

Thomas E Mallouk

List of Publications by Year in descending order

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467
papers

58,840
citations

576

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1333

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498
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498
docs citations

498
times ranked

54840
citing authors

#	ARTICLE	IF	CITATIONS
1	Layer-by-Layer Assembly of Ultrathin Composite Films from Micron-Sized Graphite Oxide Sheets and Polycations. <i>Chemistry of Materials</i> , 1999, 11, 771-778.	3.2	3,066
2	Catalytic Nanomotors: Autonomous Movement of Striped Nanorods. <i>Journal of the American Chemical Society</i> , 2004, 126, 13424-13431.	6.6	1,805
3	Remediation of Cr(VI) and Pb(II) Aqueous Solutions Using Supported, Nanoscale Zero-valent Iron. <i>Environmental Science & Technology</i> , 2000, 34, 2564-2569.	4.6	1,097
4	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.	7.6	1,089
5	Visible Light Water Splitting Using Dye-Sensitized Oxide Semiconductors. <i>Accounts of Chemical Research</i> , 2009, 42, 1966-1973.	7.6	957
6	Combinatorial Electrochemistry: A Highly Parallel, Optical Screening Method for Discovery of Better Electrocatalysts. <i>Science</i> , 1998, 280, 1735-1737.	6.0	919
7	Electric-field assisted assembly and alignment of metallic nanowires. <i>Applied Physics Letters</i> , 2000, 77, 1399-1401.	1.5	876
8	Photoassisted Overall Water Splitting in a Visible Light-Absorbing Dye-Sensitized Photoelectrochemical Cell. <i>Journal of the American Chemical Society</i> , 2009, 131, 926-927.	6.6	841
9	A Facile and Template-Free Hydrothermal Synthesis of Mn ₃ O ₄ Nanorods on Graphene Sheets for Supercapacitor Electrodes with Long Cycle Stability. <i>Chemistry of Materials</i> , 2012, 24, 1158-1164.	3.2	728
10	Perovskites by Design: A Toolbox of Solid-State Reactions. <i>Chemistry of Materials</i> , 2002, 14, 1455-1471.	3.2	625
11	Ordered Mesoporous Polymers of Tunable Pore Size from Colloidal Silica Templates. <i>Science</i> , 1999, 283, 963-965.	6.0	617
12	Layered metal phosphates and phosphonates: from crystals to monolayers. <i>Accounts of Chemical Research</i> , 1992, 25, 420-427.	7.6	605
13	Fast and Efficient Preparation of Exfoliated 2H MoS ₂ Nanosheets by Sonication-Assisted Lithium Intercalation and Infrared Laser-Induced 1T to 2H Phase Reversion. <i>Nano Letters</i> , 2015, 15, 5956-5960.	4.5	603
14	Autonomous Motion of Metallic Microrods Propelled by Ultrasound. <i>ACS Nano</i> , 2012, 6, 6122-6132.	7.3	597
15	Polymer-inorganic solid electrolyte interphase for stable lithium metal batteries under lean electrolyte conditions. <i>Nature Materials</i> , 2019, 18, 384-389.	13.3	587
16	Small power: Autonomous nano- and micromotors propelled by self-generated gradients. <i>Nano Today</i> , 2013, 8, 531-554.	6.2	586
17	Layer-by-Layer Assembly of Intercalation Compounds and Heterostructures on Surfaces: Toward Molecular "Beaker" Epitaxy. <i>Journal of the American Chemical Society</i> , 1994, 116, 8817-8818.	6.6	573
18	Standing Wave Enhancement of Red Absorbance and Photocurrent in Dye-Sensitized Titanium Dioxide Photoelectrodes Coupled to Photonic Crystals. <i>Journal of the American Chemical Society</i> , 2003, 125, 6306-6310.	6.6	564

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19	Turning Down the Heat: Design and Mechanism in Solid-State Synthesis. <i>Science</i> , 1993, 259, 1558-1564.	6.0	535
20	Optical properties of coupled metallic nanorods for field-enhanced spectroscopy. <i>Physical Review B</i> , 2005, 71, .	1.1	534
21	Controlled Synthesis and Transfer of Large-Area WS ₂ Sheets: From Single Layer to Few Layers. <i>ACS Nano</i> , 2013, 7, 5235-5242.	7.3	534
22	Hydrodechlorination of Trichloroethylene to Hydrocarbons Using Bimetallic Nickel-iron Nanoparticles. <i>Chemistry of Materials</i> , 2002, 14, 5140-5147.	3.2	526
23	Chemical Locomotion. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 5420-5429.	7.2	524
24	Delivery Vehicles for Zerovalent Metal Nanoparticles in Soil and Groundwater. <i>Chemistry of Materials</i> , 2004, 16, 2187-2193.	3.2	511
25	Design and development of photoanodes for water-splitting dye-sensitized photoelectrochemical cells. <i>Chemical Society Reviews</i> , 2013, 42, 2357-2387.	18.7	495
26	Orthogonal Self-Assembly on Colloidal Gold-Platinum Nanorods. <i>Advanced Materials</i> , 1999, 11, 1021-1025.	11.1	476
27	Bipolar Electrochemical Mechanism for the Propulsion of Catalytic Nanomotors in Hydrogen Peroxide Solutions. <i>Langmuir</i> , 2006, 22, 10451-10456.	1.6	461
28	Catalytic Nanomotors: Remote-Controlled Autonomous Movement of Striped Metallic Nanorods. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 744-746.	7.2	432
29	Schooling Behavior of Light-Powered Autonomous Micromotors in Water. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 3308-3312.	7.2	424
30	Sensitized layered metal oxide semiconductor particles for photochemical hydrogen evolution from nonsacrificial electron donors. <i>The Journal of Physical Chemistry</i> , 1993, 97, 11802-11810.	2.9	418
31	Inorganic analogs of Langmuir-Blodgett films: adsorption of ordered zirconium 1,10-decanebisphosphonate multilayers on silicon surfaces. <i>Journal of the American Chemical Society</i> , 1988, 110, 618-620.	6.6	404
32	Structural and Electrochemical Characterization of Binary, Ternary, and Quaternary Platinum Alloy Catalysts for Methanol Electro-oxidation. <i>Journal of Physical Chemistry B</i> , 1998, 102, 9997-10003.	1.2	395
33	Motility of Catalytic Nanoparticles through Self-Generated Forces. <i>Chemistry - A European Journal</i> , 2005, 11, 6462-6470.	1.7	395
34	Catalytically Induced Electrokinetics for Motors and Micropumps. <i>Journal of the American Chemical Society</i> , 2006, 128, 14881-14888.	6.6	384
35	New First Order Raman-active Modes in Few Layered Transition Metal Dichalcogenides. <i>Scientific Reports</i> , 2014, 4, 4215.	1.6	367
36	Electrochemical Growth of Single-Crystal Metal Nanowires via a Two-Dimensional Nucleation and Growth Mechanism. <i>Nano Letters</i> , 2003, 3, 919-923.	4.5	362

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37	Carbothermal Synthesis of Carbon-supported Nanoscale Zero-valent Iron Particles for the Remediation of Hexavalent Chromium. <i>Environmental Science & Technology</i> , 2008, 42, 2600-2605.	4.6	335
38	Divide and conquer. <i>Nature Chemistry</i> , 2013, 5, 362-363.	6.6	335
39	Individual Single-Walled Nanotubes and Hydrogels Made by Oxidative Exfoliation of Carbon Nanotube Ropes. <i>Journal of the American Chemical Society</i> , 2003, 125, 9761-9769.	6.6	331
40	Electron Transfer in Self-Assembled Inorganic Polyelectrolyte/Metal Nanoparticle Heterostructures. <i>Journal of the American Chemical Society</i> , 1996, 118, 7640-7641.	6.6	328
41	Nanowires as Building Blocks for Self-Assembling Logic and Memory Circuits. <i>Chemistry - A European Journal</i> , 2002, 8, 4354-4363.	1.7	302
42	DNA-Directed Assembly of Gold Nanowires on Complementary Surfaces. <i>Advanced Materials</i> , 2001, 13, 249-254.	11.1	297
43	Development of Supported Bifunctional Electrocatalysts for Unitized Regenerative Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2002, 149, A1092.	1.3	295
44	Combinatorial Discovery of Alloy Electrocatalysts for Amperometric Glucose Sensors. <i>Analytical Chemistry</i> , 2001, 73, 1599-1604.	3.2	294
45	Adsorption of ordered zirconium phosphonate multilayer films on silicon and gold surfaces. <i>The Journal of Physical Chemistry</i> , 1988, 92, 2597-2601.	2.9	288
46	Powering Nanorobots. <i>Scientific American</i> , 2009, 300, 72-77.	1.0	285
47	A High Yield Synthesis of Ligand-Free Iridium Oxide Nanoparticles with High Electrocatalytic Activity. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 402-406.	2.1	282
48	Acoustic Propulsion of Nanorod Motors Inside Living Cells. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3201-3204.	7.2	281
49	Improving the efficiency of water splitting in dye-sensitized solar cells by using a biomimetic electron transfer mediator. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 15612-15616.	3.3	280
50	Increasing the Conversion Efficiency of Dye-Sensitized TiO ₂ Photoelectrochemical Cells by Coupling to Photonic Crystals. <i>Journal of Physical Chemistry B</i> , 2005, 109, 6334-6342.	1.2	279
51	Layer-by-Layer Assembly of Thin Film Zener Diodes from Conducting Polymers and CdSe Nanoparticles. <i>Journal of the American Chemical Society</i> , 1998, 120, 7848-7859.	6.6	277
52	Photocatalytic Water Oxidation in a Buffered Tris(2,2'-bipyridyl)ruthenium Complex-Colloidal IrO ₂ System. <i>Journal of Physical Chemistry A</i> , 2000, 104, 5275-5280.	1.1	273
53	Prying Apart Ruddlesden-Popper Phases: Exfoliation into Sheets and Nanotubes for Assembly of Perovskite Thin Films. <i>Chemistry of Materials</i> , 2000, 12, 3427-3434.	3.2	270
54	From One to Many: Dynamic Assembly and Collective Behavior of Self-Propelled Colloidal Motors. <i>Accounts of Chemical Research</i> , 2015, 48, 1938-1946.	7.6	267

