Richard M Crooks

List of Publications by Year in Descending Order

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

206 19,690 75 137 h-index g-index citations papers 8.9 21,072 217 7.03 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
206	Correlating Surface Structures and Electrochemical Activity Using Shape-Controlled Single-Pt Nanoparticles. <i>ACS Nano</i> , 2021 ,	16.7	4
205	Dual-Shaped Silver Nanoparticle Labels for Electrochemical Detection of Bioassays. <i>ACS Applied Nano Materials</i> , 2021 , 4, 10764-10770	5.6	0
204	Effect of Serum on Electrochemical Detection of Bioassays Having Ag Nanoparticle Labels. <i>ACS Sensors</i> , 2021 , 6, 1956-1962	9.2	1
203	Silver Nanocubes as Electrochemical Labels for Bioassays. <i>ACS Sensors</i> , 2021 , 6, 1111-1119	9.2	4
202	Electrochemical Cleaning Stability and Oxygen Reduction Reaction Activity of 1-2 nm Dendrimer-Encapsulated Au Nanoparticles. <i>ChemElectroChem</i> , 2021 , 8, 2545-2555	4.3	О
201	Filtering and continuously separating microplastics from water using electric field gradients formed electrochemically in the absence of buffer. <i>Chemical Science</i> , 2021 , 12, 13744-13755	9.4	О
2 00	Multilayer electrodeposition of Pt onto 1-2 nm Au nanoparticles using a hydride-termination approach. <i>Nanoscale</i> , 2020 , 12, 11026-11039	7.7	1
199	Focusing, sorting, and separating microplastics by serial faradaic ion concentration polarization. <i>Chemical Science</i> , 2020 , 11, 5547-5558	9.4	16
198	Electrochemical Detection of NT-proBNP Using a Metalloimmunoassay on a Paper Electrode Platform. <i>ACS Sensors</i> , 2020 , 5, 853-860	9.2	18
197	Hybrid paper and 3D-printed microfluidic device for electrochemical detection of Ag nanoparticle labels. <i>Lab on A Chip</i> , 2020 , 20, 1648-1657	7.2	19
196	Effect of TiOx Substrate Interactions on the Electrocatalytic Oxygen Reduction Reaction at Au Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 10045-10056	3.8	7
195	Well-Defined Nanoparticle Electrocatalysts for the Refinement of Theory. <i>Chemical Reviews</i> , 2020 , 120, 814-850	68.1	47
194	Cation-Specific Electrokinetic Separations Using Prussian Blue Intercalation Reactions. <i>ChemElectroChem</i> , 2020 , 7, 4108-4117	4.3	О
193	AuxPd(300-x) Alloy Nanoparticles for the Oxygen Reduction Reaction in Alkaline Media. <i>ChemElectroChem</i> , 2020 , 7, 3824-3831	4.3	3
192	Interactions between Oligoethylene Glycol-Capped AuNPs and Attached Peptides Control Peptide Structure. <i>Bioconjugate Chemistry</i> , 2020 , 31, 2383-2391	6.3	1
191	Testing the predictive power of theory for PdxIr(100🛭) alloy nanoparticles for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 8421-8429	13	5
190	Conjugation of an EHelical Peptide to the Surface of Gold Nanoparticles. <i>Langmuir</i> , 2019 , 35, 3363-3371	4	11

