James M Tour

List of Publications by Year in Descending Order

526 papers	70,735 citations	133 h-index	253 g-index
575 ext. papers	77,928 ext. citations	12.7 avg, IF	8.2 L-index

#	Paper	IF	Citations
526	Machine Learning Guided Synthesis of Flash Graphene.. *Advanced Materials*, **2022**, e2106506	24	4
525	Phase controlled synthesis of transition metal carbide nanocrystals by ultrafast flash Joule heating.. *Nature Communications*, **2022**, 13, 262	17.4	2
524	Atomic Molybdenum for Synthesis of Ammonia with 50% Faradic Efficiency.. *Small*, **2022**, e2106327	11	2
523	Heteroatom-Doped Flash Graphene.. *ACS Nano*, **2022**,	16.7	6
522	Rare earth elements from waste.. *Science Advances*, **2022**, 8, eabm3132	14.3	7
521	Advances in nanomaterials for sulfurized carbon cathodes **2022**, 241-270		
520	Inverted Conformation Stability of a Motor Molecule on a Metal Surface. *Journal of Physical Chemistry C*, **2022**, 126, 9034-9040	3.8	3
519	Large-Scale Syntheses of 2-D Materials: Flash Joule Heating and Other Methods. *Advanced Materials*, **2021**, e2106970	24	11
518	Urban mining by flash Joule heating. *Nature Communications*, **2021**, 12, 5794	17.4	1
517	The Future of Flash Graphene for the Sustainable Management of Solid Waste. *ACS Nano*, **2021**, 15, 15461-15470	16.7	7
516	Converting plastic waste pyrolysis ash into flash graphene. *Carbon*, **2021**, 174, 430-438	10.4	16
515	High-Resolution Laser-Induced Graphene from Photoresist. *ACS Nano*, **2021**, 15, 8976-8983	16.7	11
514	Metal-Free Electrocatalysts for Oxygen Reduction to Hydrogen Peroxide. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100021	1.6	3
513	Bulk Production of Any Ratio C:C Turbostratic Flash Graphene and Its Unusual Spectroscopic Characteristics. *ACS Nano*, **2021**, 15, 10542-10552	16.7	4
512	Ultrafast and Controllable Phase Evolution by Flash Joule Heating. *ACS Nano*, **2021**,	16.7	10
511	Flash graphene from rubber waste. *Carbon*, **2021**, 178, 649-656	10.4	20
510	Millisecond Conversion of Metastable 2D Materials by Flash Joule Heating. *ACS Nano*, **2021**, 15, 1282-1290	16.7	20

509	Hydrogen Peroxide Generation with 100% Faradaic Efficiency on Metal-Free Carbon Black. *ACS Catalysis*, **2021**, 11, 2454-2459	13.1	31
508	What Can be Expected from Anode-Free Lithium Metal Batteries?. *Advanced Energy and Sustainability Research*, **2021**, 2, 2000110	1.6	9
507	Tuning Metal Elements in Open Frameworks for Efficient Oxygen Evolution and Oxygen Reduction Reaction Catalysts. *ACS Applied Materials & Interfaces*, **2021**, 13, 42715-42723	9.5	5
506	Bioinspired Redox Mediator in Lithium-Oxygen Batteries. *ACS Catalysis*, **2021**, 11, 1833-1840	13.1	4
505	The Chemical Basis of Intracerebral Hemorrhage and Cell Toxicity With Contributions From Eryptosis and Ferroptosis. *Frontiers in Cellular Neuroscience*, **2020**, 14, 603043	6.1	6
504	Adsorption and Motion of Single Molecular Motors on TiO2(110). *Journal of Physical Chemistry C*, **2020**, 124, 24776-24785	3.8	4
503	Banning carbon nanotubes would be scientifically unjustified and damaging to innovation. *Nature Nanotechnology*, **2020**, 15, 164-166	28.7	40
502	Oxidized Activated Charcoal Nanoparticles as Catalytic Superoxide Dismutase Mimetics: Evidence for Direct Participation of an Intrinsic Radical. *ACS Applied Nano Materials*, **2020**, 3, 6962-6971	5.6	7
501	Laser-Induced Silicon Oxide for Anode-Free Lithium Metal Batteries. *Advanced Materials*, **2020**, 32, e2002850	24	35
500	Molecular Nanomachines Can Destroy Tissue or Kill Multicellular Eukaryotes. *ACS Applied Materials & Interfaces*, **2020**, 12, 13657-13670	9.5	6
499	High-Resolution Laser-Induced Graphene. Flexible Electronics beyond the Visible Limit. *ACS Applied Materials & Interfaces*, **2020**, 12, 10902-10907	9.5	65
498	Pervasive Genomic Damage in Experimental Intracerebral Hemorrhage: Therapeutic Potential of a Mechanistic-Based Carbon Nanoparticle. *ACS Nano*, **2020**, 14, 2827-2846	16.7	15
497	Use of a bioengineered antioxidant in mouse models of metabolic syndrome. *Expert Opinion on Investigational Drugs*, **2020**, 29, 209-219	5.9	
496	Gram-scale bottom-up flash graphene synthesis. *Nature*, **2020**, 577, 647-651	50.4	201
495	Laminated Laser-Induced Graphene Composites. *ACS Nano*, **2020**, 14, 7911-7919	16.7	28
494	Top-down synthesis of graphene nanoribbons using different sources of carbon nanotubes. *Carbon*, **2020**, 158, 615-623	10.4	11
493	Quasi-Solid-State Li-O2 Batteries with Laser-Induced Graphene Cathode Catalysts. *ACS Applied Energy Materials*, **2020**, 3, 1702-1709	6.1	11
492	Light-Activated Organic Molecular Motors and Their Applications. *Chemical Reviews*, **2020**, 120, 79-124	68.1	83

491	Visible-Light-Activated Molecular Nanomachines Kill Pancreatic Cancer Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 410-417	9.5	6
490	Nanocars with Permanent Dipoles: Preparing for the Second International Nanocar Race. *Journal of Organic Chemistry*, **2020**, 85, 13644-13654	4.2	5
489	Antioxidant Carbon Nanoparticles Inhibit Fibroblast-Like Synoviocyte Invasiveness and Reduce Disease Severity in a Rat Model of Rheumatoid Arthritis. *Antioxidants*, **2020**, 9,	7.1	1
488	Flash Graphene from Plastic Waste. *ACS Nano*, **2020**, 14, 15595-15604	16.7	42
487	CO to Formic Acid Using Cu-Sn on Laser-Induced Graphene. *ACS Applied Materials & Interfaces*, **2020**, 12, 41223-41229	9.5	17
486	Flash Graphene Morphologies. *ACS Nano*, **2020**, 14, 13691-13699	16.7	33
485	Laser-induced graphene and carbon nanotubes as conductive carbon-based materials in environmental technology. *Materials Today*, **2020**, 34, 115-131	21.8	39
484	New insights into the mechanism of graphene oxide and radionuclide interaction. *Carbon*, **2020**, 158, 291-302	10.4	17
483	Revisiting the intersection of amyloid, pathologically modified tau and iron in Alzheimer's disease from a ferroptosis perspective. *Progress in Neurobiology*, **2020**, 184, 101716	10.9	49
482	Critical Comparison of the Superoxide Dismutase-like Activity of Carbon Antioxidant Nanozymes by Direct Superoxide Consumption Kinetic Measurements. *ACS Nano*, **2019**, 13, 11203-11213	16.7	16
481	Graphene at Fifteen. *ACS Nano*, **2019**, 13, 10872-10878	16.7	50
480	Self-Sterilizing Laser-Induced Graphene Bacterial Air Filter. *ACS Nano*, **2019**, 13, 11912-11920	16.7	65
479	Doping Nanoscale Graphene Domains Improves Magnetism in Hexagonal Boron Nitride. *Advanced Materials*, **2019**, 31, e1805778	24	40
478	Functional and Structural Improvement with a Catalytic Carbon Nano-Antioxidant in Experimental Traumatic Brain Injury Complicated by Hypotension and Resuscitation. *Journal of Neurotrauma*, **2019**, 36, 2139-2146	5.4	3
477	Near-Infrared Light Activates Molecular Nanomachines to Drill into and Kill Cells. *ACS Nano*, **2019**, 13, 6813-6823	16.7	25
476	Catalytic oxidation and reduction reactions of hydrophilic carbon clusters with NADH and cytochrome C: features of an electron transport nanozyme. *Nanoscale*, **2019**, 11, 10791-10807	7.7	8
475	Laser-Induced Graphene Triboelectric Nanogenerators. *ACS Nano*, **2019**, 13, 7166-7174	16.7	97
474	Graphene Art. *ACS Applied Nano Materials*, **2019**, 2, 3007-3011	5.6	15

