James M Tour

List of Publications by Year
in descending order

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557 papers	84,877 citations	256 142 h-index	443 274 g-index
575 all docs	575 docs citations	575 times ranked	67065 citing authors

#	Article	IF	Citations
1	Improved Synthesis of Graphene Oxide. ACS Nano, 2010, 4, 4806-4814.	14.6	10,035
2	Longitudinal unzipping of carbon nanotubes to form graphene nanoribbons. Nature, 2009, 458, 872-876.	27.8	3,246
3	Laser-induced porous graphene films from commercial polymers. Nature Communications, 2014, 5, 5714.	12.8	1,645
4	Functionalization of Carbon Nanotubes by Electrochemical Reduction of Aryl Diazonium Salts:â€‰ A Bucky Paper Electrode. Journal of the American Chemical Society, 2001, 123, 6536-6542.	13.7	1,364
5	Atomic cobalt on nitrogen-doped graphene for hydrogen generation. Nature Communications, 2015, 6, 8668.	12.8	1,356
6	Electronic Structure Control of Single-Walled Carbon Nanotube Functionalization. Science, 2003, 301, 1519-1522.	12.6	1,270
7	Molecular Electronics. Synthesis and Testing of Components. Accounts of Chemical Research, 2000, 33, 791-804.	15.6	1,263
8	Growth of graphene from solid carbon sources. Nature, 2010, 468, 549-552.	27.8	1,234
9	Conjugated Macromolecules of Precise Length and Constitution. Organic Synthesis for the Construction of Nanoarchitectures. Chemical Reviews, 1996, 96, 537-554.	47.7	1,002
10	Diazonium Functionalization of Surfactant-Wrapped Chemically Converted Graphene Sheets. Journal of the American Chemical Society, 2008, 130, 16201-16206.	13.7	926
11	Covalent chemistry of single-wall carbon nanotubes. Journal of Materials Chemistry, 2002, 12, 1952-1958.	6.7	841
12	Nanotube composites. Nature, 2007, 447, 1066-1068.	27.8	720
13	Self-Assembled Monolayers and Multilayers of Conjugated Thiols, .alpha.,.omega.-Dithiols, and Thioacetyl-Containing Adsorbates. Understanding Attachments between Potential Molecular Wires and Gold Surfaces. Journal of the American Chemical Society, 1995, 117, 9529-9534.	13.7	710
14	Mechanism of Graphene Oxide Formation. ACS Nano, 2014, 8, 3060-3068.	14.6	705
15	Coal as an abundant source of graphene quantum dots. Nature Communications, 2013, 4, 2943.	12.8	686
16	3-Dimensional Graphene Carbon Nanotube Carpet-Based Microsupercapacitors with High Electrochemical Performance. Nano Letters, 2013, 13, 72-78.	9.1	672
17	Highly Functionalized Carbon Nanotubes Using in Situ Generated Diazonium Compounds. Chemistry of Materials, 2001, 13, 3823-3824.	6.7	652
18	Spatially resolving edge states of chiral grapheneÂnanoribbons. Nature Physics, 2011, 7, 616-620.	16.7	628

