

Raymond E Schaak

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.

164
papers

18,835
citations

64
h-index

136
g-index

194
ext. papers

21,152
ext. citations

11.8
avg, IF

7.22
L-index

#	Paper	IF	Citations
164	Ultrasensitive electrode-free and co-catalyst-free detection of nanomoles per hour hydrogen evolution for the discovery of new photocatalysts.. <i>Review of Scientific Instruments</i> , 2022 , 93, 025002	1.7	0
163	Incorporation of Metal Phosphide Domains into Colloidal Hybrid Nanoparticles. <i>Inorganic Chemistry</i> , 2021 , 60, 4278-4290	5.1	0
162	Colloidal Nanostructures of Transition-Metal Dichalcogenides. <i>Accounts of Chemical Research</i> , 2021 , 54, 1517-1527	24.3	9
161	X-ray-Based Techniques to Study the Nano-Bio Interface. <i>ACS Nano</i> , 2021 , 15, 3754-3807	16.7	18
160	Multistep Regioselectivity and Non-Kirkendall Anion Exchange of Copper Chalcogenide Nanorods. <i>Chemistry of Materials</i> , 2021 , 33, 3841-3850	9.6	3
159	Real-Time Monitoring of Competing Nanoparticle Formation Pathways during Cation Exchange Using Benchtop Light Scattering. <i>Chemistry of Materials</i> , 2021 , 33, 3936-3944	9.6	0
158	Morphology-Dependent Phase Selectivity of Cobalt Sulfide during Nanoparticle Cation Exchange Reactions. <i>Journal of the American Chemical Society</i> , 2021 , 143, 7915-7919	16.4	6
157	Synthetic Control of Hot-Electron Thermalization Efficiency in Size-Tunable Au-Pt Hybrid Nanoparticles. <i>ACS Nano</i> , 2021 , 15, 1378-1387	16.7	6
156	Emergence and Control of Stacking Fault Formation during Nanoparticle Cation Exchange Reactions. <i>Journal of the American Chemical Society</i> , 2021 , 143, 1779-1783	16.4	8
155	Simultaneous Multication Exchange Pathway to High-Entropy Metal Sulfide Nanoparticles. <i>Journal of the American Chemical Society</i> , 2021 , 143, 1017-1023	16.4	30
154	In Situ Evolution of Ru ₄ Al ₁₃ Crystals into a Highly Active Catalyst for the Hydrogen Evolution Reaction. <i>Chemistry of Materials</i> , 2021 , 33, 7124-7131	9.6	4
153	Optimizing accuracy and efficacy in data-driven materials discovery for the solar production of hydrogen. <i>Energy and Environmental Science</i> , 2021 , 14, 2335-2348	35.4	8
152	Experimental Insights into Partial Cation Exchange Reactions for Synthesizing Heterostructured Metal Sulfide Nanocrystals. <i>Chemistry of Materials</i> , 2020 , 32, 5461-5482	9.6	14
151	Bulk-immiscible AgRh Alloy Nanoparticles as a Highly Active Electrocatalyst for the Hydrogen Evolution Reaction. <i>ChemNanoMat</i> , 2020 , 6, 1320-1324	3.5	2
150	Interface-mediated noble metal deposition on transition metal dichalcogenide nanostructures. <i>Nature Chemistry</i> , 2020 , 12, 284-293	17.6	42
149	Rational construction of a scalable heterostructured nanorod megalibrary. <i>Science</i> , 2020 , 367, 418-424	33.3	96
148	Made-to-Order Heterostructured Nanoparticle Libraries. <i>Accounts of Chemical Research</i> , 2020 , 53, 2558-2568	17.6	15