473	Less is more. *Nature Nanotechnology*, **2019**, 14, 500-501	28.7	3
472	Highly Oxidized Graphene Quantum Dots from Coal as Efficient Antioxidants. *ACS Applied Materials & Interfaces*, **2019**, 11, 16815-16821	9.5	35
471	Laser-Induced Graphene for Flexible and Embeddable Gas Sensors. *ACS Nano*, **2019**, 13, 3474-3482	16.7	120
470	Inducible lung epithelial resistance requires multisource reactive oxygen species generation to protect against bacterial infections. *PLoS ONE*, **2019**, 14, e0208216	3.7	11
469	Laser-Induced Graphene Composites as Multifunctional Surfaces. *ACS Nano*, **2019**, 13, 2579-2586	16.7	87
468	Li-Breathing Air Batteries Catalyzed by MnNiFe/Laser-Induced Graphene Catalysts. *Advanced Materials Interfaces*, **2019**, 6, 1901035	4.6	15
467	Stage Transitions in Graphite Intercalation Compounds: Role of the Graphite Structure. *Journal of Physical Chemistry C*, **2019**, 123, 19246-19253	3.8	19
466	Sustainable Synthesis of Bright Green Fluorescent Nitrogen-Doped Carbon Quantum Dots from Alkali Lignin. *ChemSusChem*, **2019**, 12, 4202-4210	8.3	46
465	Two-Dimensional Lateral Epitaxy of 2H (MoSe)-1T′ (ReSe) Phases. *Nano Letters*, **2019**, 19, 6338-6345	11.5	18
464	How to control single-molecule rotation. *Nature Communications*, **2019**, 10, 4631	17.4	34
463	Atomic Ru Immobilized on Porous h-BN through Simple Vacuum Filtration for Highly Active and Selective CO2 Methanation. *ACS Catalysis*, **2019**, 9, 10077-10086	13.1	43
462	Strain-controlled optical transmittance tuning of three-dimensional carbon nanotube architectures. *Journal of Materials Chemistry C*, **2019**, 7, 1927-1933	7.1	3
461	Pore Characteristics for Efficient CO Storage in Hydrated Carbons. *ACS Applied Materials & Interfaces*, **2019**,	9.5	11
460	Detecting Li Dendrites in a Two-Electrode Battery System. *Advanced Materials*, **2019**, 31, e1807405	24	27
459	Enteral Activation of WR-2721 Mediates Radioprotection and Improved Survival from Lethal Fractionated Radiation. *Scientific Reports*, **2019**, 9, 1949	4.9	8
458	Molecular Nanomachines Disrupt Bacterial Cell Wall, Increasing Sensitivity of Extensively Drug-Resistant to Meropenem. *ACS Nano*, **2019**, 13, 14377-14387	16.7	18
457	Enhancing Photostability of Fluorescent Dye-Attached Molecular Machines at Air□lass Interface Using Cyclooctatetraene. *Journal of Physical Chemistry C*, **2019**, 123, 3011-3018	3.8	4
456	Laser-Induced Graphene Hybrid Catalysts for Rechargeable Zn-Air Batteries. *ACS Applied Energy Materials*, **2019**, 2, 1460-1468	6.1	36

455	Laser-Induced Graphene: From Discovery to Translation. *Advanced Materials*, **2019**, 31, e1803621	24	287
454	Hybrid MoS/h-BN Nanofillers As Synergic Heat Dissipation and Reinforcement Additives in Epoxy Nanocomposites. *ACS Applied Materials & Interfaces*, **2019**, 11, 24485-24492	9.5	28
453	Manganese deception on graphene and implications in catalysis. *Carbon*, **2018**, 132, 623-631	10.4	48
452	Oxidized Laser-Induced Graphene for Efficient Oxygen Electrocatalysis. *Advanced Materials*, **2018**, 30, e1707319	24	63
451	Singular wavelength dependence on the sensitization of lanthanides by graphene quantum dots. *Chemical Communications*, **2018**, 54, 4325-4328	5.8	5
450	In Situ Synthesis of Efficient Water Oxidation Catalysts in Laser-Induced Graphene. *ACS Energy Letters*, **2018**, 3, 677-683	20.1	64
449	Laser-Induced Graphene by Multiple Lasing: Toward Electronics on Cloth, Paper, and Food. *ACS Nano*, **2018**, 12, 2176-2183	16.7	364
448	Mechanical Properties of Ultralow Density Graphene Oxide/Polydimethylsiloxane Foams. *MRS Advances*, **2018**, 3, 61-66	0.7	0
447	High-yield single-step catalytic growth of graphene nanostripes by plasma enhanced chemical vapor deposition. *Carbon*, **2018**, 129, 527-536	10.4	13
446	Laser-Induced Conversion of Teflon into Fluorinated Nanodiamonds or Fluorinated Graphene. *ACS Nano*, **2018**, 12, 1083-1088	16.7	69
445	A fast and zero-biased photodetector based on GaTe□hSe vertical 2D p□ heterojunction. *2D Materials*, **2018**, 5, 025008	5.9	59
444	Directly deposited porous two-dimensional MoS 2 films as electrocatalysts for hydrogen evolution reactions. *Materials Letters*, **2018**, 225, 65-68	3.3	14
443	Low-Temperature-Processed SiOx One Diode□One Resistor Crossbar Array and Its Flexible Memory Application. *Advanced Electronic Materials*, **2018**, 4, 1700665	6.4	12
442	Electrochemical CO2 Reduction with Atomic Iron-Dispersed on Nitrogen-Doped Graphene. *Advanced Energy Materials*, **2018**, 8, 1703487	21.8	277
441	Revisiting the Mechanism of Oxidative Unzipping of Multiwall Carbon Nanotubes to Graphene Nanoribbons. *ACS Nano*, **2018**, 12, 3985-3993	16.7	61
440	Transfer of Dyes and Drugs into Cells Using EGFR-Targeted Nanosyringes. *ACS Chemical Neuroscience*, **2018**, 9, 107-117	5.7	4
439	Laser-induced graphene fibers. *Carbon*, **2018**, 126, 472-479	10.4	163
438	Toughening Graphene by Integrating Carbon Nanotubes. *ACS Nano*, **2018**, 12, 7901-7910	16.7	31

437	Diffusion of Nanocars on an Air□lass Interface. *Journal of Physical Chemistry C*, **2018**, 122, 19025-19036	3.8	8
436	Laser-induced graphene synthesis of Co3O4 in graphene for oxygen electrocatalysis and metal-air batteries. *Carbon*, **2018**, 139, 880-887	10.4	54
435	Efficacy of Novel Carbon Nanoparticle Antioxidant Therapy in a Severe Model of Reversible Middle Cerebral Artery Stroke in Acutely Hyperglycemic Rats. *Frontiers in Neurology*, **2018**, 9, 199	4.1	24
434	Laser-Induced Graphene from Wood Impregnated with Metal Salts and Use in Electrocatalysis. *ACS Applied Nano Materials*, **2018**, 1, 5053-5061	5.6	54
433	Achieving Self-Stiffening and Laser Healing by Interconnecting Graphene Oxide Sheets with Amine-Functionalized Ovalbumin. *Advanced Materials Interfaces*, **2018**, 5, 1800932	4.6	4
432	Laser-Induced Graphene. *Accounts of Chemical Research*, **2018**, 51, 1609-1620	24.3	243
431	Effect of Graphene Nanoribbons (TexasPEG) on locomotor function recovery in a rat model of lumbar spinal cord transection. *Neural Regeneration Research*, **2018**, 13, 1440-1446	4.5	10
430	Sulfur-Doped Laser-Induced Porous Graphene Derived from Polysulfone-Class Polymers and Membranes. *ACS Nano*, **2018**, 12, 289-297	16.7	141
429	Ultra-Stiff Graphene Foams as Three-Dimensional Conductive Fillers for Epoxy Resin. *ACS Nano*, **2018**, 12, 11219-11228	16.7	26
428	Tip-Sonicated Red Phosphorus-Graphene Nanoribbon Composite for Full Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2018**, 10, 38936-38943	9.5	7
427	Suppressing Li Metal Dendrites Through a Solid Li-Ion Backup Layer. *Advanced Materials*, **2018**, 30, e1803869	24	49
426	Efficient removal of bisphenol-A by ultra-high surface area porous activated carbon derived from asphalt. *Carbon*, **2018**, 140, 441-448	10.4	43
425	Inducible Lung Epithelial Resistance Requires Multisource Reactive Oxygen Species Generation To Protect against Viral Infections. *MBio*, **2018**, 9,	7.8	20
424	Laminated Object Manufacturing of 3D-Printed Laser-Induced Graphene Foams. *Advanced Materials* , **2018**, 30, e1707416	24	118
423	Oxidatively modified carbon as efficient material for removing radionuclides from water. *Carbon*, **2017**, 115, 394-401	10.4	18
422	Segregation of Amphiphilic Polymer-Coated Nanoparticles to Bicontinuous Oil/Water Microemulsion Phases. *Energy & Fuels*, **2017**, 31, 1339-1346	4.1	22
421	Perylene Diimide as a Precise Graphene-like Superoxide Dismutase Mimetic. *ACS Nano*, **2017**, 11, 2024-2032	13.7	40
420	High Performance Electrocatalytic Reaction of Hydrogen and Oxygen on Ruthenium Nanoclusters. *ACS Applied Materials & Interfaces*, **2017**, 9, 3785-3791	9.5	84

