

# Thomas E Mallouk

## List of Publications by Year in descending order

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467  
papers

58,840  
citations

492

129  
h-index

1158

229  
g-index

498  
all docs

498  
docs citations

498  
times ranked

47519  
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.	6.7	3,066
2	Catalytic Nanomotors: Autonomous Movement of Striped Nanorods. <i>Journal of the American Chemical Society</i> , 2004, 126, 13424-13431.	13.7	1,805
3	Remediation of Cr(VI) and Pb(II) Aqueous Solutions Using Supported, Nanoscale Zero-valent Iron. <i>Environmental Science &amp; Technology</i> , 2000, 34, 2564-2569.	10.0	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.	15.6	1,089
5	Visible Light Water Splitting Using Dye-Sensitized Oxide Semiconductors. <i>Accounts of Chemical Research</i> , 2009, 42, 1966-1973.	15.6	957
6	Combinatorial Electrochemistry: A Highly Parallel, Optical Screening Method for Discovery of Better Electrocatalysts. <i>Science</i> , 1998, 280, 1735-1737.	12.6	919
7	Electric-field assisted assembly and alignment of metallic nanowires. <i>Applied Physics Letters</i> , 2000, 77, 1399-1401.	3.3	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.	13.7	841
9	A Facile and Template-Free Hydrothermal Synthesis of Mn <sub>3</sub> O <sub>4</sub> Nanorods on Graphene Sheets for Supercapacitor Electrodes with Long Cycle Stability. <i>Chemistry of Materials</i> , 2012, 24, 1158-1164.	6.7	728
10	Perovskites by Design: A Toolbox of Solid-State Reactions. <i>Chemistry of Materials</i> , 2002, 14, 1455-1471.	6.7	625
11	Ordered Mesoporous Polymers of Tunable Pore Size from Colloidal Silica Templates. <i>Science</i> , 1999, 283, 963-965.	12.6	617
12	Layered metal phosphates and phosphonates: from crystals to monolayers. <i>Accounts of Chemical Research</i> , 1992, 25, 420-427.	15.6	605
13	Fast and Efficient Preparation of Exfoliated 2H MoS <sub>2</sub> Nanosheets by Sonication-Assisted Lithium Intercalation and Infrared Laser-Induced 1T to 2H Phase Reversion. <i>Nano Letters</i> , 2015, 15, 5956-5960.	9.1	603
14	Autonomous Motion of Metallic Microrods Propelled by Ultrasound. <i>ACS Nano</i> , 2012, 6, 6122-6132.	14.6	597
15	Polymer-inorganic solid electrolyte interphase for stable lithium metal batteries under lean electrolyte conditions. <i>Nature Materials</i> , 2019, 18, 384-389.	27.5	587
16	Small power: Autonomous nano- and micromotors propelled by self-generated gradients. <i>Nano Today</i> , 2013, 8, 531-554.	11.9	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.	13.7	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.	13.7	564

