Jason Riordon

List of Publications by Year
in descending order

42 papers	1,510 citations	331538 21 h-index	315616 38 g-index
43 all docs	43 docs citations	43 times ranked	1899 citing authors

#	Article	IF	Citations
1	Enhanced Fluorescence from Arrays of Nanoholes in a Gold Film. Journal of the American Chemical Society, 2005, 127, 14936-14941.	6.6	203
2	Deep Learning with Microfluidics for Biotechnology. Trends in Biotechnology, 2019, 37, 310-324.	4.9	160
3	Microfluidics for sperm analysis and selection. Nature Reviews Urology, 2017, 14, 707-730.	1.9	144
4	Microfluidic and nanofluidic phase behaviour characterization for industrial CO₂, oil and gas. Lab on A Chip, 2017, 17, 2740-2759.	3.1	83
5	Deep learning for the classification of human sperm. Computers in Biology and Medicine, 2019, 111, 103342.	3.9	73
6	Fast Fluorescence-Based Microfluidic Method for Measuring Minimum Miscibility Pressure of CO₂ in Crude Oils. Analytical Chemistry, 2015, 87, 3160-3164.	3.2	68
7	Capillary Condensation in 8 nm Deep Channels. Journal of Physical Chemistry Letters, 2018, 9, 497-503.	2.1	65
8	Surface Plasmonâˆ’Quantum Dot Coupling from Arrays of Nanoholes. Journal of Physical Chemistry B, 2006, 110, 8307-8313.	1.2	64
9	Deep learning-based selection of human sperm with high DNA integrity. Communications Biology, 2019, 2, 250.	2.0	64
10	Microfluidic Manufacturing of Polymeric Nanoparticles: Comparing Flow Control of Multiscale Structure in Single-Phase Staggered Herringbone and Two-Phase Reactors. Langmuir, 2016, 32, 12781-12789.	1.6	48
11	Exploring Anomalous Fluid Behavior at the Nanoscale: Direct Visualization and Quantification via Nanofluidic Devices. Accounts of Chemical Research, 2020, 53, 347-357.	7.6	43
12	Hollow core photonic crystal fiber as a reusable Raman biosensor. Optics Express, 2013, 21, 12340.	1.7	42
13	Machine learning for sperm selection. Nature Reviews Urology, 2021, 18, 387-403.	1.9	39
14	Microalgae on display: a microfluidic pixel-based irradiance assay for photosynthetic growth. Lab on A Chip, 2015, 15, 3116-3124.	3.1	36
15	Microfluidic Synthesis of Photoresponsive Spool-Like Block Copolymer Nanoparticles: Flow-Directed Formation and Light-Triggered Dissociation. Chemistry of Materials, 2015, 27, 8094-8104.	3.2	29
16	FertDish: microfluidic sperm selection-in-a-dish for intracytoplasmic sperm injection. Lab on A Chip, 2021, 21, 775-783.	3.1	29
17	When robotics met fluidics. Lab on A Chip, 2020, 20, 709-716.	3.1	27
18	Microfluidic cell volume sensor with tunable sensitivity. Lab on A Chip, 2012, 12, 3016.	3.1	25

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19	Direct Measurement of the Fluid Phase Diagram. Analytical Chemistry, 2016, 88, 6986-6989.	3.2	25
20	Hydrothermal disruption of algae cells for astaxanthin extraction. Green Chemistry, 2017, 19, 106-111.	4.6	25
21	Prediction of DNA Integrity from Morphological Parameters Using a Singleâ€Sperm DNA Fragmentation Index Assay. Advanced Science, 2019, 6, 1900712.	5.6	23
22	Self-assembled nanoparticle-stabilized photocatalytic reactors. Nanoscale, 2016, 8, 2107-2115.	2.8	22
23	A combined method for pore-scale optical and thermal characterization of SAGD. Journal of Petroleum Science and Engineering, 2016, 146, 866-873.	2.1	21
24	Two-dimensional planar swimming selects for high DNA integrity sperm. Lab on A Chip, 2019, 19, 2161-2167.	3.1	20
25	Selection of high-quality sperm with thousands of parallel channels. Lab on A Chip, 2021, 21, 2464-2475.	3.1	15
26	Quantifying the volume of single cells continuously using a microfluidic pressure-driven trap with media exchange. Biomicrofluidics, 2014, 8, 011101.	1.2	13
27	Breathable waveguides for combined light and CO2 delivery to microalgae. Bioresource Technology, 2016, 209, 391-396.	4.8	13
28	Using the fringing electric field in microfluidic volume sensors to enhance sensitivity and accuracy. Applied Physics Letters, 2012, 101, .	1.5	12
29	The Full Pressureâ€"Temperature Phase Envelope of a Mixture in 1000 Microfluidic Chambers. Angewandte Chemie - International Edition, 2017, 56, 13962-13967.	7.2	12
30	Using active microfluidic flow focusing to sort particles and cells based on high-resolution volume measurements. Microelectronic Engineering, 2014, 118, 35-40.	1.1	11
31	Accelerating Fluid Development on a Chip for Renewable Energy. Energy & Fuels, 2020, 34, 11219-11226.	2.5	10
32	Evaluation of a Microencapsulated Phase Change Slurry for Subsurface Energy Recovery. Energy & Fuels, 2021, 35, 10293-10302.	2.5	10
33	Periodic harvesting of microalgae from calcium alginate hydrogels for sustained highâ€density production. Biotechnology and Bioengineering, 2017, 114, 2023-2031.	1.7	9
34	Deformation of microdroplets in crude oil for rapid screening of enhanced oil recovery additives. Journal of Petroleum Science and Engineering, 2018, 165, 298-304.	2.1	9
35	Photoactive periodic media. Applied Physics Letters, 2009, 94, 111904.	1.5	6
36	The Full Pressureâ€"Temperature Phase Envelope of a Mixture in 1000 Microfluidic Chambers. Angewandte Chemie, 2017, 129, 14150-14155.	1.6	6

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37	Single-material multilayer with enhanced photoactivity. Applied Physics Letters, 2010, 97, 163104.	1.5	2
38	Hollow core photonic crystal fiber as a robust Raman biosensor. Proceedings of SPIE, 2013, , .	0.8	2
39	Local control of light polarization with low-temperature fiber optics. Optics Letters, 2007, 32, 1378.	1.7	1
40	Frontispiz: The Full Pressureâ€“Temperature Phase Envelope of a Mixture in 1000 Microfluidic Chambers. Angewandte Chemie, 2017, 129, .	1.6	1
41	BROADBAND PUMPâ€“PROBING INSIDE AN OPTICAL PARAMETRIC AMPLIFIER. Journal of Nonlinear Optical Physics and Materials, 2009, 18, 693-700.	1.1	0
42	Frontispiece: The Full Pressureâ€“Temperature Phase Envelope of a Mixture in 1000 Microfluidic Chambers. Angewandte Chemie - International Edition, 2017, 56, .	7.2	0