419	In situ mechanical investigation of carbon nanotube-graphene junction in three-dimensional carbon nanostructures. *Nanoscale*, **2017**, 9, 2916-2924	7.7	29
418	Three-Dimensional Rebar Graphene. *ACS Applied Materials & Interfaces*, **2017**, 9, 7376-7384	9.5	39
417	Graphene Carbon Nanotube Carpets Grown Using Binary Catalysts for High-Performance Lithium-Ion Capacitors. *ACS Nano*, **2017**, 11, 2724-2733	16.7	78
416	High Toughness in Ultralow Density Graphene Oxide Foam. *Advanced Materials Interfaces*, **2017**, 4, 1700030	4.6	15
415	Laser-Induced Graphene in Controlled Atmospheres: From Superhydrophilic to Superhydrophobic Surfaces. *Advanced Materials*, **2017**, 29, 1700496	24	163
414	Lithium Batteries with Nearly Maximum Metal Storage. *ACS Nano*, **2017**, 11, 6362-6369	16.7	154
413	Laser-Induced Graphene Layers and Electrodes Prevents Microbial Fouling and Exerts Antimicrobial Action. *ACS Applied Materials & Interfaces*, **2017**, 9, 18238-18247	9.5	130
412	Three-Dimensional Printed Graphene Foams. *ACS Nano*, **2017**, 11, 6860-6867	16.7	133
411	Atomic H-Induced MoC Hybrid as an Active and Stable Bifunctional Electrocatalyst. *ACS Nano*, **2017**, 11, 384-394	16.7	114
410	Increased solubility and fiber spinning of graphenide dispersions aided by crown-ethers. *Chemical Communications*, **2017**, 53, 1498-1501	5.8	5
409	Ultrafast Charging High Capacity Asphalt-Lithium Metal Batteries. *ACS Nano*, **2017**, 11, 10761-10767	16.7	70
408	Molecular machines open cell membranes. *Nature*, **2017**, 548, 567-572	50.4	164
407	Structurally Engineered Nanoporous TaO Selector-Less Memristor for High Uniformity and Low Power Consumption. *ACS Applied Materials & Interfaces*, **2017**, 9, 34015-34023	9.5	13
406	Polyimide derived laser-induced graphene as adsorbent for cationic and anionic dyes. *Carbon*, **2017**, 124, 515-524	10.4	58
405	Laser-Induced Graphene Formation on Wood. *Advanced Materials*, **2017**, 29, 1702211	24	243
404	Germanium on seamless graphene carbon nanotube hybrids for lithium ion anodes. *Carbon*, **2017**, 123, 433-439	10.4	26
403	DMFC catalyst with single Ru atoms on graphene matches Pt. *Fuel Cells Bulletin*, **2017**, 2017, 15	1.6	3
402	Efficient Water-Splitting Electrodes Based on Laser-Induced Graphene. *ACS Applied Materials & Interfaces*, **2017**, 9, 26840-26847	9.5	63

401	Lightweight Hexagonal Boron Nitride Foam for CO Absorption. *ACS Nano*, **2017**, 11, 8944-8952	16.7	42
400	Increased CO2 selectivity of asphalt-derived porous carbon through introduction of water into pore space. *Nature Energy*, **2017**, 2, 932-938	62.3	19
399	Synthesis of light-driven motorized nanocars for linear trajectories and their detailed NMR structural determination. *Tetrahedron*, **2017**, 73, 4864-4873	2.4	11
398	How to build and race a fast nanocar. *Nature Nanotechnology*, **2017**, 12, 604-606	28.7	44
397	Single-Atomic Ruthenium Catalytic Sites on Nitrogen-Doped Graphene for Oxygen Reduction Reaction in Acidic Medium. *ACS Nano*, **2017**, 11, 6930-6941	16.7	327
396	Ultra-High Surface Area Activated Porous Asphalt for CO2 Capture through Competitive Adsorption at High Pressures. *Advanced Energy Materials*, **2017**, 7, 1600693	21.8	64
395	Physical and electrical characterization of TexasPEG: An electrically conductive neuronal scaffold. *Surgical Neurology International*, **2017**, 8, 84	1	5
394	Silicon Nanowires and Lithium Cobalt Oxide Nanowires in Graphene Nanoribbon Papers for Full Lithium Ion Battery. *Advanced Energy Materials*, **2016**, 6, 1600918	21.8	68
393	Characterization of a novel MR-detectable nanoantioxidant that mitigates the recall immune response. *NMR in Biomedicine*, **2016**, 29, 1436-44	4.4	3
392	Sandwich structured graphene-wrapped FeS-graphene nanoribbons with improved cycling stability for lithium ion batteries. *Nano Research*, **2016**, 9, 2904-2911	10	45
391	Preferential uptake of antioxidant carbon nanoparticles by T lymphocytes for immunomodulation. *Scientific Reports*, **2016**, 6, 33808	4.9	24
390	Light-Induced Translation of Motorized Molecules on a Surface. *ACS Nano*, **2016**, 10, 10945-10952	16.7	59
389	High-Performance Pseudocapacitive Microsupercapacitors from Laser-Induced Graphene. *Advanced Materials*, **2016**, 28, 838-45	24	335
388	High-Performance Hydrogen Evolution from MoS2(1-x) P(x) Solid Solution. *Advanced Materials*, **2016**, 28, 1427-32	24	260
387	Mechanistic Study of the Conversion of Superoxide to Oxygen and Hydrogen Peroxide in Carbon Nanoparticles. *ACS Applied Materials & Interfaces*, **2016**, 8, 15086-92	9.5	30
386	Biochar as a renewable source for high-performance CO2 sorbent. *Carbon*, **2016**, 107, 344-351	10.4	65
385	Rivet Graphene. *ACS Nano*, **2016**, 10, 7307-13	16.7	14
384	Composites of Graphene Nanoribbon Stacks and Epoxy for Joule Heating and Deicing of Surfaces. *ACS Applied Materials & Interfaces*, **2016**, 8, 3551-6	9.5	80

383	Growth and Transfer of Seamless 3D Graphene-Nanotube Hybrids. *Nano Letters*, **2016**, 16, 1287-92	11.5	22
382	Preparation of Three-Dimensional Graphene Foams Using Powder Metallurgy Templates. *ACS Nano*, **2016**, 10, 1411-6	16.7	95
381	Growing Carbon Nanotubes from Both Sides of Graphene. *ACS Applied Materials & Interfaces*, **2016**, 8, 7356-62	9.5	32
380	Graphene nanoribbon Polymer composites: The critical role of edge functionalization. *Carbon*, **2016**, 99, 444-450	10.4	72
379	Chemical Mass Production of Graphene Nanoplatelets in ~100% Yield. *ACS Nano*, **2016**, 10, 274-9	16.7	112
378	Biocompatibility of reduced graphene oxide nanoscaffolds following acute spinal cord injury in rats. *Surgical Neurology International*, **2016**, 7, 75	1	30
377	Spinal cord fusion with PEG-GNRs (TexasPEG): Neurophysiological recovery in 24 hours in rats. *Surgical Neurology International*, **2016**, 7, S632-6	1	11
376	Passive Anti-Icing and Active Deicing Films. *ACS Applied Materials & Interfaces*, **2016**, 8, 14169-73	9.5	93
375	Nitrogen-doped carbonized cotton for highly flexible supercapacitors. *Carbon*, **2016**, 105, 260-267	10.4	85
374	Synthesis and Photostability of Unimolecular Submersible Nanomachines: Toward Single-Molecule Tracking in Solution. *Organic Letters*, **2016**, 18, 2343-6	6.2	11
373	Microwave Heating of Functionalized Graphene Nanoribbons in Thermoset Polymers for Wellbore Reinforcement. *ACS Applied Materials & Interfaces*, **2016**, 8, 12985-91	9.5	28
372	Flexible Nanoporous WO3-x Nonvolatile Memory Device. *ACS Nano*, **2016**, 10, 7598-603	16.7	87
371	Porous cobalt-based thin film as a bifunctional catalyst for hydrogen generation and oxygen generation. *Advanced Materials*, **2015**, 27, 3175-80	24	406
370	Synthesis of a fluorescent BODIPY-tagged ROMP catalyst and initial polymerization-propelled diffusion studies. *Tetrahedron*, **2015**, 71, 5965-5972	2.4	8
369	Flexible Boron-Doped Laser-Induced Graphene Microsupercapacitors. *ACS Nano*, **2015**, 9, 5868-75	16.7	410
368	Bandgap engineering of coal-derived graphene quantum dots. *ACS Applied Materials & Interfaces*, **2015**, 7, 7041-8	9.5	137
367	Meniscus-mask lithography for fabrication of narrow nanowires. *Nano Letters*, **2015**, 15, 2933-7	11.5	14
366	Cobalt nanoparticles embedded in nitrogen-doped carbon for the hydrogen evolution reaction. *ACS Applied Materials & Interfaces*, **2015**, 7, 8083-7	9.5	158