189	Effect of Chloride Oxidation on Local Electric Fields in Microelectrochemical Systems. <i>ChemElectroChem</i> , 2019 , 6, 4867-4876	4.3	3	
188	Orientation-Controlled Bioconjugation of Antibodies to Silver Nanoparticles. <i>Bioconjugate Chemistry</i> , 2019 , 30, 3078-3086	6.3	13	
187	Combined Experimental and Theoretical Study of the Structure of AuPt Nanoparticles Prepared by Galvanic Exchange. <i>Langmuir</i> , 2019 , 35, 16496-16507	4	1	
186	Oxygen Reduction Reaction on Classically Immiscible Bimetallics: A Case Study of RhAu. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 2712-2716	3.8	102	
185	Shape-controlled electrodeposition of single Pt nanocrystals onto carbon nanoelectrodes. <i>Faraday Discussions</i> , 2018 , 210, 267-280	3.6	12	
184	Continuous Redirection and Separation of Microbeads by Faradaic Ion Concentration Polarization. <i>ChemElectroChem</i> , 2018 , 5, 877-884	4.3	9	
183	Experimental and Theoretical Structural Investigation of AuPt Nanoparticles Synthesized Using a Direct Electrochemical Method. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6249-6259	16.4	24	
182	Structural characterization of heterogeneous RhAu nanoparticles from a microwave-assisted synthesis. <i>Nanoscale</i> , 2018 , 10, 22520-22532	7.7	10	
181	Detection of Silver Nanoparticles by Electrochemically Activated Galvanic Exchange. <i>Langmuir</i> , 2018 , 34, 15719-15726	4	9	
180	Electrocatalytic Study of the Oxygen Reduction Reaction at Gold Nanoparticles in the Absence and Presence of Interactions with SnO Supports. <i>Journal of the American Chemical Society</i> , 2018 , 140, 1377	5- 1 3 7 8.	5 ²⁷	
179	Beyond fossil fuel-driven nitrogen transformations. <i>Science</i> , 2018 , 360,	33.3	772	
178	Photoelectrochemical ion concentration polarization: membraneless ion filtration based on light-driven electrochemical reactions. <i>Lab on A Chip</i> , 2017 , 17, 2491-2499	7.2	7	
177	Detection of microRNA by Electrocatalytic Amplification: A General Approach for Single-Particle Biosensing. <i>Journal of the American Chemical Society</i> , 2017 , 139, 7657-7664	16.4	100	
176	Tunability of the Adsorbate Binding on Bimetallic Alloy Nanoparticles for the Optimization of Catalytic Hydrogenation. <i>Journal of the American Chemical Society</i> , 2017 , 139, 5538-5546	16.4	78	
175	Faradaic Ion Concentration Polarization on a Paper Fluidic Platform. <i>Analytical Chemistry</i> , 2017 , 89, 429	94 7 4300) 25	
174	Microelectrochemical Flow Cell for Studying Electrocatalytic Reactions on Oxide-Coated Electrodes. <i>Analytical Chemistry</i> , 2017 , 89, 11027-11035	7.8	4	
173	Structural Characterization of Rh and RhAu Dendrimer-Encapsulated Nanoparticles. <i>Langmuir</i> , 2017 , 33, 12434-12442	4	12	
172	Computationally Assisted STEM and EXAFS Characterization of Tunable Rh/Au and Rh/Ag Bimetallic Nanoparticle Catalysts. <i>Microscopy and Microanalysis</i> , 2017 , 23, 2030-2031	0.5	10	

171	Managing Heart Failure at Home With Point-of-Care Diagnostics. <i>IEEE Journal of Translational Engineering in Health and Medicine</i> , 2017 , 5, 2800206	3	10
170	Size Stability and H/CO Selectivity for Au Nanoparticles during Electrocatalytic CO Reduction. <i>Journal of the American Chemical Society</i> , 2017 , 139, 16161-16167	16.4	86
169	Microfluidic Surface Titrations of Electroactive Thin Films. <i>Langmuir</i> , 2017 , 33, 7053-7061	4	2
168	Paper-Based Sensor for Electrochemical Detection of Silver Nanoparticle Labels by Galvanic Exchange. <i>ACS Sensors</i> , 2016 , 1, 40-47	9.2	45
167	Efficient CO Oxidation Using Dendrimer-Encapsulated Pt Nanoparticles Activated with . <i>ACS Nano</i> , 2016 , 10, 8760-9	16.7	35
166	Electrocatalytic Reduction of Oxygen on Platinum Nanoparticles in the Presence and Absence of Interactions with the Electrode Surface. <i>Langmuir</i> , 2016 , 32, 9727-35	4	12
165	Addressing Colloidal Stability for Unambiguous Electroanalysis of Single Nanoparticle Impacts. Journal of Physical Chemistry Letters, 2016 , 7, 2512-7	6.4	47
164	Principles of Bipolar Electrochemistry. <i>ChemElectroChem</i> , 2016 , 3, 357-359	4.3	60
163	Quantitative electrochemical metalloimmunoassay for TFF3 in urine using a paper analytical device. <i>Analyst, The</i> , 2016 , 141, 1734-44	5	23
162	A Theoretical and Experimental In-Situ Electrochemical Infrared Spectroscopy Study of Adsorbed CO on Pt Dendrimer-Encapsulated Nanoparticles. <i>Journal of the Electrochemical Society</i> , 2016 , 163, H30	ю ¹⁹ нз	065
161	Electrocatalytic amplification of DNA-modified nanoparticle collisions enzymatic digestion. <i>Chemical Science</i> , 2016 , 7, 6450-6457	9.4	26
160	Characterization of nanometric inclusions via nanoprojectile impacts. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2016 , 34, 03H104	1.3	2
159	Concluding remarks: single entity electrochemistry one step at a time. <i>Faraday Discussions</i> , 2016 , 193, 533-547	3.6	21
158	A combined theoretical and experimental EXAFS study of the structure and dynamics of Au147 nanoparticles. <i>Catalysis Science and Technology</i> , 2016 , 6, 6879-6885	5.5	22
157	Electron Transfer Facilitated by Dendrimer-Encapsulated Pt Nanoparticles Across Ultrathin, Insulating Oxide Films. <i>Journal of the American Chemical Society</i> , 2016 , 138, 6829-37	16.4	20
156	New Functionalities for Paper-Based Sensors Lead to Simplified User Operation, Lower Limits of Detection, and New Applications. <i>Annual Review of Analytical Chemistry</i> , 2016 , 9, 183-202	12.5	80
155	Electrocatalytic amplification of nanoparticle collisions at electrodes modified with polyelectrolyte multilayer films. <i>Langmuir</i> , 2015 , 31, 876-85	4	38
154	Paper diagnostic device for quantitative electrochemical detection of ricin at picomolar levels. <i>Lab on A Chip</i> , 2015 , 15, 3707-15	7.2	39

