David Sinton

List of Publications by Year
in descending order

246	27,300	5876 81	6454 157
papers	citations	h-index	g-index

252	252	252	18096
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microplastics shift impacts of climate change on a plant-microbe mutualism: Temperature, CO2, and tire wear particles. Environmental Research, 2022, 203, 111727.	3.7	18
2	Concentrated Ethanol Electrosynthesis from CO₂ via a Porous Hydrophobic Adlayer. ACS Applied Materials & Interfaces, 2022, 14, 4155-4162.	4.0	15
3	Efficient electrosynthesis of n-propanol from carbon monoxide using a Agâ€“Ruâ€“Cu catalyst. Nature Energy, 2022, 7, 170-176.	19.8	96
4	Redox-mediated electrosynthesis of ethylene oxide from CO2 and water. Nature Catalysis, 2022, 5, 185-192.	16.1	40
5	Nanoplastic State and Fate in Aquatic Environments: Multiscale Modeling. Environmental Science & Technology, 2022, 56, 4017-4028.	4.6	24
6	Past, Present, and Future of Microfluidic Fluid Analysis in the Energy Industry. Energy & Fuels, 2022, 36, 8578-8590.	2.5	10
7	Carbon-efficient carbon dioxide electrolysers. Nature Sustainability, 2022, 5, 563-573.	11.5	95
8	A microchanneled solid electrolyte for carbon-efficient CO2 electrolysis. Joule, 2022, 6, 1333-1343.	11.7	51
9	Eliminating the need for anodic gas separation in CO2 electroreduction systems via liquid-to-liquid anodic upgrading. Nature Communications, 2022, 13, .	5.8	37
10	Toxicity of nanoplastics to zooplankton is influenced by temperature, salinity, and natural particulate matter. Environmental Science: Nano, 2022, 9, 2678-2690.	2.2	10
11	Bipolar membrane electrolyzers enable high single-pass CO2 electroreduction to multicarbon products. Nature Communications, 2022, 13, .	5.8	81
12	High carbon utilization in CO2 reduction to multi-carbon products in acidic media. Nature Catalysis, 2022, 5, 564-570.	16.1	197
13	(Digital Presentation) Assessing the Energy Intensity of Product Purification in CO₂ Electrolysis. ECS Meeting Abstracts, 2022, MA2022-01, 2445-2445.	0.0	0
14	CO₂ Electroreduction to Formate at a Partial Current Density of 930 mA cm^{â€“2} with InP Colloidal Quantum Dot Derived Catalysts. ACS Energy Letters, 2021, 6, 79-84.	8.8	100
15	FertDish: microfluidic sperm selection-in-a-dish for intracytoplasmic sperm injection. Lab on A Chip, 2021, 21, 775-783.	3.1	29
16	Selection of high-quality sperm with thousands of parallel channels. Lab on A Chip, 2021, 21, 2464-2475.	3.1	15
17	Suppressing the liquid product crossover in electrochemical CO₂ reduction. SmartMat, 2021, 2, 12-16.	6.4	90
18	Self-Cleaning CO₂ Reduction Systems: Unsteady Electrochemical Forcing Enables Stability. ACS Energy Letters, 2021, 6, 809-815.	8.8	159