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19	Covalent Functionalization of Single-Walled Carbon Nanotubes for Materials Applications. Journal of Physical Chemistry A, 2004, 108, 11151-11159.	2.5	617
20	Laser-Induced Graphene by Multiple Lasing: Toward Electronics on Cloth, Paper, and Food. ACS Nano, 2018, 12, 2176-2183.	14.6	607
21	Large-Scale Growth and Characterizations of Nitrogen-Doped Monolayer Graphene Sheets. ACS Nano, 2011, 5, 4112-4117.	14.6	590
22	Dispersion of Functionalized Carbon Nanotubes in Polystyrene. Macromolecules, 2002, 35, 8825-8830.	4.8	579
23	Edgeâ€Oriented MoS₂ Nanoporous Films as Flexible Electrodes for Hydrogen Evolution Reactions and Supercapacitor Devices. Advanced Materials, 2014, 26, 8163-8168.	21.0	552
24	Graphene Oxide. Origin of Acidity, Its Instability in Water, and a New Dynamic Structural Model. ACS Nano, 2013, 7, 576-588.	14.6	548
25	Flexible Boron-Doped Laser-Induced Graphene Microsupercapacitors. ACS Nano, 2015, 9, 5868-5875.	14.6	542
26	Reduction of Graphene Oxide via Bacterial Respiration. ACS Nano, 2010, 4, 4852-4856.	14.6	539
27	Lower-Defect Graphene Oxide Nanoribbons from Multiwalled Carbon Nanotubes. ACS Nano, 2010, 4, 2059-2069.	14.6	539
28	Toward the Synthesis of Wafer-Scale Single-Crystal Graphene on Copper Foils. ACS Nano, 2012, 6, 9110-9117.	14.6	537
29	Spontaneous high-concentration dispersions and liquid crystals of graphene. Nature Nanotechnology, 2010, 5, 406-411.	31.5	532
30	Dissolution of small diameter single-wall carbon nanotubes in organic solvents?. Chemical Communications, 2001, , 193-194.	4.1	525
31	Laserâ€Induced Graphene: From Discovery to Translation. Advanced Materials, 2019, 31, e1803621.	21.0	512
32	Solvent-Free Functionalization of Carbon Nanotubes. Journal of the American Chemical Society, 2003, 125, 1156-1157.	13.7	509
33	High-Yield Organic Dispersions of Unfunctionalized Graphene. Nano Letters, 2009, 9, 3460-3462.	9.1	481
34	Porous Cobaltâ€Based Thin Film as a Bifunctional Catalyst for Hydrogen Generation and Oxygen Generation. Advanced Materials, 2015, 27, 3175-3180.	21.0	460
35	The fourth element. Nature, 2008, 453, 42-43.	27.8	459
36	A seamless three-dimensional carbon nanotube graphene hybrid material. Nature Communications, 2012, 3, 1225.	12.8	456

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37	Growth of Graphene from Food, Insects, and Waste. ACS Nano, 2011, 5, 7601-7607.	14.6	454
38	Laser-Induced Graphene. Accounts of Chemical Research, 2018, 51, 1609-1620.	15.6	441
39	Highâ€Performance Pseudocapacitive Microsupercapacitors from Laserâ€Induced Graphene. Advanced Materials, 2016, 28, 838-845.	21.0	439
40	Gram-scale bottom-up flash graphene synthesis. Nature, 2020, 577, 647-651.	27.8	438
41	Single-Atomic Ruthenium Catalytic Sites on Nitrogen-Doped Graphene for Oxygen Reduction Reaction in Acidic Medium. ACS Nano, 2017, 11, 6930-6941.	14.6	435
42	Directional Control in Thermally Driven Single-Molecule Nanocars. Nano Letters, 2005, 5, 2330-2334.	9.1	432
43	Theoretical Study of a Molecular Resonant Tunneling Diode. Journal of the American Chemical Society, 2000, 122, 3015-3020.	13.7	431
44	Graphene Nanoribbon and Nanostructured SnO₂Composite Anodes for Lithium Ion Batteries. ACS Nano, 2013, 7, 6001-6006.	14.6	421
45	Overcoming the Insolubility of Carbon Nanotubes Through High Degrees of Sidewall Functionalization. Chemistry - A European Journal, 2004, 10, 812-817.	3.3	418
46	Laserâ€Induced Graphene Formation on Wood. Advanced Materials, 2017, 29, 1702211.	21.0	397
47	Boron- and Nitrogen-Doped Graphene Quantum Dots/Graphene Hybrid Nanoplatelets as Efficient Electrocatalysts for Oxygen Reduction. ACS Nano, 2014, 8, 10837-10843.	14.6	396
48	Pristine Graphite Oxide. Journal of the American Chemical Society, 2012, 134, 2815-2822.	13.7	393
49	Unbundled and Highly Functionalized Carbon Nanotubes from Aqueous Reactions. Nano Letters, 2003, 3, 1215-1218.	9.1	391
50	Electrochemical CO₂ Reduction with Atomic Ironâ€Dispersed on Nitrogenâ€Doped Graphene. Advanced Energy Materials, 2018, 8, 1703487.	19.5	369
51	Graphene oxide for effective radionuclide removal. Physical Chemistry Chemical Physics, 2013, 15, 2321.	2.8	361
52	Efficient Electrocatalytic Oxygen Evolution on Amorphous Nickelâ€“Cobalt Binary Oxide Nanoporous Layers. ACS Nano, 2014, 8, 9518-9523.	14.6	359
53	Grapheneâ€Wrapped MnO₂â€“Graphene Nanoribbons as Anode Materials for Highâ€Performance Lithium Ion Batteries. Advanced Materials, 2013, 25, 6298-6302.	21.0	355
54	Molecularly inherent voltage-controlled conductance switching. Nature Materials, 2005, 4, 167-172.	27.5	352