365	Atomic cobalt on nitrogen-doped graphene for hydrogen generation. *Nature Communications*, **2015**, 6, 8668	17.4	1077
364	Three-Dimensional Networked Nanoporous Ta2O(5-x) Memory System for Ultrahigh Density Storage. *Nano Letters*, **2015**, 15, 6009-14	11.5	39
363	The microRNA miR-22 inhibits the histone deacetylase HDAC4 to promote T(H)17 cell-dependent emphysema. *Nature Immunology*, **2015**, 16, 1185-94	19.1	67
362	Synthesis of a Light-Driven Motorized Nanocar. *Asian Journal of Organic Chemistry*, **2015**, 4, 1308-1314	3	14
361	Carbon-Free Electrocatalyst for Oxygen Reduction and Oxygen Evolution Reactions. *ACS Applied Materials & Interfaces*, **2015**, 7, 20607-11	9.5	31
360	In Situ Formation of Metal Oxide Nanocrystals Embedded in Laser-Induced Graphene. *ACS Nano*, **2015**, 9, 9244-51	16.7	137
359	Nanosized Pt anchored onto 3D nitrogen-doped graphene nanoribbons towards efficient methanol electrooxidation. *Journal of Materials Chemistry A*, **2015**, 3, 19696-19701	13	49
358	Tin Disulfide Nanoplates on Graphene Nanoribbons for Full Lithium Ion Batteries. *ACS Applied Materials & Interfaces*, **2015**, 7, 26549-56	9.5	39
357	Unimolecular Submersible Nanomachines. Synthesis, Actuation, and Monitoring. *Nano Letters*, **2015**, 15, 8229-39	11.5	38
356	Rebar graphene from functionalized boron nitride nanotubes. *ACS Nano*, **2015**, 9, 532-8	16.7	22
355	Vertically Aligned WS2 Nanosheets for Water Splitting. *Advanced Functional Materials*, **2015**, 25, 6199-6204	13.4	98
354	Graphene Quantum Dots Doping of MoS2 Monolayers. *Advanced Materials*, **2015**, 27, 5235-40	24	135
353	Enhanced Cycling Stability of Lithium-Ion Batteries Using Graphene-Wrapped Fe3O4-Graphene Nanoribbons as Anode Materials. *Advanced Energy Materials*, **2015**, 5, 1500171	21.8	113
352	Tungsten-based porous thin-films for electrocatalytic hydrogen generation. *Journal of Materials Chemistry A*, **2015**, 3, 5798-5804	13	38
351	Chemical Makeup and Hydrophilic Behavior of Graphene Oxide Nanoribbons after Low-Temperature Fluorination. *ACS Nano*, **2015**, 9, 7009-18	16.7	34
350	Three-dimensional patterning of solid microstructures through laser reduction of colloidal graphene oxide in liquid-crystalline dispersions. *Nature Communications*, **2015**, 6, 7157	17.4	47
349	Luminescent Polymer Composite Films Containing Coal-Derived Graphene Quantum Dots. *ACS Applied Materials & Interfaces*, **2015**, 7, 26063-8	9.5	66
348	Tuning Electrical Conductivity of Inorganic Minerals with Carbon Nanomaterials. *ACS Applied Materials & Interfaces*, **2015**, 7, 26079-84	9.5	3

347	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, 2343-8	11.5	136
346	Boron- and Nitrogen-Substituted Graphene Nanoribbons as Efficient Catalysts for Oxygen Reduction Reaction. *Chemistry of Materials*, **2015**, 27, 1181-1186	9.6	202
345	Asphalt-derived high surface area activated porous carbons for carbon dioxide capture. *ACS Applied Materials & Interfaces*, **2015**, 7, 1376-82	9.5	91
344	Flexible and stackable laser-induced graphene supercapacitors. *ACS Applied Materials & Interfaces*, **2015**, 7, 3414-9	9.5	265
343	Nanoparticulate carbon black in cigarette smoke induces DNA cleavage and Th17-mediated emphysema. *ELife*, **2015**, 4, e09623	8.9	45
342	Rebar graphene. *ACS Nano*, **2014**, 8, 5061-8	16.7	155
341	Polymer-coated nanoparticles for enhanced oil recovery. *Journal of Applied Polymer Science*, **2014**, 131, n/a-n/a	2.9	239
340	Mechanism of graphene oxide formation. *ACS Nano*, **2014**, 8, 3060-8	16.7	553
339	Iron Oxide Nanoparticle and Graphene Nanoribbon Composite as an Anode Material for High-Performance Li-Ion Batteries. *Advanced Functional Materials*, **2014**, 24, 2044-2048	15.6	142
338	Layered materials: scaling up exfoliation. *Nature Materials*, **2014**, 13, 545-6	27	32
337	Preparation of carbon-coated iron oxide nanoparticles dispersed on graphene sheets and applications as advanced anode materials for lithium-ion batteries. *Nano Research*, **2014**, 7, 502-510	10	92
336	Chemical vapor deposition of graphene single crystals. *Accounts of Chemical Research*, **2014**, 47, 1327-37	24.3	170
335	Three-dimensional nanoporous Fe□/Fe□-graphene heterogeneous thin films for lithium-ion batteries. *ACS Nano*, **2014**, 8, 3939-46	16.7	151
334	Radio-frequency-transparent, electrically conductive graphene nanoribbon thin films as deicing heating layers. *ACS Applied Materials & Interfaces*, **2014**, 6, 298-304	9.5	41
333	Conducting-interlayer SiOx memory devices on rigid and flexible substrates. *ACS Nano*, **2014**, 8, 1410-8	16.7	24
332	Salt- and temperature-stable quantum dot nanoparticles for porous media flow. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2014**, 443, 492-500	5.1	19
331	Silver-Graphene Nanoribbon Composite Catalyst for the Oxygen Reduction Reaction in Alkaline Electrolyte. *Electroanalysis*, **2014**, 26, 164-170	3	56
330	Edge-oriented MoS2 nanoporous films as flexible electrodes for hydrogen evolution reactions and supercapacitor devices. *Advanced Materials*, **2014**, 26, 8163-8	24	497

329	Vertically Aligned Carbon Nanotubes/Graphene Hybrid Electrode as a TCO- and Pt-Free Flexible Cathode for Application in Solar Cells. *Journal of Materials Chemistry A*, **2014**, 2, 20902-20907	13	41
328	High-yield synthesis of boron nitride nanoribbons via longitudinal splitting of boron nitride nanotubes by potassium vapor. *ACS Nano*, **2014**, 8, 9867-73	16.7	19
327	Enhanced Electrocatalysis for Hydrogen Evolution Reactions from WS2 Nanoribbons. *Advanced Energy Materials*, **2014**, 4, 1301875	21.8	116
326	Enhanced cycling stability of lithium sulfur batteries using sulfur-polyaniline-graphene nanoribbon composite cathodes. *ACS Applied Materials & Interfaces*, **2014**, 6, 15033-9	9.5	69
325	Large Hexagonal Bi- and Trilayer Graphene Single Crystals with Varied Interlayer Rotations. *Angewandte Chemie*, **2014**, 126, 1591-1595	3.6	24
324	SnO2-reduced graphene oxide nanoribbons as anodes for lithium ion batteries with enhanced cycling stability. *Nano Research*, **2014**, 7, 1319-1326	10	63
323	Hydrophilic carbon clusters as therapeutic, high-capacity antioxidants. *Trends in Biotechnology*, **2014**, 32, 501-5	15.1	27
322	High thermal conductivity of suspended few-layer hexagonal boron nitride sheets. *Nano Research*, **2014**, 7, 1232-1240	10	157
321	Efficient electrocatalytic oxygen evolution on amorphous nickel-cobalt binary oxide nanoporous layers. *ACS Nano*, **2014**, 8, 9518-23	16.7	310
320	Nanoporous silicon oxide memory. *Nano Letters*, **2014**, 14, 4694-9	11.5	56
319	Large hexagonal bi- and trilayer graphene single crystals with varied interlayer rotations. *Angewandte Chemie - International Edition*, **2014**, 53, 1565-9	16.4	63
318	Functionalized graphene nanoribbon films as a radiofrequency and optically transparent material. *ACS Applied Materials & Interfaces*, **2014**, 6, 16661-8	9.5	19
317	Materials chemistry: Seeds of selective nanotube growth. *Nature*, **2014**, 512, 30-1	50.4	13
316	Boron- and nitrogen-doped graphene quantum dots/graphene hybrid nanoplatelets as efficient electrocatalysts for oxygen reduction. *ACS Nano*, **2014**, 8, 10837-43	16.7	346
315	LiFePO4 nanoparticles encapsulated in graphene nanoshells for high-performance lithium-ion battery cathodes. *Chemical Communications*, **2014**, 50, 7117-9	5.8	40
314	Three-dimensional thin film for lithium-ion batteries and supercapacitors. *ACS Nano*, **2014**, 8, 7279-87	16.7	46
313	Capturing carbon dioxide as a polymer from natural gas. *Nature Communications*, **2014**, 5, 3961	17.4	43
312	Flexible three-dimensional nanoporous metal-based energy devices. *Journal of the American Chemical Society*, **2014**, 136, 6187-90	16.4	99