147	Colloidal Nanoparticles of a Metastable Copper Selenide Phase with Near-Infrared Plasmon Resonance. <i>Chemistry of Materials</i> , 2020 , 32, 10227-10234	9.6	5
146	Phosphine-Induced Phase Transition in Copper Sulfide Nanoparticles Prior to Initiation of a Cation Exchange Reaction. <i>Journal of the American Chemical Society</i> , 2020 , 142, 13345-13349	16.4	18
145	Retrosynthetic Design of Morphologically Complex Metal Sulfide Nanoparticles Using Sequential Partial Cation Exchange and Chemical Etching 2020 , 2, 1106-1114		6
144	Phase-Selective Solution Synthesis of Perovskite-Related Cesium Cadmium Chloride Nanoparticles. <i>Inorganic Chemistry</i> , 2020 , 59, 11688-11694	5.1	9
143	Seeded Growth of Metal Nitrides on Noble-Metal Nanoparticles To Form Complex Nanoscale Heterostructures. <i>Chemistry of Materials</i> , 2019 , 31, 4605-4613	9.6	14
142	Multi-Step Topochemical Pathway to Metastable MoAlB and Related Two-Dimensional Nanosheet Heterostructures. <i>Journal of the American Chemical Society</i> , 2019 , 141, 10852-10861	16.4	43
141	ZnO-Templated Synthesis and Metal-Insulator Transition of VO ₂ Nanostructures. <i>Chemistry of Materials</i> , 2019 , 31, 2088-2096	9.6	6
140	General Solution-Phase Synthesis of Nanoscale Transition Metal Tellurides Using Metal Nanoparticle Reagents. <i>European Journal of Inorganic Chemistry</i> , 2019 , 2019, 3490-3493	2.3	4
139	Tutorial on Powder X-ray Diffraction for Characterizing Nanoscale Materials. <i>ACS Nano</i> , 2019 , 13, 7359-7365	16.5	285
138	Defect-mediated selective hydrogenation of nitroarenes on nanostructured WS. <i>Chemical Science</i> , 2019 , 10, 10310-10317	9.4	14
137	Structure-Selective Synthesis of Wurtzite and Zincblende ZnS, CdS, and CuInS Using Nanoparticle Cation Exchange Reactions. <i>Inorganic Chemistry</i> , 2019 , 58, 672-678	5.1	31
136	Tunable intraparticle frameworks for creating complex heterostructured nanoparticle libraries. <i>Science</i> , 2018 , 360, 513-517	33.3	174
135	Intermetallic NiTa Electrocatalyst for the Oxygen Evolution Reaction in Highly Acidic Electrolytes. <i>Inorganic Chemistry</i> , 2018 , 57, 6010-6015	5.1	41
134	Metal Ruthenate Perovskites as Heterogeneous Catalysts for the Hydrolysis of Ammonia Borane. <i>ACS Omega</i> , 2018 , 3, 3501-3506	3.9	8
133	Topochemical Deintercalation of Al from MoAlB: Stepwise Etching Pathway, Layered Intergrowth Structures, and Two-Dimensional MBene. <i>Journal of the American Chemical Society</i> , 2018 , 140, 8833-8840	16.4	104
132	Composition-Based Separation of PtFe ₃ O ₄ Hybrid Nanoparticles by Thermal Field-Flow Fractionation. <i>ACS Applied Nano Materials</i> , 2018 , 1, 6435-6443	5.6	5
131	Exploiting Crystallographic Regioselectivity To Engineer Asymmetric Three-Component Colloidal Nanoparticle Isomers Using Partial Cation Exchange Reactions. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6771-6775	16.4	29
130	Nanoscience and Nanotechnology Cross Borders. <i>ACS Nano</i> , 2017 , 11, 1123-1126	16.7	3

