Richard M Crooks

List of Publications by Year
in descending order

211 papers	22,596 citations	80 h-index	146 g-index
217 all docs	217 docs citations	217 times ranked	17439 citing authors

6254

8630

#	Article	IF	Citations
1	Electrochemical pH regulation in droplet microfluidics. Lab on A Chip, 2022, 22, 632-640.	6.0	7
2	Effect of Intermediate Semiconducting TiOx Thin Films on Nanoparticle-Mediated Electron Transfer: Electrooxidation of CO. Nanomaterials, 2022, 12, 855.	4.1	2
3	Detection Efficiency of Ag Nanoparticle Labels for a Heart Failure Marker Using Linear and Square-Wave Anodic Stripping Voltammetry. Biosensors, 2022, 12, 203.	4.7	7
4	Plastic-based lateral flow immunoassay device for electrochemical detection of NT-proBNP. Analyst, The, 2022, 147, 2460-2469.	3.5	5
5	Enriching Cations Using Electric Field Gradients Generated by Bipolar Electrodes in the Absence of Buffer. ChemElectroChem, 2022, 9, .	3.4	2
6	Single atoms and small clusters of atoms may accompany Au and Pd dendrimer-encapsulated nanoparticles. Soft Matter, 2022, 18, 5067-5073.	2.7	5
7	Paper Biosensor for the Detection of NT-proBNP Using Silver Nanodisks as Electrochemical Labels. Nanomaterials, 2022, 12, 2254.	4.1	5
8	Silver Nanocubes as Electrochemical Labels for Bioassays. ACS Sensors, 2021, 6, 1111-1119.	7.8	13
9	Effect of Serum on Electrochemical Detection of Bioassays Having Ag Nanoparticle Labels. ACS Sensors, 2021, 6, 1956-1962.	7.8	7
10	Electrochemical Cleaning Stability and Oxygen Reduction Reaction Activity of 1â€2â€‰nm Dendrimerâ€Encapsulated Au Nanoparticles. ChemElectroChem, 2021, 8, 2545-2555.	3.4	5
11	Filtering and continuously separating microplastics from water using electric field gradients formed electrochemically in the absence of buffer. Chemical Science, 2021, 12, 13744-13755.	7.4	11
12	Dual-Shaped Silver Nanoparticle Labels for Electrochemical Detection of Bioassays. ACS Applied Nano Materials, 2021, 4, 10764-10770.	5.0	7
13	Correlating Surface Structures and Electrochemical Activity Using Shape-Controlled Single-Pt Nanoparticles. ACS Nano, 2021, 15, 17926-17937.	14.6	11
14	Well-Defined Nanoparticle Electrocatalysts for the Refinement of Theory. Chemical Reviews, 2020, 120, 814-850.	47.7	75
15	Cationâ€Specific Electrokinetic Separations Using Prussian Blue Intercalation Reactions. ChemElectroChem, 2020, 7, 4108-4117.	3.4	1
16	Au_{<i>x</i>}Pd_(300â€<i>x</i>) Alloy Nanoparticles for the Oxygen Reduction Reaction in Alkaline Media. ChemElectroChem, 2020, 7, 3824-3831.	3.4	9
17	Interactions between Oligoethylene Glycol-Capped AuNPs and Attached Peptides Control Peptide Structure. Bioconjugate Chemistry, 2020, 31, 2383-2391.	3.6	5
18	Multilayer electrodeposition of Pt onto 1â€"2 nm Au nanoparticles using a hydride-termination approach. Nanoscale, 2020, 12, 11026-11039.	5.6	3

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19	Focusing, sorting, and separating microplastics by serial faradaic ion concentration polarization. Chemical Science, 2020, 11, 5547-5558.	7.4	30
20	Electrochemical Detection of NT-proBNP Using a Metalloimmunoassay on a Paper Electrode Platform. ACS Sensors, 2020, 5, 853-860.	7.8	35
21	Hybrid paper and 3D-printed microfluidic device for electrochemical detection of Ag nanoparticle labels. Lab on A Chip, 2020, 20, 1648-1657.	6.0	27