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55	Molecular Recognition in Lamellar Solids and Thin Films. <i>Accounts of Chemical Research</i> , 1998, 31, 209-217.	7.6	266
56	Synthesis and structural characterization of a homologous series of divalent-metal phosphonates, $MII(O_3PR)_2 \cdot nH_2O$ and $MII(HO_3PR)_2$. <i>Inorganic Chemistry</i> , 1988, 27, 2781-2785.	1.9	265
57	Electrolysis of Gaseous CO_2 to CO in a Flow Cell with a Bipolar Membrane. <i>ACS Energy Letters</i> , 2018, 3, 149-154.	8.8	265
58	Interfacial Chemistry Regulation via a Skin-Grafting Strategy Enables High-Performance Lithium-Metal Batteries. <i>Journal of the American Chemical Society</i> , 2017, 139, 15288-15291.	6.6	255
59	Surface Chemistry and Electrochemistry of Supported Zerovalent Iron Nanoparticles in the Remediation of Aqueous Metal Contaminants. <i>Chemistry of Materials</i> , 2001, 13, 479-486.	3.2	252
60	Nanoscale Tubules Formed by Exfoliation of Potassium Hexaniobate. <i>Chemistry of Materials</i> , 2000, 12, 1556-1562.	3.2	251
61	Characterization of Zirconium Phosphate/Polycation Thin Films Grown by Sequential Adsorption Reactions. <i>Chemistry of Materials</i> , 1997, 9, 1414-1421.	3.2	249
62	Ordered SBA-15 Nanorod Arrays Inside a Porous Alumina Membrane. <i>Journal of the American Chemical Society</i> , 2004, 126, 8650-8651.	6.6	246
63	Rapid Charge Transport in Dye-Sensitized Solar Cells Made from Vertically Aligned Single-Crystal Rutile TiO_2 Nanowires. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 2727-2730.	7.2	244
64	Photoinduced Energy and Electron Transfer Reactions in Lamellar Polyanion/Polycation Thin Films: Toward an Inorganic Leaf. <i>Journal of the American Chemical Society</i> , 1999, 121, 3435-3445.	6.6	243
65	Electrolysis of CO_2 to Syngas in Bipolar Membrane-Based Electrochemical Cells. <i>ACS Energy Letters</i> , 2016, 1, 1149-1153.	8.8	235
66	Templated Surface Sol-Gel Synthesis of SiO_2 Nanotubes and SiO_2 -Insulated Metal Nanowires. <i>Advanced Materials</i> , 2003, 15, 780-785.	11.1	231
67	Understanding the Efficiency of Autonomous Nano- and Microscale Motors. <i>Journal of the American Chemical Society</i> , 2013, 135, 10557-10565.	6.6	230
68	Demonstration of a shell-core structure in layered cadmium selenide-zinc selenide small particles by x-ray photoelectron and Auger spectroscopies. <i>The Journal of Physical Chemistry</i> , 1992, 96, 3812-3817.	2.9	229
69	Self-powered enzyme micropumps. <i>Nature Chemistry</i> , 2014, 6, 415-422.	6.6	228
70	Electron-Transfer Reactions of Ruthenium Trisbipyridyl-Viologen Donor-Acceptor Molecules: Comparison of the Distance Dependence of Electron Transfer-Rates in the Normal and Marcus Inverted Regions. <i>Journal of the American Chemical Society</i> , 1994, 116, 4786-4795.	6.6	226
71	Fluoride ion affinities of germanium tetrafluoride and boron trifluoride from thermodynamic and structural data for $(SF_3)_2GeF_6$, ClO_2GeF_5 , and ClO_2BF_4 . <i>Inorganic Chemistry</i> , 1984, 23, 3167-3173.	1.9	222
72	Effect of Micropore Topology on the Structure and Properties of Zeolite Polymer Replicas. <i>Chemistry of Materials</i> , 1997, 9, 2448-2458.	3.2	222

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73	Layer-by-Layer Growth and Condensation Reactions of Niobate and Titanoniobate Thin Films. <i>Chemistry of Materials</i> , 1999, 11, 1526-1532.	3.2	221
74	Silicon Nanowire Array Photoelectrochemical Cells. <i>Journal of the American Chemical Society</i> , 2007, 129, 12344-12345.	6.6	215
75	Photoluminescence of Perovskite Nanosheets Prepared by Exfoliation of Layered Oxides, $K_{2}Ln_{2}Ti_{3}O_{10}$, $KLnNb_{2}O_{7}$, and $RbLnTa_{2}O_{7}$ (Ln: Lanthanide Ion). <i>Journal of the American Chemical Society</i> , 2008, 130, 7052-7059.	6.6	214
76	Excited Excitonic States in 1L, 2L, 3L, and Bulk WSe_{2} Observed by Resonant Raman Spectroscopy. <i>ACS Nano</i> , 2014, 8, 9629-9635.	7.3	207
77	Controlled Exfoliation of MoS_{2} Crystals into Trilayer Nanosheets. <i>Journal of the American Chemical Society</i> , 2016, 138, 5143-5149.	6.6	207
78	Combinatorial discovery of bifunctional oxygen reduction “ water oxidation electrocatalysts for regenerative fuel cells. <i>Catalysis Today</i> , 2001, 67, 341-355.	2.2	203
79	3D steerable, acoustically powered microswimmers for single-particle manipulation. <i>Science Advances</i> , 2019, 5, eaax3084.	4.7	199
80	Template Synthesis of Metal Nanowires Containing Monolayer Molecular Junctions. <i>Journal of the American Chemical Society</i> , 2002, 124, 4020-4026.	6.6	198
81	Electrocatalysis in Alkaline Media and Alkaline Membrane-Based Energy Technologies. <i>Chemical Reviews</i> , 2022, 122, 6117-6321.	23.0	195
82	Template-Grown Metal Nanowires. <i>Inorganic Chemistry</i> , 2006, 45, 7555-7565.	1.9	194
83	Interplay between superconductivity and ferromagnetism in crystalline nanowires. <i>Nature Physics</i> , 2010, 6, 389-394.	6.5	194
84	Substrate Catalysis Enhances Single-Enzyme Diffusion. <i>Journal of the American Chemical Society</i> , 2010, 132, 2110-2111.	6.6	193
85	Visible-light photolysis of hydrogen iodide using sensitized layered semiconductor particles. <i>Journal of the American Chemical Society</i> , 1991, 113, 9561-9563.	6.6	192
86	Size quantization effects in cadmium sulfide layers formed by a Langmuir-Blodgett technique. <i>Chemical Physics Letters</i> , 1988, 152, 265-268.	1.2	188
87	Photoinduced Charge Separation in Multilayer Thin Films Grown by Sequential Adsorption of Polyelectrolytes. <i>Journal of the American Chemical Society</i> , 1995, 117, 12879-12880.	6.6	188
88	Resistance and polarization losses in aqueous buffer“membrane electrolytes for water-splitting photoelectrochemical cells. <i>Energy and Environmental Science</i> , 2012, 5, 7582.	15.6	188
89	Coupling of Titania Inverse Opals to Nanocrystalline Titania Layers in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2008, 112, 14415-14421.	1.2	187
90	Formation of quantum-size semiconductor particles in a layered metal phosphonate host lattice. <i>Chemistry of Materials</i> , 1991, 3, 149-156.	3.2	186

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91	Tungsten Ditelluride: a layered semimetal. <i>Scientific Reports</i> , 2015, 5, 10013.	1.6	186
92	Growth and characterization of metal(II) alkanebisphosphonate multilayer thin films on gold surfaces. <i>Journal of the American Chemical Society</i> , 1993, 115, 11855-11862.	6.6	185
93	Self-assembly of Tiled Perovskite Monolayer and Multilayer Thin Films. <i>Chemistry of Materials</i> , 2000, 12, 2513-2516.	3.2	180
94	Template Growth of Photoconductive Metal ^{II} CdSe ^{II} Metal Nanowires. <i>Journal of Physical Chemistry B</i> , 2002, 106, 7458-7462.	1.2	179
95	Enhanced Diffusion due to Active Swimmers at a Solid Surface. <i>Physical Review Letters</i> , 2011, 106, 048102.	2.9	178
96	Morphology of Template-Grown Polyaniline Nanowires and Its Effect on the Electrochemical Capacitance of Nanowire Arrays. <i>Chemistry of Materials</i> , 2008, 20, 5260-5265.	3.2	175
97	Non-oxidative intercalation and exfoliation of graphite by Brønsted acids. <i>Nature Chemistry</i> , 2014, 6, 957-963.	6.6	175
98	Two-Dimensional Metal Oxide Nanosheets as Building Blocks for Artificial Photosynthetic Assemblies. <i>Bulletin of the Chemical Society of Japan</i> , 2019, 92, 38-54.	2.0	175
99	Water splitting dye-sensitized solar cells. <i>Nano Today</i> , 2017, 14, 42-58.	6.2	174
100	Salt-Gel Synthesis of Porous Transition-Metal Oxides. <i>Chemistry of Materials</i> , 1995, 7, 304-313.	3.2	173
101	Niobium Oxide Nanoscrolls as Building Blocks for Dye-Sensitized Hydrogen Production from Water under Visible Light Irradiation. <i>Chemistry of Materials</i> , 2008, 20, 6770-6778.	3.2	173
102	Dissipation in quasi-one-dimensional superconducting single-crystal Sn nanowires. <i>Physical Review B</i> , 2005, 71, .	1.1	172
103	Photoinduced electron transfer in covalently linked ruthenium tris(bipyridyl)-viologen molecules: observation of back electron transfer in the Marcus inverted region. <i>Journal of the American Chemical Society</i> , 1992, 114, 8081-8087.	6.6	170
104	A "Mix and Match" Ionic-Covalent Strategy for Self-Assembly of Inorganic Multilayer Films. <i>Journal of the American Chemical Society</i> , 1997, 119, 12184-12191.	6.6	166
105	Catalytically powered dynamic assembly of rod-shaped nanomotors and passive tracer particles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 17744-17749.	3.3	166
106	Optimization of Nano- and Microiron Transport through Sand Columns Using Polyelectrolyte Mixtures. <i>Environmental Science & Technology</i> , 2007, 41, 6418-6424.	4.6	159
107	Synthesis and structural characterization of layered calcium and lanthanide phosphonate salts. <i>Inorganic Chemistry</i> , 1990, 29, 2112-2117.	1.9	157
108	Shape-selective intercalation reactions of layered zinc and cobalt phosphonates. <i>Inorganic Chemistry</i> , 1991, 30, 1434-1438.	1.9	155

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109	Autonomously Moving Nanorods at a Viscous Interface. <i>Nano Letters</i> , 2006, 6, 66-72.	4.5	154
110	Bidentate Dicarboxylate Capping Groups and Photosensitizers Control the Size of IrO ₂ Nanoparticle Catalysts for Water Oxidation. <i>Journal of Physical Chemistry B</i> , 2007, 111, 6845-6856.	1.2	154
111	Photocatalytic Hydrogen Evolution from Hexaniobate Nanoscrolls and Calcium Niobate Nanosheets Sensitized by Ruthenium(II) Bipyridyl Complexes. <i>Journal of Physical Chemistry C</i> , 2009, 113, 7962-7969.	1.5	152
112	Catalytic Micropumps: A Microscopic Convective Fluid Flow and Pattern Formation. <i>Journal of the American Chemical Society</i> , 2005, 127, 17150-17151.	6.6	150
113	Chemistry on the Edge: A Microscopic Analysis of the Intercalation, Exfoliation, Edge Functionalization, and Monolayer Surface Tiling Reactions of \pm -Zirconium Phosphate. <i>Journal of the American Chemical Society</i> , 1998, 120, 10887-10894.	6.6	149
114	Controllable Template Synthesis of Superconducting Zn Nanowires with Different Microstructures by Electrochemical Deposition. <i>Nano Letters</i> , 2005, 5, 1247-1253.	4.5	149
115	Immobilization of DNA on an Aluminum(III) Alkanebisphosphonate Thin Film with Electrogenerated Chemiluminescent Detection. <i>Journal of the American Chemical Society</i> , 1994, 116, 8386-8387.	6.6	146
116	Inter- and Intralayer Energy Transfer in Zirconium Phosphate/Poly(allylamine hydrochloride) Multilayers: An Efficient Photon Antenna and a Spectroscopic Ruler for Self-Assembled Thin Films. <i>Journal of the American Chemical Society</i> , 1996, 118, 4222-4223.	6.6	146
117	Tunability of the Refractive Index of Gold Nanoparticle Dispersions. <i>Nano Letters</i> , 2007, 7, 3418-3423.	4.5	146
118	Kinetics of Electron Transfer and Oxygen Evolution in the Reaction of [Ru(bpy) ₃] ³⁺ with Colloidal Iridium Oxide. <i>Journal of Physical Chemistry A</i> , 2004, 108, 9115-9119.	1.1	145
119	Layer-by-Layer Assembly of Rectifying Junctions in and on Metal Nanowires. <i>Journal of Physical Chemistry B</i> , 2001, 105, 8762-8769.	1.2	144
120	Tunable Nanowire Patterning Using Standing Surface Acoustic Waves. <i>ACS Nano</i> , 2013, 7, 3306-3314.	7.3	142
121	Chiral molecular recognition in intercalated zirconium phosphate. <i>Journal of the American Chemical Society</i> , 1992, 114, 7574-7575.	6.6	139
122	Salt-Based Organic-Inorganic Nanocomposites: Towards A Stable Lithium Metal/Li ₁₀ GeP ₂ S ₁₂ Solid Electrolyte Interface. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13608-13612.	7.2	138
123	Renewable electricity storage using electrolysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 12558-12563.	3.3	136
124	Bioinspiration in light harvesting and catalysis. <i>Nature Reviews Materials</i> , 2020, 5, 828-846.	23.3	136
125	Long-lived light-induced charge separation in a zeolite L-based molecular triad. <i>Journal of the American Chemical Society</i> , 1988, 110, 8232-8234.	6.6	135
126	Rheotaxis of Bimetallic Micromotors Driven by Chemical-Acoustic Hybrid Power. <i>ACS Nano</i> , 2017, 11, 10591-10598.	7.3	135

