Paul J A Kenis

List of Publications by Year
in descending order

221 papers	22,426 citations	11651 70 h-index	8866 145 g-index
235 all docs	235 docs citations	235 times ranked	19280 citing authors

#	Article	IF	Citations
1	Frontiers, Opportunities, and Challenges in Biochemical and Chemical Catalysis of CO₂ Fixation. Chemical Reviews, 2013, 113, 6621-6658.	47.7	1,786
2	Ionic Liquidâ€"Mediated Selective Conversion of CO ₂ to CO at Low Overpotentials. Science, 2011, 334, 643-644.	12.6	1,293
3	Prospects of CO₂ Utilization via Direct Heterogeneous Electrochemical Reduction. Journal of Physical Chemistry Letters, 2010, 1, 3451-3458.	4.6	1,207
4	Microfabrication Inside Capillaries Using Multiphase Laminar Flow Patterning. Science, 1999, 285, 83-85.	12.6	649
5	Electrochemical conversion of CO2 to useful chemicals: current status, remaining challenges, and future opportunities. Current Opinion in Chemical Engineering, 2013, 2, 191-199.	7.8	645
6	Electroreduction of Carbon Dioxide to Hydrocarbons Using Bimetallic Cuâ€"Pd Catalysts with Different Mixing Patterns. Journal of the American Chemical Society, 2017, 139, 47-50.	13.7	632
7	Nanoporous Copperâ€"Silver Alloys by Additive-Controlled Electrodeposition for the Selective Electroreduction of CO₂ to Ethylene and Ethanol. Journal of the American Chemical Society, 2018, 140, 5791-5797.	13.7	599
8	Patterning cells and their environments using multiple laminar fluid flows in capillary networks. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 5545-5548.	7.1	507
9	A metal-free electrocatalyst for carbon dioxide reduction to multi-carbon hydrocarbons and oxygenates. Nature Communications, 2016, 7, 13869.	12.8	505
10	A Grossâ€Margin Model for Defining Technoeconomic Benchmarks in the Electroreduction of CO₂. ChemSusChem, 2016, 9, 1972-1979.	6.8	485
11	Experimental and theoretical scaling laws for transverse diffusive broadening in two-phase laminar flows in microchannels. Applied Physics Letters, 2000, 76, 2376-2378.	3.3	478
12	Microfluidic fuel cell based on laminar flow. Journal of Power Sources, 2004, 128, 54-60.	7.8	478
13	Co-electrolysis of CO2 and glycerol as a pathway to carbon chemicals with improved technoeconomics due to low electricity consumption. Nature Energy, 2019, 4, 466-474.	39.5	458
14	One-step electrosynthesis of ethylene and ethanol from CO2 in an alkaline electrolyzer. Journal of Power Sources, 2016, 301, 219-228.	7.8	399
15	Insights into the Low Overpotential Electroreduction of CO₂ to CO on a Supported Gold Catalyst in an Alkaline Flow Electrolyzer. ACS Energy Letters, 2018, 3, 193-198.	17.4	384
16	Nanoparticle Silver Catalysts That Show Enhanced Activity for Carbon Dioxide Electrolysis. Journal of Physical Chemistry C, 2013, 117, 1627-1632.	3.1	369
17	The effect of electrolyte composition on the electroreduction of CO₂to CO on Ag based gas diffusion electrodes. Physical Chemistry Chemical Physics, 2016, 18, 7075-7084.	2.8	367
18	Air-Breathing Laminar Flow-Based Microfluidic Fuel Cell. Journal of the American Chemical Society, 2005, 127, 16758-16759.	13.7	330

