

Paul J A Kenis

List of Publications by Citations

Source: <https://exaly.com/author-pdf/1123963/paul-j-a-kenis-publications-by-citations.pdf>

Version: 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

214
papers

17,748
citations

64
h-index

130
g-index

235
ext. papers

20,150
ext. citations

7.6
avg, IF

6.98
L-index

#	Paper	IF	Citations
214	Frontiers, opportunities, and challenges in biochemical and chemical catalysis of CO ₂ fixation. <i>Chemical Reviews</i> , 2013 , 113, 6621-58	68.1	1415
213	Ionic liquid-mediated selective conversion of CO ₂ to CO at low overpotentials. <i>Science</i> , 2011 , 334, 643-4	33.3	1042
212	Prospects of CO ₂ Utilization via Direct Heterogeneous Electrochemical Reduction. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 3451-3458	6.4	971
211	Microfabrication inside capillaries using multiphase laminar flow patterning. <i>Science</i> , 1999 , 285, 83-5	33.3	580
210	Electrochemical conversion of CO ₂ to useful chemicals: current status, remaining challenges, and future opportunities. <i>Current Opinion in Chemical Engineering</i> , 2013 , 2, 191-199	5.4	526
209	Patterning cells and their environments using multiple laminar fluid flows in capillary networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999 , 96, 5545-8	11.5	455
208	Electroreduction of Carbon Dioxide to Hydrocarbons Using Bimetallic Cu-Pd Catalysts with Different Mixing Patterns. <i>Journal of the American Chemical Society</i> , 2017 , 139, 47-50	16.4	446
207	Experimental and theoretical scaling laws for transverse diffusive broadening in two-phase laminar flows in microchannels. <i>Applied Physics Letters</i> , 2000 , 76, 2376-2378	3.4	436
206	Microfluidic fuel cell based on laminar flow. <i>Journal of Power Sources</i> , 2004 , 128, 54-60	8.9	413
205	Nanoporous Copper-Silver Alloys by Additive-Controlled Electrodeposition for the Selective Electroreduction of CO to Ethylene and Ethanol. <i>Journal of the American Chemical Society</i> , 2018 , 140, 5791-5797	16.4	398
204	A metal-free electrocatalyst for carbon dioxide reduction to multi-carbon hydrocarbons and oxygenates. <i>Nature Communications</i> , 2016 , 7, 13869	17.4	385
203	A Gross-Margin Model for Defining Technoeconomic Benchmarks in the Electroreduction of CO ₂ . <i>ChemSusChem</i> , 2016 , 9, 1972-9	8.3	343
202	Nanoparticle Silver Catalysts That Show Enhanced Activity for Carbon Dioxide Electrolysis. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 1627-1632	3.8	308
201	One-step electrosynthesis of ethylene and ethanol from CO ₂ in an alkaline electrolyzer. <i>Journal of Power Sources</i> , 2016 , 301, 219-228	8.9	306
200	Air-breathing laminar flow-based microfluidic fuel cell. <i>Journal of the American Chemical Society</i> , 2005 , 127, 16758-9	16.4	291
199	Patterning electro-osmotic flow with patterned surface charge. <i>Physical Review Letters</i> , 2000 , 84, 3314-7	7.4	271
198	The effect of electrolyte composition on the electroreduction of CO ₂ to CO on Ag based gas diffusion electrodes. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 7075-84	3.6	269