311	Rice group shows graphene quantum dots beat Pt catalyst. *Fuel Cells Bulletin*, **2014**, 2014, 13	1.6	2
310	Magnetic defects in chemically converted graphene nanoribbons: electron spin resonance investigation. *AIP Advances*, **2014**, 4, 047104	1.5	9
309	Laser-induced porous graphene films from commercial polymers. *Nature Communications*, **2014**, 5, 5714	17.4	1020
308	Top-Down versus Bottom-Up Fabrication of Graphene-Based Electronics. *Chemistry of Materials*, **2014**, 26, 163-171	9.6	138
307	Molecular Wires **2014**, 2752-2769		
306	Biocompatibility of pristine graphene for neuronal interface. *Journal of Neurosurgery: Pediatrics*, **2013**, 11, 575-83	2.1	53
305	Meniscus-mask lithography for narrow graphene nanoribbons. *ACS Nano*, **2013**, 7, 6894-8	16.7	46
304	Effect of anchor and functional groups in functionalized graphene devices. *Nano Research*, **2013**, 6, 138-148	10	19
303	High-performance and low-power rewritable SiOx 1 kbit one diode-one resistor crossbar memory array. *Advanced Materials*, **2013**, 25, 4789-93	24	58
302	Large flake graphene oxide fibers with unconventional 100% knot efficiency and highly aligned small flake graphene oxide fibers. *Advanced Materials*, **2013**, 25, 4592-7	24	158
301	Nanocomposite of polyaniline nanorods grown on graphene nanoribbons for highly capacitive pseudocapacitors. *ACS Applied Materials & Interfaces*, **2013**, 5, 6622-7	9.5	155
300	Thickness-dependent patterning of MoS2 sheets with well-oriented triangular pits by heating in air. *Nano Research*, **2013**, 6, 703-711	10	92
299	Design of poly(ethylene glycol)-functionalized hydrophilic carbon clusters for targeted therapy of cerebrovascular dysfunction in mild traumatic brain injury. *Journal of Neurotrauma*, **2013**, 30, 789-96	5.4	31
298	Graphene-wrapped MnO2 -graphene nanoribbons as anode materials for high-performance lithium ion batteries. *Advanced Materials*, **2013**, 25, 6298-302	24	326
297	Functionalized low defect graphene nanoribbons and polyurethane composite film for improved gas barrier and mechanical performances. *ACS Nano*, **2013**, 7, 10380-6	16.7	109
296	Coal as an abundant source of graphene quantum dots. *Nature Communications*, **2013**, 4, 2943	17.4	556
295	Graphene oxide. Origin of acidity, its instability in water, and a new dynamic structural model. *ACS Nano*, **2013**, 7, 576-88	16.7	450
294	Three-dimensional metal-graphene-nanotube multifunctional hybrid materials. *ACS Nano*, **2013**, 7, 58-64	16.7	185

293	Graphene: powder, flakes, ribbons, and sheets. *Accounts of Chemical Research*, **2013**, 46, 2307-18	24.3	95
292	Calculating the hydrodynamic volume of poly(ethylene oxylated) single-walled carbon nanotubes and hydrophilic carbon clusters. *Journal of Physical Chemistry B*, **2013**, 117, 343-54	3.4	20
291	Graphene oxide for effective radionuclide removal. *Physical Chemistry Chemical Physics*, **2013**, 15, 2321-7	3.6	300
290	3-Dimensional graphene carbon nanotube carpet-based microsupercapacitors with high electrochemical performance. *Nano Letters*, **2013**, 13, 72-8	11.5	588
289	Increased solubility, liquid-crystalline phase, and selective functionalization of single-walled carbon nanotube polyelectrolyte dispersions. *ACS Nano*, **2013**, 7, 4503-10	16.7	82
288	Synthesis and single-molecule imaging of highly mobile adamantane-wheeled nanocars. *ACS Nano*, **2013**, 7, 35-41	16.7	68
287	Functionalized graphene nanoribbons via anionic polymerization initiated by alkali metal-intercalated carbon nanotubes. *ACS Nano*, **2013**, 7, 2669-75	16.7	28
286	Direct real-time monitoring of stage transitions in graphite intercalation compounds. *ACS Nano*, **2013**, 7, 2773-80	16.7	121
285	Graphene nanoribbons as an advanced precursor for making carbon fiber. *ACS Nano*, **2013**, 7, 1628-37	16.7	104
284	Splitting of a vertical multiwalled carbon nanotube carpet to a graphene nanoribbon carpet and its use in supercapacitors. *ACS Nano*, **2013**, 7, 5151-9	16.7	69
283	Graphene nanoribbon and nanostructured SnO2 composite anodes for lithium ion batteries. *ACS Nano*, **2013**, 7, 6001-6	16.7	384
282	A seamless three-dimensional carbon nanotube graphene hybrid material. *Nature Communications*, **2012**, 3, 1225	17.4	390
281	Synthesis of dispersible ferromagnetic graphene nanoribbon stacks with enhanced electrical percolation properties in a magnetic field. *ACS Nano*, **2012**, 6, 10396-404	16.7	17
280	Carbon nanotube and graphene nanoribbon-coated conductive Kevlar fibers. *ACS Applied Materials & Interfaces*, **2012**, 4, 131-6	9.5	72
279	Graphene oxide as a high-performance fluid-loss-control additive in water-based drilling fluids. *ACS Applied Materials & Interfaces*, **2012**, 4, 222-7	9.5	180
278	Large-area Bernal-stacked bi-, tri-, and tetralayer graphene. *ACS Nano*, **2012**, 6, 9790-6	16.7	147
277	Toward the synthesis of wafer-scale single-crystal graphene on copper foils. *ACS Nano*, **2012**, 6, 9110-7	16.7	488
276	Effect of Tether Conductivity on the Efficiency of Photoisomerization of Azobenzene-Functionalized Molecules on Au{111}. *Journal of Physical Chemistry Letters*, **2012**, 3, 2388-94	6.4	22

275	Noncovalent assembly of targeted carbon nanovectors enables synergistic drug and radiation cancer therapy in vivo. *ACS Nano*, **2012**, 6, 2497-505	16.7	23
274	Nonlinear photoluminescence imaging of isotropic and liquid crystalline dispersions of graphene oxide. *ACS Nano*, **2012**, 6, 8060-6	16.7	34
273	Highly transparent nonvolatile resistive memory devices from silicon oxide and graphene. *Nature Communications*, **2012**, 3, 1101	17.4	146
272	Antioxidant carbon particles improve cerebrovascular dysfunction following traumatic brain injury. *ACS Nano*, **2012**, 6, 8007-14	16.7	88
271	New routes to graphene, graphene oxide and their related applications. *Advanced Materials*, **2012**, 24, 4924-55	24	282
270	In situ intercalation replacement and selective functionalization of graphene nanoribbon stacks. *ACS Nano*, **2012**, 6, 4231-40	16.7	94
269	Reversible formation of ammonium persulfate/sulfuric acid graphite intercalation compounds and their peculiar Raman spectra. *ACS Nano*, **2012**, 6, 7842-9	16.7	75
268	Pristine graphite oxide. *Journal of the American Chemical Society*, **2012**, 134, 2815-22	16.4	336
267	Toward a light-driven motorized nanocar: synthesis and initial imaging of single molecules. *ACS Nano*, **2012**, 6, 592-7	16.7	100
266	Nanoscale frictional characteristics of graphene nanoribbons. *Applied Physics Letters*, **2012**, 101, 123104	3.4	13
265	Terahertz and infrared spectroscopy of gated large-area graphene. *Nano Letters*, **2012**, 12, 3711-5	11.5	203
264	In situ imaging of the conducting filament in a silicon oxide resistive switch. *Scientific Reports*, **2012**, 2, 242	4.9	133
263	Controlled ambipolar-to-unipolar conversion in graphene field-effect transistors through surface coating with poly(ethylene imine)/poly(ethylene glycol) films. *Small*, **2012**, 8, 59-62	11	31
262	Genesis of creativity. *ACS Nano*, **2012**, 6, 3649-54	16.7	1
261	Highly water soluble multi-layer graphene nanoribbons and related honey-comb carbon nanostructures. *Chemical Communications*, **2012**, 48, 5602-4	5.8	11
260	Antibody-targeted nanovectors for the treatment of brain cancers. *ACS Nano*, **2012**, 6, 3114-20	16.7	21
259	Chemical Approaches to Produce Graphene Oxide and Related Materials **2012**, 205-234		5
258	Quantitative analysis of structure and bandgap changes in graphene oxide nanoribbons during thermal annealing. *Journal of the American Chemical Society*, **2012**, 134, 11774-80	16.4	46