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19	Designing anion exchange membranes for CO2 electrolysers. Nature Energy, 2021, 6, 339-348.	19.8	209
20	Cascade CO2 electroreduction enables efficient carbonate-free production of ethylene. Joule, 2021, 5, 706-719.	11.7	158
21	Screening High-Temperature Foams with Microfluidics for Thermal Recovery Processes. Energy & Fuels, 2021, 35, 7866-7873.	2.5	21
22	Silica-copper catalyst interfaces enable carbon-carbon coupling towards ethylene electrosynthesis. Nature Communications, 2021, 12, 2808.	5.8	91
23	Low coordination number copper catalysts for electrochemical CO2 methanation in a membrane electrode assembly. Nature Communications, 2021, 12, 2932.	5.8	97
24	Evaluation of a Microencapsulated Phase Change Slurry for Subsurface Energy Recovery. Energy & Fuels, 2021, 35, 10293-10302.	2.5	10
25	Machine learning for sperm selection. Nature Reviews Urology, 2021, 18, 387-403.	1.9	39
26	Gold-in-copper at low *CO coverage enables efficient electromethanation of CO2. Nature Communications, 2021, 12, 3387.	5.8	70
27	CO ₂ electrolysis to multicarbon products in strong acid. Science, 2021, 372, 1074-1078.	6.0	541
28	Effects of Hydrogen Peroxide on Cyanobacterium <i>Microcystis aeruginosa</i> in the Presence of Nanoplastics. ACS ES&T Water, 2021, 1, 1596-1607.	2.3	22
29	Single Pass CO₂ Conversion Exceeding 85% in the Electrosynthesis of Multicarbon Products via Local CO₂ Regeneration. ACS Energy Letters, 2021, 6, 2952-2959.	8.8	155
30	Gold Adparticles on Silver Combine Low Overpotential and High Selectivity in Electrochemical CO₂ Conversion. ACS Applied Energy Materials, 2021, 4, 7504-7512.	2.5	18
31	Reducing the crossover of carbonate and liquid products during carbon dioxide electroreduction. Cell Reports Physical Science, 2021, 2, 100522.	2.8	38
32	In Situ Formation of Nano Niâ€"Co Oxyhydroxide Enables Water Oxidation Electrocatalysts Durable at High Current Densities. Advanced Materials, 2021, 33, e2103812.	11.1	78
33	Glycerol Oxidation Pairs with Carbon Monoxide Reduction for Low-Voltage Generation of C₂ and C₃ Product Streams. ACS Energy Letters, 2021, 6, 3538-3544.	8.8	36
34	Electroosmotic flow steers neutral products and enables concentrated ethanol electroproduction from CO2. Joule, 2021, 5, 2742-2753.	11.7	37
35	Stable, active CO2 reduction to formate via redox-modulated stabilization of active sites. Nature Communications, 2021, 12, 5223.	5.8	145
36	AbCellera's success is unprecedented: what have we learned?. Lab on A Chip, 2021, 21, 2330-2332.	3.1	2

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37	Boride-derived oxygen-evolution catalysts. Nature Communications, 2021, 12, 6089.	5.8	51
38	How to select ICSI-viable sperm from the most challenging samples. Nature Reviews Urology, 2021, , .	1.9	3
39	Downstream of the CO₂ Electrolyzer: Assessing the Energy Intensity of Product Separation. ACS Energy Letters, 2021, 6, 4405-4412.	8.8	53
40	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
41	Increased Temperature and Turbulence Alter the Effects of Leachates from Tire Particles on Fathead Minnow (<i>Pimephales promelas</i>). Environmental Science & Technology, 2020, 54, 1750-1759.	4.6	52
42	Oxygen-tolerant electroproduction of C₂ products from simulated flue gas. Energy and Environmental Science, 2020, 13, 554-561.	15.6	113
43	When robotics met fluidics. Lab on A Chip, 2020, 20, 709-716.	3.1	27
44	Efficient electrocatalytic conversion of carbon dioxide in a low-resistance pressurized alkaline electrolyzer. Applied Energy, 2020, 261, 114305.	5.1	65
45	Catalyst synthesis under CO2 electroreduction favours faceting and promotes renewable fuels electrosynthesis. Nature Catalysis, 2020, 3, 98-106.	16.1	325
46	Tuning OH binding energy enables selective electrochemical oxidation of ethylene to ethylene glycol. Nature Catalysis, 2020, 3, 14-22.	16.1	120
47	Promoting CO2 methanation via ligand-stabilized metal oxide clusters as hydrogen-donating motifs. Nature Communications, 2020, 11, 6190.	5.8	93
48	Enhanced multi-carbon alcohol electroproduction from CO via modulated hydrogen adsorption. Nature Communications, 2020, 11, 3685.	5.8	72
49	High-Rate and Efficient Ethylene Electrosynthesis Using a Catalyst/Promoter/Transport Layer. ACS Energy Letters, 2020, 5, 2811-2818.	8.8	106
50	Accelerating Fluid Development on a Chip for Renewable Energy. Energy & Fuels, 2020, 34, 11219-11226.	2.5	10
51	CO₂ Electroreduction to Methane at Production Rates Exceeding 100 mA/cm². ACS Sustainable Chemistry and Engineering, 2020, 8, 14668-14673.	3.2	41
52	Efficient electrically powered CO2-to-ethanol via suppression of deoxygenation. Nature Energy, 2020, 5, 478-486.	19.8	363
53	Chloride-mediated selective electrosynthesis of ethylene and propylene oxides at high current density. Science, 2020, 368, 1228-1233.	6.0	196
54	CO ₂ electrolysis to multicarbon products at activities greater than 1 A cm ^{â^’2}. Science, 2020, 367, 661-666.	6.0	860