197	Insights into the Low Overpotential Electroreduction of CO ₂ to CO on a Supported Gold Catalyst in an Alkaline Flow Electrolyzer. <i>ACS Energy Letters</i> , 2018 , 3, 193-198	20.1	263
196	DNA-mediated control of metal nanoparticle shape: one-pot synthesis and cellular uptake of highly stable and functional gold nanoflowers. <i>Nano Letters</i> , 2010 , 10, 1886-91	11.5	250
195	Fabricating complex three-dimensional nanostructures with high-resolution conformable phase masks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 12428-33	11.5	247
194	Co-electrolysis of CO ₂ and glycerol as a pathway to carbon chemicals with improved techno-economics due to low electricity consumption. <i>Nature Energy</i> , 2019 , 4, 466-474	62.3	228
193	Effect of Cations on the Electrochemical Conversion of CO ₂ to CO. <i>Journal of the Electrochemical Society</i> , 2013 , 160, F69-F74	3.9	222
192	Microfluidic Reactor for the Electrochemical Reduction of Carbon Dioxide: The Effect of pH. <i>Electrochemical and Solid-State Letters</i> , 2010 , 13, B109		219
191	Characterization and application of electrodeposited Pt, Pt/Pd, and Pd catalyst structures for direct formic acid micro fuel cells. <i>Electrochimica Acta</i> , 2005 , 50, 4674-4682	6.7	175
190	Membraneless laminar flow-based micro fuel cells operating in alkaline, acidic, and acidic/alkaline media. <i>Electrochimica Acta</i> , 2005 , 50, 5390-5398	6.7	173
189	Nanoporous Copper Films by Additive-Controlled Electrodeposition: CO ₂ Reduction Catalysis. <i>ACS Catalysis</i> , 2017 , 7, 3313-3321	13.1	172
188	Silver supported on titania as an active catalyst for electrochemical carbon dioxide reduction. <i>ChemSusChem</i> , 2014 , 7, 866-74	8.3	155
187	The Effects of Catalyst Layer Deposition Methodology on Electrode Performance. <i>Advanced Energy Materials</i> , 2013 , 3, 589-599	21.8	148
186	Nitrogen-based catalysts for the electrochemical reduction of CO ₂ to CO. <i>Journal of the American Chemical Society</i> , 2012 , 134, 19520-3	16.4	145
185	Mechanism of CO oxidation on Pt(111) in alkaline media. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 9545-55	3.4	143
184	Electrooxidation of adsorbed CO on Pt(111) and Pt(111)/Ru in alkaline media and comparison with results from acidic media. <i>Journal of Electroanalytical Chemistry</i> , 2004 , 568, 215-224	4.1	143
183	Fabrication inside microchannels using fluid flow. <i>Accounts of Chemical Research</i> , 2000 , 33, 841-7	24.3	133
182	On the performance of membraneless laminar flow-based fuel cells. <i>Journal of Power Sources</i> , 2010 , 195, 3569-3578	8.9	126
181	Carbon nanotube containing Ag catalyst layers for efficient and selective reduction of carbon dioxide. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 8573-8578	13	122
180	Tailored Macroporous SiCN and SiC Structures for High-Temperature Fuel Reforming. <i>Advanced Functional Materials</i> , 2005 , 15, 1336-1342	15.6	121

179	Influence of dilute feed and pH on electrochemical reduction of CO ₂ to CO on Ag in a continuous flow electrolyzer. <i>Electrochimica Acta</i> , 2015 , 166, 271-276	6.7	118
178	Microfluidic arrays of fluid-fluid diffusional contacts as detection elements and combinatorial tools. <i>Analytical Chemistry</i> , 2001 , 73, 5207-13	7.8	110
177	Cell migration and polarity on microfabricated gradients of extracellular matrix proteins. <i>Langmuir</i> , 2006 , 22, 4250-8	4	107
176	Effects of composition of the micro porous layer and the substrate on performance in the electrochemical reduction of CO ₂ to CO. <i>Journal of Power Sources</i> , 2016 , 312, 192-198	8.9	107
175	Active control of the depletion boundary layers in microfluidic electrochemical reactors. <i>Lab on A Chip</i> , 2006 , 6, 1516-24	7.2	105
174	A multiplexed microfluidic platform for rapid antibiotic susceptibility testing. <i>Biosensors and Bioelectronics</i> , 2013 , 49, 118-25	11.8	101
173	Characterization of Limiting Factors in Laminar Flow-Based Membraneless Microfuel Cells. <i>Electrochemical and Solid-State Letters</i> , 2005 , 8, A348		95
172	Microfabrication and characterization of a silicon-based millimeter scale, PEM fuel cell operating with hydrogen, methanol, or formic acid. <i>Sensors and Actuators B: Chemical</i> , 2005 , 107, 882-891	8.5	95
171	Air-Breathing Laminar Flow-Based Direct Methanol Fuel Cell with Alkaline Electrolyte. <i>Electrochemical and Solid-State Letters</i> , 2006 , 9, A252		93
170	A Nitrogen-Doped Carbon Catalyst for Electrochemical CO Conversion to CO with High Selectivity and Current Density. <i>ChemSusChem</i> , 2017 , 10, 1094-1099	8.3	92
169	Pressure-driven laminar flow in tangential microchannels: an elastomeric microfluidic switch. <i>Analytical Chemistry</i> , 2001 , 73, 4682-7	7.8	90
168	A Stochastic Model for Nucleation Kinetics Determination in Droplet-Based Microfluidic Systems. <i>Crystal Growth and Design</i> , 2010 , 10, 2515-2521	3.5	89
167	Direct Growth of Glycine from Neutral Aqueous Solutions by Slow, Evaporation-Driven Crystallization. <i>Crystal Growth and Design</i> , 2006 , 6, 1746-1749	3.5	85
166	Electrochemical CO ₂ -to-ethylene conversion on polyamine-incorporated Cu electrodes. <i>Nature Catalysis</i> , 2021 , 4, 20-27	36.5	85
165	Microfluidic generation of gradient hydrogels to modulate hematopoietic stem cell culture environment. <i>Advanced Healthcare Materials</i> , 2014 , 3, 449-58	10.1	82
164	Investigation of fuel and media flexible laminar flow-based fuel cells. <i>Electrochimica Acta</i> , 2009 , 54, 7099-7105	7.1	75
163	Carbonate resilience of flowing electrolyte-based alkaline fuel cells. <i>Journal of Power Sources</i> , 2011 , 196, 1762-1768	8.9	74
162	A carbon-supported copper complex of 3,5-diamino-1,2,4-triazole as a cathode catalyst for alkaline fuel cell applications. <i>Journal of the American Chemical Society</i> , 2010 , 132, 12185-7	16.4	73