#	Article	IF	Citations
19	Patterning Electro-osmotic Flow with Patterned Surface Charge. Physical Review Letters, 2000, 84, 3314-3317.	7.8	317
20	Electrochemical CO2-to-ethylene conversion on polyamine-incorporated Cu electrodes. Nature Catalysis, 2021, 4, 20-27.	34.4	313
21	Microfluidic Reactor for the Electrochemical Reduction of Carbon Dioxide: The Effect of pH. Electrochemical and Solid-State Letters, 2010, 13, B109.	2.2	289
22	Effect of Cations on the Electrochemical Conversion of CO₂to CO. Journal of the Electrochemical Society, 2013, 160, F69-F74.	2.9	289
23	Fabricating complex three-dimensional nanostructures with high-resolution conformable phase masks. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12428-12433.	7.1	280
24	DNA-Mediated Control of Metal Nanoparticle Shape: One-Pot Synthesis and Cellular Uptake of Highly Stable and Functional Gold Nanoflowers. Nano Letters, 2010, 10, 1886-1891.	9.1	278
25	Nanoporous Copper Films by Additive-Controlled Electrodeposition: CO₂ Reduction Catalysis. ACS Catalysis, 2017, 7, 3313-3321.	11.2	224
26	Membraneless laminar flow-based micro fuel cells operating in alkaline, acidic, and acidic/alkaline media. Electrochimica Acta, 2005, 50, 5390-5398.	5.2	199
27	Characterization and application of electrodeposited Pt, Pt/Pd, and Pd catalyst structures for direct formic acid micro fuel cells. Electrochimica Acta, 2005, 50, 4674-4682.	5.2	190
28	Silver Supported on Titania as an Active Catalyst for Electrochemical Carbon Dioxide Reduction. ChemSusChem, 2014, 7, 866-874.	6.8	189
29	The Effects of Catalyst Layer Deposition Methodology on Electrode Performance. Advanced Energy Materials, 2013, 3, 589-599.	19.5	183
30	Effects of composition of the micro porous layer and the substrate on performance in the electrochemical reduction of CO2 to CO. Journal of Power Sources, 2016, 312, 192-198.	7.8	177
31	Influence of dilute feed and pH on electrochemical reduction of CO2 to CO on Ag in a continuous flow electrolyzer. Electrochimica Acta, 2015, 166, 271-276.	5.2	169
32	Nitrogen-Based Catalysts for the Electrochemical Reduction of CO₂ to CO. Journal of the American Chemical Society, 2012, 134, 19520-19523.	13.7	168
33	Carbon nanotube containing Ag catalyst layers for efficient and selective reduction of carbon dioxide. Journal of Materials Chemistry A, 2016, 4, 8573-8578.	10.3	166
34	Mechanism of CO Oxidation on Pt(111) in Alkaline Media. Journal of Physical Chemistry B, 2006, 110, 9545-9555.	2.6	164
35	Electrooxidation of adsorbed CO on Pt(111) and Pt(111)/Ru in alkaline media and comparison with results from acidic media. Journal of Electroanalytical Chemistry, 2004, 568, 215-224.	3.8	159
36	On the performance of membraneless laminar flow-based fuel cells. Journal of Power Sources, 2010, 195, 3569-3578.	7.8	154

#	Article	IF	Citations
37	Fabrication inside Microchannels Using Fluid Flow. Accounts of Chemical Research, 2000, 33, 841-847.	15.6	151
38	Tailored Macroporous SiCN and SiC Structures for High-Temperature Fuel Reforming. Advanced Functional Materials, 2005, 15, 1336-1342.	14.9	127
39	Microfluidic Arrays of Fluidâˆ'Fluid Diffusional Contacts as Detection Elements and Combinatorial Tools. Analytical Chemistry, 2001, 73, 5207-5213.	6.5	126
40	Durable Cathodes and Electrolyzers for the Efficient Aqueous Electrochemical Reduction of CO₂. ChemSusChem, 2020, 13, 855-875.	6.8	124
41	Active control of the depletion boundary layers in microfluidic electrochemical reactors. Lab on A Chip, 2006, 6, 1516.	6.0	123
42	A multiplexed microfluidic platform for rapid antibiotic susceptibility testing. Biosensors and Bioelectronics, 2013, 49, 118-125.	10.1	122
43	Cell Migration and Polarity on Microfabricated Gradients of Extracellular Matrix Proteins. Langmuir, 2006, 22, 4250-4258.	3.5	116
44	A Stochastic Model for Nucleation Kinetics Determination in Droplet-Based Microfluidic Systems. Crystal Growth and Design, 2010, 10, 2515-2521.	3.0	114
45	A Nitrogenâ€Doped Carbon Catalyst for Electrochemical CO₂ Conversion to CO with High Selectivity and Current Density. ChemSusChem, 2017, 10, 1094-1099.	6.8	109
46	Characterization of Limiting Factors in Laminar Flow-Based Membraneless Microfuel Cells. Electrochemical and Solid-State Letters, 2005, 8, A348.	2.2	108
47	Controlling Speciation during CO₂ Reduction on Cu-Alloy Electrodes. ACS Catalysis, 2020, 10, 672-682.	11.2	107
48	Microfabrication and characterization of a silicon-based millimeter scale, PEM fuel cell operating with hydrogen, methanol, or formic acid. Sensors and Actuators B: Chemical, 2005, 107, 882-891.	7.8	106
49	Air-Breathing Laminar Flow-Based Direct Methanol Fuel Cell with Alkaline Electrolyte. Electrochemical and Solid-State Letters, 2006, 9, A252.	2.2	103
50	Pressure-Driven Laminar Flow in Tangential Microchannels:Â an Elastomeric Microfluidic Switch. Analytical Chemistry, 2001, 73, 4682-4687.	6.5	94
51	Microfluidic Generation of Gradient Hydrogels to Modulate Hematopoietic Stem Cell Culture Environment. Advanced Healthcare Materials, 2014, 3, 449-458.	7.6	94
52	High efficiency electrochemical reduction of CO₂ beyond the two-electron transfer pathway on grain boundary rich ultra-small SnO₂ nanoparticles. Journal of Materials Chemistry A, 2018, 6, 10313-10319.	10.3	92
53	Direct Growth of Î³-Glycine from Neutral Aqueous Solutions by Slow, Evaporation-Driven Crystallization. Crystal Growth and Design, 2006, 6, 1746-1749.	3.0	90
54	Methods to study the tumor microenvironment under controlled oxygen conditions. Trends in Biotechnology, 2014, 32, 556-563.	9.3	90