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55	Enhanced Nitrate-to-Ammonia Activity on Copperâ€“Nickel Alloys via Tuning of Intermediate Adsorption. Journal of the American Chemical Society, 2020, 142, 5702-5708.	6.6	638
56	Molecular tuning of CO2-to-ethylene conversion. Nature, 2020, 577, 509-513.	13.7	682
57	Biological Responses to Climate Change and Nanoplastics Are Altered in Concert: Full-Factor Screening Reveals Effects of Multiple Stressors on Primary Producers. Environmental Science & Technology, 2020, 54, 2401-2410.	4.6	48
58	Efficient Methane Electrosynthesis Enabled by Tuning Local CO₂ Availability. Journal of the American Chemical Society, 2020, 142, 3525-3531.	6.6	154
59	Cooperative CO2-to-ethanol conversion via enriched intermediates at moleculeâ€“metal catalyst interfaces. Nature Catalysis, 2020, 3, 75-82.	16.1	390
60	Deep learning-based selection of human sperm with high DNA integrity. Communications Biology, 2019, 2, 250.	2.0	64
61	Dopant-tuned stabilization of intermediates promotes electrosynthesis of valuable C3 products. Nature Communications, 2019, 10, 4807.	5.8	26
62	Continuous Carbon Dioxide Electroreduction to Concentrated Multi-carbon Products Using a Membrane Electrode Assembly. Joule, 2019, 3, 2777-2791.	11.7	350
63	Identification of Microfibers in the Environment Using Multiple Lines of Evidence. Environmental Science & Technology, 2019, 53, 11877-11887.	4.6	54
64	Live sperm trap microarray for high throughput imaging and analysis. Lab on A Chip, 2019, 19, 815-824.	3.1	19
65	Magnetic Extraction of Microplastics from Environmental Samples. Environmental Science and Technology Letters, 2019, 6, 68-72.	3.9	242
66	Natural gas vaporization in a nanoscale throat connected model of shale: multi-scale, multi-component and multi-phase. Lab on A Chip, 2019, 19, 272-280.	3.1	30
67	Fluorescent Dyes for Visualizing Microplastic Particles and Fibers in Laboratory-Based Studies. Environmental Science and Technology Letters, 2019, 6, 334-340.	3.9	115
68	Deep learning for the classification of human sperm. Computers in Biology and Medicine, 2019, 111, 103342.	3.9	73
69	Prediction of DNA Integrity from Morphological Parameters Using a Singleâ€Sperm DNA Fragmentation Index Assay. Advanced Science, 2019, 6, 1900712.	5.6	23
70	Binding Site Diversity Promotes CO₂ Electroreduction to Ethanol. Journal of the American Chemical Society, 2019, 141, 8584-8591.	6.6	338
71	Electrochemical CO₂ Reduction into Chemical Feedstocks: From Mechanistic Electrocatalysis Models to System Design. Advanced Materials, 2019, 31, e1807166.	11.1	769
72	Two-dimensional planar swimming selects for high DNA integrity sperm. Lab on A Chip, 2019, 19, 2161-2167.	3.1	20