161	In situ deposition and patterning of single-walled carbon nanotubes by laminar flow and controlled flocculation in microfluidic channels. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 581-5	16.4	73
160	Microfluidic hydrogen fuel cell with a liquid electrolyte. <i>Langmuir</i> , 2007 , 23, 6871-4	4	72
159	Nanoporous separator and low fuel concentration to minimize crossover in direct methanol laminar flow fuel cells. <i>Journal of Power Sources</i> , 2010 , 195, 3523-3528	8.9	70
158	Ceramic microreactors for on-site hydrogen production. <i>Journal of Catalysis</i> , 2006 , 241, 235-242	7.3	68
157	Solving Mazes Using Microfluidic Networks. <i>Langmuir</i> , 2003 , 19, 4714-4722	4	67
156	High efficiency electrochemical reduction of CO ₂ beyond the two-electron transfer pathway on grain boundary rich ultra-small SnO ₂ nanoparticles. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 10313-10319	1.9	66
155	Greenhouse Gas Emissions, Energy Efficiency, and Cost of Synthetic Fuel Production Using Electrochemical CO ₂ Conversion and the Fischer-Tropsch Process. <i>Energy & Fuels</i> , 2016 , 30, 5980-5989	4.1	66
154	Microfluidic chip for combinatorial mixing and screening of assays. <i>Lab on A Chip</i> , 2009 , 9, 1676-80	7.2	66
153	Ruthenium cluster-like chalcogenide as a methanol tolerant cathode catalyst in air-breathing laminar flow fuel cells. <i>Electrochimica Acta</i> , 2009 , 54, 4384-4388	6.7	65
152	Methods to study the tumor microenvironment under controlled oxygen conditions. <i>Trends in Biotechnology</i> , 2014 , 32, 556-563	15.1	64
151	Durable Cathodes and Electrolyzers for the Efficient Aqueous Electrochemical Reduction of CO ₂ . <i>ChemSusChem</i> , 2020 , 13, 855-875	8.3	64
150	Efficient Electrochemical Flow System with Improved Anode for the Conversion of CO ₂ to CO. <i>Journal of the Electrochemical Society</i> , 2014 , 161, F1124-F1131	3.9	63
149	Simple methods for the direct assembly, functionalization, and patterning of acid-terminated monolayers on Si(111). <i>Langmuir</i> , 2005 , 21, 10537-44	4	63
148	Design, fabrication, and characterization of a planar, silicon-based, monolithically integrated micro laminar flow fuel cell with a bridge-shaped microchannel cross-section. <i>Journal of Power Sources</i> , 2011 , 196, 4638-4645	8.9	61
147	Passive direct formic acid microfabricated fuel cells. <i>Journal of Power Sources</i> , 2006 , 160, 1058-1064	8.9	61
146	Microtopographically patterned surfaces promote the alignment of tenocytes and extracellular collagen. <i>Acta Biomaterialia</i> , 2010 , 6, 2580-9	10.8	60
145	Methanol dehydrogenation and oxidation on Pt(111) in alkaline solutions. <i>Langmuir</i> , 2006 , 22, 10457-64	4	60
144	Mammalian target of rapamycin and Rictor control neutrophil chemotaxis by regulating Rac/Cdc42 activity and the actin cytoskeleton. <i>Molecular Biology of the Cell</i> , 2013 , 24, 3369-80	3.5	58