22	Effect of TiO_{<i>x</i>} Substrate Interactions on the Electrocatalytic Oxygen Reduction Reaction at Au Nanoparticles. Journal of Physical Chemistry C, 2020, 124, 10045-10056.	3.1	14
23	Testing the predictive power of theory for Pd_xIr_(100âˆ’x) alloy nanoparticles for the oxygen reduction reaction. Journal of Materials Chemistry A, 2020, 8, 8421-8429.	10.3	9
24	Effect of Chloride Oxidation on Local Electric Fields in Microelectrochemical Systems. ChemElectroChem, 2019, 6, 4867-4876.	3.4	3
25	Orientation-Controlled Bioconjugation of Antibodies to Silver Nanoparticles. Bioconjugate Chemistry, 2019, 30, 3078-3086.	3.6	26
26	Conjugation of an Î±-Helical Peptide to the Surface of Gold Nanoparticles. Langmuir, 2019, 35, 3363-3371.	3.5	19
27	Combined Experimental and Theoretical Study of the Structure of AuPt Nanoparticles Prepared by Galvanic Exchange. Langmuir, 2019, 35, 16496-16507.	3.5	1
28	Oxygen Reduction Reaction on Classically Immiscible Bimetallics: A Case Study of RhAu. Journal of Physical Chemistry C, 2018, 122, 2712-2716.	3.1	123
29	Shape-controlled electrodeposition of single Pt nanocrystals onto carbon nanoelectrodes. Faraday Discussions, 2018, 210, 267-280.	3.2	13
30	Continuous Redirection and Separation of Microbeads by Faradaic Ion Concentration Polarization. ChemElectroChem, 2018, 5, 877-884.	3.4	14
31	Structural characterization of heterogeneous RhAu nanoparticles from a microwave-assisted synthesis. Nanoscale, 2018, 10, 22520-22532.	5.6	15
32	Detection of Silver Nanoparticles by Electrochemically Activated Galvanic Exchange. Langmuir, 2018, 34, 15719-15726.	3.5	14
33	Highlights of the Langmuir 2018 Editorial Advisory Board. Langmuir, 2018, 34, 12233-12233.	3.5	1
34	Electrocatalytic Study of the Oxygen Reduction Reaction at Gold Nanoparticles in the Absence and Presence of Interactions with SnO_{<i>x</i>} Supports. Journal of the American Chemical Society, 2018, 140, 13775-13785.	13.7	42
35	Beyond fossil fuelâ€"driven nitrogen transformations. Science, 2018, 360, .	12.6	1,379
36	Experimental and Theoretical Structural Investigation of AuPt Nanoparticles Synthesized Using a Direct Electrochemical Method. Journal of the American Chemical Society, 2018, 140, 6249-6259.	13.7	33

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37	Photoelectrochemical ion concentration polarization: membraneless ion filtration based on light-driven electrochemical reactions. Lab on A Chip, 2017, 17, 2491-2499.	6.0	9
38	Detection of microRNA by Electrocatalytic Amplification: A General Approach for Single-Particle Biosensing. Journal of the American Chemical Society, 2017, 139, 7657-7664.	13.7	124
39	Tunability of the Adsorbate Binding on Bimetallic Alloy Nanoparticles for the Optimization of Catalytic Hydrogenation. Journal of the American Chemical Society, 2017, 139, 5538-5546.	13.7	96
40	Faradaic Ion Concentration Polarization on a Paper Fluidic Platform. Analytical Chemistry, 2017, 89, 4294-4300.	6.5	31
41	Microelectrochemical Flow Cell for Studying Electrocatalytic Reactions on Oxide-Coated Electrodes. Analytical Chemistry, 2017, 89, 11027-11035.	6.5	9
42	Structural Characterization of Rh and RhAu Dendrimer-Encapsulated Nanoparticles. Langmuir, 2017, 33, 12434-12442.	3.5	16