(2014-2015)

153	Increasing the Collision Rate of Particle Impact Electroanalysis with Magnetically Guided Pt-Decorated Iron Oxide Nanoparticles. <i>ACS Nano</i> , 2015 , 9, 7583-95	16.7	43
152	Unusual Activity Trend for CO Oxidation on Pd(x)Au(140-x)@Pt Core@Shell Nanoparticle Electrocatalysts. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2562-8	6.4	17
151	A theoretical and experimental approach for correlating nanoparticle structure and electrocatalytic activity. <i>Accounts of Chemical Research</i> , 2015 , 48, 1351-7	24.3	69
150	Correlating Structure and Function of Metal Nanoparticles for Catalysis. Surface Science, 2015, 640, 65-	7 2. 8	30
149	In Situ Probing of the Active Site Geometry of Ultrathin Nanowires for the Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12597-609	16.4	43
148	Electrocatalytic Amplification of Single Nanoparticle Collisions Using DNA-Modified Surfaces. <i>Langmuir</i> , 2015 , 31, 11724-33	4	35
147	Detection of hepatitis B virus DNA with a paper electrochemical sensor. <i>Analytical Chemistry</i> , 2015 , 87, 9009-15	7.8	123
146	Direct electrochemical detection of individual collisions between magnetic microbead/silver nanoparticle conjugates and a magnetized ultramicroelectrode. <i>Chemical Science</i> , 2015 , 6, 6665-6671	9.4	28
145	Low-voltage paper isotachophoresis device for DNA focusing. <i>Lab on A Chip</i> , 2015 , 15, 4090-8	7.2	47
144	Electrochemical Activity of Dendrimer-Stabilized Tin Nanoparticles for Lithium Alloying Reactions. <i>Langmuir</i> , 2015 , 31, 6570-6	4	9
144		4-3	9 29
	Langmuir, 2015 , 31, 6570-6	4-3	29
143	Electrochemical Desalination for a Sustainable Water Future. ChemElectroChem, 2014, 1, 850-857 Electrochemistry in hollow-channel paper analytical devices. Journal of the American Chemical		29 115
143	Electrochemical Desalination for a Sustainable Water Future. <i>ChemElectroChem</i> , 2014 , 1, 850-857 Electrochemistry in hollow-channel paper analytical devices. <i>Journal of the American Chemical Society</i> , 2014 , 136, 4616-23	16.4	29 115
143 142 141	Electrochemical Desalination for a Sustainable Water Future. <i>ChemElectroChem</i> , 2014 , 1, 850-857 Electrochemistry in hollow-channel paper analytical devices. <i>Journal of the American Chemical Society</i> , 2014 , 136, 4616-23 Therapeutics: Detective work on drug dosage. <i>Nature</i> , 2014 , 505, 165-6 Single nanoparticle collisions at microfluidic microband electrodes: the effect of electrode material	16.4	29 115 1
143 142 141 140	Electrochemical Desalination for a Sustainable Water Future. ChemElectroChem, 2014, 1, 850-857 Electrochemistry in hollow-channel paper analytical devices. Journal of the American Chemical Society, 2014, 136, 4616-23 Therapeutics: Detective work on drug dosage. Nature, 2014, 505, 165-6 Single nanoparticle collisions at microfluidic microband electrodes: the effect of electrode material and mass transfer. Langmuir, 2014, 30, 13462-9 Electrochemical properties of metal-oxide-coated carbon electrodes prepared by atomic layer	16.4 50.4	29 115 1 39
143 142 141 140	Electrochemical Desalination for a Sustainable Water Future. ChemElectroChem, 2014, 1, 850-857 Electrochemistry in hollow-channel paper analytical devices. Journal of the American Chemical Society, 2014, 136, 4616-23 Therapeutics: Detective work on drug dosage. Nature, 2014, 505, 165-6 Single nanoparticle collisions at microfluidic microband electrodes: the effect of electrode material and mass transfer. Langmuir, 2014, 30, 13462-9 Electrochemical properties of metal-oxide-coated carbon electrodes prepared by atomic layer deposition. Langmuir, 2014, 30, 13707-15 Paper electrochemical device for detection of DNA and thrombin by target-induced conformational	16.4 50.4 4	29 115 1 39 9