#	Article	IF	Citations
55	Greenhouse Gas Emissions, Energy Efficiency, and Cost of Synthetic Fuel Production Using Electrochemical CO₂ Conversion and the Fischerâ€“Tropsch Process. Energy & Fuels, 2016, 30, 5980-5989.	5.1	90
56	System Design Rules for Intensifying the Electrochemical Reduction of CO₂ to CO on Ag Nanoparticles. ChemElectroChem, 2020, 7, 2001-2011.	3.4	90
57	Investigation of fuel and media flexible laminar flow-based fuel cells. Electrochimica Acta, 2009, 54, 7099-7105.	5.2	86
58	Nanoporous separator and low fuel concentration to minimize crossover in direct methanol laminar flow fuel cells. Journal of Power Sources, 2010, 195, 3523-3528.	7.8	82
59	A Carbon-Supported Copper Complex of 3,5-Diamino-1,2,4-triazole as a Cathode Catalyst for Alkaline Fuel Cell Applications. Journal of the American Chemical Society, 2010, 132, 12185-12187.	13.7	81
60	Carbonate resilience of flowing electrolyte-based alkaline fuel cells. Journal of Power Sources, 2011, 196, 1762-1768.	7.8	81
61	Investigation of Electrolyte-Dependent Carbonate Formation on Gas Diffusion Electrodes for CO₂ Electrolysis. ACS Applied Materials & Interfaces, 2021, 13, 15132-15142.	8.0	81
62	Microfluidic Hydrogen Fuel Cell with a Liquid Electrolyte. Langmuir, 2007, 23, 6871-6874.	3.5	79
63	Ceramic microreactors for on-site hydrogen production. Journal of Catalysis, 2006, 241, 235-242.	6.2	78
64	In Situ Deposition and Patterning of Single-Walled Carbon Nanotubes by Laminar Flow and Controlled Flocculation in Microfluidic Channels. Angewandte Chemie - International Edition, 2006, 45, 581-585.	13.8	78
65	Solving Mazes Using Microfluidic Networks. Langmuir, 2003, 19, 4714-4722.	3.5	77
66	Potential Dependence of the Local pH in a CO₂ Reduction Electrolyzer. ACS Catalysis, 2021, 11, 255-263.	11.2	77
67	Mammalian target of rapamycin and Rictor control neutrophil chemotaxis by regulating Rac/Cdc42 activity and the actin cytoskeleton. Molecular Biology of the Cell, 2013, 24, 3369-3380.	2.1	75
68	Microfluidic chip for combinatorial mixing and screening of assays. Lab on A Chip, 2009, 9, 1676.	6.0	74
69	Efficient Electrochemical Flow System with Improved Anode for the Conversion of CO₂to CO. Journal of the Electrochemical Society, 2014, 161, F1124-F1131.	2.9	74
70	Ruthenium cluster-like chalcogenide as a methanol tolerant cathode catalyst in air-breathing laminar flow fuel cells. Electrochimica Acta, 2009, 54, 4384-4388.	5.2	73
71	Passive direct formic acid microfabricated fuel cells. Journal of Power Sources, 2006, 160, 1058-1064.	7.8	71
72	Microtopographically patterned surfaces promote the alignment of tenocytes and extracellular collagen. Acta Biomaterialia, 2010, 6, 2580-2589.	8.3	70