43	Computationally Assisted STEM and EXAFS Characterization of Tunable Rh/Au and Rh/Ag Bimetallic Nanoparticle Catalysts. Microscopy and Microanalysis, 2017, 23, 2030-2031.	0.4	10
44	Managing Heart Failure at Home With Point-of-Care Diagnostics. IEEE Journal of Translational Engineering in Health and Medicine, 2017, 5, 1-6.	3.7	17
45	Size Stability and H₂/CO Selectivity for Au Nanoparticles during Electrocatalytic CO₂ Reduction. Journal of the American Chemical Society, 2017, 139, 16161-16167.	13.7	113
46	Microfluidic Surface Titrations of Electroactive Thin Films. Langmuir, 2017, 33, 7053-7061.	3.5	5
47	Electrocatalytic amplification of DNA-modified nanoparticle collisions via enzymatic digestion. Chemical Science, 2016, 7, 6450-6457.	7.4	32
48	Characterization of nanometric inclusions via nanoprojectile impacts. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, .	1.2	3
49	Concluding remarks: single entity electrochemistry one step at a time. Faraday Discussions, 2016, 193, 533-547.	3.2	28
50	A Compelling Case for Bipolar Electrochemistry. ChemElectroChem, 2016, 3, 351-352.	3.4	30
51	A combined theoretical and experimental EXAFS study of the structure and dynamics of Au₁₄₇ nanoparticles. Catalysis Science and Technology, 2016, 6, 6879-6885.	4.1	26
52	Electron Transfer Facilitated by Dendrimer-Encapsulated Pt Nanoparticles Across Ultrathin, Insulating Oxide Films. Journal of the American Chemical Society, 2016, 138, 6829-6837.	13.7	24
53	New Functionalities for Paper-Based Sensors Lead to Simplified User Operation, Lower Limits of Detection, and New Applications. Annual Review of Analytical Chemistry, 2016, 9, 183-202.	5.4	93
54	Efficient CO Oxidation Using Dendrimer-Encapsulated Pt Nanoparticles Activated with <2% Cu Surface Atoms. ACS Nano, 2016, 10, 8760-8769.	14.6	39

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55	Electrocatalytic Reduction of Oxygen on Platinum Nanoparticles in the Presence and Absence of Interactions with the Electrode Surface. Langmuir, 2016, 32, 9727-9735.	3.5	14
56	Addressing Colloidal Stability for Unambiguous Electroanalysis of Single Nanoparticle Impacts. Journal of Physical Chemistry Letters, 2016, 7, 2512-2517.	4.6	53
57	Principles of Bipolar Electrochemistry. ChemElectroChem, 2016, 3, 357-359.	3.4	94
58	Quantitative electrochemical metalloimmunoassay for TFF3 in urine using a paper analytical device. Analyst, The, 2016, 141, 1734-1744.	3.5	26
59	A Theoretical and Experimental In-Situ Electrochemical Infrared Spectroscopy Study of Adsorbed CO on Pt Dendrimer-Encapsulated Nanoparticles. Journal of the Electrochemical Society, 2016, 163, H3061-H3065.	2.9	10
60	Paper-Based Sensor for Electrochemical Detection of Silver Nanoparticle Labels by Galvanic Exchange. ACS Sensors, 2016, 1, 40-47.	7.8	55
61	Electrochemical Activity of Dendrimer-Stabilized Tin Nanoparticles for Lithium Alloying Reactions. Langmuir, 2015, 31, 6570-6576.	3.5	10
62	Electrocatalytic Amplification of Nanoparticle Collisions at Electrodes Modified with Polyelectrolyte Multilayer Films. Langmuir, 2015, 31, 876-885.	3.5	42
63	Paper diagnostic device for quantitative electrochemical detection of ricin at picomolar levels. Lab on A Chip, 2015, 15, 3707-3715.	6.0	46