129	Structure-Selective Cation Exchange in the Synthesis of Zincblende MnS and CoS Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 6464-6467	16.4	37
128	Structure-Selective Cation Exchange in the Synthesis of Zincblende MnS and CoS Nanocrystals. <i>Angewandte Chemie</i> , 2017 , 129, 6564-6567	3.6	3
127	Reactive AgAuS and Ag ₃ AuS ₂ Synthons Enable the Sequential Transformation of Spherical Nanocrystals into Asymmetric Multicomponent Hybrid Nanoparticles. <i>Chemistry of Materials</i> , 2017 , 29, 4153-4160	9.6	14
126	Controlling Configurational Isomerism in Three-Component Colloidal Hybrid Nanoparticles. <i>Accounts of Chemical Research</i> , 2017 , 50, 1433-1440	24.3	27
125	Stability and Activity of Non-Noble-Metal-Based Catalysts Toward the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 9767-9771	16.4	81
124	Bulk iron pyrite as a catalyst for the selective hydrogenation of nitroarenes. <i>Chemical Communications</i> , 2017 , 53, 4807-4810	5.8	28
123	Semi-preparative asymmetrical flow field-flow fractionation: A closer look at channel dimensions and separation performance. <i>Journal of Chromatography A</i> , 2017 , 1499, 149-157	4.5	16
122	Diverse Applications of Nanomedicine. <i>ACS Nano</i> , 2017 , 11, 2313-2381	16.7	714
121	Crystalline Cobalt Oxide Films for Sustained Electrocatalytic Oxygen Evolution under Strongly Acidic Conditions. <i>Chemistry of Materials</i> , 2017 , 29, 950-957	9.6	109
120	Solution-Synthesized In ₄ SnSe ₄ Semiconductor Microwires with a Direct Band Gap. <i>Chemistry of Materials</i> , 2017 , 29, 1095-1098	9.6	7
119	Solution-Mediated Growth of Two-Dimensional Nanosheet Heterostructures. <i>Chemistry of Materials</i> , 2017 , 29, 817-822	9.6	14
118	Size- and Interface-Modulated Metal/Insulator Transition in Solution-Synthesized Nanoscale VO ₂ -TiO ₂ -VO ₂ Heterostructures. <i>Angewandte Chemie</i> , 2017 , 129, 15756-15760	3.6	5
117	Size- and Interface-Modulated Metal-Insulator Transition in Solution-Synthesized Nanoscale VO ₂ -TiO ₂ -VO ₂ Heterostructures. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 15550-15554	16.4	13
116	Solution synthesis of few-layer WTe ₂ and Mo _x W _{1-x} Te ₂ nanostructures. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 11317-11323	7.1	15
115	Partial Etching of Al from MoAlB Single Crystals To Expose Catalytically Active Basal Planes for the Hydrogen Evolution Reaction. <i>Chemistry of Materials</i> , 2017 , 29, 8953-8957	9.6	63
114	Low-Temperature Solution Synthesis of Transition Metal Dichalcogenide Alloys with Tunable Optical Properties. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11096-11105	16.4	54
113	Synthetic Deconvolution of Interfaces and Materials Components in Hybrid Nanoparticles. <i>Chemistry of Materials</i> , 2017 , 29, 6168-6177	9.6	11
112	Insights into the Seeded-Growth Synthesis of Colloidal Hybrid Nanoparticles. <i>Chemistry of Materials</i> , 2017 , 29, 106-119	9.6	28