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19	Turning Down the Heat: Design and Mechanism in Solid-State Synthesis. <i>Science</i> , 1993, 259, 1558-1564.	12.6	535
20	Optical properties of coupled metallic nanorods for field-enhanced spectroscopy. <i>Physical Review B</i> , 2005, 71, .	3.2	534
21	Controlled Synthesis and Transfer of Large-Area WS <sub>2</sub> Sheets: From Single Layer to Few Layers. <i>ACS Nano</i> , 2013, 7, 5235-5242.	14.6	534
22	Hydrodechlorination of Trichloroethylene to Hydrocarbons Using Bimetallic Nickel-iron Nanoparticles. <i>Chemistry of Materials</i> , 2002, 14, 5140-5147.	6.7	526
23	Chemical Locomotion. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 5420-5429.	13.8	524
24	Delivery Vehicles for Zerovalent Metal Nanoparticles in Soil and Groundwater. <i>Chemistry of Materials</i> , 2004, 16, 2187-2193.	6.7	511
25	Design and development of photoanodes for water-splitting dye-sensitized photoelectrochemical cells. <i>Chemical Society Reviews</i> , 2013, 42, 2357-2387.	38.1	495
26	Orthogonal Self-Assembly on Colloidal Gold-Platinum Nanorods. <i>Advanced Materials</i> , 1999, 11, 1021-1025.	21.0	476
27	Bipolar Electrochemical Mechanism for the Propulsion of Catalytic Nanomotors in Hydrogen Peroxide Solutions. <i>Langmuir</i> , 2006, 22, 10451-10456.	3.5	461
28	Catalytic Nanomotors: Remote-Controlled Autonomous Movement of Striped Metallic Nanorods. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 744-746.	13.8	432
29	Schooling Behavior of Light-Powered Autonomous Micromotors in Water. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 3308-3312.	13.8	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.	13.7	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.	2.6	395
33	Motility of Catalytic Nanoparticles through Self-Generated Forces. <i>Chemistry - A European Journal</i> , 2005, 11, 6462-6470.	3.3	395
34	Catalytically Induced Electrokinetics for Motors and Micropumps. <i>Journal of the American Chemical Society</i> , 2006, 128, 14881-14888.	13.7	384
35	New First Order Raman-active Modes in Few Layered Transition Metal Dichalcogenides. <i>Scientific Reports</i> , 2014, 4, 4215.	3.3	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.	9.1	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 &amp; Technology</i> , 2008, 42, 2600-2605.	10.0	335
38	Divide and conquer. <i>Nature Chemistry</i> , 2013, 5, 362-363.	13.6	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.	13.7	331
40	Electron Transfer in Self-Assembled Inorganic Polyelectrolyte/Metal Nanoparticle Heterostructures. <i>Journal of the American Chemical Society</i> , 1996, 118, 7640-7641.	13.7	328
41	Nanowires as Building Blocks for Self-Assembling Logic and Memory Circuits. <i>Chemistry - A European Journal</i> , 2002, 8, 4354-4363.	3.3	302
42	DNA-Directed Assembly of Gold Nanowires on Complementary Surfaces. <i>Advanced Materials</i> , 2001, 13, 249-254.	21.0	297
43	Development of Supported Bifunctional Electrocatalysts for Unitized Regenerative Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2002, 149, A1092.	2.9	295
44	Combinatorial Discovery of Alloy Electrocatalysts for Amperometric Glucose Sensors. <i>Analytical Chemistry</i> , 2001, 73, 1599-1604.	6.5	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.	4.6	282
48	Acoustic Propulsion of Nanorod Motors Inside Living Cells. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3201-3204.	13.8	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.	7.1	280
50	Increasing the Conversion Efficiency of Dye-Sensitized TiO <sub>2</sub> Photoelectrochemical Cells by Coupling to Photonic Crystals. <i>Journal of Physical Chemistry B</i> , 2005, 109, 6334-6342.	2.6	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.	13.7	277
52	Photocatalytic Water Oxidation in a Buffered Tris(2,2'-bipyridyl)ruthenium Complex-Colloidal IrO <sub>2</sub> System. <i>Journal of Physical Chemistry A</i> , 2000, 104, 5275-5280.	2.5	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.	6.7	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.	15.6	267

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55	Molecular Recognition in Lamellar Solids and Thin Films. <i>Accounts of Chemical Research</i> , 1998, 31, 209-217.	15.6	266
56	Synthesis and structural characterization of a homologous series of divalent-metal phosphonates, $MII(O_3PR) \cdot nH_2O$ and $MII(HO_3PR)_2$ . <i>Inorganic Chemistry</i> , 1988, 27, 2781-2785.	4.0	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.	17.4	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.	13.7	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.	6.7	252
60	Nanoscale Tubules Formed by Exfoliation of Potassium Hexaniobate. <i>Chemistry of Materials</i> , 2000, 12, 1556-1562.	6.7	251
61	Characterization of Zirconium Phosphate/Polycation Thin Films Grown by Sequential Adsorption Reactions. <i>Chemistry of Materials</i> , 1997, 9, 1414-1421.	6.7	249
62	Ordered SBA-15 Nanorod Arrays Inside a Porous Alumina Membrane. <i>Journal of the American Chemical Society</i> , 2004, 126, 8650-8651.	13.7	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.	13.8	244
64	Photoinduced Energy and Electron Transfer Reactions in Lamellar Polyanion/Polycation Thin Films: Toward an Inorganic $\mu$ -Journal of the American Chemical Society, 1999, 121, 3435-3445.	13.7	243
65	Electrolysis of $CO_2$ to Syngas in Bipolar Membrane-Based Electrochemical Cells. <i>ACS Energy Letters</i> , 2016, 1, 1149-1153.	17.4	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.	21.0	231
67	Understanding the Efficiency of Autonomous Nano- and Microscale Motors. <i>Journal of the American Chemical Society</i> , 2013, 135, 10557-10565.	13.7	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.	13.6	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.	13.7	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.	4.0	222
72	Effect of Micropore Topology on the Structure and Properties of Zeolite Polymer Replicas. <i>Chemistry of Materials</i> , 1997, 9, 2448-2458.	6.7	222