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55	Flexible and Stackable Laser-Induced Graphene Supercapacitors. ACS Applied Materials & Interfaces, 2015, 7, 3414-3419.	8.0	352
56	Charge Transport through Self-Assembled Monolayers of Compounds of Interest in Molecular Electronics. Journal of the American Chemical Society, 2002, 124, 5550-5560.	13.7	351
57	Direct Covalent Grafting of Conjugated Molecules onto Si, GaAs, and Pd Surfaces from Aryldiazonium Salts. Journal of the American Chemical Society, 2004, 126, 370-378.	13.7	339
58	Kinetics of Diazonium Functionalization of Chemically Converted Graphene Nanoribbons. ACS Nano, 2010, 4, 1949-1954.	14.6	333
59	New Routes to Graphene, Graphene Oxide and Their Related Applications. Advanced Materials, 2012, 24, 4924-4955.	21.0	329
60	Magnetite (Fe3O4) Coreâ^'Shell Nanowires:â€‰ Synthesis and Magnetoresistance. Nano Letters, 2004, 4, 2151-2155.	9.1	320
61	Highâ€Performance Hydrogen Evolution from MoS_{2(1â€“x)}P_x Solid Solution. Advanced Materials, 2016, 28, 1427-1432.	21.0	309
62	Alternating Donor/Acceptor Repeat Units in Polythiophenes. Intramolecular Charge Transfer for Reducing Band Gaps in Fully Substituted Conjugated Polymers. Journal of the American Chemical Society, 1998, 120, 5355-5362.	13.7	306
63	Polymerâ€coated nanoparticles for enhanced oil recovery. Journal of Applied Polymer Science, 2014, 131, .	2.6	297
64	Resistive Switches and Memories from Silicon Oxide. Nano Letters, 2010, 10, 4105-4110.	9.1	293
65	Rational Design of Hybrid Graphene Films for High-Performance Transparent Electrodes. ACS Nano, 2011, 5, 6472-6479.	14.6	290
66	Laser-induced graphene fibers. Carbon, 2018, 126, 472-479.	10.3	287
67	Simultaneous Measurements of Electronic Conduction and Raman Response in Molecular Junctions. Nano Letters, 2008, 8, 919-924.	9.1	270
68	Growth of Bilayer Graphene on Insulating Substrates. ACS Nano, 2011, 5, 8187-8192.	14.6	269
69	Convergent Synthetic Routes to Orthogonally Fused Conjugated Oligomers Directed toward Molecular Scale Electronic Device Applications. Journal of Organic Chemistry, 1996, 61, 6906-6921.	3.2	265
70	Graphene Nanoribbon Composites. ACS Nano, 2010, 4, 7415-7420.	14.6	264
71	Direct Growth of Bilayer Graphene on SiO₂ Substrates by Carbon Diffusion through Nickel. ACS Nano, 2011, 5, 8241-8247.	14.6	260
72	Reversible Photo-Switching of Single Azobenzene Molecules in Controlled Nanoscale Environments. Nano Letters, 2008, 8, 1644-1648.	9.1	258