257	The Chemical Synthesis of Graphene Nanoribbons□A Tutorial Review. *Macromolecular Chemistry and Physics*, **2012**, 213, 1033-1050	2.6	35
256	Graphene-Ni-□MnO2 and -Cu-□MnO2 nanowire blends as highly active non-precious metal catalysts for the oxygen reduction reaction. *Chemical Communications*, **2012**, 48, 7931-3	5.8	76
255	Patterning graphene nanoribbons using copper oxide nanowires. *Applied Physics Letters*, **2012**, 100, 103106	3.4	20
254	Highly stable carbon nanoparticles designed for downhole hydrocarbon detection. *Energy and Environmental Science*, **2012**, 5, 8304	35.4	38
253	Large-scale growth and characterizations of nitrogen-doped monolayer graphene sheets. *ACS Nano* , **2011**, 5, 4112-7	16.7	538
252	High Throughput Preparation of Large Area Transparent Electrodes Using Non-Functionalized Graphene Nanoribbons. *Chemistry of Materials*, **2011**, 23, 935-939	9.6	19
251	Interface toughness of carbon nanotube reinforced epoxy composites. *ACS Applied Materials & Interfaces*, **2011**, 3, 129-34	9.5	78
250	Growth of bilayer graphene on insulating substrates. *ACS Nano*, **2011**, 5, 8187-92	16.7	243
249	In situ synthesis of polymer-modified mesoporous carbon CMK-3 composites for CO2 sequestration. *ACS Applied Materials & Interfaces*, **2011**, 3, 4782-6	9.5	41
248	Rational design of hybrid graphene films for high-performance transparent electrodes. *ACS Nano*, **2011**, 5, 6472-9	16.7	265
247	Highly conductive graphene nanoribbons by longitudinal splitting of carbon nanotubes using potassium vapor. *ACS Nano*, **2011**, 5, 968-74	16.7	186
246	Silicon oxide: a non-innocent surface for molecular electronics and nanoelectronics studies. *Journal of the American Chemical Society*, **2011**, 133, 941-8	16.4	47
245	Growth of graphene from food, insects, and waste. *ACS Nano*, **2011**, 5, 7601-7	16.7	384
244	Toward chemical propulsion: synthesis of ROMP-propelled nanocars. *ACS Nano*, **2011**, 5, 85-90	16.7	26
243	Direct growth of bilayer graphene on SiO□substrates by carbon diffusion through nickel. *ACS Nano*, **2011**, 5, 8241-7	16.7	231
242	Vibrational and electronic heating in nanoscale junctions. *Nature Nanotechnology*, **2011**, 6, 33-8	28.7	190
241	Spatially resolving edge states of chiral graphene nanoribbons. *Nature Physics*, **2011**, 7, 616-620	16.2	557
240	Is graphene's future in the hands of the chemist?. *Materials Today*, **2011**, 14, 454	21.8	1

239	Towards hybrid superlattices in graphene. *Nature Communications*, **2011**, 2, 559	17.4	130
238	Layer-by-layer removal of graphene for device patterning. *Science*, **2011**, 331, 1168-72	33.3	199
237	Liquid crystals of aqueous, giant graphene oxide flakes. *Soft Matter*, **2011**, 7, 11154	3.6	160
236	Graphene Chemistry: Synthesis and Manipulation. *Journal of Physical Chemistry Letters*, **2011**, 2, 2425-2432	6.4	220
235	Intrinsic resistive switching and memory effects in silicon oxide. *Applied Physics A: Materials Science and Processing*, **2011**, 102, 835-839	2.6	34
234	Noncovalent functionalization of carbon nanovectors with an antibody enables targeted drug delivery. *ACS Nano*, **2011**, 5, 6643-50	16.7	43
233	Engineered nanoparticles for hydrocarbon detection in oil-field rocks. *Energy and Environmental Science*, **2011**, 4, 505-509	35.4	68
232	Controlled modulation of electronic properties of graphene by self-assembled monolayers on SiO2 substrates. *ACS Nano*, **2011**, 5, 1535-40	16.7	92
231	Longitudinal splitting of boron nitride nanotubes for the facile synthesis of high quality boron nitride nanoribbons. *Nano Letters*, **2011**, 11, 3221-6	11.5	106
230	Low-loss, high-permittivity composites made from graphene nanoribbons. *ACS Applied Materials & Interfaces*, **2011**, 3, 4657-61	9.5	56
229	Plasmons in nanoscale metal junctions: optical rectification and thermometry **2011**,		2
228	Growth of graphene from solid carbon sources. *Nature*, **2010**, 468, 549-52	50.4	1106
227	Green carbon as a bridge to renewable energy. *Nature Materials*, **2010**, 9, 871-4	27	110
226	Is nanotechnology too broad to practise?. *Nature Nanotechnology*, **2010**, 5, 168-9	28.7	19
225	Spontaneous high-concentration dispersions and liquid crystals of graphene. *Nature Nanotechnology*, **2010**, 5, 406-11	28.7	488
224	Corrugation of chemically converted graphene monolayers on SiO(2). *ACS Nano*, **2010**, 4, 3095-102	16.7	39
223	Synthesis of fluorescent dye-tagged nanomachines for single-molecule fluorescence spectroscopy. *Journal of Organic Chemistry*, **2010**, 75, 6631-43	4.2	14
222	Kinetics of diazonium functionalization of chemically converted graphene nanoribbons. *ACS Nano*, **2010**, 4, 1949-54	16.7	301

221	Solution-phase synthesis of heteroatom-substituted carbon scaffolds for hydrogen storage. *Journal of the American Chemical Society*, **2010**, 132, 15246-51	16.4	42
220	Graphene nanoribbon thin films using layer-by-layer assembly. *Nano Letters*, **2010**, 10, 4356-62	11.5	63
219	Synthesis of highly fluorescent BODIPY-based nanocars. *Organic Letters*, **2010**, 12, 1464-7	6.2	72
218	Bottom-up assembly of molecular wagons on a surface. *Journal of the American Chemical Society*, **2010**, 132, 16848-54	16.4	72
217	Patterning graphene through the self-assembled templates: toward periodic two-dimensional graphene nanostructures with semiconductor properties. *Journal of the American Chemical Society*, **2010**, 132, 14730-2	16.4	148
216	Graphene nanoribbon devices produced by oxidative unzipping of carbon nanotubes. *ACS Nano*, **2010**, 4, 5405-13	16.7	111
215	Diameter-dependent solubility of single-walled carbon nanotubes. *ACS Nano*, **2010**, 4, 3063-72	16.7	60
214	Lower-defect graphene oxide nanoribbons from multiwalled carbon nanotubes. *ACS Nano*, **2010**, 4, 2059-69	16.7	488
213	Graphene nanoribbon composites. *ACS Nano*, **2010**, 4, 7415-20	16.7	239
212	Two-terminal molecular memories from solution-deposited C60 films in vertical silicon nanogaps. *ACS Nano*, **2010**, 4, 1879-88	16.7	27
211	Effective drug delivery, in vitro and in vivo, by carbon-based nanovectors noncovalently loaded with unmodified Paclitaxel. *ACS Nano*, **2010**, 4, 4621-36	16.7	75
210	Influence of the Substrate on the Mobility of Individual Nanocars. *Journal of Physical Chemistry Letters*, **2010**, 1, 3288-3291	6.4	22
209	Decoration, Migration, and Aggregation of Palladium Nanoparticles on Graphene Sheets. *Chemistry of Materials*, **2010**, 22, 5695-5699	9.6	172
208	Wet catalyst-support films for production of vertically aligned carbon nanotubes. *ACS Applied Materials & Interfaces*, **2010**, 2, 1851-6	9.5	15
207	Polarizabilities of adsorbed and assembled molecules: measuring the conductance through buried contacts. *ACS Nano*, **2010**, 4, 7630-6	16.7	34
206	Transport Study of Nanoparticles for Oilfield Application **2010**,		21
205	Resistive switches and memories from silicon oxide. *Nano Letters*, **2010**, 10, 4105-10	11.5	255
204	Improved synthesis of graphene oxide. *ACS Nano*, **2010**, 4, 4806-14	16.7	8269