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127	Nanowire-Based Molecular Monolayer Junctions: Synthesis, Assembly, and Electrical Characterization. <i>Journal of Physical Chemistry B</i> , 2004, 108, 2827-2832.	1.2	134
128	Synthetic Nano- and Micromachines in Analytical Chemistry: Sensing, Migration, Capture, Delivery, and Separation. <i>Annual Review of Analytical Chemistry</i> , 2015, 8, 311-333.	2.8	134
129	Sensitization of titanium dioxide and strontium titanate electrodes by ruthenium(II) tris(2,2'-bipyridine-4,4'-dicarboxylic acid) and zinc tetrakis(4-carboxyphenyl)porphyrin: an evaluation of sensitization efficiency for component photoelectrodes in a multipanel device. <i>The Journal of Physical Chemistry</i> , 1988, 92, 1872-1878.	2.9	133
130	Light-to-Chemical Energy Conversion in Lamellar Solids and Thin Films. <i>Inorganic Chemistry</i> , 2005, 44, 6828-6840.	1.9	133
131	Metal-free organic sensitizers for use in water-splitting dye-sensitized photoelectrochemical cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 1681-1686.	3.3	133
132	Microtwinning in Template-Synthesized Single-Crystal Metal Nanowires. <i>Journal of Physical Chemistry B</i> , 2004, 108, 841-845.	1.2	130
133	Visible Light Photolysis of Hydrogen Iodide Using Sensitized Layered Metal Oxide Semiconductors: The Role of Surface Chemical Modification in Controlling Back Electron Transfer Reactions. <i>Journal of Physical Chemistry B</i> , 1997, 101, 2508-2513.	1.2	129
134	Penetrating the Oxide Barrier in Situ and Separating Freestanding Porous Anodic Alumina Films in One Step. <i>Nano Letters</i> , 2005, 5, 697-703.	4.5	128
135	Direct Deposition of Trivalent Rhodium Hydroxide Nanoparticles onto a Semiconducting Layered Calcium Niobate for Photocatalytic Hydrogen Evolution. <i>Nano Letters</i> , 2008, 8, 794-799.	4.5	128
136	A High-Throughput Optical Screening Method for the Optimization of Colloidal Water Oxidation Catalysts. <i>Journal of the American Chemical Society</i> , 2002, 124, 11114-11121.	6.6	127
137	Reversible intercalation of graphite by fluorine: a new bifluoride, C ₁₂ HF ₂ , and graphite fluorides, C _x F _(5 > x > 2) . <i>Journal of the Chemical Society Chemical Communications</i> , 1983, , 103.	2.0	125
138	Photochemical hydrogen evolution via singlet-state electron-transfer quenching of zinc tetra(N-methyl-4-pyridyl)porphyrin cations in a zeolite L based system. <i>Journal of the American Chemical Society</i> , 1987, 109, 7309-7314.	6.6	125
139	Soft chemistry of ion-exchangeable layered metal oxides. <i>Chemical Society Reviews</i> , 2018, 47, 2401-2430.	18.7	125
140	Electrochemical Characterization of Liquid Phase Exfoliated Two-Dimensional Layers of Molybdenum Disulfide. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 2125-2130.	4.0	121
141	Improving the efficiency of CO ₂ electrolysis by using a bipolar membrane with a weak-acid cation exchange layer. <i>Nature Chemistry</i> , 2021, 13, 33-40.	6.6	121
142	Fabrication of two-dimensional photonic crystals using interference lithography and electrodeposition of CdSe. <i>Applied Physics Letters</i> , 2001, 79, 3392-3394.	1.5	120
143	Synthesis and characterization of superconducting single-crystal Sn nanowires. <i>Applied Physics Letters</i> , 2003, 83, 1620-1622.	1.5	120
144	Scrolled Sheet Precursor Route to Niobium and Tantalum Oxide Nanotubes. <i>Nano Letters</i> , 2007, 7, 2142-2145.	4.5	116

#	ARTICLE	IF	CITATIONS
145	Comparison of two- and three-layer restacked Dionâ€“Jacobson phase niobate nanosheets as catalysts for photochemical hydrogen evolution. <i>Journal of Materials Chemistry</i> , 2009, 19, 4813.	6.7	116
146	Visible-light controlled catalytic Cu ₂ O@Au micromotors. <i>Nanoscale</i> , 2017, 9, 75-78.	2.8	116
147	Anodic Deposition of Colloidal Iridium Oxide Thin Films from Hexahydroxyiridate(IV) Solutions. <i>Small</i> , 2011, 7, 2087-2093.	5.2	115
148	Bipolar Membranes Inhibit Product Crossover in CO ₂ Electrolysis Cells. <i>Advanced Sustainable Systems</i> , 2018, 2, 1700187.	2.7	114
149	Density and Shape Effects in the Acoustic Propulsion of Bimetallic Nanorod Motors. <i>ACS Nano</i> , 2016, 10, 4763-4769.	7.3	112
150	General Method of Manipulating Formation, Composition, and Morphology of Solid-Electrolyte Interphases for Stable Li-Alloy Anodes. <i>Journal of the American Chemical Society</i> , 2017, 139, 17359-17367.	6.6	112
151	High Yield Exfoliation of WS ₂ Crystals into 1â€“2 Layer Semiconducting Nanosheets and Efficient Photocatalytic Hydrogen Evolution from WS ₂ /CdS Nanorod Composites. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 2810-2818.	4.0	112
152	Removal of Perchnetate from Simulated Nuclear Waste Streams Using Supported Zerovalent Iron. <i>Chemistry of Materials</i> , 2007, 19, 5703-5713.	3.2	110
153	Enhanced conversion efficiencies for pillar array solar cells fabricated from crystalline silicon with short minority carrier diffusion lengths. <i>Applied Physics Letters</i> , 2010, 96, 213503.	1.5	110
154	A tale of two forces: simultaneous chemical and acoustic propulsion of bimetallic micromotors. <i>Chemical Communications</i> , 2015, 51, 1020-1023.	2.2	110
155	Steering Acoustically Propelled Nanowire Motors toward Cells in a Biologically Compatible Environment Using Magnetic Fields. <i>Langmuir</i> , 2013, 29, 16113-16118.	1.6	107
156	Dynamic Interactions between Fast Microscale Rotors. <i>Journal of the American Chemical Society</i> , 2009, 131, 9926-9927.	6.6	106
157	Dense layers of vertically oriented WO ₃ crystals as anodes for photoelectrochemical water oxidation. <i>Chemical Communications</i> , 2012, 48, 729-731.	2.2	106
158	Template Fabrication of Protein-Functionalized Gold@Polypyrrole@Gold Segmented Nanowires. <i>Chemistry of Materials</i> , 2004, 16, 3431-3438.	3.2	104
159	Assessing the Utility of Bipolar Membranes for use in Photoelectrochemical Water-Splitting Cells. <i>ChemSusChem</i> , 2014, 7, 3017-3020.	3.6	104
160	Photoinduced Electron Transfer Reactions in Zeolite-Based Donor-Acceptor and Donor-Donor-Acceptor Diads and Triads. <i>Journal of the American Chemical Society</i> , 1994, 116, 10557-10563.	6.6	103
161	Ion-Exchangeable, Electronically Conducting Layered Perovskite Oxyfluorides. <i>Journal of the American Chemical Society</i> , 2009, 131, 9849-9855.	6.6	103
162	An Artificial Z-Scheme Constructed from Dye-Sensitized Metal Oxide Nanosheets for Visible Light-Driven Overall Water Splitting. <i>Journal of the American Chemical Society</i> , 2020, 142, 8412-8420.	6.6	103

#	ARTICLE	IF	CITATIONS
163	Self-Assembly of Nanorod Motors into Geometrically Regular Multimers and Their Propulsion by Ultrasound. <i>ACS Nano</i> , 2014, 8, 11053-11060.	7.3	101
164	NanoCell Electronic Memories. <i>Journal of the American Chemical Society</i> , 2003, 125, 13279-13283.	6.6	100
165	Dielectrophoretic assembly and integration of nanowire devices with functional CMOS operating circuitry. <i>Microelectronic Engineering</i> , 2004, 75, 31-42.	1.1	100
166	The balance of electric field and interfacial catalysis in promoting water dissociation in bipolar membranes. <i>Energy and Environmental Science</i> , 2018, 11, 2235-2245.	15.6	100
167	Optical and Electrical Characterizations of Ultrathin Films Self-Assembled from 11-Aminoundecanoic Acid Capped TiO ₂ Nanoparticles and Polyallylamine Hydrochloride. <i>Langmuir</i> , 2000, 16, 241-246.	1.6	99
168	Exfoliation of layered rutile and perovskite tungstates. <i>Chemical Communications</i> , 2002, , 706-707.	2.2	99
169	Hydrazine Fuels for Bimetallic Catalytic Microfluidic Pumping. <i>Journal of the American Chemical Society</i> , 2007, 129, 7762-7763.	6.6	99
170	Microporous Brookite-Phase Titania Made by Replication of a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2013, 135, 16276-16279.	6.6	98
171	Vectorial electron transport at ion-exchanged zeolite-Y-modified electrodes. <i>The Journal of Physical Chemistry</i> , 1987, 91, 643-648.	2.9	97
172	Raman, infrared and n.m.r. studies of the graphite hydrofluorides C _x F _{1-\hat{r}} (HF) \hat{r} (2 $\hat{\alpha}$ % x $\hat{\alpha}$ % 5). <i>Philosophical Transactions of the Royal Society A</i> , 1985, 314, 179-187.	1.3	96
173	Adsorption of well-ordered zirconium phosphonate multilayer films on high surface area silica. <i>Chemistry of Materials</i> , 1991, 3, 521-527.	3.2	95
174	Distinct photoluminescence and Raman spectroscopy signatures for identifying highly crystalline WS ₂ monolayers produced by different growth methods. <i>Journal of Materials Research</i> , 2016, 31, 931-944.	1.2	95
175	Dielectric Properties of the Lamellar Niobates and Titanoniobates AM ₂ Nb ₃ O ₁₀ and ATiNbO ₅ (A = H, K, M) \hat{r} ETQq1 1 0.784314 rgBT 1519-1525.	3.2	93
176	Two Forces Are Better than One: Combining Chemical and Acoustic Propulsion for Enhanced Micromotor Functionality. <i>Accounts of Chemical Research</i> , 2018, 51, 1948-1956.	7.6	93
177	Flat-Band Potentials of Molecularly Thin Metal Oxide Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 11539-11547.	4.0	92
178	Photoassisted hydrogen generation: platinum and cadmium sulfide supported on separate particles. <i>The Journal of Physical Chemistry</i> , 1987, 91, 3316-3320.	2.9	91
179	Photocatalytic Oxidation of Water by Silica-Supported Tris(4- \hat{r} -dialkyl-2,2- \hat{r} -bipyridyl)ruthenium Polymeric Sensitizers and Colloidal Iridium Oxide. <i>Chemistry of Materials</i> , 2001, 13, 4668-4675.	3.2	91
180	Topochemical Synthesis of Three-Dimensional Perovskites from Lamellar Precursors. <i>Journal of the American Chemical Society</i> , 2000, 122, 2798-2803.	6.6	89