135	Three-dimensional wax patterning of paper fluidic devices. <i>Langmuir</i> , 2014 , 30, 7030-6	4	120
134	Simple, sensitive, and quantitative electrochemical detection method for paper analytical devices. <i>Analytical Chemistry</i> , 2014 , 86, 6501-7	7.8	71
133	Wire, mesh, and fiber electrodes for paper-based electroanalytical devices. <i>Analytical Chemistry</i> , 2014 , 86, 3659-66	7.8	66
132	Multistep galvanic exchange synthesis yielding fully reduced Pt dendrimer-encapsulated nanoparticles. <i>Langmuir</i> , 2014 , 30, 15009-15	4	23
131	Low-voltage origami-paper-based electrophoretic device for rapid protein separation. <i>Analytical Chemistry</i> , 2014 , 86, 12390-7	7.8	60
130	Hollow-channel paper analytical devices. <i>Analytical Chemistry</i> , 2013 , 85, 7976-9	7.8	149
129	Electrochemically-gated delivery of analyte bands in microfluidic devices using bipolar electrodes. <i>Lab on A Chip</i> , 2013 , 13, 2292-9	7.2	23
128	Bipolar electrochemistry. Angewandte Chemie - International Edition, 2013, 52, 10438-56	16.4	460
127	Bipolare Elektrochemie. Angewandte Chemie, 2013, 125, 10632-10651	3.6	71
126	An experimental and theoretical investigation of the inversion of pd@pt core@shell dendrimer-encapsulated nanoparticles. <i>ACS Nano</i> , 2013 , 7, 9345-53	16.7	60
125	Design of Pt-shell nanoparticles with alloy cores for the oxygen reduction reaction. <i>ACS Nano</i> , 2013 , 7, 9168-72	16.7	133
124	Electrochemical detection of individual DNA hybridization events. <i>Lab on A Chip</i> , 2013 , 13, 349-54	7.2	48
123	Efficient electrocatalytic oxidation of formic acid using Au@Pt dendrimer-encapsulated nanoparticles. <i>Journal of the American Chemical Society</i> , 2013 , 135, 5521-4	16.4	93
122	Electrochemically mediated seawater desalination. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 8107-10	16.4	77
121	Highly reproducible chronoamperometric analysis in microdroplets. <i>Lab on A Chip</i> , 2013 , 13, 1364-70	7.2	19
120	A theoretical and experimental examination of systematic ligand-induced disorder in Au dendrimer-encapsulated nanoparticles. <i>Chemical Science</i> , 2013 , 4, 2912	9.4	61
119	DNA detection using origami paper analytical devices. <i>Analytical Chemistry</i> , 2013 , 85, 9713-20	7.8	102
118	Electrochemically Mediated Seawater Desalination. <i>Angewandte Chemie</i> , 2013 , 125, 8265-8268	3.6	9

(2011-2012)