111	Low-Temperature Solution Synthesis of Few-Layer 1T α -MoTe ₂ Nanostructures Exhibiting Lattice Compression. <i>Angewandte Chemie</i> , 2016 , 128, 2880-2884	3.6	15
110	Preserving Both Anion and Cation Sublattice Features during a Nanocrystal Cation-Exchange Reaction: Synthesis of Metastable Wurtzite-Type CoS and MnS. <i>Journal of the American Chemical Society</i> , 2016 , 138, 471-4	16.4	92
109	Solution Synthesis of Thiospinel CuCo ₂ S ₄ Nanoparticles. <i>Inorganic Chemistry</i> , 2016 , 55, 221-6	5.1	61
108	Colloidally-synthesized cobalt molybdenum nanoparticles as active and stable electrocatalysts for the hydrogen evolution reaction under alkaline conditions. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 3077-3081	13	34
107	Low-Temperature Solution Synthesis of Few-Layer 1T α -MoTe ₂ Nanostructures Exhibiting Lattice Compression. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 2830-4	16.4	63
106	2D materials advances: from large scale synthesis and controlled heterostructures to improved characterization techniques, defects and applications. <i>2D Materials</i> , 2016 , 3, 042001	5.9	297
105	General Strategy for the Synthesis of Transition Metal Phosphide Films for Electrocatalytic Hydrogen and Oxygen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 12798-803	9.5	201
104	Synthesis, Characterization, and Properties of Metal Phosphide Catalysts for the Hydrogen-Evolution Reaction. <i>Chemistry of Materials</i> , 2016 , 28, 6017-6044	9.6	414
103	Highly branched cobalt phosphide nanostructures for hydrogen-evolution electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 5420-5425	13	98
102	Pt ₂ Au Nanoparticle Heterodimers as Seeds for Pt ₂ Au Metal Sulfide Heterotrimers: Thermal Stability and Chemoselective Growth Characteristics. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 8952-8959	3.8	21
101	Comparison of the Performance of CoP-Coated and Pt-Coated Radial Junction n(+)/p-Silicon Microwire-Array Photocathodes for the Sunlight-Driven Reduction of Water to H ₂ (g). <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 1679-83	6.4	56
100	Nanostructured Co ₂ P Electrocatalyst for the Hydrogen Evolution Reaction and Direct Comparison with Morphologically Equivalent CoP. <i>Chemistry of Materials</i> , 2015 , 27, 3769-3774	9.6	388
99	Formation and Interlayer Decoupling of Colloidal MoSe ₂ Nanoflowers. <i>Chemistry of Materials</i> , 2015 , 27, 3167-3175	9.6	86
98	Colloidal Hybrid Nanoparticle Insertion Reaction for Transforming Heterodimers into Heterotrimers. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12514-7	16.4	24
97	Recent Advances in Two-Dimensional Materials beyond Graphene. <i>ACS Nano</i> , 2015 , 9, 11509-39	16.7	1581
96	Colloidal ZnO and Zn(1-x)Co(x)O tetrapod nanocrystals with tunable arm lengths. <i>Nanoscale</i> , 2015 , 7, 16671-6	7.7	7
95	Microscopic Investigation of Chemoselectivity in Ag-Pt-Fe ₃ O ₄ Heterotrimer Formation: Mechanistic Insights and Implications for Controlling High-Order Hybrid Nanoparticle Morphology. <i>Journal of the American Chemical Society</i> , 2015 , 137, 15493-500	16.4	43
94	Transition metal dichalcogenides and beyond: synthesis, properties, and applications of single- and few-layer nanosheets. <i>Accounts of Chemical Research</i> , 2015 , 48, 56-64	24.3	864

93	Sequential Anion and Cation Exchange Reactions for Complete Material Transformations of Nanoparticles with Morphological Retention. <i>Angewandte Chemie</i> , 2015 , 127, 8793-8796	3.6	16
92	Sequential Anion and Cation Exchange Reactions for Complete Material Transformations of Nanoparticles with Morphological Retention. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 8669-8672	16.4	45
91	Titelbild: Sequential Anion and Cation Exchange Reactions for Complete Material Transformations of Nanoparticles with Morphological Retention (Angew. Chem. 30/2015). <i>Angewandte Chemie</i> , 2015 , 127, 8687-8687	3.6	
90	Solution synthesis of metal silicide nanoparticles. <i>Inorganic Chemistry</i> , 2015 , 54, 707-9	5.1	34
89	Ligand-induced fate of embryonic species in the shape-controlled synthesis of rhodium nanoparticles. <i>ACS Nano</i> , 2015 , 9, 1707-20	16.7	41
88	Highly active electrocatalysis of the hydrogen evolution reaction by cobalt phosphide nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 5427-30	16.4	926
87	Highly Active Electrocatalysis of the Hydrogen Evolution Reaction by Cobalt Phosphide Nanoparticles. <i>Angewandte Chemie</i> , 2014 , 126, 5531-5534	3.6	339
86	Ternary hybrid nanoparticle isomers: directing the nucleation of Ag on Pt-Fe(3)O(4) using a solid-state protecting group. <i>ACS Nano</i> , 2014 , 8, 1047-55	16.7	35
85	Insights into the Thermal Decomposition of Co(II) Oleate for the Shape-Controlled Synthesis of Wurtzite-Type CoO Nanocrystals. <i>Chemistry of Materials</i> , 2014 , 26, 1492-1499	9.6	35
84	Electrocatalytic hydrogen evolution using amorphous tungsten phosphide nanoparticles. <i>Chemical Communications</i> , 2014 , 50, 11026-8	5.8	236
83	Electrocatalytic and photocatalytic hydrogen production from acidic and neutral-pH aqueous solutions using iron phosphide nanoparticles. <i>ACS Nano</i> , 2014 , 8, 11101-7	16.7	361
82	Synthesis of Hybrid Au-In ₂ O ₃ Nanoparticles Exhibiting Dual Plasmonic Resonance. <i>Chemistry of Materials</i> , 2014 , 26, 5900-5904	9.6	43
81	Amorphous Molybdenum Phosphide Nanoparticles for Electrocatalytic Hydrogen Evolution. <i>Chemistry of Materials</i> , 2014 , 26, 4826-4831	9.6	337
80	Solution Synthesis of Cu ₃ PdN Nanocrystals as Ternary Metal Nitride Electrocatalysts for the Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , 2014 , 26, 6226-6232	9.6	60
79	Synthesis and crystallographic analysis of shape-controlled SnS nanocrystal photocatalysts: evidence for a pseudotetragonal structural modification. <i>Journal of the American Chemical Society</i> , 2013 , 135, 11634-44	16.4	112
78	Solution-Phase Synthesis and Magnetic Properties of Single-Crystal Iron Germanide Nanostructures. <i>Chemistry of Materials</i> , 2013 , 25, 4396-4401	9.6	11
77	Au ₂ Te and Ag ₂ Te Heterodimers with Tunable Domain Sizes: A Supersaturation-Precipitation Route to Colloidal Hybrid Nanoparticles. <i>Chemistry of Materials</i> , 2013 , 25, 4304-4311	9.6	27
76	Synthesis, properties and applications of colloidal germanium and germanium-based nanomaterials. <i>Chemical Society Reviews</i> , 2013 , 42, 2861-79	58.5	141