#	ARTICLE	IF	CITATIONS
181	Calcium Niobate Nanosheets Prepared by the Polymerized Complex Method as Catalytic Materials for Photochemical Hydrogen Evolution. <i>Chemistry of Materials</i> , 2009, 21, 3611-3617.	3.2	89
182	Reversible Intercalation of Hexagonal Boron Nitride with Brønsted Acids. <i>Journal of the American Chemical Society</i> , 2013, 135, 8372-8381.	6.6	88
183	Electrical Transport and Chemical Sensing Properties of Individual Conducting Polymer Nanowires. <i>Nano Letters</i> , 2008, 8, 4653-4658.	4.5	86
184	Room temperature negative differential resistance in molecular nanowires. <i>Journal of Materials Chemistry</i> , 2002, 12, 2927-2930.	6.7	83
185	Layer-by-layer self-assembly strategy for template synthesis of nanoscale devices. <i>Materials Science and Engineering C</i> , 2002, 19, 255-262.	3.8	82
186	Nanowire p-n Heterojunction Diodes Made by Templated Assembly of Multilayer Carbon-Nanotube/Polymer/Semiconductor-Particle Shells around Metal Nanowires. <i>Advanced Materials</i> , 2005, 17, 187-192.	11.1	82
187	Radial junction silicon wire array solar cells fabricated by gold-catalyzed vapor-liquid-solid growth. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	82
188	Tungsten disulfide: a novel hydrogen evolution catalyst for water decomposition. <i>The Journal of Physical Chemistry</i> , 1988, 92, 2311-2315.	2.9	81
189	Growth of lamellar Hofmann clathrate films by sequential ligand exchange reactions: assembling a coordination solid one layer at a time. <i>Journal of the American Chemical Society</i> , 1994, 116, 8374-8375.	6.6	81
190	Kilohertz Rotation of Nanorods Propelled by Ultrasound, Traced by Microvortex Advection of Nanoparticles. <i>ACS Nano</i> , 2014, 8, 8300-8309.	7.3	81
191	Observation of Superconductivity in Granular Bi Nanowires Fabricated by Electrodeposition. <i>Nano Letters</i> , 2006, 6, 2773-2780.	4.5	79
192	Effects of Electron Trapping and Protonation on the Efficiency of Water-Splitting Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2014, 136, 10974-10982.	6.6	79
193	Structural studies of some new lamellar magnesium, manganese and calcium phosphonates. <i>Solid State Ionics</i> , 1988, 26, 63-69.	1.3	78
194	Facile Solvothermal Method for Fabricating Arrays of Vertically Oriented Fe_2O_3 Nanowires and Their Application in Photoelectrochemical Water Oxidation. <i>Energy & Fuels</i> , 2011, 25, 5257-5263.	2.5	78
195	Electrochemistry of metalloporphyrins and viologens at zeolite Y-modified electrodes: evidence for electron trapping by monomolecular porphyrin layers. <i>The Journal of Physical Chemistry</i> , 1988, 92, 2592-2597.	2.9	77
196	Dynamic electron-transfer quenching of the tris(2,2'-bipyridyl)ruthenium(II) MLCT excited state by intrazeolitic methylviologen ions. <i>The Journal of Physical Chemistry</i> , 1992, 96, 2879-2885.	2.9	77
197	EIS Studies of Porous Oxygen Electrodes with Discrete Particles. <i>Journal of the Electrochemical Society</i> , 2003, 150, E423.	1.3	77
198	Self-assembling trimolecular redox chains at zeolite Y modified electrodes. <i>Inorganic Chemistry</i> , 1989, 28, 178-182.	1.9	76

#	ARTICLE	IF	CITATIONS
199	Superconductivity and Quantum Oscillations in Crystalline Bi Nanowire. <i>Nano Letters</i> , 2009, 9, 3196-3202.	4.5	76
200	Shape-Directed Microsp spinners Powered by Ultrasound. <i>ACS Nano</i> , 2018, 12, 2939-2947.	7.3	74
201	Hydrothermal Growth and Photoelectrochemistry of Highly Oriented, Crystalline Anatase TiO ₂ Nanorods on Transparent Conducting Electrodes. <i>Chemistry of Materials</i> , 2015, 27, 4180-4183.	3.2	73
202	Coaxially Gated In-Wire Thin-Film Transistors Made by Template Assembly. <i>Journal of the American Chemical Society</i> , 2004, 126, 12738-12739.	6.6	72
203	Effect of Twinning on the Photoluminescence and Photoelectrochemical Properties of Indium Phosphide Nanowires Grown on Silicon (111). <i>Nano Letters</i> , 2008, 8, 4664-4669.	4.5	72
204	Soft Chemical Conversion of Layered Double Hydroxides to Superparamagnetic Spinel Platelets. <i>Chemistry of Materials</i> , 2008, 20, 2374-2381.	3.2	71
205	Dielectrophoretically assembled polymer nanowires for gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2007, 125, 55-59.	4.0	70
206	Electrochemical measurements of electron transfer rates through zirconium 1,2-ethanediybis(phosphonate) multilayer films on gold electrodes. <i>Langmuir</i> , 1991, 7, 2362-2369.	1.6	69
207	Anodic Electrodeposition of Highly Oriented Zirconium Phosphate and Polyaniline-Intercalated Zirconium Phosphate Films. <i>Journal of the American Chemical Society</i> , 2006, 128, 16634-16640.	6.6	69
208	Photochemical Charge Transfer and Hydrogen Evolution Mediated by Oxide Semiconductor Particles in Zeolite-Based Molecular Assemblies. <i>Journal of Physical Chemistry B</i> , 1997, 101, 2491-2500.	1.2	67
209	Self-Assembled Diode Junctions Prepared from a Ruthenium Tris(Bipyridyl) Polymer, n-Type TiO ₂ Nanoparticles, and Graphite Oxide Sheets. <i>Advanced Materials</i> , 2000, 12, 1363-1366.	11.1	67
210	Surface Sol-Gel Synthesis of Ultrathin Semiconductor Films. <i>Chemistry of Materials</i> , 2000, 12, 383-389.	3.2	67
211	Direct fabrication of two-dimensional titania arrays using interference photolithography. <i>Applied Physics Letters</i> , 2001, 79, 3332-3334.	1.5	67
212	Microstructure and Interdiffusion of Template-Synthesized Au/Sn/Au Junction Nanowires. <i>Nano Letters</i> , 2004, 4, 1313-1318.	4.5	67
213	Electrochemistry and photoelectrochemistry of transition metal complexes in well-ordered surface layers. <i>Coordination Chemistry Reviews</i> , 1990, 97, 237-248.	9.5	66
214	Proximity-Induced Superconductivity in Nanowires: Minigap State and Differential Magnetoresistance Oscillations. <i>Physical Review Letters</i> , 2009, 102, 247003.	2.9	65
215	Topochemical diacetylene polymerization in layered metal phosphate salts. <i>Journal of Solid State Chemistry</i> , 1991, 94, 59-71.	1.4	64
216	The pH-sensitive tungsten(VI) oxide-based microelectrochemical transistors. <i>The Journal of Physical Chemistry</i> , 1987, 91, 648-654.	2.9	63

#	ARTICLE	IF	CITATIONS
217	Metallotexaphyrins: a new family of photosensitisers for efficient generation of singlet oxygen. <i>Journal of the Chemical Society Chemical Communications</i> , 1989, , 314.	2.0	63
218	New photochemical method for selective fluorination of organic molecules. <i>Journal of the American Chemical Society</i> , 1990, 112, 2016-2018.	6.6	62
219	NSOM Investigations of the Spectroscopy and Morphology of Self-Assembled Multilayered Thin Films. <i>Journal of Physical Chemistry B</i> , 1998, 102, 9451-9460.	1.2	62
220	Ultrathin Anisotropic Films Assembled from Individual Single-Walled Carbon Nanotubes and Amine Polymers. <i>Journal of Physical Chemistry B</i> , 2005, 109, 2540-2545.	1.2	62
221	Electron transfer kinetics in water splitting dye-sensitized solar cells based on core-shell oxide electrodes. <i>Faraday Discussions</i> , 2012, 155, 165-176.	1.6	62
222	Photoactivity of ternary lead-group IVB oxides for hydrogen and oxygen evolution. <i>Catalysis Letters</i> , 1990, 5, 61-66.	1.4	61
223	Designer solids and surfaces. <i>Journal of Chemical Education</i> , 1990, 67, 829.	1.1	61
224	Photocatalytic water oxidation by Nafion-stabilized iridium oxide colloids. <i>Chemical Communications</i> , 2000, , 1903-1904.	2.2	61
225	Charge Transfer Stabilization of Late Transition Metal Oxide Nanoparticles on a Layered Niobate Support. <i>Journal of the American Chemical Society</i> , 2015, 137, 16216-16224.	6.6	60
226	Polymer mesofibres. <i>Journal of Materials Chemistry</i> , 1998, 8, 13-14.	6.7	59
227	Nanoscale Metal Replicas of Colloidal Crystals. <i>Advanced Materials</i> , 2000, 12, 1040-1042.	11.1	59
228	Structural analysis and characterization of layer perovskite oxynitrides made from Dionâ€“Jacobson oxide precursors. <i>Journal of Solid State Chemistry</i> , 2005, 178, 2313-2321.	1.4	59
229	Visible light-driven, magnetically steerable gold/iron oxide nanomotors. <i>Chemical Communications</i> , 2017, 53, 11465-11468.	2.2	59
230	Bipolar titanium dioxide/platinum semiconductor photoelectrodes and multielectrode arrays for unassisted photolytic water splitting. <i>The Journal of Physical Chemistry</i> , 1986, 90, 4604-4607.	2.9	58
231	Wide-range tuning of the titanium dioxide flat-band potential by adsorption of fluoride and hydrofluoric acid. <i>The Journal of Physical Chemistry</i> , 1990, 94, 4276-4280.	2.9	58
232	Self-assembly of three-dimensional photonic-crystals with air-core line defects. <i>Journal of Materials Chemistry</i> , 2002, 12, 3637-3639.	6.7	58
233	Harnessing catalytic pumps for directional delivery of microparticles in microchambers. <i>Nature Communications</i> , 2017, 8, 14384.	5.8	58
234	Bipolar cadmium selenide/cobalt(II) sulfide semiconductor photoelectrode arrays for unassisted photolytic water splitting. <i>The Journal of Physical Chemistry</i> , 1987, 91, 6-8.	2.9	56