117	Site-selective Cu deposition on Pt dendrimer-encapsulated nanoparticles: correlation of theory and experiment. <i>Journal of the American Chemical Society</i> , 2012 , 134, 4153-62	16.4	40
116	Dual-channel bipolar electrode focusing: simultaneous separation and enrichment of both anions and cations. <i>Lab on A Chip</i> , 2012 , 12, 4107-14	7.2	40
115	Dual-electrode microfluidic cell for characterizing electrocatalysts. Lab on A Chip, 2012, 12, 986-93	7.2	36
114	In situ structural characterization of platinum dendrimer-encapsulated oxygen reduction electrocatalysts. <i>Langmuir</i> , 2012 , 28, 1596-603	4	16
113	Enrichment of cations via bipolar electrode focusing. <i>Analytical Chemistry</i> , 2012 , 84, 7393-9	7.8	34
112	Au@Pt dendrimer encapsulated nanoparticles as model electrocatalysts for comparison of experiment and theory. <i>Chemical Science</i> , 2012 , 3, 1033	9.4	51
111	Aptamer-Based Origami Paper Analytical Device for Electrochemical Detection of Adenosine. <i>Angewandte Chemie</i> , 2012 , 124, 7031-7034	3.6	73
110	Aptamer-based origami paper analytical device for electrochemical detection of adenosine. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 6925-8	16.4	216
109	Effect of mass transfer on the oxygen reduction reaction catalyzed by platinum dendrimer encapsulated nanoparticles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 11493-7	11.5	36
108	Dendrimer-encapsulated nanoparticles: New synthetic and characterization methods and catalytic applications. <i>Chemical Science</i> , 2011 , 2, 1632	9.4	275
107	Synthesis, characterization, and electrocatalysis using Pt and Pd dendrimer-encapsulated nanoparticles prepared by galvanic exchange. <i>New Journal of Chemistry</i> , 2011 , 35, 2054	3.6	30
106	Bipolar electrode depletion: membraneless filtration of charged species using an electrogenerated electric field gradient. <i>Analyst, The</i> , 2011 , 136, 4134-7	5	32
105	Three-dimensional paper microfluidic devices assembled using the principles of origami. <i>Journal of the American Chemical Society</i> , 2011 , 133, 17564-6	16.4	397
104	Bipolar electrode focusing: tuning the electric field gradient. <i>Lab on A Chip</i> , 2011 , 11, 518-27	7.2	53
103	Characterization of Pt@Cu core@shell dendrimer-encapsulated nanoparticles synthesized by Cu underpotential deposition. <i>Langmuir</i> , 2011 , 27, 4227-35	4	48
102	Bipolar electrode focusing: faradaic ion concentration polarization. <i>Analytical Chemistry</i> , 2011 , 83, 2351	-8 .8	72
101	Pressure-driven bipolar electrochemistry. <i>Journal of the American Chemical Society</i> , 2011 , 133, 4687-9	16.4	23
100	Label-free electrochemical monitoring of concentration enrichment during bipolar electrode focusing. <i>Analytical Chemistry</i> , 2011 , 83, 6746-53	7.8	31