143	Controlling Speciation during CO ₂ Reduction on Cu-Alloy Electrodes. <i>ACS Catalysis</i> , 2020 , 10, 672-682	13.1	58
142	Alkaline Microfluidic Hydrogen-Oxygen Fuel Cell as a Cathode Characterization Platform. <i>Journal of the Electrochemical Society</i> , 2009 , 156, B565	3.9	57
141	Second-Order Nonlinear Optical Properties of the Four Tetranitrotetrapropoxycalix[4]arene Conformers. <i>Journal of the American Chemical Society</i> , 1998 , 120, 7875-7883	16.4	56
140	Fabrication of X-ray compatible microfluidic platforms for protein crystallization. <i>Sensors and Actuators B: Chemical</i> , 2012 , 174, 1-9	8.5	53
139	Engineering redox-sensitive linkers for genetically encoded FRET-based biosensors. <i>Experimental Biology and Medicine</i> , 2008 , 233, 238-48	3.7	51
138	Modeling and Experimental Validation of Electrochemical Reduction of CO ₂ to CO in a Microfluidic Cell. <i>Journal of the Electrochemical Society</i> , 2015 , 162, F23-F32	3.9	49
137	Gold Nanoparticles on Polymer-Wrapped Carbon Nanotubes: An Efficient and Selective Catalyst for the Electroreduction of CO. <i>ChemPhysChem</i> , 2017 , 18, 3274-3279	3.2	48
136	System Design Rules for Intensifying the Electrochemical Reduction of CO ₂ to CO on Ag Nanoparticles. <i>ChemElectroChem</i> , 2020 , 7, 2001-2011	4.3	48
135	Design considerations for elastomeric normally closed microfluidic valves. <i>Sensors and Actuators B: Chemical</i> , 2011 , 160, 1216-1223	8.5	47
134	Laminar flow-based electrochemical microreactor for efficient regeneration of nicotinamide cofactors for biocatalysis. <i>Journal of the American Chemical Society</i> , 2005 , 127, 10466-7	16.4	47
133	Microfluidic Generation of Lipidic Mesophases for Membrane Protein Crystallization. <i>Crystal Growth and Design</i> , 2009 , 9, 2566-2569	3.5	44
132	Screening and optimization of protein crystallization conditions through gradual evaporation using a novel crystallization platform. <i>Journal of Applied Crystallography</i> , 2005 , 38, 988-995	3.8	43
131	Elasticity in Macrophage-Synthesized Biocrystals. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 1815-1819	16.4	42
130	The Role of Surface Defects in CO Oxidation, Methanol Oxidation, and Oxygen Reduction on Pt(111). <i>Journal of the Electrochemical Society</i> , 2007 , 154, F238	3.9	41
129	Regiospecific control of protein expression in cells cultured on two-component counter gradients of extracellular matrix proteins. <i>Langmuir</i> , 2005 , 21, 3061-8	4	41
128	Analysis of Pt/C electrode performance in a flowing-electrolyte alkaline fuel cell. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 2559-2570	6.7	40
127	Determination of Critical Supersaturation from Microdroplet Evaporation Experiments. <i>Crystal Growth and Design</i> , 2006 , 6, 1175-1180	3.5	40
126	Gravity-induced reorientation of the interface between two liquids of different densities flowing laminaarily through a microchannel. <i>Lab on A Chip</i> , 2005 , 5, 1259-63	7.2	39

125	Design rules for electrode arrangement in an air-breathing alkaline direct methanol laminar flow fuel cell. <i>Journal of Power Sources</i> , 2012 , 218, 28-33	8.9	38
124	Microfluidic radiolabeling of biomolecules with PET radiometals. <i>Nuclear Medicine and Biology</i> , 2013 , 40, 42-51	2.1	38
123	Ceramic microreactors for on-site hydrogen production from high temperature steam reforming of propane. <i>Lab on A Chip</i> , 2006 , 6, 1328-37	7.2	38
122	Combining Structural and Electrochemical Analysis of Electrodes Using Micro-Computed Tomography and a Microfluidic Fuel Cell. <i>Journal of the Electrochemical Society</i> , 2012 , 159, B292-B298	3.9	36
121	A microfluidic approach for protein structure determination at room temperature via on-chip anomalous diffraction. <i>Lab on A Chip</i> , 2013 , 13, 3183-7	7.2	35
120	A microfluidic approach to study the effect of bacterial interactions on antimicrobial susceptibility in polymicrobial cultures. <i>RSC Advances</i> , 2015 , 5, 35211-35223	3.7	35
119	Chemical Analysis of Drug Biocrystals: A Role for Counterion Transport Pathways in Intracellular Drug Disposition. <i>Molecular Pharmaceutics</i> , 2015 , 12, 2528-36	5.6	34
118	Microfluidic labeling of biomolecules with radiometals for use in nuclear medicine. <i>Lab on A Chip</i> , 2010 , 10, 3387-96	7.2	34
117	Carbon Foam Decorated with Silver Nanoparticles for Electrochemical CO ₂ Conversion. <i>Energy Technology</i> , 2017 , 5, 861-863	3.5	33
116	Electrochemical Reduction of Carbon Dioxide on Cu/CuO Core/Shell Catalysts. <i>ChemElectroChem</i> , 2014 , 1, 1577-1582	4.3	33
115	A microfluidic platform for pharmaceutical salt screening. <i>Lab on A Chip</i> , 2011 , 11, 3829-37	7.2	33
114	Supramolecular Materials: Molecular Packing of Tetranitrotetrapropoxycalix[4]arene in Highly Stable Films with Second-Order Nonlinear Optical Properties. <i>Chemistry - A European Journal</i> , 1998 , 4, 1225-1234	4.8	32
113	Cross metathesis on olefin-terminated monolayers on Si(111) using the Grubbs catalyst. <i>Langmuir</i> , 2006 , 22, 2146-55	4	31
112	High temperature continuous flow synthesis of CdSe/CdS/ZnS, CdS/ZnS, and CdSeS/ZnS nanocrystals. <i>Nanoscale</i> , 2015 , 7, 15895-903	7.7	30
111	Comprehensive energy analysis of a photovoltaic thermal water electrolyzer. <i>Applied Energy</i> , 2016 , 164, 294-302	10.7	30
110	Microfluidic approach to polymorph screening through antisolvent crystallization. <i>CrystEngComm</i> , 2012 , 14, 2404	3.3	29
109	Microfluidic Approach to Cocrystal Screening of Pharmaceutical Parent Compounds. <i>Crystal Growth and Design</i> , 2012 , 12, 6023-6034	3.5	29
108	Investigation of Electrolyte-Dependent Carbonate Formation on Gas Diffusion Electrodes for CO Electrolysis. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 15132-15142	9.5	29