64	Increasing the Collision Rate of Particle Impact Electroanalysis with Magnetically Guided Pt-Decorated Iron Oxide Nanoparticles. ACS Nano, 2015, 9, 7583-7595.	14.6	47
65	Unusual Activity Trend for CO Oxidation on Pd_{<i>x</i>}Au_{140â€“<i>x</i>}@Pt Core@Shell Nanoparticle Electrocatalysts. Journal of Physical Chemistry Letters, 2015, 6, 2562-2568.	4.6	18
66	A Theoretical and Experimental Approach for Correlating Nanoparticle Structure and Electrocatalytic Activity. Accounts of Chemical Research, 2015, 48, 1351-1357.	15.6	78
67	Correlating Structure and Function of Metal Nanoparticles for Catalysis. Surface Science, 2015, 640, 65-72.	1.9	35
68	In Situ Probing of the Active Site Geometry of Ultrathin Nanowires for the Oxygen Reduction Reaction. Journal of the American Chemical Society, 2015, 137, 12597-12609.	13.7	46
69	Electrocatalytic Amplification of Single Nanoparticle Collisions Using DNA-Modified Surfaces. Langmuir, 2015, 31, 11724-11733.	3.5	41
70	Detection of Hepatitis B Virus DNA with a Paper Electrochemical Sensor. Analytical Chemistry, 2015, 87, 9009-9015.	6.5	150
71	Direct electrochemical detection of individual collisions between magnetic microbead/silver nanoparticle conjugates and a magnetized ultramicroelectrode. Chemical Science, 2015, 6, 6665-6671.	7.4	31
72	Low-voltage paper isotachophoresis device for DNA focusing. Lab on A Chip, 2015, 15, 4090-4098.	6.0	54

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73	Multistep Galvanic Exchange Synthesis Yielding Fully Reduced Pt Dendrimer-Encapsulated Nanoparticles. Langmuir, 2014, 30, 15009-15015.	3.5	25
74	Low-Voltage Origami-Paper-Based Electrophoretic Device for Rapid Protein Separation. Analytical Chemistry, 2014, 86, 12390-12397.	6.5	72
75	Electrochemical Desalination for a Sustainable Water Future. ChemElectroChem, 2014, 1, 850-857.	3.4	37
76	Electrochemistry in Hollow-Channel Paper Analytical Devices. Journal of the American Chemical Society, 2014, 136, 4616-4623.	13.7	129
77	Detective work on drug dosage. Nature, 2014, 505, 165-166.	27.8	3
78	Single Nanoparticle Collisions at Microfluidic Microband Electrodes: The Effect of Electrode Material and Mass Transfer. Langmuir, 2014, 30, 13462-13469.	3.5	44
79	Electrochemical Properties of Metal-Oxide-Coated Carbon Electrodes Prepared by Atomic Layer Deposition. Langmuir, 2014, 30, 13707-13715.	3.5	13
80	Paper Electrochemical Device for Detection of DNA and Thrombin by Target-Induced Conformational Switching. Analytical Chemistry, 2014, 86, 6166-6170.	6.5	149
81	High-Efficiency Generation-Collection Microelectrochemical Platform for Interrogating Electroactive Thin Films. Analytical Chemistry, 2014, 86, 9962-9969.	6.5	11
82	Evaluating Electrocatalysts for the Hydrogen Evolution Reaction Using Bipolar Electrode Arrays: Bi- and Trimetallic Combinations of Co, Fe, Ni, Mo, and W. ACS Catalysis, 2014, 4, 1332-1339.	11.2	83
83	Three-Dimensional Wax Patterning of Paper Fluidic Devices. Langmuir, 2014, 30, 7030-7036.	3.5	135
84	Simple, Sensitive, and Quantitative Electrochemical Detection Method for Paper Analytical Devices. Analytical Chemistry, 2014, 86, 6501-6507.	6.5	82
85	Wire, Mesh, and Fiber Electrodes for Paper-Based Electroanalytical Devices. Analytical Chemistry, 2014, 86, 3659-3666.	6.5	76
86	Hollow-Channel Paper Analytical Devices. Analytical Chemistry, 2013, 85, 7976-7979.	6.5	159