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73	Accessory-free quantitative smartphone imaging of colorimetric paper-based assays. Lab on A Chip, 2019, 19, 1991-1999.	3.1	52
74	Efficient electrocatalytic conversion of carbon monoxide to propanol using fragmented copper. Nature Catalysis, 2019, 2, 251-258.	16.1	188
75	Hydroxide promotes carbon dioxide electroreduction to ethanol on copper via tuning of adsorbed hydrogen. Nature Communications, 2019, 10, 5814.	5.8	201
76	Efficient upgrading of CO to C3 fuel using asymmetric C-C coupling active sites. Nature Communications, 2019, 10, 5186.	5.8	127
77	Constraining CO coverage on copper promotes high-efficiency ethylene electroproduction. Nature Catalysis, 2019, 2, 1124-1131.	16.1	214
78	Multi-site electrocatalysts for hydrogen evolution in neutral media by destabilization of water molecules. Nature Energy, 2019, 4, 107-114.	19.8	470
79	Deep Learning with Microfluidics for Biotechnology. Trends in Biotechnology, 2019, 37, 310-324.	4.9	160
80	Efficient Electroreduction of CO2 in an Ultra-Slim Pressurized Electrolyzer. ECS Meeting Abstracts, 2019, , .	0.0	0
81	Carbon Dioxide Electroreduction to Multi-Carbon Products Using a Large-Scale Membrane Electrode Assembly. ECS Meeting Abstracts, 2019, , .	0.0	0
82	Stable, High-Rate CO2 Electroreduction to Multi-Carbon Products in a Membrane Electrode Assembly System. ECS Meeting Abstracts, 2019, , .	0.0	0
83	Direct Visualization of Evaporation in a Two-Dimensional Nanoporous Model for Unconventional Natural Gas. ACS Applied Nano Materials, 2018, 1, 1332-1338.	2.4	40
84	Hydronium-Induced Switching between CO₂ Electroreduction Pathways. Journal of the American Chemical Society, 2018, 140, 3833-3837.	6.6	144
85	Visualization of fracturing fluid dynamics in a nanofluidic chip. Journal of Petroleum Science and Engineering, 2018, 165, 181-186.	2.1	33
86	Pore-scale analysis of steam-solvent coinjection: azeotropic temperature, dilution and asphaltene deposition. Fuel, 2018, 220, 151-158.	3.4	34
87	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
88	Fluorescence in sub-10 nm channels with an optical enhancement layer. Lab on A Chip, 2018, 18, 568-573.	3.1	13
89	A Platform for Highâ€Throughput Assessments of Environmental Multistressors. Advanced Science, 2018, 5, 1700677.	5.6	8
90	Full Characterization of CO₂â€“Oil Properties On-Chip: Solubility, Diffusivity, Extraction Pressure, Miscibility, and Contact Angle. Analytical Chemistry, 2018, 90, 2461-2467.	3.2	78

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91	Asphaltene Deposition during Bitumen Extraction with Natural Gas Condensate and Naphtha. Energy & Fuels, 2018, 32, 1433-1439.	2.5	41
92	Digestible Fluorescent Coatings for Cumulative Quantification of Microplastic Ingestion. Environmental Science and Technology Letters, 2018, 5, 62-67.	3.9	19
93	Capillary Condensation in 8 nm Deep Channels. Journal of Physical Chemistry Letters, 2018, 9, 497-503.	2.1	65
94	Emerging microalgae technology: a review. Sustainable Energy and Fuels, 2018, 2, 13-38.	2.5	74
95	Low pressure supercritical CO2 extraction of astaxanthin from Haematococcus pluvialis demonstrated on a microfluidic chip. Bioresource Technology, 2018, 250, 481-485.	4.8	42
96	Disposable silicon-glass microfluidic devices: precise, robust and cheap. Lab on A Chip, 2018, 18, 3872-3880.	3.1	47
97	Nanomodel visualization of fluid injections in tight formations. Nanoscale, 2018, 10, 21994-22002.	2.8	56
98	A Surface Reconstruction Route to High Productivity and Selectivity in CO₂ Electroreduction toward C₂₊ Hydrocarbons. Advanced Materials, 2018, 30, e1804867.	11.1	200
99	Bubble Point Pressures of Hydrocarbon Mixtures in Multiscale Volumes from Density Functional Theory. Langmuir, 2018, 34, 14058-14068.	1.6	22
100	Copper adparticle enabled selective electrosynthesis of n-propanol. Nature Communications, 2018, 9, 4614.	5.8	153
101	High Rate, Selective, and Stable Electroreduction of CO₂ to CO in Basic and Neutral Media. ACS Energy Letters, 2018, 3, 2835-2840.	8.8	230
102	Copper nanocavities confine intermediates for efficient electrosynthesis of C3 alcohol fuels from carbon monoxide. Nature Catalysis, 2018, 1, 946-951.	16.1	354
103	Copper-on-nitride enhances the stable electrosynthesis of multi-carbon products from CO2. Nature Communications, 2018, 9, 3828.	5.8	279
104	CO ₂ electroreduction to ethylene via hydroxide-mediated copper catalysis at an abrupt interface. Science, 2018, 360, 783-787.	6.0	1,638
105	Nanoscale Phase Measurement for the Shale Challenge: Multicomponent Fluids in Multiscale Volumes. Langmuir, 2018, 34, 9927-9935.	1.6	45
106	Dopant-induced electron localization drives CO2 reduction to C2 hydrocarbons. Nature Chemistry, 2018, 10, 974-980.	6.6	781
107	Metalâ€“Organic Frameworks Mediate Cu Coordination for Selective CO₂ Electroreduction. Journal of the American Chemical Society, 2018, 140, 11378-11386.	6.6	326
108	2D Metal Oxyhalideâ€Derived Catalysts for Efficient CO₂ Electroreduction. Advanced Materials, 2018, 30, e1802858.	11.1	200

