Joseph E Reiner

List of Publications by Year
in descending order

53 papers	1,859 citations	331670 21 h-index	289244 40 g-index
54 all docs	54 docs citations	54 times ranked	2061 citing authors

#	Article	IF	Citations
1	Nanoscopic Porous Sensors. Annual Review of Analytical Chemistry, 2008, 1, 737-766.	5.4	261
2	Disease Detection and Management via Single Nanopore-Based Sensors. Chemical Reviews, 2012, 112, 6431-6451.	47.7	222
3	Preparation of nanoparticles by continuous-flow microfluidics. Journal of Nanoparticle Research, 2008, 10, 925-934.	1.9	217
4	Theory for polymer analysis using nanopore-based single-molecule mass spectrometry. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12080-12085.	7.1	195
5	PEG-Labeled Nucleotides and Nanopore Detection for Single Molecule DNASequencing by Synthesis. Scientific Reports, 2012, 2, 684.	3.3	109
6	Capture and Release of a Conditional State of a Cavity QED System by Quantum Feedback. Physical Review Letters, 2002, 89, 133601.	7.8	100
7	Single Molecule Nanopore Spectrometry for Peptide Detection. ACS Sensors, 2017, 2, 1319-1328.	7.8	81
8	Theory of Polymerâ€“Nanopore Interactions Refined Using Molecular Dynamics Simulations. Journal of the American Chemical Society, 2013, 135, 7064-7072.	13.7	65
9	The Utility of Nanopore Technology for Protein and Peptide Sensing. Proteomics, 2018, 18, e1800026.	2.2	58
10	Temperature Sculpting in Yoctoliter Volumes. Journal of the American Chemical Society, 2013, 135, 3087-3094.	13.7	51
11	Stable and robust polymer nanotubes stretched from polymersomes. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1173-1177.	7.1	45
12	The effects of diffusion on an exonuclease/nanopore-based DNA sequencing engine. Journal of Chemical Physics, 2012, 137, 214903.	3.0	30
13	Enhanced Single Molecule Mass Spectrometry via Charged Metallic Clusters. Analytical Chemistry, 2014, 86, 11077-11085.	6.5	29
14	Determining the Physical Properties of Molecules with Nanometer-Scale Pores. ACS Sensors, 2018, 3, 251-263.	7.8	28
15	Single-molecule analysis of i-motif within self-assembled DNA duplexes and nanocircles. Nucleic Acids Research, 2019, 47, 7199-7212.	14.5	28
16	Changes in ion channel geometry resolved to sub-Ã¥ngstrÃ¶m precision via single molecule mass spectrometry. Journal of Physics Condensed Matter, 2010, 22, 454108.	1.8	27
17	Nanopore sensing: A physical-chemical approach. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183644.	2.6	27
18	Detection of Heteroplasmic Mitochondrial DNA in Single Mitochondria. PLoS ONE, 2010, 5, e14359.	2.5	25