87	Electrochemically-gated delivery of analyte bands in microfluidic devices using bipolar electrodes. Lab on A Chip, 2013, 13, 2292.	6.0	26
88	Bipolar Electrochemistry. Angewandte Chemie - International Edition, 2013, 52, 10438-10456.	13.8	588
89	An Experimental and Theoretical Investigation of the Inversion of Pd@Pt Core@Shell Dendrimer-Encapsulated Nanoparticles. ACS Nano, 2013, 7, 9345-9353.	14.6	75
90	Design of Pt-Shell Nanoparticles with Alloy Cores for the Oxygen Reduction Reaction. ACS Nano, 2013, 7, 9168-9172.	14.6	141

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91	Electrochemical detection of individual DNA hybridization events. Lab on A Chip, 2013, 13, 349-354.	6.0	53
92	Efficient Electrocatalytic Oxidation of Formic Acid Using Au@Pt Dendrimer-Encapsulated Nanoparticles. Journal of the American Chemical Society, 2013, 135, 5521-5524.	13.7	103
93	Electrochemically Mediated Seawater Desalination. Angewandte Chemie - International Edition, 2013, 52, 8107-8110.	13.8	89
94	Highly reproducible chronoamperometric analysis in microdroplets. Lab on A Chip, 2013, 13, 1364.	6.0	21
95	A theoretical and experimental examination of systematic ligand-induced disorder in Au dendrimer-encapsulated nanoparticles. Chemical Science, 2013, 4, 2912.	7.4	63
96	DNA Detection Using Origami Paper Analytical Devices. Analytical Chemistry, 2013, 85, 9713-9720.	6.5	109
97	Effect of mass transfer on the oxygen reduction reaction catalyzed by platinum dendrimer encapsulated nanoparticles. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11493-11497.	7.1	47
98	Site-Selective Cu Deposition on Pt Dendrimer-Encapsulated Nanoparticles: Correlation of Theory and Experiment. Journal of the American Chemical Society, 2012, 134, 4153-4162.	13.7	44
99	Dual-channel bipolar electrode focusing: simultaneous separation and enrichment of both anions and cations. Lab on A Chip, 2012, 12, 4107.	6.0	45
100	Dual-electrode microfluidic cell for characterizing electrocatalysts. Lab on A Chip, 2012, 12, 986.	6.0	40
101	In Situ Structural Characterization of Platinum Dendrimer-Encapsulated Oxygen Reduction Electrocatalysts. Langmuir, 2012, 28, 1596-1603.	3.5	17
102	Enrichment of Cations via Bipolar Electrode Focusing. Analytical Chemistry, 2012, 84, 7393-7399.	6.5	37
103	Au@Pt dendrimer encapsulated nanoparticles as model electrocatalysts for comparison of experiment and theory. Chemical Science, 2012, 3, 1033.	7.4	56
104	Aptamerâ€Based Origami Paper Analytical Device for Electrochemical Detection of Adenosine. Angewandte Chemie - International Edition, 2012, 51, 6925-6928.	13.8	239
105	Bipolar electrode focusing: tuning the electric field gradient. Lab on A Chip, 2011, 11, 518-527.	6.0	65
106	Characterization of Pt@Cu Core@Shell Dendrimer-Encapsulated Nanoparticles Synthesized by Cu Underpotential Deposition. Langmuir, 2011, 27, 4227-4235.	3.5	50
107	Bipolar Electrode Focusing: Faradaic Ion Concentration Polarization. Analytical Chemistry, 2011, 83, 2351-2358.	6.5	83
108	Pressure-Driven Bipolar Electrochemistry. Journal of the American Chemical Society, 2011, 133, 4687-4689.	13.7	27

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109	Label-Free Electrochemical Monitoring of Concentration Enrichment during Bipolar Electrode Focusing. Analytical Chemistry, 2011, 83, 6746-6753.	6.5	31