107	X-ray Transparent Microfluidic Chip for Mesophase-Based Crystallization of Membrane Proteins and On-Chip Structure Determination. <i>Crystal Growth and Design</i> , 2014 , 14, 4886-4890	3.5	28
106	Development of a high-dynamic range, GFP-based FRET probe sensitive to oxidative microenvironments. <i>Experimental Biology and Medicine</i> , 2011 , 236, 681-91	3.7	28
105	Towards time-resolved serial crystallography in a microfluidic device. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2015 , 71, 823-30	1.1	27
104	Thiolene and SIFEL-based Microfluidic Platforms for Liquid-Liquid Extraction. <i>Sensors and Actuators B: Chemical</i> , 2014 , 190, 634-644	8.5	27
103	serial Laue diffraction on a microfluidic crystallization device. <i>Journal of Applied Crystallography</i> , 2014 , 47, 1975-1982	3.8	27
102	Design considerations for electrostatic microvalves with applications in poly(dimethylsiloxane)-based microfluidics. <i>Lab on A Chip</i> , 2012 , 12, 1078-88	7.2	26
101	Determination of the phase diagram for soluble and membrane proteins. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 4432-41	3.4	26
100	Multilevel microfluidics via single-exposure photolithography. <i>Journal of the American Chemical Society</i> , 2005 , 127, 7674-5	16.4	26
99	Multiplexed detection of nucleic acids in a combinatorial screening chip. <i>Lab on A Chip</i> , 2011 , 11, 1916-23	7.2	25
98	Fabrication of metallic microstructures using exposed, developed silver halide-based photographic film. <i>Analytical Chemistry</i> , 2000 , 72, 645-51	7.8	24
97	Manufacturing all-polymer laminar flow-based fuel cells. <i>Journal of Power Sources</i> , 2013 , 240, 486-493	8.9	23
96	Crystallization Optimization of Pharmaceutical Solid Forms with X-ray Compatible Microfluidic Platforms. <i>Crystal Growth and Design</i> , 2015 , 15, 1201-1209	3.5	23
95	Potential Dependence of the Local pH in a CO ₂ Reduction Electrolyzer. <i>ACS Catalysis</i> , 2021 , 11, 255-263	13.1	23
94	The Q-Cycle Mechanism of the bc Complex: A Biologist's Perspective on Atomistic Studies. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 3701-3717	3.4	22
93	Antisolvent Crystallization and Polymorph Screening of Glycine in Microfluidic Channels Using Hydrodynamic Focusing. <i>Crystal Growth and Design</i> , 2015 , 15, 3299-3306	3.5	22
92	Identification of nucleation rates in droplet-based microfluidic systems. <i>Chemical Engineering Science</i> , 2012 , 77, 235-241	4.4	22
91	Investigation of Pt, Pt ₃ Co, and Pt ₃ Co/Mo Cathodes for the ORR in a Microfluidic H ₂ /O ₂ Fuel Cell. <i>Journal of the Electrochemical Society</i> , 2010 , 157, B837	3.9	22
90	Twists and turns in the development and maintenance of the mammalian small intestine epithelium. <i>Birth Defects Research Part C: Embryo Today Reviews</i> , 2005 , 75, 58-71		22

