Zhenpeng Qin

List of Publications by Citations

38 papers	1,399 citations	16 h-index	37 g-index
60 ext. papers	1,770 ext. citations	10.2 avg, IF	4.99 L-index

#	Paper	IF	Citations
38	Thermophysical and biological responses of gold nanoparticle laser heating. *Chemical Society Reviews*, **2012**, 41, 1191-217	58.5	408
37	Multisite validation of cryptococcal antigen lateral flow assay and quantification by laser thermal contrast. *Emerging Infectious Diseases*, **2014**, 20, 45-53	10.2	193
36	Significantly improved analytical sensitivity of lateral flow immunoassays by using thermal contrast. *Angewandte Chemie - International Edition*, **2012**, 51, 4358-61	16.4	122
35	Quantitative Comparison of Photothermal Heat Generation between Gold Nanospheres and Nanorods. *Scientific Reports*, **2016**, 6, 29836	4.9	95
34	Ultrasensitive and Highly Specific Lateral Flow Assays for Point-of-Care Diagnosis. *ACS Nano*, **2021**, 15, 3593-3611	16.7	73
33	Gold Nanorod Induced Warming of Embryos from the Cryogenic State Enhances Viability. *ACS Nano* , **2017**, 11, 7869-7878	16.7	66
32	Thermal Contrast Amplification Reader Yielding 8-Fold Analytical Improvement for Disease Detection with Lateral Flow Assays. *Analytical Chemistry*, **2016**, 88, 11774-11782	7.8	61
31	Effects of particle's off-axis position, shape, orientation and entry position on resistance changes of micro Coulter counting devices. *Measurement Science and Technology*, **2011**, 22, 045804	2	60
30	Correlated parameter fit of arrhenius model for thermal denaturation of proteins and cells. *Annals of Biomedical Engineering*, **2014**, 42, 2392-404	4.7	40
29	Signal amplification and quantification on lateral flow assays by laser excitation of plasmonic nanomaterials. *Theranostics*, **2020**, 10, 4359-4373	12.1	36
28	Irreversible electroporation: an in vivo study with dorsal skin fold chamber. *Annals of Biomedical Engineering*, **2013**, 41, 619-29	4.7	35
27	Membrane-targeting approaches for enhanced cancer cell destruction with irreversible electroporation. *Annals of Biomedical Engineering*, **2014**, 42, 193-204	4.7	24
26	Molecular Hyperthermia: Spatiotemporal Protein Unfolding and Inactivation by Nanosecond Plasmonic Heating. *Small*, **2017**, 13, 1700841	11	23
25	Ultrafast Near-Infrared Light-triggered Intracellular Uncaging to Probe Cell Signaling. *Advanced Functional Materials*, **2017**, 27, 1605778	15.6	22
24	Site-Selective Nucleation and Size Control of Gold Nanoparticle Photothermal Antennae on the Pore Structures of a Virus. *Journal of the American Chemical Society*, **2018**, 140, 17226-17233	16.4	20
23	Near-Infrared Light Triggered-Release in Deep Brain Regions Using Ultra-photosensitive Nanovesicles. *Angewandte Chemie - International Edition*, **2020**, 59, 8608-8615	16.4	17
22	Tuning the Gold Nanoparticle Colorimetric Assay by Nanoparticle Size, Concentration, and Size Combinations for Oligonucleotide Detection. *ACS Sensors*, **2017**, 2, 1627-1636	9.2	15

21	Significantly Improved Analytical Sensitivity of Lateral Flow Immunoassays by Using Thermal Contrast. *Angewandte Chemie*, **2012**, 124, 4434-4437	3.6	15
20	Rock the nucleus: significantly enhanced nuclear membrane permeability and gene transfection by plasmonic nanobubble induced nanomechanical transduction. *Chemical Communications*, **2018**, 54, 2479-2482	5.8	13
19	Understanding the Collective Optical Properties of Complex Plasmonic Vesicles. *Advanced Optical Materials*, **2017**, 5, 1700403	8.1	10
18	Transient Photoinactivation of Cell Membrane Protein Activity without Genetic Modification by Molecular Hyperthermia. *ACS Nano*, **2019**, 13, 12487-12499	16.7	8
17	Ultrafast Pulsed Laser Induced Nanocrystal Transformation in Colloidal Plasmonic Vesicles. *Advanced Optical Materials*, **2018**, 6, 1800726	8.1	7
16	Reversibly Modulating the Blood-Brain Barrier by Laser Stimulation of Molecular-Targeted Nanoparticles. *Nano Letters*, **2021**, 21, 9805-9815	11.5	7
15	Non-Arrhenius Reaction-Diffusion Kinetics for Protein Inactivation over a Large Temperature Range. *ACS Nano*, **2019**, 13, 8669-8679	16.7	6
14	One Dimensional Experimental Setup to Study the Heating of Nanoparticle Laden Systems **2010**,		3
13	An In Vitro Study on Adjuvant Enhanced Irreversible Electroporation **2012**,		3
12	Nanotransducers for Wireless Neuromodulation. *Matter*, **2021**, 4, 1484-1510	12.7	3
11	Brain Targeting, Antioxidant Polymeric Nanoparticles for Stroke Drug Delivery and Therapy.. *Small*, **2022**, e2107126	11	3
10	Plasmonic LAMP: Improving the Detection Specificity and Sensitivity for SARS-CoV-2 by Plasmonic Sensing of Isothermally Amplified Nucleic Acids.. *Small*, **2022**, e2107832	11	2
9	Computational Investigation of Protein Photoinactivation by Molecular Hyperthermia. *Journal of Biomechanical Engineering*, **2021**, 143,	2.1	2
8	Single-Particle Counting Based on Digital Plasmonic Nanobubble Detection for Rapid and Ultrasensitive Diagnostics **2021**,		2
7	Near-Infrared Light Triggered-Release in Deep Brain Regions Using Ultra-photosensitive Nanovesicles. *Angewandte Chemie*, **2020**, 132, 8686-8693	3.6	1
6	Nanoparticle heating: nanoscale to bulk effects of electromagnetically heated iron oxide and gold for biomedical applications **2011**,		1
5	Spatiotemporal Evolution of Temperature During Transient Heating of Nanoparticle Arrays. *Journal of Heat Transfer*, **2022**, 144,	1.8	1
4	Single pulse heating of a nanoparticle array for biological applications.. *Nanoscale Advances*, **2022**, 4, 2090-2097	5.1	0

3	Digital plasmonic nanobubble detection for rapid and ultrasensitive virus diagnostics.. *Nature Communications*, **2022**, 13, 1687	17.4	0
2	Toward dynamic, anisotropic, high-resolution, and functional measurement in the brain extracellular space.. *Neurophotonics*, **2022**, 9, 032210	3.9	0
1	Plasmonic LAMP: Improving the Detection Specificity and Sensitivity for SARS-CoV-2 by Plasmonic Sensing of Isothermally Amplified Nucleic Acids (Small 12/2022). *Small*, **2022**, 18, 2270059	11	