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109	Steering post-Câ€“C coupling selectivity enables high efficiency electroreduction of carbon dioxide to multi-carbon alcohols. Nature Catalysis, 2018, 1, 421-428.	16.1	537
110	Combined high alkalinity and pressurization enable efficient CO₂ electroreduction to CO. Energy and Environmental Science, 2018, 11, 2531-2539.	15.6	214
111	Bubble nucleation and growth in nanochannels. Physical Chemistry Chemical Physics, 2017, 19, 8223-8229.	1.3	48
112	Light dilution via wavelength management for efficient highâ€density photobioreactors. Biotechnology and Bioengineering, 2017, 114, 1160-1169.	1.7	30
113	Microfluidic pore-scale comparison of alcohol- and alkaline-based SAGD processes. Journal of Petroleum Science and Engineering, 2017, 154, 139-149.	2.1	46
114	Changes in mineral reactivity driven by pore fluid mobility in partially wetted porous media. Chemical Geology, 2017, 463, 1-11.	1.4	32
115	Periodic harvesting of microalgae from calcium alginate hydrogels for sustained highâ€density production. Biotechnology and Bioengineering, 2017, 114, 2023-2031.	1.7	9
116	Hydrothermal disruption of algae cells for astaxanthin extraction. Green Chemistry, 2017, 19, 106-111.	4.6	25
117	Turning the Page: Advancing Paper-Based Microfluidics for Broad Diagnostic Application. Chemical Reviews, 2017, 117, 8447-8480.	23.0	439
118	Direct visualization of fluid dynamics in sub-10 nm nanochannels. Nanoscale, 2017, 9, 9556-9561.	2.8	22
119	Nanomorphology-Enhanced Gas-Evolution Intensifies CO₂ Reduction Electrochemistry. ACS Sustainable Chemistry and Engineering, 2017, 5, 4031-4040.	3.2	135
120	Field-emission from quantum-dot-in-perovskite solids. Nature Communications, 2017, 8, 14757.	5.8	83
121	Pore-scale analysis of condensing solvent bitumen extraction. Fuel, 2017, 193, 284-293.	3.4	35
122	Condensation in One-Dimensional Dead-End Nanochannels. ACS Nano, 2017, 11, 304-313.	7.3	52
123	A penalty on photosynthetic growth in fluctuating light. Scientific Reports, 2017, 7, 12513.	1.6	50
124	Microfluidics for sperm analysis and selection. Nature Reviews Urology, 2017, 14, 707-730.	1.9	144
125	Frontispiece: The Full Pressureâ€“Temperature Phase Envelope of a Mixture in 1000 Microfluidic Chambers. Angewandte Chemie - International Edition, 2017, 56, .	7.2	0
126	Roadmap for optofluidics. Journal of Optics (United Kingdom), 2017, 19, 093003.	1.0	78