#	ARTICLE	IF	CITATIONS
235	Molecular Design of Intercalation-Based Sensors. 1. Ammonia Sensing with Quartz Crystal Microbalances Modified by Copper Biphenylbis(phosphonate) Thin Films. <i>Analytical Chemistry</i> , 1997, 69, 679-687.	3.2	56
236	Catalytically Driven Colloidal Patterning and Transport. <i>Journal of Physical Chemistry B</i> , 2006, 110, 24513-24521.	1.2	56
237	Interfacial Bonding Stabilizes Rhodium and Rhodium Oxide Nanoparticles on Layered Nb Oxide and Ta Oxide Supports. <i>Journal of the American Chemical Society</i> , 2014, 136, 5687-5696.	6.6	56
238	Dynamics of Electron Injection in SnO ₂ /TiO ₂ Core/Shell Electrodes for Water-Splitting Dye-Sensitized Photoelectrochemical Cells. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2930-2934.	2.1	56
239	Wafer-Scale Fabrication of Micro- to Nanoscale Bubble Swimmers and Their Fast Autonomous Propulsion by Ultrasound. <i>ACS Nano</i> , 2020, 14, 7520-7528.	7.3	56
240	A "Chimie Douce" Synthesis of Perovskite-Type SrTa ₂ O ₆ and SrTa _{2-x} Nb _x O ₆ . <i>Chemistry of Materials</i> , 1998, 10, 2585-2587.	3.2	55
241	Intercalation of Well-Dispersed Gold Nanoparticles into Layered Oxide Nanosheets through Intercalation of a Polyamine. <i>Journal of the American Chemical Society</i> , 2007, 129, 3064-3065.	6.6	55
242	Electrochemical characterization of surface-bound redox polymers derived from 1,1'-bis[[(3-(triethoxysilyl)propyl)amino]carbonyl]cobaltocenium: charge transport, anion binding, and use in photoelectrochemical hydrogen generation. <i>Inorganic Chemistry</i> , 1985, 24, 3119-3126.	1.9	54
243	Chiral Molecular Recognition in a Tripeptide Benzylviologen Cyclophane Host. <i>Journal of Organic Chemistry</i> , 1998, 63, 7663-7669.	1.7	53
244	Low-Cost Laboratory Adaptations for Precollege Students Who Are Blind or Visually Impaired. <i>Journal of Chemical Education</i> , 2008, 85, 243.	1.1	53
245	Visible-light driven Si-Au micromotors in water and organic solvents. <i>Nanoscale</i> , 2017, 9, 11434-11438.	2.8	53
246	Comparison of High-Throughput Electrochemical Methods for Testing Direct Methanol Fuel Cell Anode Electrocatalysts. <i>Journal of the Electrochemical Society</i> , 2005, 152, A594.	1.3	52
247	Molecular Design of Intercalation-Based Sensors. 2. Sensing of Carbon Dioxide in Functionalized Thin Films of Copper Octanediybis(phosphonate). <i>Analytical Chemistry</i> , 1997, 69, 688-694.	3.2	50
248	KLnTiO ₄ (Ln=La, Nd, Sm, Eu, Gd, Dy): A New Series of Ruddlesden-Popper Phases Synthesized by Ion-Exchange of HLnTiO ₄ . <i>Journal of Solid State Chemistry</i> , 2001, 161, 225-232.	1.4	50
249	Ground- and excited-state spectral and redox properties of cadmium(II) texaphyrin. <i>The Journal of Physical Chemistry</i> , 1989, 93, 8111-8115.	2.9	49
250	Synthesis, Proton Exchange, and Topochemical Dehydration of New Ruddlesden-Popper Tantalates and Titanotantalates. <i>Journal of Solid State Chemistry</i> , 2000, 155, 46-54.	1.4	49
251	Template synthesis of polymer-insulated colloidal gold nanowires with reactive ends. <i>Chemical Communications</i> , 2000, , 2445-2446.	2.2	49
252	Fabrication technique for filling-factor tunable titanium dioxide colloidal crystal replicas. <i>Applied Physics Letters</i> , 2002, 81, 4532-4534.	1.5	49

#	ARTICLE	IF	CITATIONS
253	Potassium niobate nanoscrolls incorporating rhodium hydroxide nanoparticles for photocatalytic hydrogen evolution. <i>Journal of Materials Chemistry</i> , 2008, 18, 5982.	6.7	49
254	Utilization of Direct and Diffuse Sunlight in a Dye-Sensitized Solar Cell " Silicon Photovoltaic Hybrid Concentrator System. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 581-585.	2.1	49
255	Broadband Light Absorption with Multiple Surface Plasmon Polariton Waves Excited at the Interface of a Metallic Grating and Photonic Crystal. <i>ACS Nano</i> , 2013, 7, 4995-5007.	7.3	49
256	Ultrathin nanoparticle ZnS and ZnS: Mn films: surface sol-gel synthesis, morphology, photophysical properties. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2000, 69-70, 411-417.	1.7	48
257	The Emerging Technology of Solar Fuels. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2738-2739.	2.1	48
258	Ultrafast Electron Injection Dynamics of Photoanodes for Water-Splitting Dye-Sensitized Photoelectrochemical Cells. <i>Journal of Physical Chemistry C</i> , 2016, 120, 5940-5948.	1.5	48
259	Ultrasmall particles of cadmium selenide and cadmium sulfide formed in Nafion by an ion-dilution technique. <i>The Journal of Physical Chemistry</i> , 1990, 94, 7543-7549.	2.9	47
260	A new approach to the photochemical trifluoromethylation of aromatic compounds. <i>Journal of the Chemical Society Chemical Communications</i> , 1993, , 1359.	2.0	47
261	Dynamics of Electron Recombination and Transport in Water-Splitting Dye-Sensitized Photoanodes. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13858-13867.	1.5	47
262	Wafer-Scale Fabrication of Plasmonic Crystals from Patterned Silicon Templates Prepared by Nanosphere Lithography. <i>Nano Letters</i> , 2013, 13, 2623-2627.	4.5	46
263	Preparative-Scale Separation of Enantiomers Using Intercalated .alpha.-Zirconium Phosphate. <i>Chemistry of Materials</i> , 1995, 7, 1968-1973.	3.2	44
264	Self-assembled thin films from lamellar metal disulfides and organic polymers. <i>Chemical Communications</i> , 1998, , 1563-1564.	2.2	44
265	Interactions Between Suspended Nanowires and Patterned Surfaces. <i>Advanced Functional Materials</i> , 2002, 12, 759-765.	7.8	44
266	Synthesis and characterization of the multi-photon absorption and excited-state properties of a neat liquid 4-propyl 4-butyl diphenyl acetylene. <i>Journal of Materials Chemistry</i> , 2009, 19, 7525.	6.7	44
267	Template Electrodeposition of Single-Phase p- and n-Type Copper Indium Diselenide (CuInSe ₂) Nanowire Arrays. <i>ACS Nano</i> , 2011, 5, 3237-3241.	7.3	44
268	Gas sensing properties of single conducting polymer nanowires and the effect of temperature. <i>Nanotechnology</i> , 2009, 20, 434014.	1.3	43
269	Photovoltage Effects of Sintered IrO ₂ Nanoparticle Catalysts in Water-Splitting Dye-Sensitized Photoelectrochemical Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 17046-17053.	1.5	43
270	An Easily Fabricated Low-Cost Potentiostat Coupled with User-Friendly Software for Introducing Students to Electrochemical Reactions and Electroanalytical Techniques. <i>Journal of Chemical Education</i> , 2018, 95, 1658-1661.	1.1	43

#	ARTICLE	IF	CITATIONS
271	Effect of Oxygen on Linked Ru(bpy) ₃ ²⁺ Viologen Species and Methylviologen: A Reinterpretation of the Electrogenerated Chemiluminescence. <i>Journal of the American Chemical Society</i> , 1997, 119, 10525-10531.	6.6	42
272	Encapsulation of Anionic Dye Molecules by a Swelling Fluoromica through Intercalation of Cationic Polyelectrolytes. <i>Chemistry of Materials</i> , 2007, 19, 79-87.	3.2	42
273	Understanding the Effect of Monomeric Iridium(III/IV) Aquo Complexes on the Photoelectrochemistry of IrO _x /H ₂ O-Catalyzed Water-Splitting Systems. <i>Journal of the American Chemical Society</i> , 2015, 137, 8749-8757.	6.6	41
274	Charge Recombination with Fractional Reaction Orders in Water-Splitting Dye-Sensitized Photoelectrochemical Cells. <i>Journal of the American Chemical Society</i> , 2018, 140, 11647-11654.	6.6	41
275	Stabilization of Intrazeolitic Cadmium Telluride Nanoclusters by Ion Exchange. <i>Chemistry of Materials</i> , 1996, 8, 2121-2127.	3.2	40
276	Influence of Different Iodide Salts on the Performance of Dye-Sensitized Solar Cells Containing Phosphazene-Based Nonvolatile Electrolytes. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15234-15242.	1.5	40
277	Synthesis, Exfoliation, and Electronic/Protonic Conductivity of the Dion-Jacobson Phase Layer Perovskite HLa ₂ TiTa ₂ O ₁₀ . <i>Chemistry of Materials</i> , 2014, 26, 898-906.	3.2	40
278	Reduction at 300 K of NO by CO over supported platinum catalysts. <i>Journal of Catalysis</i> , 1990, 125, 565-567.	3.1	39
279	Electrochemistry and photoelectrochemistry of pillared-clay-modified electrodes. <i>Inorganic Chemistry</i> , 1990, 29, 1531-1535.	1.9	39
280	Autonomously Moving Local Nanoprobes in Heterogeneous Magnetic Fields. <i>Journal of Physical Chemistry C</i> , 2007, 111, 3607-3613.	1.5	39
281	Structural characterization of multilayer metal phosphonate film on silicon using angular-dependent x-ray photoelectron spectroscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1989, 7, 1608-1613.	0.9	37
282	Atomic and Electronic Structures of WTe ₂ Probed by High Resolution Electron Microscopy and ab Initio Calculations. <i>Journal of Physical Chemistry C</i> , 2016, 120, 8364-8369.	1.5	37
283	Split-Pool Method for Synthesis of Solid-State Material Combinatorial Libraries. <i>ACS Combinatorial Science</i> , 2002, 4, 569-575.	3.3	36
284	Optimization of the absorption efficiency of an amorphous-silicon thin-film tandem solar cell backed by a metallic surface-relief grating. <i>Applied Optics</i> , 2013, 52, 966.	0.9	36
285	Structural studies of salts of cis and trans .mu.-fluoro-bridged polymers of pentafluorogermanate(1-) and of the pentafluorogermanate(1-) monomer. <i>Inorganic Chemistry</i> , 1984, 23, 3160-3166.	1.9	35
286	New solids and surfaces, via coordination chemistry. <i>Materials Chemistry and Physics</i> , 1993, 35, 225-232.	2.0	35
287	Structural Effects in the Protonic/Electronic Conductivity of Dion-Jacobson Phase Niobate and Tantalate Layered Perovskites. <i>Journal of Physical Chemistry C</i> , 2007, 111, 3185-3191.	1.5	35
288	Proton-Induced Trap States, Injection and Recombination Dynamics in Water-Splitting Dye-Sensitized Photoelectrochemical Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 16727-16735.	4.0	35