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73	Molecular machines open cell membranes. Nature, 2017, 548, 567-572.	27.8	257
74	Iterative Divergent/Convergent Approach to Linear Conjugated Oligomers by Successive Doubling of the Molecular Length: A Rapid Route to a 128Ã…-Long Potential Molecular Wire. Angewandte Chemie International Edition in English, 1994, 33, 1360-1363.	4.4	253
75	Molecular Scale Electronics:Â A Synthetic/Computational Approach to Digital Computing. Journal of the American Chemical Society, 1998, 120, 8486-8493.	13.7	252
76	Graphite Oxide Flame-Retardant Polymer Nanocomposites. ACS Applied Materials & Interfaces, 2009, 1, 2256-2261.	8.0	245
77	Recent progress on nanovehicles. Chemical Society Reviews, 2006, 35, 1043.	38.1	241
78	Computing with Molecules. Scientific American, 2000, 282, 86-93.	1.0	239
79	Graphene Oxide as a High-Performance Fluid-Loss-Control Additive in Water-Based Drilling Fluids. ACS Applied Materials & Interfaces, 2012, 4, 222-227.	8.0	239
80	Synthesis of 14C-Labeled C60, Its Suspension in Water, and Its Uptake by Human Keratinocytes. Journal of the American Chemical Society, 1994, 116, 4517-4518.	13.7	237
81	Graphene Chemistry: Synthesis and Manipulation. Journal of Physical Chemistry Letters, 2011, 2, 2425-2432.	4.6	237
82	Synthesis and Preliminary Testing of Molecular Wires and Devices. Chemistry - A European Journal, 2001, 7, 5118-5134.	3.3	236
83	Terahertz and Infrared Spectroscopy of Gated Large-Area Graphene. Nano Letters, 2012, 12, 3711-3715.	9.1	235
84	Rapid Solution and Solid Phase Syntheses of Oligo(1,4-phenylene ethynylene)s with Thioester Termini:Â Molecular Scale Wires with Alligator Clips. Derivation of Iterative Reaction Efficiencies on a Polymer Support. Journal of Organic Chemistry, 1997, 62, 1388-1410.	3.2	233
85	Laserâ€Induced Graphene in Controlled Atmospheres: From Superhydrophilic to Superhydrophobic Surfaces. Advanced Materials, 2017, 29, 1700496.	21.0	227
86	Laser-Induced Graphene for Flexible and Embeddable Gas Sensors. ACS Nano, 2019, 13, 3474-3482.	14.6	226
87	Layer-by-Layer Removal of Graphene for Device Patterning. Science, 2011, 331, 1168-1172.	12.6	221
88	Boron- and Nitrogen-Substituted Graphene Nanoribbons as Efficient Catalysts for Oxygen Reduction Reaction. Chemistry of Materials, 2015, 27, 1181-1186.	6.7	219
89	Water-Soluble, Exfoliated, Nonroping Single-Wall Carbon Nanotubes. Journal of the American Chemical Society, 2004, 126, 11158-11159.	13.7	212
90	High thermal conductivity of suspended few-layer hexagonal boron nitride sheets. Nano Research, 2014, 7, 1232-1240.	10.4	211

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91	Sulfur-Doped Laser-Induced Porous Graphene Derived from Polysulfone-Class Polymers and Membranes. ACS Nano, 2018, 12, 289-297.	14.6	211
92	Single Wall Carbon Nanotube Amplification:Â En Route to a Type-Specific Growth Mechanism. Journal of the American Chemical Society, 2006, 128, 15824-15829.	13.7	209
93	Vibrational and electronic heating in nanoscale junctions. Nature Nanotechnology, 2011, 6, 33-38.	31.5	208
94	Effect of Local Environment on Molecular Conduction:Â Isolated Molecule versus Self-Assembled Monolayer. Nano Letters, 2005, 5, 61-65.	9.1	206
95	Highly Conductive Graphene Nanoribbons by Longitudinal Splitting of Carbon Nanotubes Using Potassium Vapor. ACS Nano, 2011, 5, 968-974.	14.6	204
96	Three-Dimensional Metalâ€“Grapheneâ€“Nanotube Multifunctional Hybrid Materials. ACS Nano, 2013, 7, 58-64.	14.6	202
97	Chemical Vapor Deposition of Graphene Single Crystals. Accounts of Chemical Research, 2014, 47, 1327-1337.	15.6	201
98	Surface-Rolling Molecules. Journal of the American Chemical Society, 2006, 128, 4854-4864.	13.7	200
99	Synthesis of Single-Molecule Nanocars. Accounts of Chemical Research, 2009, 42, 473-487.	15.6	200
100	Rapid Syntheses of Oligo(2,5-thiophene ethynylene)s with Thioester Termini:Â Potential Molecular Scale Wires with Alligator Clips. Journal of Organic Chemistry, 1997, 62, 1376-1387.	3.2	198
101	In Situ Formation of Metal Oxide Nanocrystals Embedded in Laser-Induced Graphene. ACS Nano, 2015, 9, 9244-9251.	14.6	198
102	Functionalization of Single-Walled Carbon Nanotubes â€œOn Waterâ€• Journal of the American Chemical Society, 2006, 128, 12899-12904.	13.7	196
103	Top-Down versus Bottom-Up Fabrication of Graphene-Based Electronics. Chemistry of Materials, 2014, 26, 163-171.	6.7	192
104	Electrical Measurements in Molecular Electronics. Chemistry of Materials, 2004, 16, 4423-4435.	6.7	191
105	En Route to a Motorized Nanocar. Organic Letters, 2006, 8, 1713-1716.	4.6	191
106	Purification of gram quantities of C60. A new inexpensive and facile method. Journal of the American Chemical Society, 1992, 114, 7917-7919.	13.7	189
107	Green Chemical Functionalization of Single-Walled Carbon Nanotubes in Ionic Liquids. Journal of the American Chemical Society, 2005, 127, 14867-14870.	13.7	186
108	Decoration, Migration, and Aggregation of Palladium Nanoparticles on Graphene Sheets. Chemistry of Materials, 2010, 22, 5695-5699.	6.7	186