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127	Microfluidics-based measurement of solubility and diffusion coefficient of propane in bitumen. Fuel, 2017, 210, 23-31.	3.4	33
128	The Full Pressureâ€“Temperature Phase Envelope of a Mixture in 1000 Microfluidic Chambers. Angewandte Chemie - International Edition, 2017, 56, 13962-13967.	7.2	12
129	Microfluidic and nanofluidic phase behaviour characterization for industrial CO₂, oil and gas. Lab on A Chip, 2017, 17, 2740-2759.	3.1	83
130	Joint tuning of nanostructured Cu-oxide morphology and local electrolyte programs high-rate CO₂ reduction to C₂H₄. Green Chemistry, 2017, 19, 4023-4030.	4.6	58
131	Self-adaptive Bioinspired Hummingbird-wing Stimulated Triboelectric Nanogenerators. Scientific Reports, 2017, 7, 17143.	1.6	32
132	The Full Pressureâ€“Temperature Phase Envelope of a Mixture in 1000 Microfluidic Chambers. Angewandte Chemie, 2017, 129, 14150-14155.	1.6	6
133	Frontispiz: The Full Pressureâ€“Temperature Phase Envelope of a Mixture in 1000 Microfluidic Chambers. Angewandte Chemie, 2017, 129, .	1.6	1
134	Dual gradients of light intensity and nutrient concentration for full-factorial mapping of photosynthetic productivity. Lab on A Chip, 2016, 16, 2785-2790.	3.1	9
135	Predominance of sperm motion in corners. Scientific Reports, 2016, 6, 26669.	1.6	41
136	Turning the corner in fertility: high DNA integrity of boundary-following sperm. Lab on A Chip, 2016, 16, 2418-2422.	3.1	42
137	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
138	Enhanced electrocatalytic CO2 reduction via field-induced reagent concentration. Nature, 2016, 537, 382-386.	13.7	1,429
139	Paper-based sperm DNA integrity analysis. Analytical Methods, 2016, 8, 6260-6264.	1.3	21
140	High-Density Nanosharp Microstructures Enable Efficient CO₂ Electroreduction. Nano Letters, 2016, 16, 7224-7228.	4.5	158
141	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
142	Photon management for augmented photosynthesis. Nature Communications, 2016, 7, 12699.	5.8	200
143	Breathable waveguides for combined light and CO2 delivery to microalgae. Bioresource Technology, 2016, 209, 391-396.	4.8	13
144	Direct Measurement of the Fluid Phase Diagram. Analytical Chemistry, 2016, 88, 6986-6989.	3.2	25

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145	Paper-Based Quantification of Male Fertility Potential. Clinical Chemistry, 2016, 62, 458-465.	1.5	60
146	Biomass-to-biocrude on a chip via hydrothermal liquefaction of algae. Lab on A Chip, 2016, 16, 256-260.	3.1	27
147	Self-assembled nanoparticle-stabilized photocatalytic reactors. Nanoscale, 2016, 8, 2107-2115.	2.8	22
148	Microfluidics and Their Macro Applications for the Oil and Gas Industry. The Way Ahead, 2015, 11, 8-10.	0.2	10
149	Microalgae on display: a microfluidic pixel-based irradiance assay for photosynthetic growth. Lab on A Chip, 2015, 15, 3116-3124.	3.1	36
150	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
151	Detection of bubble and dew point using optical thin-film interference. Sensors and Actuators B: Chemical, 2015, 207, 640-649.	4.0	18
152	Fast Fluorescence-Based Microfluidic Method for Measuring Minimum Miscibility Pressure of CO₂ in Crude Oils. Analytical Chemistry, 2015, 87, 3160-3164.	3.2	68
153	Wavelength-selective plasmonics for enhanced cultivation of microalgae. Applied Physics Letters, 2015, 106, .	1.5	23
154	Surface Plasmon Resonance for Crude Oil Characterization. Energy & Fuels, 2015, 29, 3019-3023.	2.5	13
155	Microfluidic assessment of swimming media for motility-based sperm selection. Biomicrofluidics, 2015, 9, 044113.	1.2	37
156	Direct DNA Analysis with Paper-Based Ion Concentration Polarization. Journal of the American Chemical Society, 2015, 137, 13913-13919.	6.6	121
157	Two-dimensional slither swimming of sperm within a micrometre of a surface. Nature Communications, 2015, 6, 8703.	5.8	135
158	Evanescent cultivation of photosynthetic bacteria on thin waveguides. Journal of Micromechanics and Microengineering, 2014, 24, 045017.	1.5	12
159	A photosynthetic-plasmonic-voltaic cell: Excitation of photosynthetic bacteria and current collection through a plasmonic substrate. Applied Physics Letters, 2014, 104, 043704.	1.5	22
160	Rapid selection of sperm with high DNA integrity. Lab on A Chip, 2014, 14, 1142.	3.1	131
161	Lab-in-a-pen: a diagnostics format familiar to patients for low-resource settings. Lab on A Chip, 2014, 14, 957.	3.1	24
162	Out-of-plane ion concentration polarization for scalable water desalination. Lab on A Chip, 2014, 14, 681-685.	3.1	43