110	Dendrimer-encapsulated nanoparticles: New synthetic and characterization methods and catalytic applications. Chemical Science, 2011, 2, 1632.	7.4	300
111	Synthesis, characterization, and electrocatalysis using Pt and Pd dendrimer-encapsulated nanoparticles prepared by galvanic exchange. New Journal of Chemistry, 2011, 35, 2054.	2.8	37
112	Bipolar electrode depletion: membraneless filtration of charged species using an electrogenerated electric field gradient. Analyst, The, 2011, 136, 4134.	3.5	35
113	Three-Dimensional Paper Microfluidic Devices Assembled Using the Principles of Origami. Journal of the American Chemical Society, 2011, 133, 17564-17566.	13.7	466
114	In situ Xâ€ray Absorption Analysis of â^¼1.8 nm Dendrimerâ€Encapsulated Pt Nanoparticles during Electrochemical CO Oxidation. ChemPhysChem, 2010, 11, 2942-2950.	2.1	27
115	Bipolar Electrodes: A Useful Tool for Concentration, Separation, and Detection of Analytes in Microelectrochemical Systems. Analytical Chemistry, 2010, 82, 8766-8774.	6.5	295
116	Synthesis and Characterization of NiSn Dendrimer-Encapsulated Nanoparticles. Langmuir, 2010, 26, 12994-12999.	3.5	26
117	Electrochemical Synthesis and Electrocatalytic Properties of Au@Pt Dendrimer-Encapsulated Nanoparticles. Journal of the American Chemical Society, 2010, 132, 10988-10989.	13.7	135
118	Structural Analysis of PdAu Dendrimer-Encapsulated Bimetallic Nanoparticles. Langmuir, 2010, 26, 1137-1146.	3.5	86
119	A Large-Scale, Wireless Electrochemical Bipolar Electrode Microarray. Journal of the American Chemical Society, 2009, 131, 8364-8365.	13.7	213
120	Bipolar Electrode Focusing: Simultaneous Concentration Enrichment and Separation in a Microfluidic Channel Containing a Bipolar Electrode. Analytical Chemistry, 2009, 81, 8923-8929.	6.5	111
121	Bipolar Electrode Focusing: The Effect of Current and Electric Field on Concentration Enrichment. Analytical Chemistry, 2009, 81, 10149-10155.	6.5	81
122	A Theoretical and Experimental Framework for Understanding Electrogenerated Chemiluminescence (ECL) Emission at Bipolar Electrodes. Analytical Chemistry, 2009, 81, 6218-6225.	6.5	138
123	Synthesis and Catalytic Evaluation of Dendrimer-Encapsulated Cu Nanoparticles. An Undergraduate Experiment Exploring Catalytic Nanomaterials. Journal of Chemical Education, 2009, 86, 368.	2.3	86
124	NMR Characterization of Fourth-Generation PAMAM Dendrimers in the Presence and Absence of Palladium Dendrimer-Encapsulated Nanoparticles. Journal of the American Chemical Society, 2009, 131, 341-350.	13.7	104
125	Electric field gradient focusing in microchannels with embedded bipolar electrode. Lab on A Chip, 2009, 9, 1903.	6.0	93
126	Structural Rearrangement of Bimetallic Alloy PdAu Nanoparticles within Dendrimer Templates to Yield Core/Shell Configurations. Chemistry of Materials, 2008, 20, 1019-1028.	6.7	149

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127	Transient Effects on Microchannel Electrokinetic Filtering with an Ion-Permselective Membrane. Analytical Chemistry, 2008, 80, 1039-1048.	6.5	103
128	Periodicity and Atomic Ordering in Nanosized Particles of Crystals. Journal of Physical Chemistry C, 2008, 112, 8907-8911.	3.1	70