89	Triazine-based tool box for developing peptidic PET imaging probes: syntheses, microfluidic radiolabeling, and structure-activity evaluation. <i>Bioconjugate Chemistry</i> , 2014 , 25, 761-72	6.3	21
88	An X-ray transparent microfluidic platform for screening of the phase behavior of lipidic mesophases. <i>Analyst, The</i> , 2013 , 138, 5384-95	5	21
87	The non-receptor tyrosine kinase Lyn controls neutrophil adhesion by recruiting the CrkL-C3G complex and activating Rap1 at the leading edge. <i>Journal of Cell Science</i> , 2011 , 124, 2153-64	5.3	21
86	In Situ Deposition and Patterning of Single-Walled Carbon Nanotubes by Laminar Flow and Controlled Flocculation in Microfluidic Channels. <i>Angewandte Chemie</i> , 2006 , 118, 595-599	3.6	21
85	Förster resonance energy transfer-based sensor targeting endoplasmic reticulum reveals highly oxidative environment. <i>Experimental Biology and Medicine</i> , 2012 , 237, 652-62	3.7	20
84	Multiplexed electrical sensor arrays in microfluidic networks. <i>Sensors and Actuators B: Chemical</i> , 2009 , 136, 350-358	8.5	20
83	A kinetic model to simulate protein crystal growth in an evaporation-based crystallization platform. <i>Langmuir</i> , 2007 , 23, 4516-22	4	20
82	Fabrication of Ceramic Microscale Structures. <i>Journal of the American Ceramic Society</i> , 2007 , 90, 2779-2783	3.3	20
81	Selective Electrooxidation of Glycerol to Formic Acid over Carbon Supported Ni _{1-x} M _x (M = Bi, Pd, and Au) Nanocatalysts and Coelectrolysis of CO ₂ . <i>ACS Applied Energy Materials</i> , 2020 , 3, 8725-8738	6.1	20
80	A method of cryoprotection for protein crystallography by using a microfluidic chip and its application for in situ X-ray diffraction measurements. <i>Analytical Chemistry</i> , 2015 , 87, 4194-200	7.8	19
79	Double transfer printing of small volumes of liquids. <i>Langmuir</i> , 2007 , 23, 2906-14	4	19
78	Metastable States of small-molecule solutions. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 14121-9	3.4	19
77	Mild methods to assemble and pattern organic monolayers on hydrogen-terminated Si(111). <i>Chemical Communications</i> , 2005 , 3198-200	5.8	19
76	Oscillatory behavior of neutrophils under opposing chemoattractant gradients supports a winner-take-all mechanism. <i>PLoS ONE</i> , 2014 , 9, e85726	3.7	19
75	Thiol-based antioxidants elicit mitochondrial oxidation via respiratory complex III. <i>American Journal of Physiology - Cell Physiology</i> , 2015 , 309, C81-91	5.4	18
74	A Millifluidic Reactor System for Multistep Continuous Synthesis of InP/ZnSe Nanoparticles. <i>ChemNanoMat</i> , 2018 , 4, 943-953	3.5	18
73	Microfluidic platform for the study of intercellular communication via soluble factor-cell and cell-cell paracrine signaling. <i>Biomicrofluidics</i> , 2014 , 8, 044104	3.2	18
72	Microfluidic flow-flash: method for investigating protein dynamics. <i>Analytical Chemistry</i> , 2007 , 79, 122-87.8	7.8	18

71	Materials for Micro- and Nanofluidics. <i>MRS Bulletin</i> , 2006 , 31, 87-94	3.2	18
70	Highly dispersed, single-site copper catalysts for the electroreduction of CO ₂ to methane. <i>Journal of Electroanalytical Chemistry</i> , 2020 , 875, 113862	4.1	17
69	X-ray transparent microfluidic platforms for membrane protein crystallization with microseeds. <i>Lab on A Chip</i> , 2018 , 18, 944-954	7.2	17
68	A microfluidic platform for evaporation-based salt screening of pharmaceutical parent compounds. <i>Lab on A Chip</i> , 2013 , 13, 1708-23	7.2	17
67	Second-Order Nonlinear Optical Active Calix[4]arene Polyimides Suitable for Frequency Doubling in the UV Region. <i>Chemistry of Materials</i> , 1997 , 9, 596-601	9.6	16
66	Probability of Nucleation in a Metastable Zone: Induction Supersaturation and Implications. <i>Crystal Growth and Design</i> , 2017 , 17, 1132-1145	3.5	15
65	Continuous Flow Synthesis of Anisotropic Cadmium Selenide and Zinc Selenide Nanoparticles. <i>ChemNanoMat</i> , 2017 , 3, 204-211	3.5	15
64	Two-layer multiplexed peristaltic pumps for high-density integrated microfluidics. <i>Sensors and Actuators B: Chemical</i> , 2011 , 151, 384-393	8.5	15
63	Quantitative Analysis of Single-Electrode Plots to Understand In-Situ Behavior of Individual Electrodes. <i>Journal of the Electrochemical Society</i> , 2012 , 159, B761-B769	3.9	15
62	Elasticity in Macrophage-Synthesized Biocrystals. <i>Angewandte Chemie</i> , 2017 , 129, 1841-1845	3.6	14
61	A microfluidic-based protein crystallization method in 10 micrometer-sized crystallization space. <i>CrystEngComm</i> , 2016 , 18, 7722-7727	3.3	14
60	Solvent compatible microfluidic platforms for pharmaceutical solid form screening. <i>RSC Advances</i> , 2016 , 6, 13286-13296	3.7	13
59	Control of pressure-driven components in integrated microfluidic devices using an on-chip electrostatic microvalve. <i>RSC Advances</i> , 2014 , 4, 51593-51602	3.7	13
58	Design rules for pumping and metering of highly viscous fluids in microfluidics. <i>Lab on A Chip</i> , 2010 , 10, 3112-24	7.2	13
57	Fabrication and characterization of microscale sandwich beams. <i>Journal of Materials Research</i> , 2001 , 16, 597-605	2.5	13
56	Scanning Force Microscopy Studies on Molecular Packing and Friction Anisotropy in Thin Films of Tetranitrotetrapropoxycalix[4]arene. <i>Langmuir</i> , 1998 , 14, 2801-2809	4	13
55	Crystallization and characterization of cocrystals of piroxicam and 2,5-dihydroxybenzoic acid. <i>CrystEngComm</i> , 2015 , 17, 5299-5306	3.3	12
54	Microfluidic Preparation of a ⁸⁹ Zr-Labeled Trastuzumab Single-Patient Dose. <i>Journal of Nuclear Medicine</i> , 2016 , 57, 747-52	8.9	12