#	Article	IF	Citations
19	Green Fluorescent Protein in Inertially Injected Aqueous Nanodroplets. Langmuir, 2008, 24, 4975-4978.	3.5	24
20	Functional characterization of a melittin analog containing a nonâ€natural tryptophan analog. Biopolymers, 2015, 104, 384-394.	2.4	24
21	Optical tweezers as an effective tool for spermatozoa isolation from mixed forensic samples. PLoS ONE, 2019, 14, e0211810.	2.5	24
22	Laser-based temperature control to study the roles of entropy and enthalpy in polymer-nanopore interactions. Science Advances, 2021, 7, .	10.3	20
23	Generation and Mixing of Subfemtoliter Aqueous Droplets On Demand. Analytical Chemistry, 2009, 81, 8041-8047.	6.5	19
24	Anthrax toxin-induced rupture of artificial lipid bilayer membranes. Journal of Chemical Physics, 2013, 139, 065101.	3.0	18
25	Ligand-Induced Structural Changes of Thiolate-Capped Gold Nanoclusters Observed with Resistive-Pulse Nanopore Sensing. Journal of the American Chemical Society, 2019, 141, 3792-3796.	13.7	16
26	Redox Potential Measurements in Red Blood Cell Packets Using Nanoporous Gold Electrodes. ACS Sensors, 2018, 3, 1601-1608.	7.8	14
27	Accurate Optical Analysis of Single-Molecule Entrapment in Nanoscale Vesicles. Analytical Chemistry, 2010, 82, 180-188.	6.5	13
28	Infrared Laser Heating Applied to Nanopore Sensing for DNA Duplex Analysis. Analytical Chemistry, 2016, 88, 2645-2651.	6.5	13
29	Improving the prospects of cleavage-based nanopore sequencing engines. Journal of Chemical Physics, 2015, 143, 074904.	3.0	12
30	Microdroplet-Based Potentiometric Redox Measurements on Gold Nanoporous Electrodes. Analytical Chemistry, 2016, 88, 3768-3774.	6.5	12
31	Voltage and blockade state optimization of cluster-enhanced nanopore spectrometry. Analyst, The, 2015, 140, 7718-7725.	3.5	11
32	Intensity-field correlations of non-classical light. Progress in Optics, 2004, 46, 355-404.	0.6	8
33	Resistive-Pulse Nanopore Sensing of Ligand Exchange at the Single Nanocluster Limit for Peptide Detection. ACS Applied Nano Materials, 2020, 3, 7973-7981.	5.0	7
34	Nanopore Analysis as a Tool for Studying Rapid Holliday Junction Dynamics and Analyte Binding. Analytical Chemistry, 2022, 94, 10027-10034.	6.5	6
35	Detecting and Characterizing Individual Molecules with Single Nanopores. Methods in Molecular Biology, 2012, 870, 3-20.	0.9	5
36	Third-order correlations in cavity quantum electrodynamics. Journal of Optics B: Quantum and Semiclassical Optics, 2002, 4, S281-S284.	1.4	3

#	Article	IF	Citations
37	Biological nanopores elucidate the differences between isomers of mercaptobenzoic-capped gold clusters. Physical Chemistry Chemical Physics, 2021, 23, 7938-7947.	2.8	3
38	Broadening mechanisms and their effects in non-classical correlations on cavity QED with atomic beams. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, 135-142.	1.4	2
39	Optical manipulation of lipid and polymer nanotubes with optical tweezers. , 2004, 5514, 246.		2
40	Quantum Dots: Capture and Release of a Quantum State by Quantum Feedback. Optics and Photonics News, 2002, 13, 53.	0.5	1
41	Stable and robust nanotubes formed from self-assembled polymer membranes. , 2006, , .		1
42	Liposome characterization with fluorescence cumulant analysis. , 2007, , .		1
43	Hydrosomes: optically trapped water droplets as nano-containers. , 2007, , .		1
44	Highlights on the current state of proteomic detection and characterization with nanopore sensors. Proteomics, 2022, 22, 2100061.	2.2	1
45	Optical manipulation of nanocontainers for biotechnology. , 2004, , .		0
46	Electronic Detection of Biomolecules. , 2008, , .		0
47	Creation and Mixing of Monodisperse Sub-femtoliter Bioreactors. Biophysical Journal, 2009, 96, 27a-28a.	0.5	0
48	Integrating biological molecules with electrode surfaces for bioanalytical sensing applications. , 2011, , .		0
49	Characterizing individual Au25(SG)18 clusters within a nanopore detector. Materials Research Society Symposia Proceedings, 2012, 1484, 16.	0.1	0
50	Kinetic Dynamcs in an Î±Hl-Based Nanopore DNA Sequencer. Biophysical Journal, 2012, 102, 727a.	0.5	0
51	Simulating Nanopore Sensor Dynamics Over Long Times Scales. Biophysical Journal, 2012, 102, 728a.	0.5	0
52	Development of an Optical Tweezers Methodology to Separate Single Cells and Single Mitochondria to Determine the Location of Heteroplasmy in Mitochondrial DNA. FASEB Journal, 2006, 20, A921.	0.5	0
53	On the use of laser heating to detail the physical mechanisms of nanopore sensing. Biophysical Journal, 2022, 121, 541a-542a.	0.5	0