99	Bipolar electrodes: a useful tool for concentration, separation, and detection of analytes in microelectrochemical systems. <i>Analytical Chemistry</i> , 2010 , 82, 8766-74	7.8	262
98	Synthesis and characterization of NiSn dendrimer-encapsulated nanoparticles. <i>Langmuir</i> , 2010 , 26, 129	94-9	26
97	Electrochemical synthesis and electrocatalytic properties of Au@Pt dendrimer-encapsulated nanoparticles. <i>Journal of the American Chemical Society</i> , 2010 , 132, 10988-9	16.4	126
96	Structural analysis of PdAu dendrimer-encapsulated bimetallic nanoparticles. <i>Langmuir</i> , 2010 , 26, 1137	-46	86
95	In situ X-ray absorption analysis of ~1.8 nm dendrimer-encapsulated Pt nanoparticles during electrochemical CO oxidation. <i>ChemPhysChem</i> , 2010 , 11, 2942-50	3.2	23
94	A large-scale, wireless electrochemical bipolar electrode microarray. <i>Journal of the American Chemical Society</i> , 2009 , 131, 8364-5	16.4	190
93	Bipolar electrode focusing: simultaneous concentration enrichment and separation in a microfluidic channel containing a bipolar electrode. <i>Analytical Chemistry</i> , 2009 , 81, 8923-9	7.8	104
92	Bipolar electrode focusing: the effect of current and electric field on concentration enrichment. <i>Analytical Chemistry</i> , 2009 , 81, 10149-55	7.8	72
91	A Theoretical and Experimental Framework for Understanding Electrogenerated Chemiluminescence (ECL) Emission at Bipolar Electrodes. <i>Analytical Chemistry</i> , 2009 , 81, 6218-6225	7.8	128
90	Synthesis and Catalytic Evaluation of Dendrimer-Encapsulated Cu Nanoparticles. An Undergraduate Experiment Exploring Catalytic Nanomaterials. <i>Journal of Chemical Education</i> , 2009 , 86, 368	2.4	79
89	NMR characterization of fourth-generation PAMAM dendrimers in the presence and absence of palladium dendrimer-encapsulated nanoparticles. <i>Journal of the American Chemical Society</i> , 2009 , 131, 341-50	16.4	94
88	Electric field gradient focusing in microchannels with embedded bipolar electrode. <i>Lab on A Chip</i> , 2009 , 9, 1903-13	7.2	84
87	Structural Rearrangement of Bimetallic Alloy PdAu Nanoparticles within Dendrimer Templates to Yield Core/Shell Configurations (I) Chemistry of Materials, 2008, 20, 1019-1028	9.6	138
86	Transient effects on microchannel electrokinetic filtering with an ion-permselective membrane. <i>Analytical Chemistry</i> , 2008 , 80, 1039-48	7.8	95
85	Periodicity and Atomic Ordering in Nanosized Particles of Crystals. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 8907-8911	3.8	68
84	Electrokinetics in microfluidic channels containing a floating electrode. <i>Journal of the American Chemical Society</i> , 2008 , 130, 10480-1	16.4	88
83	Synthesis and Characterization of Pt Dendrimer-Encapsulated Nanoparticles: Effect of the Template on Nanoparticle Formation. <i>Chemistry of Materials</i> , 2008 , 20, 5218-5228	9.6	126
82	Magnetic properties of dendrimer-encapsulated iron nanoparticles containing an average of 55 and 147 atoms. <i>New Journal of Chemistry</i> , 2007 , 31, 1349	3.6	39

(2003-2007)

81	Effect of particle size on the kinetics of the electrocatalytic oxygen reduction reaction catalyzed by Pt dendrimer-encapsulated nanoparticles. <i>Langmuir</i> , 2007 , 23, 11901-6	4	134
80	Extraction of Metal Nanoparticles from within Dendrimer Templates. ACS Symposium Series, 2006, 215-	2894	4
79	Effect of Pd nanoparticle size on the catalytic hydrogenation of allyl alcohol. <i>Journal of the American Chemical Society</i> , 2006 , 128, 4510-1	16.4	313
78	Size-selective catalytic activity of Pd nanoparticles encapsulated within end-group functionalized dendrimers. <i>Langmuir</i> , 2005 , 21, 10209-13	4	83
77	Synthesis, characterization, and applications of dendrimer-encapsulated nanoparticles. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 692-704	3.4	782
76	Extraction of Au nanoparticles having narrow size distributions from within dendrimer templates. <i>Journal of the American Chemical Society</i> , 2004 , 126, 16170-8	16.4	119
75	Separation of Dendrimer-Encapsulated Au and Ag Nanoparticles by Selective Extraction. <i>Chemistry of Materials</i> , 2004 , 16, 4202-4204	9.6	45
74	Bimetallic palladium-gold dendrimer-encapsulated catalysts. <i>Journal of the American Chemical Society</i> , 2004 , 126, 15583-91	16.4	305
73	Preparation and Characterization of 1½ nm Dendrimer-Encapsulated Gold Nanoparticles Having Very Narrow Size Distributions. <i>Chemistry of Materials</i> , 2004 , 16, 167-172	9.6	300
72	Titania-Supported Au and Pd Composites Synthesized from Dendrimer-Encapsulated Metal Nanoparticle Precursors. <i>Chemistry of Materials</i> , 2004 , 16, 5682-5688	9.6	64
71	Synthesis, characterization, and surface immobilization of platinum and palladium nanoparticles encapsulated within amine-terminated poly(amidoamine) dendrimers. <i>Langmuir</i> , 2004 , 20, 2915-20	4	147
70	Dendrimer-encapsulated metal nanoparticles and their applications to catalysis. <i>Comptes Rendus Chimie</i> , 2003 , 6, 1049-1059	2.7	191
69	Bimetallic palladium-platinum dendrimer-encapsulated catalysts. <i>Journal of the American Chemical Society</i> , 2003 , 125, 3708-9	16.4	273
68	Synthesis, Characterization, and Surface Immobilization of Metal Nanoparticles Encapsulated within Bifunctionalized Dendrimers. <i>Langmuir</i> , 2003 , 19, 10420-10425	4	76
67	Determination of the Intrinsic Proton Binding Constants for Poly(amidoamine) Dendrimers via Potentiometric pH Titration. <i>Macromolecules</i> , 2003 , 36, 5725-5731	5.5	169
66	Electrokinetic trapping and concentration enrichment of DNA in a microfluidic channel. <i>Journal of the American Chemical Society</i> , 2003 , 125, 13026-7	16.4	87
65	Synthesis, Characterization, and Stability of Dendrimer-Encapsulated Palladium Nanoparticles. <i>Chemistry of Materials</i> , 2003 , 15, 3873-3878	9.6	186
64	Preparation of Dendrimer-Encapsulated Metal Nanoparticles Using Organic Solvents. <i>Chemistry of Materials</i> , 2003 , 15, 3463-3467	9.6	82