53	A three-dimensional numerical model of a micro laminar flow fuel cell with a bridge-shaped microchannel cross-section. <i>Journal of Power Sources</i> , 2014 , 269, 542-549	8.9	12
52	Imaging in real-time with FRET the redox response of tumorigenic cells to glutathione perturbations in a microscale flow. <i>Integrative Biology (United Kingdom)</i> , 2011 , 3, 208-17	3.7	12
51	Cadherin and integrin regulation of epithelial cell migration. <i>Langmuir</i> , 2009 , 25, 10092-9	4	12
50	Generalized phase behavior of small molecules and nanoparticles. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 12494-9	3.4	12
49	Mechanistic Insights into Size-Focused Growth of Indium Phosphide Nanocrystals in the Presence of Trace Water. <i>Chemistry of Materials</i> , 2020 , 32, 3577-3584	9.6	11
48	Solution Coating of Pharmaceutical Nanothin Films and Multilayer Nanocomposites with Controlled Morphology and Polymorphism. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 10480-10489	9.5	11
47	Electronic Properties of a Monolayer Electrolyte Interface Obtained from Mechanistic Impedance Analysis. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 9375-9391	3.8	11
46	Binder-Focused Approaches to Improve the Stability of Cathodes for CO ₂ Electroreduction. <i>ACS Applied Energy Materials</i> , 2021 , 4, 5175-5186	6.1	11
45	Insight into the electrochemical reduction of CO ₂ on gold via surface-enhanced Raman spectroscopy and N-containing additives. <i>Journal of Solid State Electrochemistry</i> , 2016 , 20, 1149-1154	2.6	10
44	Development of a microfluidic "click chip" incorporating an immobilized Cu(I) catalyst. <i>RSC Advances</i> , 2015 , 5, 6142-6150	3.7	10
43	Unraveling the Origin of Interfacial Oxidation of InP-Based Quantum Dots: Implications for Bioimaging and Optoelectronics. <i>ACS Applied Nano Materials</i> , 2020 , 3, 12325-12333	5.6	10
42	Design, fabrication, and characterization of a proposed microchannel water electrolyzer. <i>Journal of Power Sources</i> , 2016 , 307, 122-128	8.9	10
41	Chemical and mechanical modulation of polymeric micelle assembly. <i>Nanoscale</i> , 2017 , 9, 5194-5204	7.7	9
40	Design considerations for open-well microfluidic platforms for hypoxic cell studies. <i>Biomicrofluidics</i> , 2017 , 11, 054116	3.2	9
39	Towards accelerated durability testing protocols for CO ₂ electrolysis. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 22557-22571	13	9
38	Engineering Silver-Enriched Copper Core-Shell Electrocatalysts to Enhance the Production of Ethylene and C ₂₊ Chemicals from Carbon Dioxide at Low Cell Potentials. <i>Advanced Functional Materials</i> , 2021 , 31, 2101668	15.6	9
37	Decreasing the Energy Consumption of the CO ₂ Electrolysis Process Using a Magnetic Field. <i>ACS Energy Letters</i> , 2021 , 6, 2427-2433	20.1	9
36	Polymeric microfluidic continuous flow mixer combined with hyperspectral FT-IR imaging for studying rapid biomolecular events. <i>Lab on A Chip</i> , 2019 , 19, 2598-2609	7.2	8