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73	Layer-by-Layer Growth and Condensation Reactions of Niobate and Titanoniobate Thin Films. Chemistry of Materials, 1999, 11, 1526-1532.	6.7	221
74	Silicon Nanowire Array Photoelectrochemical Cells. Journal of the American Chemical Society, 2007, 129, 12344-12345.	13.7	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). Journal of the American Chemical Society, 2008, 130, 7052-7059.	13.7	214
76	Excited Excitonic States in 1L, 2L, 3L, and Bulk $WSe_{2}$ Observed by Resonant Raman Spectroscopy. ACS Nano, 2014, 8, 9629-9635.	14.6	207
77	Controlled Exfoliation of $MoS_{2}$ Crystals into Trilayer Nanosheets. Journal of the American Chemical Society, 2016, 138, 5143-5149.	13.7	207
78	Combinatorial discovery of bifunctional oxygen reduction &” water oxidation electrocatalysts for regenerative fuel cells. Catalysis Today, 2001, 67, 341-355.	4.4	203
79	3D steerable, acoustically powered microswimmers for single-particle manipulation. Science Advances, 2019, 5, eaax3084.	10.3	199
80	Template Synthesis of Metal Nanowires Containing Monolayer Molecular Junctions. Journal of the American Chemical Society, 2002, 124, 4020-4026.	13.7	198
81	Electrocatalysis in Alkaline Media and Alkaline Membrane-Based Energy Technologies. Chemical Reviews, 2022, 122, 6117-6321.	47.7	195
82	Template-Grown Metal Nanowires. Inorganic Chemistry, 2006, 45, 7555-7565.	4.0	194
83	Interplay between superconductivity and ferromagnetism in crystalline nanowires. Nature Physics, 2010, 6, 389-394.	16.7	194
84	Substrate Catalysis Enhances Single-Enzyme Diffusion. Journal of the American Chemical Society, 2010, 132, 2110-2111.	13.7	193
85	Visible-light photolysis of hydrogen iodide using sensitized layered semiconductor particles. Journal of the American Chemical Society, 1991, 113, 9561-9563.	13.7	192
86	Size quantization effects in cadmium sulfide layers formed by a Langmuir-Blodgett technique. Chemical Physics Letters, 1988, 152, 265-268.	2.6	188
87	Photoinduced Charge Separation in Multilayer Thin Films Grown by Sequential Adsorption of Polyelectrolytes. Journal of the American Chemical Society, 1995, 117, 12879-12880.	13.7	188
88	Resistance and polarization losses in aqueous buffer&”membrane electrolytes for water-splitting photoelectrochemical cells. Energy and Environmental Science, 2012, 5, 7582.	30.8	188
89	Coupling of Titania Inverse Opals to Nanocrystalline Titania Layers in Dye-Sensitized Solar Cells. Journal of Physical Chemistry B, 2008, 112, 14415-14421.	2.6	187
90	Formation of quantum-size semiconductor particles in a layered metal phosphonate host lattice. Chemistry of Materials, 1991, 3, 149-156.	6.7	186