63	Dendrimer-Mediated Immobilization of Catalytic Nanoparticles on Flat, Solid Supports. <i>Langmuir</i> , 2002 , 18, 8231-8236	4	70
62	Patterning Bacteria within Hyperbranched Polymer Film Templates. <i>Langmuir</i> , 2002 , 18, 9914-9917	4	70
61	Efficient mixing and reactions within microfluidic channels using microbead-supported catalysts. Journal of the American Chemical Society, 2002 , 124, 13360-1	16.4	172
60	Interactions between Dendrimers and Charged Probe Molecules. 1. Theoretical Methods for Simulating Proton and Metal Ion Binding to Symmetric Polydentate Ligands. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 5864-5872	3.4	32
59	Electrochemical Rectification Using Mixed Monolayers of Redox-Active Ferrocenyl Dendrimers andn-Alkanethiols. <i>Langmuir</i> , 2002 , 18, 6981-6987	4	64
58	Electroactive Composite Dendrimer Films Containing Thiophene-Terminated Poly(amidoamine) Dendrimers Cross-Linked by Poly(3-methylthiophene). <i>Chemistry of Materials</i> , 2002 , 14, 3995-4001	9.6	26
57	Preparation of polycyclodextrin hollow spheres by templating gold nanoparticles. <i>Chemical Communications</i> , 2001 , 359-360	5.8	49
56	Dendrimer-encapsulated metal nanoparticles: synthesis, characterization, and applications to catalysis. <i>Accounts of Chemical Research</i> , 2001 , 34, 181-90	24.3	1839
55	Size-Selective Hydrogenation of Olefins by Dendrimer-Encapsulated Palladium Nanoparticles. <i>Journal of the American Chemical Society</i> , 2001 , 123, 6840-6846	16.4	319
54	Catalysis in supercritical CO2 using dendrimer-encapsulated palladium nanoparticles. <i>Chemical Communications</i> , 2001 , 2290-2291	5.8	83
53	Characterization of Poly(amidoamine) Dendrimers and Their Complexes with Cu2+ by Matrix-Assisted Laser Desorption Ionization Mass Spectrometry. <i>Macromolecules</i> , 2001 , 34, 3567-3573	5.5	103
52	Electrochemical and Spectroscopic Characterization of Viologen-Functionalized Poly(Amidoamine) Dendrimers. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 8885-8894	3.4	44
51	Two New Approaches for Patterning Polymer Films Using Templates Prepared by Microcontact Printing. <i>Macromolecules</i> , 2001 , 34, 1230-1236	5.5	39
50	Photophysical Properties of Pyrene-Functionalized Poly(propylene imine) Dendrimers. <i>Macromolecules</i> , 2000 , 33, 9034-9039	5.5	79
49	Synthesis of a Three-Layer Organic Thin Film Prepared by Sequential Reactions in the Absence of Solvents. <i>Langmuir</i> , 2000 , 16, 7783-7788	4	10
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