#	Article	IF	Citations
73	Design, fabrication, and characterization of a planar, silicon-based, monolithically integrated micro laminar flow fuel cell with a bridge-shaped microchannel cross-section. Journal of Power Sources, 2011, 196, 4638-4645.	7.8	70
74	Modeling and Experimental Validation of Electrochemical Reduction of CO₂to CO in a Microfluidic Cell. Journal of the Electrochemical Society, 2015, 162, F23-F32.	2.9	68
75	Simple Methods for the Direct Assembly, Functionalization, and Patterning of Acid-Terminated Monolayers on Si(111). Langmuir, 2005, 21, 10537-10544.	3.5	65
76	Second-Order Nonlinear Optical Properties of the Four Tetranitrotetrapropoxycalix[4]arene Conformers. Journal of the American Chemical Society, 1998, 120, 7875-7883.	13.7	64
77	Methanol Dehydrogenation and Oxidation on Pt(111) in Alkaline Solutions. Langmuir, 2006, 22, 10457-10464.	3.5	63
78	Selective Electrooxidation of Glycerol to Formic Acid over Carbon Supported Ni_{1â€“<i>x</i>}M_{<i>x</i>}(M = Bi, Pd, and Au) Nanocatalysts and Coelectrolysis of CO₂. ACS Applied Energy Materials, 2020, 3, 8725-8738.	5.1	63
79	Alkaline Microfluidic Hydrogen-Oxygen Fuel Cell as a Cathode Characterization Platform. Journal of the Electrochemical Society, 2009, 156, B565.	2.9	62
80	Fabrication of X-ray compatible microfluidic platforms for protein crystallization. Sensors and Actuators B: Chemical, 2012, 174, 1-9.	7.8	59
81	Gold Nanoparticles on Polymerâ€Wrapped Carbon Nanotubes: An Efficient and Selective Catalyst for the Electroreduction of CO₂. ChemPhysChem, 2017, 18, 3274-3279.	2.1	57
82	Laminar Flow-Based Electrochemical Microreactor for Efficient Regeneration of Nicotinamide Cofactors for Biocatalysis. Journal of the American Chemical Society, 2005, 127, 10466-10467.	13.7	56
83	Engineering Redox-Sensitive Linkers for Genetically Encoded FRET-Based Biosensors. Experimental Biology and Medicine, 2008, 233, 238-248.	2.4	55
84	Design considerations for elastomeric normally closed microfluidic valves. Sensors and Actuators B: Chemical, 2011, 160, 1216-1223.	7.8	53
85	Binder-Focused Approaches to Improve the Stability of Cathodes for CO₂ Electroreduction. ACS Applied Energy Materials, 2021, 4, 5175-5186.	5.1	53
86	Elasticity in Macrophageâ€Synthesized Biocrystals. Angewandte Chemie - International Edition, 2017, 56, 1815-1819.	13.8	51
87	Screening and optimization of protein crystallization conditions through gradual evaporation using a novel crystallization platform. Journal of Applied Crystallography, 2005, 38, 988-995.	4.5	50
88	Determination of Critical Supersaturation from Microdroplet Evaporation Experiments. Crystal Growth and Design, 2006, 6, 1175-1180.	3.0	49
89	Microfluidic Generation of Lipidic Mesophases for Membrane Protein Crystallization. Crystal Growth and Design, 2009, 9, 2566-2569.	3.0	47
90	Ceramic microreactors for on-site hydrogen production from high temperature steam reforming of propane. Lab on A Chip, 2006, 6, 1328.	6.0	45

#	Article	IF	Citations
91	The Role of Surface Defects in CO Oxidation, Methanol Oxidation, and Oxygen Reduction on Pt(111). Journal of the Electrochemical Society, 2007, 154, F238.	2.9	45
92	Analysis of Pt/C electrode performance in a flowing-electrolyte alkaline fuel cell. International Journal of Hydrogen Energy, 2012, 37, 2559-2570.	7.1	45
93	Regiospecific Control of Protein Expression in Cells Cultured on Two-Component Counter Gradients of Extracellular Matrix Proteins. Langmuir, 2005, 21, 3061-3068.	3.5	44
94	Gravity-induced reorientation of the interface between two liquids of different densities flowing laminarly through a microchannel. Lab on A Chip, 2005, 5, 1259.	6.0	44
95	Microfluidic radiolabeling of biomolecules with PET radiometals. Nuclear Medicine and Biology, 2013, 40, 42-51.	0.6	43
96	Design rules for electrode arrangement in an air-breathing alkaline direct methanol laminar flow fuel cell. Journal of Power Sources, 2012, 218, 28-33.	7.8	42
97	A microfluidic approach to study the effect of bacterial interactions on antimicrobial susceptibility in polymicrobial cultures. RSC Advances, 2015, 5, 35211-35223.	3.6	42
98	A microfluidic approach for protein structure determination at room temperature via on-chip anomalous diffraction. Lab on A Chip, 2013, 13, 3183.	6.0	40
99	Combining Structural and Electrochemical Analysis of Electrodes Using Micro-Computed Tomography and a Microfluidic Fuel Cell. Journal of the Electrochemical Society, 2012, 159, B292-B298.	2.9	39
100	Electrochemical Reduction of Carbon Dioxide on Cu/CuO Core/Shell Catalysts. ChemElectroChem, 2014, 1, 1577-1582.	3.4	39
101	Microfluidic labeling of biomolecules with radiometals for use in nuclear medicine. Lab on A Chip, 2010, 10, 3387.	6.0	38
102	A microfluidic platform for pharmaceutical salt screening. Lab on A Chip, 2011, 11, 3829.	6.0	38
103	Chemical Analysis of Drug Biocrystals: A Role for Counterion Transport Pathways in Intracellular Drug Disposition. Molecular Pharmaceutics, 2015, 12, 2528-2536.	4.6	38
104	Supramolecular Materials: Molecular Packing of Tetranitrotetrapropoxycalix[4]arene in Highly Stable Films with Second-Order Nonlinear Optical Properties. Chemistry - A European Journal, 1998, 4, 1225-1234.	3.3	37
105	Carbon Foam Decorated with Silver Nanoparticles for Electrochemical CO₂ Conversion. Energy Technology, 2017, 5, 861-863.	3.8	37
106	Microfluidic Approach to Cocrystal Screening of Pharmaceutical Parent Compounds. Crystal Growth and Design, 2012, 12, 6023-6034.	3.0	36
107	High temperature continuous flow synthesis of CdSe/CdS/ZnS, CdS/ZnS, and CdSeS/ZnS nanocrystals. Nanoscale, 2015, 7, 15895-15903.	5.6	36
108	Comprehensive energy analysis of a photovoltaic thermal water electrolyzer. Applied Energy, 2016, 164, 294-302.	10.1	36

