of the Effect of Cell Deformation Associated with Microbubble Collision in Centrifugation Field. *Cellular and Molecular Bioengineering*, **2016**, 9, 162-174	3.9	2
15	Increasing vaccine production using pulsed ultrasound waves. *PLoS ONE*, **2017**, 12, e0187048	3.7	2
14	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	3.7	2
13	Area-efficient partial-clique-energy MRF pair design with ultra-low supply voltage **2016**,		2
12	Impact of low-intensity pulsed ultrasound on the growth of Schizochytrium sp. for omega-3 production. *Biotechnology and Bioengineering*, **2021**, 118, 319-328	4.9	2
11	Simulations and design of microfabricated interdigitated electrodes for use in a gold nanoparticle enhanced biosensor. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 299-302	0.9	1
10	Low Power Area-Efficient DCT Implementation Based on Markov Random Field-Stochastic Logic **2018**,		1
9	Design and characterization of a close-proximity thermoacoustic sensor. *Ultrasound in Medicine and Biology*, **2013**, 39, 1613-22	3.5	1
8	ULTRASOUND-ASSISTED MAGNETIC NANOPARTICLE-BASED GENE DELIVERY		1
7	Improved Low-Power Cost-Effective DCT Implementation Based on Markov Random Field and Stochastic Logic. *IEEE Transactions on Circuits and Systems for Video Technology*, **2020**, 30, 3803-3813	6.4	1
6	Exploratory study on neurochemical effects of low-intensity pulsed ultrasound in brains of mice. *Medical and Biological Engineering and Computing*, **2021**, 59, 1099-1110	3.1	1
5	Selective Single-Cell Sorting Using a Multisectorial Electroactive Nanowell Platform. *ACS Nano*, **2021**,	16.7	1
4	Highly Efficient Capture and Quantification of the Airborne Fungal Pathogen Employing a Nanoelectrode-Activated Microwell Array.. *ACS Omega*, **2022**, 7, 459-468	3.9	1
3	Ultrasound-assisted magnetic nanoparticle-based gene delivery. *PLoS ONE*, **2020**, 15, e0239633	3.7	0
2	Study of interactions between cells and microbubbles in high speed centrifugation field for biomolecule delivery. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 2932-5	0.9	
1	Improving immunoassay detection accuracy of anti-SARS-CoV-2 antibodies through dual modality validation. *Biosensors and Bioelectronics: X*, **2022**, 100176	2.9	