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109	Bandgap Engineering of Coal-Derived Graphene Quantum Dots. ACS Applied Materials & Interfaces, 2015, 7, 7041-7048.	8.0	182
110	Laser-Induced Graphene Triboelectric Nanogenerators. ACS Nano, 2019, 13, 7166-7174.	14.6	181
111	Cobalt Nanoparticles Embedded in Nitrogen-Doped Carbon for the Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2015, 7, 8083-8087.	8.0	180
112	Lithium Batteries with Nearly Maximum Metal Storage. ACS Nano, 2017, 11, 6362-6369.	14.6	180
113	Rebar Graphene. ACS Nano, 2014, 8, 5061-5068.	14.6	178
114	Laser-Induced Graphene Layers and Electrodes Prevents Microbial Fouling and Exerts Antimicrobial Action. ACS Applied Materials & Interfaces, 2017, 9, 18238-18247.	8.0	176
115	Injectable Nanocomposites of Single-Walled Carbon Nanotubes and Biodegradable Polymers for Bone Tissue Engineering. Biomacromolecules, 2006, 7, 2237-2242.	5.4	175
116	Liquid crystals of aqueous, giant graphene oxide flakes. Soft Matter, 2011, 7, 11154.	2.7	175
117	Highly efficient conversion of superoxide to oxygen using hydrophilic carbon clusters. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2343-2348.	7.1	173
118	Three-Dimensional Printed Graphene Foams. ACS Nano, 2017, 11, 6860-6867.	14.6	172
119	Laminated Object Manufacturing of 3Dâ€Printed Laserâ€Induced Graphene Foams. Advanced Materials, 2018, 30, e1707416.	21.0	172
120	Large Flake Graphene Oxide Fibers with Unconventional 100% Knot Efficiency and Highly Aligned Small Flake Graphene Oxide Fibers. Advanced Materials, 2013, 25, 4592-4597.	21.0	171
121	Nanocomposite of Polyaniline Nanorods Grown on Graphene Nanoribbons for Highly Capacitive Pseudocapacitors. ACS Applied Materials & Interfaces, 2013, 5, 6622-6627.	8.0	171
122	Graphene Quantum Dots Doping of MoS₂ Monolayers. Advanced Materials, 2015, 27, 5235-5240.	21.0	168
123	Three-Dimensional Nanoporous Fe₂O₃/Fe₃C-Graphene Heterogeneous Thin Films for Lithium-Ion Batteries. ACS Nano, 2014, 8, 3939-3946.	14.6	167
124	Patterning Graphene through the Self-Assembled Templates: Toward Periodic Two-Dimensional Graphene Nanostructures with Semiconductor Properties. Journal of the American Chemical Society, 2010, 132, 14730-14732.	13.7	165
125	En Route to Surface-Bound Electric Field-Driven Molecular Motors. Journal of Organic Chemistry, 2003, 68, 5091-5103.	3.2	164
126	Large-Area Bernal-Stacked Bi-, Tri-, and Tetralayer Graphene. ACS Nano, 2012, 6, 9790-9796.	14.6	163