#	Article	IF	Citations
109	Engineering Silverâ€Enriched Copper Coreâ€Shell Electrocatalysts to Enhance the Production of Ethylene and C₂₊ Chemicals from Carbon Dioxide at Low Cell Potentials. Advanced Functional Materials, 2021, 31, 2101668.	14.9	36
110	Development of a high-dynamic range, GFP-based FRET probe sensitive to oxidative microenvironments. Experimental Biology and Medicine, 2011, 236, 681-691.	2.4	35
111	Antisolvent Crystallization and Polymorph Screening of Glycine in Microfluidic Channels Using Hydrodynamic Focusing. Crystal Growth and Design, 2015, 15, 3299-3306.	3.0	35
112	Cross Metathesis on Olefin-Terminated Monolayers on Si(111) Using the Grubbs' Catalyst. Langmuir, 2006, 22, 2146-2155.	3.5	32
113	Highly dispersed, single-site copper catalysts for the electroreduction of CO2 to methane. Journal of Electroanalytical Chemistry, 2020, 875, 113862.	3.8	32
114	Microfluidic approach to polymorph screening through antisolvent crystallization. CrystEngComm, 2012, 14, 2404.	2.6	31
115	Design considerations for electrostatic microvalves with applications in poly(dimethylsiloxane)-based microfluidics. Lab on A Chip, 2012, 12, 1078.	6.0	31
116	Fabrication of Metallic Microstructures Using Exposed, Developed Silver Halide-Based Photographic Film. Analytical Chemistry, 2000, 72, 645-651.	6.5	30
117	Thiolene and SIFEL-based microfluidic platforms for liquidâ€"liquid extraction. Sensors and Actuators B: Chemical, 2014, 190, 634-644.	7.8	30
118	Determination of the Phase Diagram for Soluble and Membrane Proteins. Journal of Physical Chemistry B, 2010, 114, 4432-4441.	2.6	29
119	<i>In situ</i>serial Laue diffraction on a microfluidic crystallization device. Journal of Applied Crystallography, 2014, 47, 1975-1982.	4.5	29
120	X-ray Transparent Microfluidic Chip for Mesophase-Based Crystallization of Membrane Proteins and On-Chip Structure Determination. Crystal Growth and Design, 2014, 14, 4886-4890.	3.0	29
121	Crystallization Optimization of Pharmaceutical Solid Forms with X-ray Compatible Microfluidic Platforms. Crystal Growth and Design, 2015, 15, 1201-1209.	3.0	29
122	Towards time-resolved serial crystallography in a microfluidic device. Acta Crystallographica Section F, Structural Biology Communications, 2015, 71, 823-830.	0.8	29
123	Multilevel Microfluidics via Single-Exposure Photolithography. Journal of the American Chemical Society, 2005, 127, 7674-7675.	13.7	28
124	The Q-Cycle Mechanism of the <i>bc</i>₁ Complex: A Biologistâ€™s Perspective on Atomistic Studies. Journal of Physical Chemistry B, 2017, 121, 3701-3717.	2.6	28
125	Multiplexed detection of nucleic acids in a combinatorial screening chip. Lab on A Chip, 2011, 11, 1916.	6.0	27
126	Thiol-based antioxidants elicit mitochondrial oxidation via respiratory complex III. American Journal of Physiology - Cell Physiology, 2015, 309, C81-C91.	4.6	27

