

Paul J A Kenis

List of Publications by Citations

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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
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