#	ARTICLE	IF	CITATIONS
289	Atomically Thin Layers of Graphene and Hexagonal Boron Nitride Made by Solvent Exfoliation of Their Phosphoric Acid Intercalation Compounds. <i>ACS Nano</i> , 2017, 11, 6746-6754.	7.3	35
290	A high throughput optical method for studying compositional effects in electrocatalysts for CO ₂ reduction. <i>Nature Communications</i> , 2021, 12, 1114.	5.8	35
291	Photorefractive CdSe and Gold Nanowire-Doped Liquid Crystals and Polymer-Dispersed-Liquid-Crystal Photonic Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2006, 446, 233-244.	0.4	34
292	Preparation and synthesis of Ag ₂ Se nanowires produced by template directed synthesis. <i>Journal of Materials Chemistry</i> , 2002, 12, 2433-2434.	6.7	33
293	Excitation of multiple surface-plasmon-polariton waves guided by the periodically corrugated interface of a metal and a periodic multilayered isotropic dielectric material. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2012, 29, 704.	0.9	33
294	Emergent Noncentrosymmetry and Piezoelectricity Driven by Oxygen Octahedral Rotations in $A_{2-x}B_x$ Dion-Jacobson Phase Layer Perovskites. <i>Advanced Functional Materials</i> , 2016, 26, 1930-1937.	7.8	33
295	Surface Superconductivity in Thin Cylindrical Bi Nanowire. <i>Nano Letters</i> , 2015, 15, 1487-1492.	4.5	32
296	Electron and energy transfer as probes of interparticle ion-exchange reactions in zeolite Y. <i>The Journal of Physical Chemistry</i> , 1993, 97, 8650-8655.	2.9	31
297	Anionic Homopolymers Efficiently Target Zerovalent Iron Particles to Hydrophobic Contaminants in Sand Columns. <i>Environmental Science & Technology</i> , 2010, 44, 9069-9074.	4.6	30
298	A new method for depositing platinum exclusively on the internal surface of zeolite L. <i>Inorganic Chemistry</i> , 1987, 26, 3825-3827.	1.9	29
299	Photoelectrochemistry and interfacial energetics of titanium dioxide photoelectrodes in fluoride-containing solutions. <i>The Journal of Physical Chemistry</i> , 1990, 94, 423-428.	2.9	29
300	Effects of substituents on the spectral and redox properties of cadmium(II) texaphyrins. <i>Inorganic Chemistry</i> , 1990, 29, 3738-3745.	1.9	29
301	Metal-insulator-semiconductor and metal-insulator-metal devices derived from zirconium phosphonate thin films. <i>Thin Solid Films</i> , 1992, 208, 132-136.	0.8	29
302	Modular Synthesis of π -Acceptor Cyclophanes Derived from 1,4,5,8-Naphthalenetetracarboxylic Diimide and 1,5-Dinitronaphthalene. <i>Journal of Organic Chemistry</i> , 2001, 66, 3027-3034.	1.7	29
303	Gate-modulated conductance of few-layer WSe ₂ field-effect transistors in the subgap regime: Schottky barrier transistor and subgap impurity states. <i>Applied Physics Letters</i> , 2015, 106, 152104.	1.5	29
304	Artificial photosynthesis in lamellar assemblies of metal poly(pyridyl) complexes and metalloporphyrins. <i>Coordination Chemistry Reviews</i> , 1999, 185-186, 403-416.	9.5	28
305	Improper Inversion Symmetry Breaking and Piezoelectricity through Oxygen Octahedral Rotations in Layered Perovskite Family, $A_{2-x}B_xTiO_{4-x}$ ($A =$ Rare Earths). <i>Advanced Electronic Materials</i> , 2016, 2, 1500196.	2.6	28
306	Balancing Water Dissociation and Current Densities To Enable Sustainable Hydrogen Production with Bipolar Membranes in Microbial Electrolysis Cells. <i>Environmental Science & Technology</i> , 2019, 53, 14761-14768.	4.6	28

#	ARTICLE	IF	CITATIONS
307	Competing Polar and Antipolar Structures in the Ruddlesden-Popper Layered Perovskite $\text{Li}_{2-x}\text{SrNb}_2\text{O}_7$. <i>Chemistry of Materials</i> , 2019, 31, 4418-4425.	3.2	28
308	Enhanced Photocatalytic Reduction of Methyl Viologen by Self-Assembling Ruthenium(II)Poly(Pyridyl) Complexes with L-Lysine Containing Side Chains. <i>Journal of Physical Chemistry B</i> , 2002, 106, 4227-4231.	1.2	27
309	High-Voltage Aqueous Redox Flow Batteries Enabled by Catalyzed Water Dissociation and Acid-Base Neutralization in Bipolar Membranes. <i>ACS Central Science</i> , 2021, 7, 1028-1035.	5.3	27
310	Sensitized polypyrrole-coated semiconducting powders as materials in photosystems for hydrogen generation. <i>Langmuir</i> , 1989, 5, 148-149.	1.6	26
311	Surface Sol-gel Synthesis of Ultrathin Titanium and Tantalum Oxide Films. <i>Journal of Nanoparticle Research</i> , 1999, 1, 43-49.	0.8	26
312	Anisotropic Alignment of Lamellar Potassium Hexaniobate Microcrystals and Nanoscrolls in a Static Magnetic Field. <i>Journal of Physical Chemistry C</i> , 2008, 112, 11280-11285.	1.5	25
313	Electrolyte infiltration in phosphazene-based dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2011, 196, 5223-5230.	4.0	25
314	Experimental excitation of multiple surface-plasmon-polariton waves and waveguide modes in a one-dimensional photonic crystal atop a two-dimensional metal grating. <i>Journal of Nanophotonics</i> , 2015, 9, 093593.	0.4	25
315	Binary Colloidal Crystal Films Grown by Vertical Evaporation of Silica Nanoparticle Suspensions. <i>Langmuir</i> , 2017, 33, 10366-10373.	1.6	25
316	Dye-sensitized photoelectrochemical water oxidation through a buried junction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6946-6951.	3.3	25
317	The fluorobasicities of ReF_7 and IF_7 as measured by the enthalpy change $\text{H}^{\circ}(\text{EF}_7(\text{g}) \rightarrow \text{EF}_6(\text{g}) + \text{F}^{\circ}(\text{g}))$. <i>Journal of Fluorine Chemistry</i> , 1984, 26, 97-116.	0.9	24
318	Modeling of Bipolar Semiconductor Photoelectrode Arrays for Electrolytic Processes. <i>Journal of the Electrochemical Society</i> , 1988, 135, 567-573.	1.3	24
319	Miniaturized electrochemistry. <i>Nature</i> , 1990, 343, 515-516.	13.7	24
320	Hydrothermal synthesis and crystal structures of two novel vanadium oxides containing interlamellar transition metal complexes. <i>Journal of Molecular Structure</i> , 1998, 470, 49-60.	1.8	24
321	2-Aminobenzenethiol-Functionalized Silver-Decorated Nanoporous Silicon Photoelectrodes for Selective CO_2 Reduction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11462-11469.	7.2	24
322	Crowns get organized. <i>Nature</i> , 1997, 387, 350-351.	13.7	23
323	Electrical and Spectroscopic Characterization of Molecular Junctions. <i>MRS Bulletin</i> , 2004, 29, 396-402.	1.7	23
324	Planar Light Concentration in Micro-Si Solar Cells Enabled by a Metallic Grating-Photonic Crystal Architecture. <i>ACS Photonics</i> , 2016, 3, 604-610.	3.2	23

#	ARTICLE	IF	CITATIONS
325	Catalytic hydrogen evolution properties of nickel-doped tungsten disulfide. <i>The Journal of Physical Chemistry</i> , 1989, 93, 401-403.	2.9	22
326	EIS Studies of Porous Oxygen Electrodes with Discrete Particles. <i>Journal of the Electrochemical Society</i> , 2003, 150, E429.	1.3	22
327	Evidence of local superconductivity in granular Bi nanowires fabricated by electrodeposition. <i>Physical Review B</i> , 2008, 78, .	1.1	22
328	Using Adaptive Tools and Techniques To Teach a Class of Students Who Are Blind or Low-Vision. <i>Journal of Chemical Education</i> , 2009, 86, 587.	1.1	22
329	Catalytically driven assembly of trisegmented metallic nanorods and polystyrene tracer particles. <i>Soft Matter</i> , 2016, 12, 2501-2504.	1.2	22
330	Competing Structural Instabilities in the Ruddlesden-Popper Derivatives HTiO_4 (R = Rare) Tj ETQq0 0 0 rgBT /Overlock Centrosymmetry. <i>Chemistry of Materials</i> , 2017, 29, 656-665.	3.2	22
331	Excited Carrier Dynamics in a Dye-Sensitized Niobate Nanosheet Photocatalyst for Visible-Light Hydrogen Evolution. <i>ACS Catalysis</i> , 2021, 11, 659-669.	5.5	22
332	A Practical Guide to Analyzing and Reporting the Movement of Nanoscale Swimmers. <i>ACS Nano</i> , 2021, 15, 15446-15460.	7.3	22
333	Voltammetry at polymer-modified stationary and rotating microelectrodes. Application to determination of electron-transfer rates at polymer solution interfaces. <i>The Journal of Physical Chemistry</i> , 1986, 90, 2150-2156.	2.9	21
334	Reductive quenching of ruthenium polypyridyl sensitizers by cyanometalate complexes. <i>Inorganic Chemistry</i> , 1989, 28, 3507-3510.	1.9	21
335	Combinatorial synthesis of modular chiral cyclophanes. <i>Tetrahedron Letters</i> , 1996, 37, 8313-8316.	0.7	21
336	Combined experimental and theoretical DFT study of molecular nanowires negative differential resistance and interaction with gold clusters. <i>European Physical Journal E</i> , 2005, 18, 201-206.	0.7	21
337	Proton-Conducting Films of Nanoscale Ribbons Formed by Exfoliation of the Layer Perovskite $\text{H}_2\text{SrTa}_2\text{O}_7$. <i>Chemistry of Materials</i> , 2008, 20, 213-219.	3.2	21
338	Chemistry at the Nano-Bio Interface. <i>Journal of the American Chemical Society</i> , 2009, 131, 7937-7939.	6.6	21
339	Synthesis and Superconductivity of Electrochemically Grown Single-Crystal Aluminum Nanowires. <i>Chemistry of Materials</i> , 2009, 21, 5557-5559.	3.2	21
340	Confined Chemical Fluid Deposition of Ferromagnetic Metalattices. <i>Nano Letters</i> , 2018, 18, 546-552.	4.5	21
341	Electrode-confined catalyst systems for use in optical-to-chemical energy conversion. <i>Journal of Photochemistry and Photobiology</i> , 1985, 29, 71-88.	0.6	20
342	Photochemical properties of ultrathin TiO_2 films prepared by chemical vapor deposition. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1989, 50, 283-290.	2.0	20