#	Article	IF	Citations
127	Identification of nucleation rates in droplet-based microfluidic systems. Chemical Engineering Science, 2012, 77, 235-241.	3.8	26
128	An X-ray transparent microfluidic platform for screening of the phase behavior of lipidic mesophases. Analyst, The, 2013, 138, 5384.	3.5	25
129	Manufacturing all-polymer laminar flow-based fuel cells. Journal of Power Sources, 2013, 240, 486-493.	7.8	25
130	Triazine-Based Tool Box for Developing Peptidic PET Imaging Probes: Syntheses, Microfluidic Radiolabeling, and Structureâ€"Activity Evaluation. Bioconjugate Chemistry, 2014, 25, 761-772.	3.6	25
131	FÃ¶rster resonance energy transfer-based sensor targeting endoplasmic reticulum reveals highly oxidative environment. Experimental Biology and Medicine, 2012, 237, 652-662.	2.4	24
132	Towards accelerated durability testing protocols for CO₂ electrolysis. Journal of Materials Chemistry A, 2020, 8, 22557-22571.	10.3	24
133	Decreasing the Energy Consumption of the CO₂ Electrolysis Process Using a Magnetic Field. ACS Energy Letters, 2021, 6, 2427-2433.	17.4	24
134	Oscillatory Behavior of Neutrophils under Opposing Chemoattractant Gradients Supports a Winner-Take-All Mechanism. PLoS ONE, 2014, 9, e85726.	2.5	24
135	Fabrication of Ceramic Microscale Structures. Journal of the American Ceramic Society, 2007, 90, 2779-2783.	3.8	23
136	Multiplexed electrical sensor arrays in microfluidic networks. Sensors and Actuators B: Chemical, 2009, 136, 350-358.	7.8	23
137	Investigation of Pt, Pt[sub 3]Co, and Pt[sub 3]Co/Mo Cathodes for the ORR in a Microfluidic H[sub 2]/O[sub 2] Fuel Cell. Journal of the Electrochemical Society, 2010, 157, B837.	2.9	23
138	The non-receptor tyrosine kinase Lyn controls neutrophil adhesion by recruiting the CrkLâ€"C3G complex and activating Rap1 at the leading edge. Journal of Cell Science, 2011, 124, 2153-2164.	2.0	23
139	Unraveling the Origin of Interfacial Oxidation of InP-Based Quantum Dots: Implications for Bioimaging and Optoelectronics. ACS Applied Nano Materials, 2020, 3, 12325-12333.	5.0	23
140	Twists and turns in the development and maintenance of the mammalian small intestine epithelium. Birth Defects Research Part C: Embryo Today Reviews, 2005, 75, 58-71.	3.6	22
141	A Kinetic Model To Simulate Protein Crystal Growth in an Evaporation-Based Crystallization Platform. Langmuir, 2007, 23, 4516-4522.	3.5	22
142	Carbon Dioxide Utilization Coming of Age. ChemPhysChem, 2017, 18, 3091-3093.	2.1	22
143	Second-Order Nonlinear Optical Active Calix[4]arene Polyimides Suitable for Frequency Doubling in the UV Region. Chemistry of Materials, 1997, 9, 596-601.	6.7	21
144	Double Transfer Printing of Small Volumes of Liquids. Langmuir, 2007, 23, 2906-2914.	3.5	21

#	Article	IF	Citations
145	Microfluidic platform for the study of intercellular communication via soluble factor-cell and cell-cell paracrine signaling. Biomicrofluidics, 2014, 8, 044104.	2.4	21
146	Probability of Nucleation in a Metastable Zone: Induction Supersaturation and Implications. Crystal Growth and Design, 2017, 17, 1132-1145.	3.0	21
147	Microfluidic Flow-Flash:Â Method for Investigating Protein Dynamics. Analytical Chemistry, 2007, 79, 122-128.	6.5	20
148	Metastable States of Small-Molecule Solutions. Journal of Physical Chemistry B, 2007, 111, 14121-14129.	2.6	20
149	A Microfluidic Platform for Evaporation-based Salt Screening of Pharmaceutical Parent compounds. Lab on A Chip, 2013, 13, 1708.	6.0	20
150	A Method of Cryoprotection for Protein Crystallography by Using a Microfluidic Chip and Its Application for in Situ X-ray Diffraction Measurements. Analytical Chemistry, 2015, 87, 4194-4200.	6.5	20
151	A Millifluidic Reactor System for Multistep Continuous Synthesis of InP/ZnSeS Nanoparticles. ChemNanoMat, 2018, 4, 943-953.	2.8	20
152	Exploring multivalent cations-based electrolytes for CO2 electroreduction. Electrochimica Acta, 2021, 394, 139055.	5.2	20
153	Mild methods to assemble and pattern organic monolayers on hydrogen-terminated Si(111). Chemical Communications, 2005, , 3198.	4.1	19
154	Materials for Micro- and Nanofluidics. MRS Bulletin, 2006, 31, 87-94.	3.5	19
155	A microfluidic-based protein crystallization method in 10 micrometer-sized crystallization space. CrystEngComm, 2016, 18, 7722-7727.	2.6	19
156	X-ray transparent microfluidic platforms for membrane protein crystallization with microseeds. Lab on A Chip, 2018, 18, 944-954.	6.0	19
157	Accelerated screening of colloidal nanocrystals using artificial neural network-assisted autonomous flow reactor technology. Nanoscale, 2021, 13, 17028-17039.	5.6	18
158	Cadherin and Integrin Regulation of Epithelial Cell Migration. Langmuir, 2009, 25, 10092-10099.	3.5	17
159	Two-layer multiplexed peristaltic pumps for high-density integrated microfluidics. Sensors and Actuators B: Chemical, 2011, 151, 384-393.	7.8	17
160	Elasticity in Macrophageâ€Synthesized Biocrystals. Angewandte Chemie, 2017, 129, 1841-1845.	2.0	17
161	Mechanistic Insights into Size-Focused Growth of Indium Phosphide Nanocrystals in the Presence of Trace Water. Chemistry of Materials, 2020, 32, 3577-3584.	6.7	17
162	Microfluidic Preparation of a ⁸⁹Zr-Labeled Trastuzumab Single-Patient Dose. Journal of Nuclear Medicine, 2016, 57, 747-752.	5.0	16