35	Effects of detergent β -D-glucoside and phosphate salt solutions on phase behavior of monoolein mesophases. <i>Biophysical Journal</i> , 2013 , 105, 1848-59	2.9	8
34	Mechanisms of Charge Transport through Monolayer-Modified Polycrystalline Gold Electrodes in the Absence of Redox-Active Moieties. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 4687-4705	3.8	8
33	Characterization of a [4Fe-4S]-Ferredoxin Model Based on a Concave Tetradentate Thiol Ligand System. <i>Chemische Berichte</i> , 1997 , 130, 23-34		8
32	Carbon-Based Electrodes and Catalysts for the Electroreduction of Carbon Dioxide (CO ₂) to Value-Added Chemicals. <i>Nanostructure Science and Technology</i> , 2019 , 219-251	0.9	7
31	Tailoring electrode hydrophobicity to improve anode performance in alkaline media. <i>Journal of Power Sources</i> , 2013 , 242, 581-588	8.9	7
30	Inhibition of glutathione synthesis distinctly alters mitochondrial and cytosolic redox poise. <i>Experimental Biology and Medicine</i> , 2014 , 239, 394-403	3.7	7
29	Exploring multivalent cations-based electrolytes for CO ₂ electroreduction. <i>Electrochimica Acta</i> , 2021 , 394, 139055	6.7	7
28	X-ray transparent microfluidic chips for high-throughput screening and optimization of membrane protein crystallization. <i>Biomicrofluidics</i> , 2017 , 11, 024118	3.2	6
27	Region specific enhancement of quantum dot emission using interleaved two-dimensional photonic crystals. <i>Applied Optics</i> , 2015 , 54, 2302-8	1.7	6
26	A monolithic poly(dimethylsiloxane) electrostatic actuator for controlling integrated pneumatic microsystems. <i>Sensors and Actuators A: Physical</i> , 2013 , 196, 22-29	3.9	6
25	Transient light-induced intracellular oxidation revealed by redox biosensor. <i>Biochemical and Biophysical Research Communications</i> , 2013 , 439, 517-21	3.4	6
24	Normally-Closed Electrostatic Microvalve Fabricated Using Exclusively Soft-Lithographic Techniques and Operated With Portable Electronics. <i>Journal of Microelectromechanical Systems</i> , 2013 , 22, 1251-1253	2.5	6
23	Patterning by Etching at the Nanoscale (PENs) on Si(111) through the Controlled Etching of PDMS. <i>Chemistry of Materials</i> , 2007 , 19, 2903-2909	9.6	6
22	Membraneless Fuel Cell Based on Laminar Flow 2003 , 261		6
21	Probability of Nucleation in a Metastable Zone: Cooling Crystallization and Polythermal Method. <i>Crystal Growth and Design</i> , 2017 , 17, 5823-5837	3.5	5
20	Non-Aqueous Primary Li-Air Flow Battery and Optimization of its Cathode through Experiment and Modeling. <i>ChemSusChem</i> , 2017 , 10, 4198-4206	8.3	5
19	In-situ measurement of ethanol tolerance in an operating fuel cell. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 8980-8991	6.7	5
18	Using macromolecular-crystallography beamline and microfluidic platform for small-angle diffraction studies of lipidic matrices for membrane-protein crystallization. <i>Journal of Physics: Conference Series</i> , 2013 , 425,	0.3	5

17	Electrochemistry for a Sustainable World. <i>Electrochemical Society Interface</i> , 2020 , 29, 41-42	3.6	5
16	Accelerated screening of colloidal nanocrystals using artificial neural network-assisted autonomous flow reactor technology. <i>Nanoscale</i> , 2021 , 13, 17028-17039	7.7	5
15	"Click Chip" Conjugation of Bifunctional Chelators to Biomolecules. <i>Bioconjugate Chemistry</i> , 2017 , 28, 986-994	6.3	4
14	Enhanced emission of quantum dots embedded within the high-index dielectric regions of photonic crystal slabs. <i>Applied Physics Letters</i> , 2016 , 108, 171108	3.4	4
13	Efficient Aqueous Electroreduction of CO ₂ to Formate at Low Overpotential on Indium Tin Oxide Nanocrystals. <i>Chemistry of Materials</i> ,	9.6	4
12	Cell-laden hydrogels in integrated microfluidic devices for long-term cell culture and tubulogenesis assays. <i>Small</i> , 2013 , 9, 3076-81	11	3
11	Ring-Opening Polymerization of Cyclic Esters in an Aqueous Dispersion. <i>Macromolecules</i> , 2020 , 53, 7767-7773	3.73	3
10	Modeling and Simulating Electrochemical Reduction of CO ₂ in a Microfluidic Cell. <i>Computer Aided Chemical Engineering</i> , 2014 , 639-644	0.6	2
9	Vapor Feed Direct Methanol Fuel Cell with Flowing Electrolyte. <i>ECS Transactions</i> , 2007 , 11, 1419-1424	1	2
8	Gold nanoparticles disrupt actin organization and pulmonary endothelial barriers. <i>Scientific Reports</i> , 2020 , 10, 13320	4.9	2
7	Vertical-cavity surface-emitting lasers for optical sensing in microfluidic microsystems 2009 ,		1
6	Integrated Electrical Sensor Arrays in Microfluidic Networks. <i>ECS Transactions</i> , 2006 , 3, 427-435	1	1
5	Supramolecular Materials: Molecular Packing of Tetranitrotetrapropoxycalix[4]arene in Highly Stable Films with Second-Order Nonlinear Optical Properties 1998 , 4, 1225		1
4	Crystal structure of a 2:1 piroxicam-gentisic acid co-crystal featuring neutral and zwitterionic piroxicam molecules. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2016 , 72, 1714-1717	0.7	0
3	Microfluidics for Studying Pharmacodynamics of Antibiotics 2016 , 177-202		
2	Role of Automatic Process Control in Quality by Design 2017 , 25-53		
1	New Concepts in the Chemistry and Engineering of Low-Temperature Fuel Cells 2010 , 565-610		