75	Chemical Transformation of PtFe ₃ O ₄ Colloidal Hybrid Nanoparticles into PtPbFe ₃ O ₄ and Pt ₃ SnFe ₃ O ₄ Heterodimers and (PtPbFe ₃ O ₄) _n Nanoflowers. <i>Chemistry of Materials</i> , 2013 , 25, 1886-1892	9.6	30
74	Emerging strategies for the total synthesis of inorganic nanostructures. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 6154-78	16.4	170
73	Nanostructured nickel phosphide as an electrocatalyst for the hydrogen evolution reaction. <i>Journal of the American Chemical Society</i> , 2013 , 135, 9267-70	16.4	2259
72	Magnetic separation of colloidal nanoparticle mixtures using a material specific peptide. <i>Chemical Communications</i> , 2013 , 49, 5471-3	5.8	13
71	Neue Strategien zur Totalsynthese von anorganischen Nanostrukturen. <i>Angewandte Chemie</i> , 2013 , 125, 6270-6297	3.6	11
70	Synthesis of tetragonal mackinawite-type FeS nanosheets by solvothermal crystallization. <i>Journal of Solid State Chemistry</i> , 2012 , 196, 17-20	3.3	34
69	Engineering Porosity into Single-Crystal Colloidal Nanosheets Using Epitaxial Nucleation and Chalcogenide Anion Exchange Reactions: The Conversion of SnSe to SnTe. <i>Chemistry of Materials</i> , 2012 , 24, 3088-3093	9.6	47
68	Colloidal Synthesis and Electrical Properties of GeSe Nanobelts. <i>Chemistry of Materials</i> , 2012 , 24, 3643-3649	9.6	68
67	Full disclosure: the practical side of nanoscale total synthesis. <i>ACS Nano</i> , 2012 , 6, 8492-7	16.7	29
66	Hybrid CuO-TiO ₂ /N _x Hollow Nanocubes for Photocatalytic Conversion of CO ₂ into Methane under Solar Irradiation. <i>Angewandte Chemie</i> , 2012 , 124, 3981-3984	3.6	41
65	Hybrid CuO-TiO ₂ (2-x)N(x) hollow nanocubes for photocatalytic conversion of CO ₂ into methane under solar irradiation. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 3915-8	16.4	199
64	Synthesis of Colloidal AuCu ₂ S Heterodimers via Chemically Triggered Phase Segregation of AuCu Nanoparticles. <i>Chemistry of Materials</i> , 2012 , 24, 1552-1554	9.6	84
63	A total-synthesis framework for the construction of high-order colloidal hybrid nanoparticles. <i>Nature Chemistry</i> , 2011 , 4, 37-44	17.6	294
62	A precursor-limited nanoparticle coalescence pathway for tuning the thickness of laterally-uniform colloidal nanosheets: the case of SnSe. <i>ACS Nano</i> , 2011 , 5, 8852-60	16.7	181
61	The solvent matters: kinetic versus thermodynamic shape control in the polyol synthesis of rhodium nanoparticles. <i>ACS Nano</i> , 2011 , 5, 8089-99	16.7	161
60	Aqueous room-temperature synthesis of AuRh, AuPt, PtRh, and PdRh alloy nanoparticles: fully tunable compositions within the miscibility gaps. <i>Journal of Materials Chemistry</i> , 2011 , 21, 11599		65
59	Pawley and Rietveld refinements using electron diffraction from L1 ₂ -type intermetallic AuFe ₃ nanocrystals during their in-situ order-disorder transition. <i>Ultramicroscopy</i> , 2011 , 111, 1295-304	3.1	15
58	Solution Chemistry Synthesis of Intermetallic GoldLithium Nanoparticles. <i>European Journal of Inorganic Chemistry</i> , 2011 , 2011, 3877-3880	2.3	2