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127	Highly transparent nonvolatile resistive memory devices from silicon oxide and graphene. Nature Communications, 2012, 3, 1101.	12.8	162
128	Theoretical Interpretation of Conductivity Measurements of a Thiotolane Sandwich. A Molecular Scale Electronic Controller. Journal of the American Chemical Society, 1998, 120, 3970-3974.	13.7	161
129	Antioxidant Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2009, 131, 3934-3941.	13.7	157
130	Iron Oxide Nanoparticle and Graphene Nanoribbon Composite as an Anode Material for Highâ€Performance Liâ€Ion Batteries. Advanced Functional Materials, 2014, 24, 2044-2048.	14.9	156
131	Ozonation of Single-Walled Carbon Nanotubes and Their Assemblies on Rigid Self-Assembled Monolayers. Chemistry of Materials, 2002, 14, 4235-4241.	6.7	153
132	In situ imaging of the conducting filament in a silicon oxide resistive switch. Scientific Reports, 2012, 2, 242.	3.3	153
133	Direct Real-Time Monitoring of Stage Transitions in Graphite Intercalation Compounds. ACS Nano, 2013, 7, 2773-2780.	14.6	153
134	Self-Assembling Supramolecular Nanostructures from a C60 Derivative: Nanorods and Vesicles. Angewandte Chemie - International Edition, 1999, 38, 2403-2405.	13.8	152
135	Light-Activated Organic Molecular Motors and Their Applications. Chemical Reviews, 2020, 120, 79-124.	47.7	152
136	Imine-Bridged Planar Poly(p-phenylene) Derivatives for Maximization of Extended .pi.-Conjugation. The Common Intermediate Approach. Journal of the American Chemical Society, 1994, 116, 11723-11736.	13.7	150
137	Molecular Wires. Topics in Current Chemistry, 2005, 257, 33-62.	4.0	150
138	Atomic H-Induced Mo₂C Hybrid as an Active and Stable Bifunctional Electrocatalyst. ACS Nano, 2017, 11, 384-394.	14.6	149
139	Glass transition of polymer/single-walled carbon nanotube composite films. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 3339-3345.	2.1	148
140	Covalent Functionalization of Surfactant-Wrapped Graphene Nanoribbons. Chemistry of Materials, 2009, 21, 5284-5291.	6.7	148
141	Towards hybrid superlattices in graphene. Nature Communications, 2011, 2, 559.	12.8	145
142	Self-Assembled Oligo(phenylene-ethynylene) Molecular Electronic Switch Monolayers on Gold:Â Structures and Chemical Stability. Langmuir, 2003, 19, 8245-8255.	3.5	144
143	Passive Anti-Icing and Active Deicing Films. ACS Applied Materials & Interfaces, 2016, 8, 14169-14173.	8.0	143
144	Molecular Alligator Clips for Single Molecule Electronics. Studies of Group 16 and Isonitriles Interfaced with Au Contacts. Journal of the American Chemical Society, 1999, 121, 411-416.	13.7	140

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145	Chemical Mass Production of Graphene Nanoplatelets in â^¼100% Yield. ACS Nano, 2016, 10, 274-279.	14.6	139
146	Electronic two-terminal bistable graphitic memories. Nature Materials, 2008, 7, 966-971.	27.5	137
147	Molecular Engineering and Measurements To Test Hypothesized Mechanisms in Single Molecule Conductance Switching. Journal of the American Chemical Society, 2006, 128, 1959-1967.	13.7	134
148	Enhanced Cycling Stability of Lithiumâ€Ion Batteries Using Grapheneâ€Wrapped Fe₃O₄â€Graphene Nanoribbons as Anode Materials. Advanced Energy Materials, 2015, 5, 1500171.	19.5	133
149	Biocompatibility of Native and Functionalized Single-Walled Carbon Nanotubes for Neuronal Interface. Journal of Nanoscience and Nanotechnology, 2006, 6, 1365-1374.	0.9	132
150	Flash Graphene from Plastic Waste. ACS Nano, 2020, 14, 15595-15604.	14.6	132
151	Green carbon as a bridge to renewable energy. Nature Materials, 2010, 9, 871-874.	27.5	131
152	Graphene Nanoribbon Devices Produced by Oxidative Unzipping of Carbon Nanotubes. ACS Nano, 2010, 4, 5405-5413.	14.6	130
153	High-Resolution Laser-Induced Graphene. Flexible Electronics beyond the Visible Limit. ACS Applied Materials & Interfaces, 2020, 12, 10902-10907.	8.0	129
154	Soluble graphene through edge-selective functionalization. Nano Research, 2010, 3, 117-125.	10.4	128
155	Enhanced Electrocatalysis for Hydrogen Evolution Reactions from WS₂ Nanoribbons. Advanced Energy Materials, 2014, 4, 1301875.	19.5	128
156	Laser-Induced Graphene Composites as Multifunctional Surfaces. ACS Nano, 2019, 13, 2579-2586.	14.6	127
157	Molecular Engineering of the Polarity and Interactions of Molecular Electronic Switches. Journal of the American Chemical Society, 2005, 127, 17421-17426.	13.7	125
158	Functionalized Low Defect Graphene Nanoribbons and Polyurethane Composite Film for Improved Gas Barrier and Mechanical Performances. ACS Nano, 2013, 7, 10380-10386.	14.6	124
159	Longitudinal Splitting of Boron Nitride Nanotubes for the Facile Synthesis of High Quality Boron Nitride Nanoribbons. Nano Letters, 2011, 11, 3221-3226.	9.1	122
160	Soluble Ultra-Short Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2006, 128, 10568-10571.	13.7	119
161	Thickness-dependent patterning of MoS2 sheets with well-oriented triangular pits by heating in air. Nano Research, 2013, 6, 703-711.	10.4	118
162	Graphene Nanoribbons as an Advanced Precursor for Making Carbon Fiber. ACS Nano, 2013, 7, 1628-1637.	14.6	117