129	Electrokinetics in Microfluidic Channels Containing a Floating Electrode. Journal of the American Chemical Society, 2008, 130, 10480-10481.	13.7	100
130	Synthesis and Characterization of Pt Dendrimer-Encapsulated Nanoparticles: Effect of the Template on Nanoparticle Formation. Chemistry of Materials, 2008, 20, 5218-5228.	6.7	135
131	Magnetic properties of dendrimer-encapsulated iron nanoparticles containing an average of 55 and 147 atoms. New Journal of Chemistry, 2007, 31, 1349.	2.8	43
132	Effect of Particle Size on the Kinetics of the Electrocatalytic Oxygen Reduction Reaction Catalyzed by Pt Dendrimer-Encapsulated Nanoparticles. Langmuir, 2007, 23, 11901-11906.	3.5	147
133	Effect of Pd Nanoparticle Size on the Catalytic Hydrogenation of Allyl Alcohol. Journal of the American Chemical Society, 2006, 128, 4510-4511.	13.7	350
134	Extraction of Metal Nanoparticles from within Dendrimer Templates. ACS Symposium Series, 2006, , 215-229.	0.5	4
135	Size-Selective Catalytic Activity of Pd Nanoparticles Encapsulated within End-Group Functionalized Dendrimers. Langmuir, 2005, 21, 10209-10213.	3.5	93
136	Synthesis, Characterization, and Applications of Dendrimer-Encapsulated Nanoparticles. Journal of Physical Chemistry B, 2005, 109, 692-704.	2.6	843
137	Extraction of Au Nanoparticles Having Narrow Size Distributions from within Dendrimer Templates. Journal of the American Chemical Society, 2004, 126, 16170-16178.	13.7	128
138	Separation of Dendrimer-Encapsulated Au and Ag Nanoparticles by Selective Extraction. Chemistry of Materials, 2004, 16, 4202-4204.	6.7	50
139	Bimetallic Palladiumâ˘'Gold Dendrimer-Encapsulated Catalysts. Journal of the American Chemical Society, 2004, 126, 15583-15591.	13.7	328
140	Preparation and Characterization of 1â˘'2 nm Dendrimer-Encapsulated Gold Nanoparticles Having Very Narrow Size Distributions. Chemistry of Materials, 2004, 16, 167-172.	6.7	331
141	Titania-Supported Au and Pd Composites Synthesized from Dendrimer-Encapsulated Metal Nanoparticle Precursors. Chemistry of Materials, 2004, 16, 5682-5688.	6.7	74
142	Synthesis, Characterization, and Surface Immobilization of Platinum and Palladium Nanoparticles Encapsulated within Amine-Terminated Poly(amidoamine) Dendrimers. Langmuir, 2004, 20, 2915-2920.	3.5	159
143	Dendrimer-encapsulated metal nanoparticles and their applications to catalysis. Comptes Rendus Chimie, 2003, 6, 1049-1059.	0.5	209
144	Bimetallic Palladiumâ˘'Platinum Dendrimer-Encapsulated Catalysts. Journal of the American Chemical Society, 2003, 125, 3708-3709.	13.7	302

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145	Synthesis, Characterization, and Surface Immobilization of Metal Nanoparticles Encapsulated within Bifunctionalized Dendrimers. Langmuir, 2003, 19, 10420-10425.	3.5	84
146	Determination of the Intrinsic Proton Binding Constants for Poly(amidoamine) Dendrimers via Potentiometric pH Titration. Macromolecules, 2003, 36, 5725-5731.	4.8	177
147	Electrokinetic Trapping and Concentration Enrichment of DNA in a Microfluidic Channel. Journal of the American Chemical Society, 2003, 125, 13026-13027.	13.7	94
148	Synthesis, Characterization, and Stability of Dendrimer-Encapsulated Palladium Nanoparticles. Chemistry of Materials, 2003, 15, 3873-3878.	6.7	196