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91	Tungsten Ditelluride: a layered semimetal. Scientific Reports, 2015, 5, 10013.	3.3	186
92	Growth and characterization of metal(II) alkanebisphosphonate multilayer thin films on gold surfaces. Journal of the American Chemical Society, 1993, 115, 11855-11862.	13.7	185
93	Self-assembly of Tiled Perovskite Monolayer and Multilayer Thin Films. Chemistry of Materials, 2000, 12, 2513-2516.	6.7	180
94	Template Growth of Photoconductive Metal/CdSe/Metal Nanowires. Journal of Physical Chemistry B, 2002, 106, 7458-7462.	2.6	179
95	Enhanced Diffusion due to Active Swimmers at a Solid Surface. Physical Review Letters, 2011, 106, 048102.	7.8	178
96	Morphology of Template-Grown Polyaniline Nanowires and Its Effect on the Electrochemical Capacitance of Nanowire Arrays. Chemistry of Materials, 2008, 20, 5260-5265.	6.7	175
97	Non-oxidative intercalation and exfoliation of graphite by Brønsted acids. Nature Chemistry, 2014, 6, 957-963.	13.6	175
98	Two-Dimensional Metal Oxide Nanosheets as Building Blocks for Artificial Photosynthetic Assemblies. Bulletin of the Chemical Society of Japan, 2019, 92, 38-54.	3.2	175
99	Water splitting dye-sensitized solar cells. Nano Today, 2017, 14, 42-58.	11.9	174
100	Salt-Gel Synthesis of Porous Transition-Metal Oxides. Chemistry of Materials, 1995, 7, 304-313.	6.7	173
101	Niobium Oxide Nanoscrolls as Building Blocks for Dye-Sensitized Hydrogen Production from Water under Visible Light Irradiation. Chemistry of Materials, 2008, 20, 6770-6778.	6.7	173
102	Dissipation in quasi-one-dimensional superconducting single-crystal Sn nanowires. Physical Review B, 2005, 71, .	3.2	172
103	Photoinduced electron transfer in covalently linked ruthenium tris(bipyridyl)-viologen molecules: observation of back electron transfer in the Marcus inverted region. Journal of the American Chemical Society, 1992, 114, 8081-8087.	13.7	170
104	A "Mix and Match" Ionic/Covalent Strategy for Self-Assembly of Inorganic Multilayer Films. Journal of the American Chemical Society, 1997, 119, 12184-12191.	13.7	166
105	Catalytically powered dynamic assembly of rod-shaped nanomotors and passive tracer particles. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17744-17749.	7.1	166
106	Optimization of Nano- and Microiron Transport through Sand Columns Using Polyelectrolyte Mixtures. Environmental Science & Technology, 2007, 41, 6418-6424.	10.0	159
107	Synthesis and structural characterization of layered calcium and lanthanide phosphonate salts. Inorganic Chemistry, 1990, 29, 2112-2117.	4.0	157
108	Shape-selective intercalation reactions of layered zinc and cobalt phosphonates. Inorganic Chemistry, 1991, 30, 1434-1438.	4.0	155