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163	Preparation of Three-Dimensional Graphene Foams Using Powder Metallurgy Templates. ACS Nano, 2016, 10, 1411-1416.	14.6	117
164	Approaches to orthogonally fused conducting polymers for molecular electronics. Journal of the American Chemical Society, 1990, 112, 5662-5663.	13.7	115
165	Assembly of DNA/Fullerene Hybrid Materials. Angewandte Chemie - International Edition, 1998, 37, 1528-1531.	13.8	115
166	Graphene: Powder, Flakes, Ribbons, and Sheets. Accounts of Chemical Research, 2013, 46, 2307-2318.	15.6	114
167	Flexible Nanoporous WO_{3â€“x} Nonvolatile Memory Device. ACS Nano, 2016, 10, 7598-7603.	14.6	114
168	Composites of Graphene Nanoribbon Stacks and Epoxy for Joule Heating and Deicing of Surfaces. ACS Applied Materials & Interfaces, 2016, 8, 3551-3556.	8.0	114
169	Self-Sterilizing Laser-Induced Graphene Bacterial Air Filter. ACS Nano, 2019, 13, 11912-11920.	14.6	112
170	Extended orthogonally fused conducting oligomers for molecular electronic devices. Journal of the American Chemical Society, 1991, 113, 7064-7066.	13.7	111
171	Chemical and Potential-Assisted Assembly of Thiolacetyl-Terminated Oligo(phenylene ethynylene)s on Gold Surfaces. Chemistry of Materials, 2002, 14, 2905-2909.	6.7	111
172	Effects of hydration on molecular junction transport. Nature Materials, 2006, 5, 901-908.	27.5	110
173	Toward a Light-Driven Motorized Nanocar: Synthesis and Initial Imaging of Single Molecules. ACS Nano, 2012, 6, 592-597.	14.6	110
174	Rheological behaviour and mechanical characterization of injectable poly(propylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td (fuma 2005, 16, S531-S538.	2.6	109
175	Reversible Bistable Switching in Nanoscale Thiol-Substituted Oligoaniline Molecular Junctions. Nano Letters, 2005, 5, 2365-2372.	9.1	108
176	Antioxidant Carbon Particles Improve Cerebrovascular Dysfunction Following Traumatic Brain Injury. ACS Nano, 2012, 6, 8007-8014.	14.6	108
177	Flexible Three-Dimensional Nanoporous Metal-Based Energy Devices. Journal of the American Chemical Society, 2014, 136, 6187-6190.	13.7	108
178	Vertically Aligned WS₂ Nanosheets for Water Splitting. Advanced Functional Materials, 2015, 25, 6199-6204.	14.9	108
179	Asphalt-Derived High Surface Area Activated Porous Carbons for Carbon Dioxide Capture. ACS Applied Materials & Interfaces, 2015, 7, 1376-1382.	8.0	108
180	Nitrogen-doped carbonized cotton for highly flexible supercapacitors. Carbon, 2016, 105, 260-267.	10.3	108

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