203	Reduction of graphene oxide via bacterial respiration. *ACS Nano*, **2010**, 4, 4852-6	16.7	449
202	Radical addition of perfluorinated alkyl iodides to multi-layered graphene and single-walled carbon nanotubes. *Nano Research*, **2010**, 3, 138-145	10	42
201	Soluble graphene through edge-selective functionalization. *Nano Research*, **2010**, 3, 117-125	10	114
200	Theoretical efficiency of nanostructured graphene-based photovoltaics. *Small*, **2010**, 6, 313-8	11	89
199	Controlling transistor threshold voltages using molecular dipoles. *Journal of Applied Physics*, **2009**, 105, 093703	2.5	12
198	Electronic transport in monolayer graphene nanoribbons produced by chemical unzipping of carbon nanotubes. *Applied Physics Letters*, **2009**, 95, 253108	3.4	68
197	Accurately determining single molecule trajectories of molecular motion on surfaces. *Journal of Chemical Physics*, **2009**, 130, 164710	3.9	28
196	Vapor Sensing Using Conjugated Molecule-Linked Au Nanoparticles in a Silica Matrix. *Journal of Nanomaterials*, **2009**, 2009, 1-9	3.2	4
195	Synthesis of a nanocar with organometallic wheels. *Tetrahedron Letters*, **2009**, 50, 1427-1430	2	36
194	Resistive switching in nanogap systems on SiO2 substrates. *Small*, **2009**, 5, 2910-5	11	58
193	Longitudinal unzipping of carbon nanotubes to form graphene nanoribbons. *Nature*, **2009**, 458, 872-6	50.4	2885
192	Environmentally friendly functionalization of single walled carbon nanotubes in molten urea. *Carbon*, **2009**, 47, 3215-3218	10.4	26
191	Fullerene/thiol-terminated molecules. *Journal of Organic Chemistry*, **2009**, 74, 7885-97	4.2	32
190	Aggressively Oxidized Ultra-Short Single-Walled Carbon Nanotubes Having Oxidized Sidewalls. *Chemistry of Materials*, **2009**, 21, 3917-3923	9.6	46
189	Micrometer-scale translation and monitoring of individual nanocars on glass. *ACS Nano*, **2009**, 3, 351-6	16.7	61
188	Synthesis of single-molecule nanocars. *Accounts of Chemical Research*, **2009**, 42, 473-87	24.3	169
187	Antioxidant single-walled carbon nanotubes. *Journal of the American Chemical Society*, **2009**, 131, 3934-41	16.4	136
186	Controllable molecular modulation of conductivity in silicon-based devices. *Journal of the American Chemical Society*, **2009**, 131, 10023-30	16.4	46

185	Nanoengineered carbon scaffolds for hydrogen storage. *Journal of the American Chemical Society*, **2009**, 131, 723-8	16.4	69
184	Transforming carbon nanotube devices into nanoribbon devices. *Journal of the American Chemical Society*, **2009**, 131, 13460-3	16.4	86
183	Mechanically Assisted Exfoliation and Functionalization of Thermally Converted Graphene Sheets. *Chemistry of Materials*, **2009**, 21, 3045-3047	9.6	79
182	High-yield organic dispersions of unfunctionalized graphene. *Nano Letters*, **2009**, 9, 3460-2	11.5	445
181	Two-terminal nonvolatile memories based on single-walled carbon nanotubes. *ACS Nano*, **2009**, 3, 4122-6	16.7	53
180	Molecular machinery: synthesis of a "nanodragster". *Organic Letters*, **2009**, 11, 5602-5	6.2	43
179	Lithographic graphitic memories. *ACS Nano*, **2009**, 3, 2760-6	16.7	47
178	Graphite oxide flame-retardant polymer nanocomposites. *ACS Applied Materials & Interfaces*, **2009**, 1, 2256-61	9.5	225
177	Covalent Functionalization of Surfactant-Wrapped Graphene Nanoribbons. *Chemistry of Materials*, **2009**, 21, 5284-5291	9.6	125
176	Fluoride-decorated oxides for large enhancement of conductivity in intrinsic silicon nanowires. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 6470-7	1.3	1
175	Electronic two-terminal bistable graphitic memories. *Nature Materials*, **2008**, 7, 966-71	27	126
174	Synthesis and self-assembly of thio derivatives of calix[4]arene on noble metal surfaces. *Langmuir*, **2008**, 24, 11523-32	4	23
173	Molecular Dynamics of Surface-Moving Thermally Driven Nanocars. *Journal of Chemical Theory and Computation*, **2008**, 4, 652-6	6.4	55
172	Synthesis and photoisomerization of fullerene- and oligo(phenylene ethynylene)-azobenzene derivatives. *ACS Nano*, **2008**, 2, 97-106	16.7	45
171	Simultaneous measurements of electronic conduction and Raman response in molecular junctions. *Nano Letters*, **2008**, 8, 919-24	11.5	256
170	Synthesis of a porphyrin-fullerene pinwheel. *Organic Letters*, **2008**, 10, 1377-80	6.2	19
169	Chemical Reactions in Monolayer Aromatic Films on Silicon Surfaces. *Chemistry of Materials*, **2008**, 20, 61-64	9.6	17
168	Reversible photo-switching of single azobenzene molecules in controlled nanoscale environments. *Nano Letters*, **2008**, 8, 1644-8	11.5	244

167	Silicon/molecule interfacial electronic modifications. *Journal of the American Chemical Society*, **2008**, 130, 1699-710	16.4	77
166	Synthesis of a new photoactive nanovehicle: a nanoworm. *Organic Letters*, **2008**, 10, 897-900	6.2	73
165	Synthesis of a nanocar with an angled chassis. Toward circling movement. *Organic Letters*, **2008**, 10, 229-32	6.2	34
164	Experimental and Theoretical Identification of Valence Energy Levels and Interface Dipole Trends for a Family of (Oligo)Phenylene-ethynylenethiols Adsorbed on Gold. *Journal of Physical Chemistry C*, **2008**, 112, 13215-13225	3.8	21
163	Etching-dependent reproducible memory switching in vertical SiO2 structures. *Applied Physics Letters*, **2008**, 93, 253101	3.4	28
162	Nanotrains and self-assembled two-dimensional arrays built from carboranes linked by hydrogen bonding of dipyridones. *Nano Research*, **2008**, 1, 412-419	10	35
161	Preparation of single-walled carbon nanotubes-induced poly(p-oxybenzoyl) crystals. *Journal of Polymer Science Part A*, **2008**, 46, 1265-1277	2.5	2
160	In vitro cytotoxicity of single-walled carbon nanotube/biodegradable polymer nanocomposites. *Journal of Biomedical Materials Research - Part A*, **2008**, 86, 813-23	5.4	71
159	Reversible Modulation of Conductance in Silicon Devices via UV/Visible-Light Irradiation. *Advanced Materials*, **2008**, 20, 4541-4546	24	8
158	The assembly line: self-assembling nanocars. *Tetrahedron*, **2008**, 64, 8522-8529	2.4	18
157	Diazonium functionalization of surfactant-wrapped chemically converted graphene sheets. *Journal of the American Chemical Society*, **2008**, 130, 16201-6	16.4	844
156	Selective photochemical functionalization of surfactant-dispersed single wall carbon nanotubes in water. *Journal of the American Chemical Society*, **2008**, 130, 14227-33	16.4	35
155	Surface Grafting of Ferrocene-Containing Triazene Derivatives on Si(100). *Chemistry of Materials*, **2008**, 20, 7352-7355	9.6	27
154	Tunable Permittivity of Polymer Composites through Incremental Blending of Raw and Functionalized Single-Wall Carbon Nanotubes. *Journal of Physical Chemistry C*, **2007**, 111, 17751-17754	3.8	14
153	Real-time measurements of conductance switching and motion of single oligo(phenylene ethynylene) molecules. *Journal of the American Chemical Society*, **2007**, 129, 10352-3	16.4	62
152	Copolymer of Single-Walled Carbon Nanotubes and Poly(p-phenylene benzobisoxazole). *Chemistry of Materials*, **2007**, 19, 291-300	9.6	32
151	Synthetic routes toward carborane-wheeled nanocars. *Journal of Organic Chemistry*, **2007**, 72, 9481-90	4.2	62
150	Transition to organic materials science. Passive, active, and hybrid nanotechnologies. *Journal of Organic Chemistry*, **2007**, 72, 7477-96	4.2	52