#	Article	IF	Citations
163	Continuous Flow Synthesis of Anisotropic Cadmium Selenide and Zinc Selenide Nanoparticles. ChemNanoMat, 2017, 3, 204-211.	2.8	16
164	Efficient Aqueous Electroreduction of CO₂ to Formate at Low Overpotential on Indium Tin Oxide Nanocrystals. Chemistry of Materials, 2021, 33, 7675-7685.	6.7	16
165	Fabrication and characterization of microscale sandwich beams. Journal of Materials Research, 2001, 16, 597-605.	2.6	15
166	Design rules for pumping and metering of highly viscous fluids in microfluidics. Lab on A Chip, 2010, 10, 3112.	6.0	15
167	Quantitative Analysis of Single-Electrode Plots to Understand In-Situ Behavior of Individual Electrodes. Journal of the Electrochemical Society, 2012, 159, B761-B769.	2.9	15
168	Solution Coating of Pharmaceutical Nanothin Films and Multilayer Nanocomposites with Controlled Morphology and Polymorphism. ACS Applied Materials & Interfaces, 2018, 10, 10480-10489.	8.0	15
169	Scanning Force Microscopy Studies on Molecular Packing and Friction Anisotropy in Thin Films of Tetranitrotetrapropoxycalix[4]arene. Langmuir, 1998, 14, 2801-2809.	3.5	14
170	Control of pressure-driven components in integrated microfluidic devices using an on-chip electrostatic microvalve. RSC Advances, 2014, 4, 51593-51602.	3.6	14
171	A three-dimensional numerical model of a micro laminar flow fuel cell with a bridge-shaped microchannel cross-section. Journal of Power Sources, 2014, 269, 542-549.	7.8	14
172	Electronic Properties of a Monolayerâˆ'Electrolyte Interface Obtained from Mechanistic Impedance Analysis. Journal of Physical Chemistry C, 2009, 113, 9375-9391.	3.1	13
173	Crystallization and characterization of cocrystals of piroxicam and 2,5-dihydroxybenzoic acid. CrystEngComm, 2015, 17, 5299-5306.	2.6	13
174	Solvent compatible microfluidic platforms for pharmaceutical solid form screening. RSC Advances, 2016, 6, 13286-13296.	3.6	13
175	Design, fabrication, and characterization of a proposed microchannel water electrolyzer. Journal of Power Sources, 2016, 307, 122-128.	7.8	13
176	Chemical and mechanical modulation of polymeric micelle assembly. Nanoscale, 2017, 9, 5194-5204.	5.6	13
177	Design considerations for open-well microfluidic platforms for hypoxic cell studies. Biomicrofluidics, 2017, 11, 054116.	2.4	13
178	Generalized Phase Behavior of Small Molecules and Nanoparticles. Journal of Physical Chemistry B, 2007, 111, 12494-12499.	2.6	12
179	Imaging in real-time with FRET the redox response of tumorigenic cells to glutathione perturbations in a microscale flow. Integrative Biology (United Kingdom), 2011, 3, 208-217.	1.3	12
180	Insight into the electrochemical reduction of CO2 on gold via surface-enhanced Raman spectroscopy and N-containing additives. Journal of Solid State Electrochemistry, 2016, 20, 1149-1154.	2.5	12

#	Article	IF	Citations
181	Development of a microfluidic â€œclick chipâ€•incorporating an immobilized Cu(<scp>i</scp>) catalyst. RSC Advances, 2015, 5, 6142-6150.	3.6	11
182	Polymeric microfluidic continuous flow mixer combined with hyperspectral FT-IR imaging for studying rapid biomolecular events. Lab on A Chip, 2019, 19, 2598-2609.	6.0	11
183	Electrochemistry for a Sustainable World. Electrochemical Society Interface, 2020, 29, 41-42.	0.4	11
184	Mechanisms of Charge Transport through Monolayer-Modified Polycrystalline Gold Electrodes in the Absence of Redox-Active Moieties. Journal of Physical Chemistry C, 2009, 113, 4687-4705.	3.1	9
185	Effects of Detergent Î2-Octylglucoside and Phosphate Salt Solutions on Phase Behavior of Monoolein Mesophases. Biophysical Journal, 2013, 105, 1848-1859.	0.5	9
186	Characterization of a [4Feâ€4S]â€Ferredoxin Model Based on a Concave Tetradentate Thiol Ligand System. Chemische Berichte, 1997, 130, 23-34.	0.2	8
187	Transient light-induced intracellular oxidation revealed by redox biosensor. Biochemical and Biophysical Research Communications, 2013, 439, 517-521.	2.1	8
188	Gold nanoparticles disrupt actin organization and pulmonary endothelial barriers. Scientific Reports, 2020, 10, 13320.	3.3	8
189	Ring-Opening Polymerization of Cyclic Esters in an Aqueous Dispersion. Macromolecules, 2020, 53, 7767-7773.	4.8	8
190	Patterning by Etching at the Nanoscale (PENs) on Si(111) through the Controlled Etching of PDMS. Chemistry of Materials, 2007, 19, 2903-2909.	6.7	7
191	Tailoring electrode hydrophobicity to improve anode performance in alkaline media. Journal of Power Sources, 2013, 242, 581-588.	7.8	7
192	A monolithic poly(dimethylsiloxane) electrostatic actuator for controlling integrated pneumatic microsystems. Sensors and Actuators A: Physical, 2013, 196, 22-29.	4.1	7
193	Normally-Closed Electrostatic Microvalve Fabricated Using Exclusively Soft-Lithographic Techniques and Operated With Portable Electronics. Journal of Microelectromechanical Systems, 2013, 22, 1251-1253.	2.5	7
194	Featured Article: Inhibition of glutathione synthesis distinctly alters mitochondrial and cytosolic redox poise. Experimental Biology and Medicine, 2014, 239, 394-403.	2.4	7
195	X-ray transparent microfluidic chips for high-throughput screening and optimization of in meso membrane protein crystallization. Biomicrofluidics, 2017, 11, 024118.	2.4	7
196	Nonâ€Aqueous Primary Liâ€“Air Flow Battery and Optimization of its Cathode through Experiment and Modeling. ChemSusChem, 2017, 10, 4198-4206.	6.8	7
197	Carbon-Based Electrodes and Catalysts for the Electroreduction of Carbon Dioxide (CO2) to Value-Added Chemicals. Nanostructure Science and Technology, 2019, , 219-251.	0.1	7
198	Membraneless Fuel Cell Based on Laminar Flow. , 2003, , 261.		6