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163	Chip-off-the-old-rock: the study of reservoir-relevant geological processes with real-rock micromodels. Lab on A Chip, 2014, 14, 4382-4390.	3.1	121
164	Nanoporous Membranes Enable Concentration and Transport in Fully Wet Paper-Based Assays. Analytical Chemistry, 2014, 86, 8090-8097.	3.2	72
165	Pore-Scale Assessment of Nanoparticle-Stabilized CO₂ Foam for Enhanced Oil Recovery. Energy & Fuels, 2014, 28, 6221-6227.	2.5	150
166	Determination of Dew Point Conditions for CO₂ with Impurities Using Microfluidics. Environmental Science & Technology, 2014, 48, 3567-3574.	4.6	44
167	Energy: the microfluidic frontier. Lab on A Chip, 2014, 14, 3127-3134.	3.1	144
168	Nanoparticle Stablized CO2 in Water Foam for Mobility Control in Enhanced Oil Recovery via Microfluidic Method. , 2014, , .		14
169	Steam-on-a-chip for oil recovery: the role of alkaline additives in steam assisted gravity drainage. Lab on A Chip, 2013, 13, 3832.	3.1	81
170	Field tested milliliter-scale blood filtration device for point-of-care applications. Biomicrofluidics, 2013, 7, 44111.	1.2	28
171	Quantification of ovarian cancer markers with integrated microfluidic concentration gradient and imaging nanohole surface plasmon resonance. Analyst, The, 2013, 138, 1450.	1.7	58
172	Morphological Control <i>via</i> Chemical and Shear Forces in Block Copolymer Self-Assembly in the Lab-on-Chip. ACS Nano, 2013, 7, 1424-1436.	7.3	61
173	Aquifer-on-a-Chip: understanding pore-scale salt precipitation dynamics during CO2 sequestration. Lab on A Chip, 2013, 13, 2508.	3.1	112
174	Flow-Directed Loading of Block Copolymer Micelles with Hydrophobic Probes in a Gasâ€"Liquid Microreactor. Langmuir, 2013, 29, 8385-8394.	1.6	28
175	Measurement of CO₂ Diffusivity for Carbon Sequestration: A Microfluidic Approach for Reservoir-Specific Analysis. Environmental Science & Technology, 2013, 47, 71-78.	4.6	79
176	Bitumenâ€"Toluene Mutual Diffusion Coefficients Using Microfluidics. Energy & Fuels, 2013, 27, 2042-2048.	2.5	64
177	Optofluidics for Energy: Fuel and Electricity From Plasmonically-Excited Photosynthetic Bacteria. , 2013, , .		0
178	Microfluidics Underground: A Micro-Core Method for Pore Scale Analysis of Supercritical CO2 Reactive Transport in Saline Aquifers. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	0.8	18
179	Plasmonically Enhanced Biofilm Photobioreactors. , 2013, , .		0
180	Culturing photosynthetic bacteria through surface plasmon resonance. Applied Physics Letters, 2012, 101, .	1.5	24

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181	Novel Approach in Algae Biofuel Production using Advanced Photonics. , 2012, , .		0
182	Hand-powered microfluidics: A membrane pump with a patient-to-chip syringe interface. Biomicrofluidics, 2012, 6, 44102.	1.2	37
183	Laminated thin-film Teflon chips for petrochemical applications. Lab on A Chip, 2012, 12, 4236.	3.1	21
184	Evanescent photosynthesis: exciting cyanobacteria in a surface-confined light field. Physical Chemistry Chemical Physics, 2012, 14, 4817.	1.3	21
185	Surface-enhanced Raman scattering (SERS) optrodes for multiplexed on-chip sensing of nile blue A and oxazine 720. Lab on A Chip, 2012, 12, 1554.	3.1	49
186	Optofluidic Concentration: Plasmonic Nanostructure as Concentrator and Sensor. Nano Letters, 2012, 12, 1592-1596.	4.5	121
187	Slab waveguide photobioreactors for microalgae based biofuel production. Lab on A Chip, 2012, 12, 3740.	3.1	35
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