#	ARTICLE	IF	CITATIONS
343	Photochemical addition of perfluoro-n-butyl iodide to alkynes and olefins. <i>Journal of Fluorine Chemistry</i> , 1991, 53, 53-60.	0.9	20
344	Converting a layer perovskite into a non-defective higher-order homologue: topochemical synthesis of $\text{Eu}_2\text{CaTi}_2\text{O}_7$. <i>Chemical Communications</i> , 2001, , 853-854.	2.2	20
345	Conductive indium-tin oxide nanowire and nanotube arrays made by electrochemically assisted deposition in template membranes: switching between wire and tube growth modes by surface chemical modification of the template. <i>Nanoscale</i> , 2011, 3, 1541.	2.8	20
346	Charge Transfer Dynamics in Aqueous Dye-Sensitized Photoelectrochemical Cells: Implications for Water Splitting Efficiency. <i>Journal of Physical Chemistry C</i> , 2019, 123, 299-305.	1.5	20
347	Bipolar Membranes for Ion Management in (Photo)Electrochemical Energy Conversion. <i>Accounts of Materials Research</i> , 2021, 2, 1156-1166.	5.9	20
348	Bettering nature's solar cells. <i>Nature</i> , 1991, 353, 698-699.	13.7	19
349	Photochemical selective fluorination of organic molecules using mercury (II) fluoride. <i>Journal of Fluorine Chemistry</i> , 1991, 51, 291-294.	0.9	19
350	Recovery of Ammonium and Cesium Ions from Aqueous Waste Streams by Sodium Tetraphenylborate. <i>Industrial & Engineering Chemistry Research</i> , 1999, 38, 4007-4010.	1.8	19
351	pH-Dependent Intercalation of Gold Nanoparticles into a Synthetic Fluoromica Modified with Poly(Allylamine). <i>Chemistry of Materials</i> , 2007, 19, 6588-6596.	3.2	19
352	Buffer layer between a planar optical concentrator and a solar cell. <i>AIP Advances</i> , 2015, 5, .	0.6	19
353	Nano-Dispersed Organic Liquid and Liquid Crystals for All-Time-Scales Optical Switching and Tunable Negative-and Zero- Index Materials. <i>Molecular Crystals and Liquid Crystals</i> , 2008, 485, 934-944.	0.4	18
354	A porphyrin-stabilized iridium oxide water oxidation catalyst. <i>Canadian Journal of Chemistry</i> , 2011, 89, 152-157.	0.6	18
355	An atomic layer deposition reactor with dose quantification for precursor adsorption and reactivity studies. <i>Review of Scientific Instruments</i> , 2013, 84, 014102.	0.6	18
356	Metal phosphonate-based quartz crystal microbalance sensors for amines and ammonia. <i>Sensors and Actuators B: Chemical</i> , 1993, 14, 703-704.	4.0	17
357	Stable metal anodes enabled by a labile organic molecule bonded to a reduced graphene oxide aerogel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 30135-30141.	3.3	17
358	Host-Guest Chemistry of a Chiral Cyclohexanediamine-Viologen Cyclophane in Solution and in the Solid State. <i>Chemistry of Materials</i> , 1998, 10, 1937-1944.	3.2	16
359	Electrochemical Synthesis of Multi-Material Nanowires as Building Blocks for Functional Nanostructures. <i>Materials Research Society Symposia Proceedings</i> , 2000, 636, 461.	0.1	16
360	Synthesis, Chemical Modification, and Surface Assembly of Carbon Nanowires. <i>Advanced Functional Materials</i> , 2003, 13, 365-370.	7.8	16

#	ARTICLE	IF	CITATIONS
361	Fabrication of TiO ₂ -Organic Hybrid Dot Arrays Using Nanosecond Laser Interference Lithography. <i>Journal of the American Ceramic Society</i> , 2006, 89, 3507-3510.	1.9	16
362	Organophosphates as Solvents for Electrolytes in Electrochemical Devices. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 13029-13034.	4.0	16
363	Examining the use of adaptive technologies to increase the hands-on participation of students with blindness or low vision in secondary-school chemistry and physics. <i>Chemistry Education Research and Practice</i> , 2016, 17, 1174-1189.	1.4	16
364	Multicomponent redox catalysts for reduction of large biological molecules using molecular hydrogen as the reductant. <i>Journal of the American Chemical Society</i> , 1988, 110, 2270-2276.	6.6	15
365	Evidence for carbocation intermediates in the titanium dioxide-catalyzed photochemical fluorination of carboxylic acids. <i>Journal of Organic Chemistry</i> , 1993, 58, 1393-1399.	1.7	15
366	Orientation of Diamagnetic Layered Transition Metal Oxide Particles in 1-Tesla Magnetic Fields. <i>Journal of the American Chemical Society</i> , 2011, 133, 1824-1831.	6.6	15
367	Antiproximity effect in aluminum nanowires with no applied magnetic field. <i>Physical Review B</i> , 2011, 83, .	1.1	15
368	Synthesis of New Polyelectrolytes via Backbone Quaternization of Poly(aryloxy- and Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (alko	2.2	15
369	Periodically multilayered planar optical concentrator for photovoltaic solar cells. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	15
370	Acoustic Manipulation of Dense Nanorods in Microgravity. <i>Microgravity Science and Technology</i> , 2020, 32, 1159-1174.	0.7	15
371	Themed issue on water splitting and photocatalysis. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2764-2765.	5.2	14
372	Achieving Minimal Heat Conductivity by Ballistic Confinement in Phononic Metalattices. <i>ACS Nano</i> , 2020, 14, 4235-4243.	7.3	14
373	Photoelectrochemical Properties of Titanium Dioxide Electrodes Prepared from a Titanium-Aluminum Alloy. <i>Journal of the Electrochemical Society</i> , 1990, 137, 3846-3849.	1.3	13
374	Chemical gating of a molecular bilayer rectifier at clay-modified electrodes. <i>Inorganic Chemistry</i> , 1993, 32, 1454-1459.	1.9	13
375	DNA-Directed Assembly of Anisotropic Nanoparticles on Lithographically Defined Surfaces and in Solution. <i>Materials Research Society Symposia Proceedings</i> , 2001, 635, C6.2.1.	0.1	13
376	Photosensitized production of doubly reduced methylviologen followed by highly efficient methylviologen radical formation using self-assembling ruthenium(ii) complexes. <i>Chemical Communications</i> , 2002, , 1534-1535.	2.2	13
377	NANOMATERIALS: Stretching the Mold. <i>Science</i> , 2001, 291, 443-444.	6.0	13
378	Intercalation of graphite by silicon tetrafluoride and fluorine to yield a second-stage salt C ₂₄ SiF ₅ . <i>Synthetic Metals</i> , 1984, 9, 433-440.	2.1	12

#	ARTICLE	IF	CITATIONS
379	Reaction of the (111) faces of single-crystal indium phosphide with alkylating agents. Evidence for selective reaction of the P-rich face. <i>Journal of the American Chemical Society</i> , 1986, 108, 3155-3157.	6.6	12
380	Photoelectrochemical evolution of elemental fluorine at titanium dioxide electrodes in anhydrous hydrogen fluoride solutions. <i>Journal of the American Chemical Society</i> , 1988, 110, 3710-3712.	6.6	12
381	Zeolitic Materials As Organizing Media For Semiconductor-Based Artificial Photosynthetic Systems. <i>Materials Research Society Symposia Proceedings</i> , 1991, 233, 145.	0.1	12
382	Metallic contacts with individual Ru nanowires prepared by electrochemical deposition and the suppression of superconductivity in ultrasmall Ru grains. <i>Applied Physics Letters</i> , 2004, 84, 5171-5173.	1.5	12
383	Electrochemically Assisted Deposition as a New Route to Transparent Conductive Indium Tin Oxide Films. <i>Chemistry of Materials</i> , 2010, 22, 4939-4949.	3.2	12
384	An Improved Z-Scheme for Overall Water Splitting Using Dye-Sensitized Calcium Niobate Nanosheets Synthesized by a Flux Method. <i>ACS Applied Energy Materials</i> , 2021, 4, 10145-10152.	2.5	12
385	Three-Chamber Design for Aqueous Acid-Base Redox Flow Batteries. <i>ACS Energy Letters</i> , 2022, 7, 908-913.	8.8	12
386	Layer-by-layer assembly and intercalation reactions of iron(III) and iron(II) alkanebisphosphonates on gold surfaces. <i>Chemical Communications</i> , 1996, , 2591.	2.2	11
387	Combinatorial Screening of Anode and Cathode Electrocatalysts for Direct Methanol Fuel Cells. <i>Materials Research Society Symposia Proceedings</i> , 1998, 549, 231.	0.1	11
388	Directed-Sorting Method for Synthesis of Bead-Based Combinatorial Libraries of Heterogeneous Catalysts. <i>ACS Combinatorial Science</i> , 2006, 8, 199-212.	3.3	11
389	Homogeneously dispersed CeO ₂ nanoparticles on exfoliated hexaniobate nanosheets. <i>Journal of Physics and Chemistry of Solids</i> , 2017, 111, 335-342.	1.9	11
390	Color Tuning of an Acidic Blue Dye by Intercalation into the Basic Interlayer Galleries of a Poly(allylamine)/Synthetic Fluoromica Nanocomposite. <i>Chemistry of Materials</i> , 2009, 21, 985-993.	3.2	10
391	Protonic and electronic conductivity of the layered perovskite oxides HCa ₂ Nb ₃ O ₁₀ and Ca ₄ Nb ₆ O ₁₉ . <i>International Journal of Hydrogen Energy</i> , 2014, 39, 4576-4580.	3.8	10
392	Nondestructive Measurements of the Mechanical and Structural Properties of Nanostructured Metalattices. <i>Nano Letters</i> , 2020, 20, 3306-3312.	4.5	10
393	Purely viscous acoustic propulsion of bimetallic rods. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	10
394	New aspects of the intercalation of graphite by fluorine and fluorides. <i>Journal of Fluorine Chemistry</i> , 1983, 23, 409.	0.9	9
395	Na ₂ Ln ₂ Ti _{3-x} MnxO ₁₀ (Ln = Sm, Eu, Gd, and Dy; 0 ≤ x ≤ 1): A New Series of Ion-Exchangeable Layered Perovskites Containing B-Site Manganese. <i>Chemistry of Materials</i> , 2002, 14, 442-448.	3.2	9
396	Patterned Nanowires of Se and Corresponding Metal Chalcogenides from Patterned Amorphous Se Nanoparticles. <i>Small</i> , 2009, 5, 356-360.	5.2	9