#	Article	IF	Citations
199	Region specific enhancement of quantum dot emission using interleaved two-dimensional photonic crystals. Applied Optics, 2015, 54, 2302.	1.8	6
200	Probability of Nucleation in a Metastable Zone: Cooling Crystallization and Polythermal Method. Crystal Growth and Design, 2017, 17, 5823-5837.	3.0	6
201	In-situ measurement of ethanol tolerance in an operating fuel cell. International Journal of Hydrogen Energy, 2013, 38, 8980-8991.	7.1	5
202	Using macromolecular-crystallography beamline and microfluidic platform for small-angle diffraction studies of lipidic matrices for membrane-protein crystallization. Journal of Physics: Conference Series, 2013, 425, 012013.	0.4	5
203	â€œClick Chipâ€•Conjugation of Bifunctional Chelators to Biomolecules. Bioconjugate Chemistry, 2017, 28, 986-994.	3.6	5
204	Cellâ€Laden Hydrogels in Integrated Microfluidic Devices for Longâ€Term Cell Culture and Tubulogenesis Assays. Small, 2013, 9, 3076-3081.	10.0	4
205	Enhanced emission of quantum dots embedded within the high-index dielectric regions of photonic crystal slabs. Applied Physics Letters, 2016, 108, .	3.3	4
206	Vapor Feed Direct Methanol Fuel Cell with Flowing Electrolyte. ECS Transactions, 2007, 11, 1419-1424.	0.5	3
207	Modeling and Simulating Electrochemical Reduction of CO2 in a Microfluidic Cell. Computer Aided Chemical Engineering, 2014, , 639-644.	0.5	3
208	Microfluidic Fuel Cells as Microscale Power Sources and Analytical Platforms. , 2009, , .		2
209	Integrated Electrical Sensor Arrays in Microfluidic Networks. ECS Transactions, 2006, 3, 427-435.	0.5	1
210	Vertical-cavity surface-emitting lasers for optical sensing in microfluidic microsystems. Proceedings of SPIE, 2009, , .	0.8	1
211	Contaminant Removal from Oxygen Production Systems for In Situ Resource Utilization. , 2012, , .		1
212	Supramolecular Materials: Molecular Packing of Tetranitrotetrapropoxycalix[4]arene in Highly Stable Films with Second-Order Nonlinear Optical Properties. Chemistry - A European Journal, 1998, 4, 1225-1234.	3.3	1
213	Crystal structure of a 2:1 piroxicamâ€"gentisic acid co-crystal featuring neutral and zwitterionic piroxicam molecules. Acta Crystallographica Section E: Crystallographic Communications, 2016, 72, 1714-1717.	0.5	1
214	Methanol Oxidation on Pt(111)/Ru in Alkaline Media. ECS Transactions, 2007, 11, 1333-1346.	0.5	0
215	Depletion Boundary Layer Engineering in Electrochemical Microreactors. ECS Meeting Abstracts, 2007, , .	0.0	0
216	Optofluidic microchip with VCSELs and edge emitting laser sources. , 2011, , .		0

#	Article	IF	Citations
217	Identification of nucleation rates in droplet-based microfluidic systems. , 2012, , .		0
218	Integration of 780 and 850-nm Vertical-Cavity Surface-Emitting Lasers into a Micro-Fluidic Microsystem. , 2009, , .		0
219	Optofluidic Microchip With Integrated 780-nm VCSEL Arrays for Biomedical and Chemical Sensing. , 2010, , .		0
220	Region Specific Enhancement of Quantum Dot Emission Using Interleaved Two-dimensional Photonic Crystals. , 2015, , .		0
221	Co-Electrolysis for Efficient Electroreduction of CO2 to Intermediates Fuels or Chemicals. , 0, , .		0