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109	Autonomously Moving Nanorods at a Viscous Interface. Nano Letters, 2006, 6, 66-72.	9.1	154
110	Bidentate Dicarboxylate Capping Groups and Photosensitizers Control the Size of IrO <sub>2</sub> Nanoparticle Catalysts for Water Oxidation. Journal of Physical Chemistry B, 2007, 111, 6845-6856.	2.6	154
111	Photocatalytic Hydrogen Evolution from Hexaniobate Nanoscrolls and Calcium Niobate Nanosheets Sensitized by Ruthenium(II) Bipyridyl Complexes. Journal of Physical Chemistry C, 2009, 113, 7962-7969.	3.1	152
112	Catalytic Micropumps: A Microscopic Convective Fluid Flow and Pattern Formation. Journal of the American Chemical Society, 2005, 127, 17150-17151.	13.7	150
113	Chemistry on the Edge: A Microscopic Analysis of the Intercalation, Exfoliation, Edge Functionalization, and Monolayer Surface Tiling Reactions of 1±-Zirconium Phosphate. Journal of the American Chemical Society, 1998, 120, 10887-10894.	13.7	149
114	Controllable Template Synthesis of Superconducting Zn Nanowires with Different Microstructures by Electrochemical Deposition. Nano Letters, 2005, 5, 1247-1253.	9.1	149
115	Immobilization of DNA on an Aluminum(III) Alkanebisphosphonate Thin Film with Electrogenenerated Chemiluminescent Detection. Journal of the American Chemical Society, 1994, 116, 8386-8387.	13.7	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. Journal of the American Chemical Society, 1996, 118, 4222-4223.	13.7	146
117	Tunability of the Refractive Index of Gold Nanoparticle Dispersions. Nano Letters, 2007, 7, 3418-3423.	9.1	146
118	Kinetics of Electron Transfer and Oxygen Evolution in the Reaction of [Ru(bpy)3]3+ with Colloidal Iridium Oxide. Journal of Physical Chemistry A, 2004, 108, 9115-9119.	2.5	145
119	Layer-by-Layer Assembly of Rectifying Junctions in and on Metal Nanowires. Journal of Physical Chemistry B, 2001, 105, 8762-8769.	2.6	144
120	Tunable Nanowire Patterning Using Standing Surface Acoustic Waves. ACS Nano, 2013, 7, 3306-3314.	14.6	142
121	Chiral molecular recognition in intercalated zirconium phosphate. Journal of the American Chemical Society, 1992, 114, 7574-7575.	13.7	139
122	Salt-Based Organic-Inorganic Nanocomposites: Towards A Stable Lithium Metal/Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> Solid Electrolyte Interface. Angewandte Chemie - International Edition, 2018, 57, 13608-13612.	13.8	138
123	Renewable electricity storage using electrolysis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12558-12563.	7.1	136
124	Bioinspiration in light harvesting and catalysis. Nature Reviews Materials, 2020, 5, 828-846.	48.7	136
125	Long-lived light-induced charge separation in a zeolite L-based molecular triad. Journal of the American Chemical Society, 1988, 110, 8232-8234.	13.7	135
126	Rheotaxis of Bimetallic Micromotors Driven by Chemical-Acoustic Hybrid Power. ACS Nano, 2017, 11, 10591-10598.	14.6	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.	2.6	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.	5.4	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.	4.0	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.	7.1	133
132	Microtwinning in Template-Synthesized Single-Crystal Metal Nanowires. <i>Journal of Physical Chemistry B</i> , 2004, 108, 841-845.	2.6	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.	2.6	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.	9.1	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.	9.1	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.	13.7	127
137	Reversible intercalation of graphite by fluorine: a new bifluoride, C <sub>12</sub> HF <sub>2</sub> , and graphite fluorides, C <sub>x</sub> F <sub>(5 &gt; x &gt; 2)</sub> . <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.	13.7	125
139	Soft chemistry of ion-exchangeable layered metal oxides. <i>Chemical Society Reviews</i> , 2018, 47, 2401-2430.	38.1	125
140	Electrochemical Characterization of Liquid Phase Exfoliated Two-Dimensional Layers of Molybdenum Disulfide. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 2125-2130.	8.0	121
141	Improving the efficiency of CO <sub>2</sub> electrolysis by using a bipolar membrane with a weak-acid cation exchange layer. <i>Nature Chemistry</i> , 2021, 13, 33-40.	13.6	121
142	Fabrication of two-dimensional photonic crystals using interference lithography and electrodeposition of CdSe. <i>Applied Physics Letters</i> , 2001, 79, 3392-3394.	3.3	120
143	Synthesis and characterization of superconducting single-crystal Sn nanowires. <i>Applied Physics Letters</i> , 2003, 83, 1620-1622.	3.3	120
144	Scrolled Sheet Precursor Route to Niobium and Tantalum Oxide Nanotubes. <i>Nano Letters</i> , 2007, 7, 2142-2145.	9.1	116

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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 <sub>2</sub> O@Au micromotors. <i>Nanoscale</i> , 2017, 9, 75-78.	5.6	116
147	Anodic Deposition of Colloidal Iridium Oxide Thin Films from Hexahydroxyiridate(IV) Solutions. <i>Small</i> , 2011, 7, 2087-2093.	10.0	115
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