149	Preparation of Dendrimer-Encapsulated Metal Nanoparticles Using Organic Solvents. Chemistry of Materials, 2003, 15, 3463-3467.	6.7	95
150	Dendrimer-Mediated Immobilization of Catalytic Nanoparticles on Flat, Solid Supports. Langmuir, 2002, 18, 8231-8236.	3.5	72
151	Patterning Bacteria within Hyperbranched Polymer Film Templates. Langmuir, 2002, 18, 9914-9917.	3.5	79
152	Efficient Mixing and Reactions within Microfluidic Channels Using Microbead-Supported Catalysts. Journal of the American Chemical Society, 2002, 124, 13360-13361.	13.7	192
153	Interactions between Dendrimers and Charged Probe Molecules. 1. Theoretical Methods for Simulating Proton and Metal Ion Binding to Symmetric Polydentate Ligands. Journal of Physical Chemistry B, 2002, 106, 5864-5872.	2.6	35
154	Electrochemical Rectification Using Mixed Monolayers of Redox-Active Ferrocenyl Dendrimers andn-Alkanethiols. Langmuir, 2002, 18, 6981-6987.	3.5	64
155	Electroactive Composite Dendrimer Films Containing Thiophene-Terminated Poly(amidoamine) Dendrimers Cross-Linked by Poly(3-methylthiophene). Chemistry of Materials, 2002, 14, 3995-4001.	6.7	29
156	Preparation of polycyclodextrin hollow spheres by templating gold nanoparticles. Chemical Communications, 2001, , 359-360.	4.1	50
157	Dendrimer-Encapsulated Metal Nanoparticles:â€‰ Synthesis, Characterization, and Applications to Catalysis. Accounts of Chemical Research, 2001, 34, 181-190.	15.6	2,004
158	Size-Selective Hydrogenation of Olefins by Dendrimer-Encapsulated Palladium Nanoparticles. Journal of the American Chemical Society, 2001, 123, 6840-6846.	13.7	352
159	Catalysis in supercritical CO2 using dendrimer-encapsulated palladium nanoparticles. Chemical Communications, 2001, , 2290-2291.	4.1	96
160	Characterization of Poly(amidoamine) Dendrimers and Their Complexes with Cu2+by Matrix-Assisted Laser Desorption Ionization Mass Spectrometry. Macromolecules, 2001, 34, 3567-3573.	4.8	109
161	Electrochemical and Spectroscopic Characterization of Viologen-Functionalized Poly(Amidoamine) Dendrimers. Journal of Physical Chemistry B, 2001, 105, 8885-8894.	2.6	46
162	Two New Approaches for Patterning Polymer Films Using Templates Prepared by Microcontact Printing. Macromolecules, 2001, 34, 1230-1236.	4.8	45

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163	Photophysical Properties of Pyrene-Functionalized Poly(propylene imine) Dendrimers. Macromolecules, 2000, 33, 9034-9039.	4.8	84
164	Synthesis of a Three-Layer Organic Thin Film Prepared by Sequential Reactions in the Absence of Solvents. Langmuir, 2000, 16, 7783-7788.	3.5	10
165	Dendrimer-Encapsulated Pd Nanoparticles as Fluorous Phase-Soluble Catalysts. Journal of the American Chemical Society, 2000, 122, 1243-1244.	13.7	249
166	Interfacial Reactivity of Hydroxyl-Terminated Monolayers in the Absence of Solvents. Langmuir, 2000, 16, 1777-1782.	3.5	16
167	Preparation and Characterization of Dendrimer-Encapsulated CdS Semiconductor Quantum Dots. Journal of the American Chemical Society, 2000, 122, 12886-12887.	13.7	181
168	Chemically Grafted Polymeric Filters for Chemical Sensors:Â Hyperbranched Poly(acrylic acid) Films Incorporating Î²-Cyclodextrin Receptors and Amine-Functionalized Filter Layers. Langmuir, 1999, 15, 885-890.	3.5	54
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