57	Purification and Magnetic Interrogation of Hybrid Au-Fe ₃ O ₄ and FePt-Fe ₃ O ₄ Nanoparticles. <i>Angewandte Chemie</i> , 2011 , 123, 10049-10053	3.6	6
56	Purification and magnetic interrogation of hybrid Au-Fe ₃ O ₄ and FePt-Fe ₃ O ₄ nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 9875-9	16.4	42
55	Bridging hcp-Ni and Ni ₃ C via a Ni ₃ C _{1-x} Solid Solution: Tunable Composition and Magnetism in Colloidal Nickel Carbide Nanoparticles. <i>Chemistry of Materials</i> , 2011 , 23, 2475-2480	9.6	82
54	Phase-selective chemical extraction of selenium and sulfur from nanoscale metal chalcogenides: a general strategy for synthesis, purification, and phase targeting. <i>Journal of the American Chemical Society</i> , 2011 , 133, 1294-7	16.4	68
53	Au ₂ Al Alloy Nanoparticles with Tunable Compositions and Plasmonic Properties: Experimental Determination of Composition and Correlation with Theory. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 19263-19269	3.8	145
52	Liquid-Phase Synthesis of Uniform Cube-Shaped GeTe Microcrystals. <i>Chemistry of Materials</i> , 2010 , 22, 3236-3240	9.6	27
51	Colloidal Synthesis of Air-Stable Crystalline Germanium Nanoparticles with Tunable Sizes and Shapes. <i>Chemistry of Materials</i> , 2010 , 22, 6103-6108	9.6	65
50	Solution chemistry synthesis, morphology studies, and optical properties of five distinct nanocrystalline Au ₂ Sn intermetallic compounds. <i>Journal of Alloys and Compounds</i> , 2010 , 490, 98-102	5.7	18
49	Single-crystal colloidal nanosheets of GeS and GeSe. <i>Journal of the American Chemical Society</i> , 2010 , 132, 15170-2	16.4	316
48	Optimized Synthesis and Magnetic Properties of Intermetallic Au ₃ Fe ₁ □, Au ₃ Co ₁ □, and Au ₃ Ni ₁ □ Nanoparticles. <i>Chemistry of Materials</i> , 2010 , 22, 3988-3994	9.6	45
47	Uniform Hollow Carbon Shells: Nanostructured Graphitic Supports for Improved Oxygen-Reduction Catalysis. <i>Angewandte Chemie</i> , 2010 , 122, 7199-7202	3.6	18
46	Colloidal synthesis of non-equilibrium wurtzite-type MnSe. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 4638-40	16.4	56
45	Uniform hollow carbon shells: nanostructured graphitic supports for improved oxygen-reduction catalysis. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 7045-8	16.4	77
44	The Active Phase in the Direct Synthesis of H ₂ O ₂ from H ₂ and O ₂ over Pd/SiO ₂ Catalyst in a H ₂ SO ₄ /Ethanol System. <i>Catalysis Letters</i> , 2009 , 132, 342-348	2.8	50
43	Orthogonal reactivity of metal and multimetal nanostructures for selective, stepwise, and spatially-controlled solid-state modification. <i>ACS Nano</i> , 2009 , 3, 940-8	16.7	22
42	ZnO-templated synthesis of wurtzite-type ZnS and ZnSe nanoparticles. <i>Journal of the American Chemical Society</i> , 2009 , 131, 424-5	16.4	80
41	Colloidal Synthesis of Germanium Nanocrystals Using Room-Temperature Benchtop Chemistry. <i>Chemistry of Materials</i> , 2009 , 21, 4105-4107	9.6	44
40	M13 Bacteriophage as a Biological Scaffold for Magnetically-Recoverable Metal Nanowire Catalysts: Combining Specific and Nonspecific Interactions To Design Multifunctional Nanocomposites. <i>Chemistry of Materials</i> , 2009 , 21, 2176-2178	9.6	55