#	ARTICLE	IF	CITATIONS
397	A New Synthetic Route to Microporous Silica with Well-Defined Pores by Replication of a Metal-Organic Framework. <i>Chemistry - A European Journal</i> , 2015, 21, 12148-12152.	1.7	9
398	Defect Density-Dependent Electron Injection from Excited-State Ru(II) Tris-Diimine Complexes into Defect-Controlled Oxide Semiconductors. <i>Journal of Physical Chemistry C</i> , 2019, 123, 28310-28318.	1.5	9
399	Artificial Photosynthesis in Zeolite-Based Molecular Assemblies. , 1990, , 365-378.		9
400	A new chiral cyclophane derived from 1,1'-binaphthol and benzylviologen. <i>Tetrahedron Letters</i> , 1995, 36, 7599-7602.	0.7	8
401	Electron Transport in Dye-Sensitized TiO ₂ Nanowire Arrays in Contact with Aqueous Electrolytes. <i>Journal of Physical Chemistry C</i> , 2020, 124, 22003-22010.	1.5	8
402	Photoinduced electron transfer in covalently linked ruthenium tris(bipyridyl)-viologen molecules: observation of back electron transfer in the Marcus inverted region. [Erratum to document cited in CA117(18):183725s]. <i>Journal of the American Chemical Society</i> , 1993, 115, 5348-5348.	6.6	7
403	Ferragels: A New Family of Materials for Remediation of Aqueous Metal ion Solutions. <i>Materials Research Society Symposia Proceedings</i> , 1999, 556, 1269.	0.1	7
404	An Environmentally Focused General Chemistry Laboratory. <i>Journal of Chemical Education</i> , 2006, 83, 250.	1.1	7
405	Oligomeric Ruthenium Polypyridyl Dye for Improved Stability of Aqueous Photoelectrochemical Cells. <i>Journal of Physical Chemistry C</i> , 2020, 124, 3542-3550.	1.5	7
406	Fluorine Intercalation Compounds of Graphite—Section I by Watanabe, Touhara, and Nakajima, Section II by Bartlett and Mallouk, and Section III by Selig.. , 1985, , 331-369.		6
407	Synthesis of Porous Transition Metal Oxides by the Salt-Gel Method. <i>Materials Research Society Symposia Proceedings</i> , 1994, 371, 69.	0.1	6
408	Editorial: Self-assembly and materials research. <i>Supramolecular Science</i> , 1997, 4, 1.	0.7	6
409	Colloidal crystal order and structure revealed by tabletop extreme ultraviolet scattering and coherent diffractive imaging. <i>Optics Express</i> , 2018, 26, 11393.	1.7	6
410	Oxide-Free Three-Dimensional Germanium/Silicon Core-Shell Metalattice Made by High-Pressure Confined Chemical Vapor Deposition. <i>ACS Nano</i> , 2020, 14, 12810-12818.	7.3	6
411	2-Aminobenzenethiol-Functionalized Silver-Decorated Nanoporous Silicon Photoelectrodes for Selective CO ₂ Reduction. <i>Angewandte Chemie</i> , 2020, 132, 11559-11566.	1.6	6
412	Oxidative Intercalation of Graphite by Fluoroanionic Species. <i>Advances in Chemistry Series</i> , 1989, , 391-402.	0.6	5
413	Septum-based photoelectrochemical cells. <i>The Journal of Physical Chemistry</i> , 1993, 97, 7127-7128.	2.9	5
414	Nanometer-Scale Architecture Using Colloidal Gold. <i>ACS Symposium Series</i> , 1997, , 7-16.	0.5	5

#	ARTICLE	IF	CITATIONS
415	NONLINEAR AND ELECTRO-OPTICS OF NANO-DISPERSED NEMATIC LIQUID CRYSTALS WITH TUNABLE NEGATIVE-, ZERO-, AND POSITIVE INDICES. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2007, 16, 381-399.	1.1	5
416	Investigation of superconductivity in electrochemically fabricated AuSn nanowires. <i>Nanotechnology</i> , 2008, 19, 365704.	1.3	5
417	Molecules meet materials. <i>Nature</i> , 2012, 485, 450-451.	13.7	5
418	Ultrafast proton-assisted tunneling through ZrO ₂ in dye-sensitized SnO ₂ -core/ZrO ₂ -shell films. <i>Chemical Communications</i> , 2018, 54, 7971-7974.	2.2	5
419	Salt-Based Organic-Inorganic Nanocomposites: Towards A Stable Lithium Metal/Li 10 GeP 2 S 12 Solid Electrolyte Interface. <i>Angewandte Chemie</i> , 2018, 130, 13796-13800.	1.6	5
420	Shape-Selective Intercalation Reactions and Chemical Sensing in Layered Metal Phosphates and Phosphonates. , 1993, , 225-236.		5
421	EIS Studies of Porous Oxygen Electrodes with Discrete Particles [J. Electrochem. Soc., 150, E423 (2003)]. <i>Journal of the Electrochemical Society</i> , 2004, 151, L1.	1.3	4
422	Developing Catalytic Nanomotors. , 2007, , 23-37.		4
423	Adaptive Shape Ripening and Interparticle Bridging of Arginine-Stabilized Silica Nanoparticles during Evaporative Colloidal Crystal Assembly. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4568-4577.	4.0	4
424	Silver Adsorption on Calcium Niobate(001) Nanosheets: Calorimetric Energies That Explain Sinter-Resistant Support. <i>Journal of the American Chemical Society</i> , 2020, 142, 15751-15763.	6.6	4
425	Self-Assembling Electron-Transport Chains in Zeolites. <i>ACS Symposium Series</i> , 1992, , 333-346.	0.5	3
426	Photochemically Induced Charge Separation in Electrostatically Constructed Organic-Inorganic Multilayer Composites. <i>Advances in Chemistry Series</i> , 1998, , 359-379.	0.6	3
427	A Scrolled Sheet Precursor Route to Niobium Oxide Nanotubes. <i>Materials Research Society Symposia Proceedings</i> , 2006, 988, 1.	0.1	3
428	Tunable refractive index materials with metallic nano-spheres dispersed in organic liquids. <i>Proceedings of SPIE</i> , 2007, , .	0.8	3
429	Effect of grating period on the excitation of multiple surface-plasmon-polariton waves guided by the interface of a metal grating and a photonic crystal. <i>Proceedings of SPIE</i> , 2013, , .	0.8	3
430	Optimization of a spectrum splitter using differential evolution algorithm for solar cell applications. <i>Journal of Photonics for Energy</i> , 2015, 5, 055099.	0.8	3
431	Quantum transport in three-dimensional metalattices of platinum featuring an unprecedentedly large surface area to volume ratio. <i>Physical Review Materials</i> , 2020, 4, .	0.9	3
432	Shape-Selective Intercalation and Chemical Sensing in Metal Phosphonate Thin Films. <i>ACS Symposium Series</i> , 1994, , 60-70.	0.5	2

#	ARTICLE	IF	CITATIONS
433	Assembly of thin Film Dielectrics by Sequential Adsorption Reactions of Unilamellar Inorganic Colloids. Materials Research Society Symposia Proceedings, 1996, 446, 377.	0.1	2
434	Continuous-Flow Process for the Separation of Cesium from Complex Waste Mixtures. Industrial & Engineering Chemistry Research, 2001, 40, 3384-3389.	1.8	2
435	Catalytic Nanomotors: Autonomous Movement of Striped Nanorods.. ChemInform, 2004, 35, no.	0.1	2
436	Synthesis of an amide cyclophane building block of shape-persistent triangular molecular wedges. Tetrahedron Letters, 2004, 45, 1151-1153.	0.7	2
437	Double Replication of Silica Colloidal Crystal Films. ACS Applied Materials & Interfaces, 2017, 9, 42075-42083.	4.0	2
438	Random anion distribution in MS_xSe_{2-x} (M = Mo, W) crystals and nanosheets. RSC Advances, 2018, 8, 9871-9878.	1.7	2
439	A chemical steering wheel for micromotors. National Science Review, 2021, 8, nwab119.	4.6	2
440	Orthogonal Self-Assembly on Colloidal Gold-Platinum Nanorods. , 1999, 11, 1021.		2
441	New salts of graphite, $C_{12}+HF_2^+$ & $C_{24}+SiF_5^+$ and the treshold for the oxidative intercalation of graphite. Journal of Fluorine Chemistry, 1982, 21, 26.	0.9	1
442	Structural, vibrational and thermodynamic studies of pentafluorogermanate salts. Journal of Fluorine Chemistry, 1982, 21, 88.	0.9	1
443	Experiments illustrating metal-insulator transitions in solids. Journal of Chemical Education, 1993, 70, 855.	1.1	1
444	Chemically Sensitive Interfaces. ACS Symposium Series, 1994, , 1-14.	0.5	1
445	Electrofluidic Assembly of Nanoelectromechanical Systems. Materials Research Society Symposia Proceedings, 2001, 687, 1.	0.1	1
446	Nonlinear liquid crystals in periodic structures. , 2001, , .		1
447	Interlayer Charge Conversion Through Intercalation of Polycations into a Synthetic Swelling Mica. Materials Research Society Symposia Proceedings, 2006, 988, 1.	0.1	1
448	Nonlinear liquid crystal Nano-metamaterials. , 2008, , .		1
449	In-situ TEM Study on Size-dependent Thermal Stability of Nickel Filled Silica Nano-Opals. Microscopy and Microanalysis, 2017, 23, 956-957.	0.2	1
450	Investigation of Surface Plasmon Resonances in Silver Infiltrated Metalattices by Monochromated Electron Energy Loss Spectroscopy. Microscopy and Microanalysis, 2018, 24, 432-433.	0.2	1

#	ARTICLE	IF	CITATIONS
451	Chemical and Biomolecular Interactions in the Assembly of Nanowires. , 2003, , 235-254.		1
452	Small-Angle X-ray Scattering Analysis of Colloidal Crystals and Replica Materials Made from l-Arginine-Stabilized Silica Nanoparticles. ACS Applied Materials & Interfaces, 2022, , .	4.0	1
453	Evolution of spectroscopy features in layered MoS _x Se _(2-x) solid solutions. Materials Research Express, 2022, 9, 046301.	0.8	1
454	Managing gas and ion transport in a PTFE fiber-based architecture for alkaline fuel cells. Cell Reports Physical Science, 2022, 3, 100912.	2.8	1
455	The relationship between gas phase oxidation strengths and graphite intercalation reactions. Synthetic Metals, 1980, 2, 213.	2.1	0
456	Using nanoporous carbon membranes in fuel cells. Materials Research Society Symposia Proceedings, 2003, 801, 181.	0.1	0
457	Light-to-Chemical Energy Conversion in Lamellar Solids and Thin Films. ChemInform, 2005, 36, no.	0.1	0
458	The Design and Control of Catalytic Motors: Manipulating Colloids and Fluids with Self-Generated Forces. Materials Research Society Symposia Proceedings, 2006, 944, 1.	0.1	0
459	Nanosecond-cw visible-IR all-optical switching and nonlinear transmission with nonlinear organic optical liquids and liquid crystals. , 2007, , .		0
460	Lithographically Fabricated 10-Micron Scale Autonomous Motors. Materials Research Society Symposia Proceedings, 2008, 1135, 30901.	0.1	0
461	Whither nanomaterials?. Nanotechnology, 2009, 20, 430207-430207.	1.3	0
462	Excitation of multiple surface-plasmon-polariton waves and waveguide modes in a 1D photonic crystal atop a 2D metal grating. , 2014, , .		0
463	Optimization of a spectrum splitter using differential evolution algorithm for solar cell applications. , 2014, , .		0
464	In-situ TEM Study of Formation of an Ordered Hollow Structure Metalattice from Silica Nano-Opals through High-Temperature Annealing. Microscopy and Microanalysis, 2018, 24, 320-321.	0.2	0
465	Plasmonic Metalattices: A Correlated Monochromated Electron Energy Loss Study and Theoretical Calculations. Microscopy and Microanalysis, 2019, 25, 678-679.	0.2	0
466	Template Synthesis and Assembly of Meta lNanowires for Electronic Applications. , 2005, , 413-435.		0
467	Modular Assembly of Surface Heterostructures from Inorganic Clusters and Polyelectrolytes. , 1997, , 41-51.		0