39	Chemical Synthesis of Two-Dimensional Iron Chalcogenide Nanosheets: FeSe, FeTe, Fe(Se,Te), and FeTe ₂ . <i>Chemistry of Materials</i> , 2009 , 21, 3655-3661	9.6	81
38	Chemical synthesis of air-stable manganese nanoparticles. <i>Journal of the American Chemical Society</i> , 2009 , 131, 9144-5	16.4	47
37	Synthesis of CuPt nanorod catalysts with tunable lengths. <i>Journal of the American Chemical Society</i> , 2009 , 131, 5720-1	16.4	132
36	Toward green metallurgy: low-temperature solution synthesis of bulk-scale intermetallic compounds in edible plant and seed oils. <i>Green Chemistry</i> , 2009 , 11, 974	10	5
35	Converting nanocrystalline metals into alloys and intermetallic compounds for applications in catalysis. <i>Journal of Materials Chemistry</i> , 2008 , 18, 275-282		125
34	Low-temperature solution synthesis of the non-equilibrium ordered intermetallic compounds Au ₃ Fe, Au ₃ Co, and Au ₃ Ni as nanocrystals. <i>Journal of the American Chemical Society</i> , 2008 , 130, 11866-7	16.4	94
33	A Library of Single-Crystal Metal ₂ In Nanorods: Using Diffusion as a Tool for Controlling the Morphology of Intermetallic Nanocrystals. <i>Chemistry of Materials</i> , 2008 , 20, 2081-2085	9.6	37
32	Low-Temperature Solution-Mediated Synthesis of Polycrystalline Intermetallic Compounds from Bulk Metal Powders. <i>Chemistry of Materials</i> , 2008 , 20, 3212-3217	9.6	13
31	Room-temperature chemical synthesis of shape-controlled indium nanoparticles. <i>Journal of the American Chemical Society</i> , 2008 , 130, 8140-1	16.4	65
30	On-wire conversion chemistry: engineering solid-state complexity into striped metal nanowires using solution chemistry reactions. <i>Journal of the American Chemical Society</i> , 2008 , 130, 14042-3	16.4	16
29	Supported palladium nanoparticles: an efficient catalyst for the direct formation of H ₂ O ₂ from H ₂ and O ₂ . <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 6221-4	16.4	89
28	Nanocrystal conversion chemistry: A unified and materials-general strategy for the template-based synthesis of nanocrystalline solids. <i>Journal of Solid State Chemistry</i> , 2008 , 181, 1509-1523	3.3	93
27	Synthesis of nanocrystalline REBO ₃ (RE=Y, Nd, Sm, Eu, Gd, Ho) and YBO ₃ :Eu using a borohydride-based solution precursor route. <i>Journal of Solid State Chemistry</i> , 2008 , 181, 3264-3268	3.3	22
26	Direct synthesis of H ₂ O ₂ from H ₂ and O ₂ over PdPt/SiO ₂ bimetallic catalysts in a H ₂ SO ₄ /ethanol system. <i>Applied Catalysis A: General</i> , 2008 , 339, 130-136	5.1	76
25	Converting metals into phosphides: a general strategy for the synthesis of metal phosphide nanocrystals. <i>Journal of the American Chemical Society</i> , 2007 , 129, 1896-7	16.4	343
24	Solution Synthesis of Nanocrystalline M ₂ Zn (M = Pd, Au, Cu) Intermetallic Compounds via Chemical Conversion of Metal Nanoparticle Precursors. <i>Chemistry of Materials</i> , 2007 , 19, 4098-4104	9.6	82
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