149	Synthesis of a dipolar nanocar. *Tetrahedron Letters*, **2007**, 48, 5821-5824	2	44
148	Synthesis of a single-molecule nanotruck. *Tetrahedron Letters*, **2007**, 48, 5817-5820	2	36
147	"Hairy" single-walled carbon nanotubes prepared by atom transfer radical polymerization. *Small*, **2007**, 3, 1803-10	11	56
146	CHARGE TRANSPORT THROUGH CARBON NANOTUBE OR FULLERENE MOLECULES SILICON JUNCTIONS. *Nano*, **2007**, 02, 285-294	1.1	0
145	Vapor phase deposition of oligo(phenylene ethynylene) molecules for use in molecular electronic devices. *Journal of Vacuum Science & Technology B*, **2007**, 25, 252		4
144	Investigating the motion of molecular machines on surfaces by STM: The nanocar and beyond **2007**,		5
143	Synthesis, Grafting, and Film Formation of Porphyrins on Silicon Surfaces Using Triazenes. *Chemistry of Materials*, **2007**, 19, 4447-4453	9.6	22
142	Repetitive Functionalization of Water-Soluble Single-Walled Carbon Nanotubes. Addition of Acid-Sensitive Addends. *Chemistry of Materials*, **2007**, 19, 3491-3498	9.6	56
141	Biocompatibility of native and functionalized single-walled carbon nanotubes for neuronal interface. *Journal of Nanoscience and Nanotechnology*, **2006**, 6, 1365-74	1.3	119
140	Characterization of self-assembled monolayers of fullerene derivatives on gold surfaces: implications for device evaluations. *Journal of the American Chemical Society*, **2006**, 128, 13479-89	16.4	86
139	Controlled modulation of conductance in silicon devices by molecular monolayers. *Journal of the American Chemical Society*, **2006**, 128, 14537-41	16.4	98
138	Single wall carbon nanotube amplification: en route to a type-specific growth mechanism. *Journal of the American Chemical Society*, **2006**, 128, 15824-9	16.4	196
137	Functionalization of single-walled carbon nanotubes "on water". *Journal of the American Chemical Society*, **2006**, 128, 12899-904	16.4	183
136	Metal-free silicon-molecule-nanotube testbed and memory device. *Nature Materials*, **2006**, 5, 63-8	27	88
135	In Situ Polymerization Initiated by Single-Walled Carbon Nanotube Salts. *Chemistry of Materials*, **2006**, 18, 4764-4767	9.6	58
134	Recent progress on nanovehicles. *Chemical Society Reviews*, **2006**, 35, 1043-55	58.5	224
133	Triazenes as a Stable Diazonium Source for Use in Functionalizing Carbon Nanotubes in Aqueous Suspensions. *Chemistry of Materials*, **2006**, 18, 2766-2770	9.6	59
132	Soluble ultra-short single-walled carbon nanotubes. *Journal of the American Chemical Society*, **2006**, 128, 10568-71	16.4	110

131	Molecular engineering and measurements to test hypothesized mechanisms in single molecule conductance switching. *Journal of the American Chemical Society*, **2006**, 128, 1959-67	16.4	125
130	Attaching Electronically Active Oligoanilines to Silicon Surfaces. *Chemistry of Materials*, **2006**, 18, 4513-4518	9.6	15
129	Electrochemical origin of voltage-controlled molecular conductance switching. *Journal of the American Chemical Society*, **2006**, 128, 14828-35	16.4	98
128	Surface-rolling molecules. *Journal of the American Chemical Society*, **2006**, 128, 4854-64	16.4	175
127	Effects of hydration on molecular junction transport. *Nature Materials*, **2006**, 5, 901-8	27	104
126	Analytical techniques for characterization of organic molecular assemblies in molecular electronics devices. *Analytica Chimica Acta*, **2006**, 568, 2-19	6.6	11
125	Single-molecule transistors: Electron transfer in the solid state. *Chemical Physics*, **2006**, 324, 267-275	2.3	59
124	Syntheses of new functionalized azobenzenes for potential molecular electronic devices. *Tetrahedron*, **2006**, 62, 10303-10310	2.4	61
123	Injectable nanocomposites of single-walled carbon nanotubes and biodegradable polymers for bone tissue engineering. *Biomacromolecules*, **2006**, 7, 2237-42	6.9	169
122	Individualized Single Walled Carbon Nanotubes from Bulk Material Using 96% Sulfuric Acid as Solvent. *Chemistry of Materials*, **2006**, 18, 374-377	9.6	73
121	En route to a motorized nanocar. *Organic Letters*, **2006**, 8, 1713-6	6.2	170
120	Separation of single-walled carbon nanotubes on silica gel. Materials morphology and Raman excitation wavelength affect data interpretation. *Journal of the American Chemical Society*, **2005**, 127, 4497-509	16.4	93
119	Molecular wires. *Topics in Current Chemistry*, **2005**, 257, 33-62		141
118	Molecular engineering of the polarity and interactions of molecular electronic switches. *Journal of the American Chemical Society*, **2005**, 127, 17421-6	16.4	119
117	Fabrication of carbon nanotube-molecule-silicon junctions. *Journal of the American Chemical Society* , **2005**, 127, 8918-9	16.4	70
116	Molecular Grafting to Silicon Surfaces in Air Using Organic Triazenes as Stable Diazonium Sources and HF as a Constant Hydride-Passivation Source. *Chemistry of Materials*, **2005**, 17, 4832-4836	9.6	84
115	Reversible bistable switching in nanoscale thiol-substituted oligoaniline molecular junctions. *Nano Letters*, **2005**, 5, 2365-72	11.5	100
114	Cross-step place-exchange of oligo(phenylene-ethynylene) molecules. *Nano Letters*, **2005**, 5, 2292-7	11.5	37

113	Mechanistic Implications of the Assembly of Organic Thiocyanates on Precious Metals. *Chemistry of Materials*, **2005**, 17, 5684-5690	9.6	42
112	Synthesis of Fluorinated Oligomers toward Physical Vapor Deposition Molecular Electronics Candidates. *Chemistry of Materials*, **2005**, 17, 1331-1345	9.6	30
111	Effect of local environment on molecular conduction: isolated molecule versus self-assembled monolayer. *Nano Letters*, **2005**, 5, 61-5	11.5	196
110	Green chemical functionalization of single-walled carbon nanotubes in ionic liquids. *Journal of the American Chemical Society*, **2005**, 127, 14867-70	16.4	176
109	Molecular Wires and Devices **2005**, 235-253		
108	Self-Assembled Molecular Electronics **2005**, 79-98		8
107	Directional control in thermally driven single-molecule nanocars. *Nano Letters*, **2005**, 5, 2330-4	11.5	364
106	Rheological behaviour and mechanical characterization of injectable poly(propylene fumarate)/single-walled carbon nanotube composites for bone tissue engineering. *Nanotechnology*, **2005**, 16, S531-8	3.4	103
105	Molecularly inherent voltage-controlled conductance switching. *Nature Materials*, **2005**, 4, 167-72	27	323
104	Synthesis, spectroscopic and nonlinear optical properties of multiple [60]fullerene-oligo(p-phenylene ethynylene) hybrids. *Chemistry - A European Journal*, **2005**, 11, 3643-58	4.8	77
103	Diazonium-Based Functionalization of Carbon Nanotubes: XPS and GC-MS Analysis and Mechanistic Implications. *Synlett*, **2004**, 2004, 155-160	2.2	18
102	Clustering effects on discontinuous gold film NanoCells. *Journal of Nanoscience and Nanotechnology*, **2004**, 4, 907-17	1.3	33
101	Covalent Functionalization of Single-Walled Carbon Nanotubes for Materials Applications. *Journal of Physical Chemistry A*, **2004**, 108, 11151-11159	2.8	559
100	Overcoming the insolubility of carbon nanotubes through high degrees of sidewall functionalization. *Chemistry - A European Journal*, **2004**, 10, 812-7	4.8	377
99	Synthesis of terphenyl oligomers as molecular electronic device candidates. *Tetrahedron*, **2004**, 60, 81-92	2.4	40
98	Electrons are transported through phenylene-ethynylene oligomer monolayers via localized molecular orbitals. *Journal of the American Chemical Society*, **2004**, 126, 2568-73	16.4	72
97	Mediating stochastic switching of single molecules using chemical functionality. *Journal of the American Chemical Society*, **2004**, 126, 12214-5	16.4	97
96	Effects of Hindered Internal Rotation on Packing and Conductance of Self-Assembled Monolayers. *Journal of Physical Chemistry B*, **2004**, 108, 16761-16767	3.4	39

95	Valence electron orbitals of an oligo(p-phenylene-ethynylene)thiol on gold. *Journal of the American Chemical Society*, **2004**, 126, 3420-1	16.4	22
94	Direct covalent grafting of conjugated molecules onto Si, GaAs, and Pd surfaces from aryldiazonium salts. *Journal of the American Chemical Society*, **2004**, 126, 370-8	16.4	315
93	Optical Characterization of Oligo(phenylene‐ethynylene) Self-Assembled Monolayers on Gold. *Journal of Physical Chemistry B*, **2004**, 108, 12547-12559	3.4	58
92	Comparative study of electrochemically directed assembly versus conventional self-assembly of thioacetyl-terminated oligo(phenylene ethynylene)s on gold and platinum surfaces. *Langmuir*, **2004**, 20, 1335-41	4	38
91	Formation and Analysis of Self-Assembled Monolayers from U-Shaped Oligo(phenylene ethynylene)s as Candidates for Molecular Electronics. *Chemistry of Materials*, **2004**, 16, 2987-2997	9.6	31
90	Spontaneous assembly of organic thiocyanates on gold sufaces. Alternative precursors for gold thiolate assemblies. *Journal of the American Chemical Society*, **2004**, 126, 13172-3	16.4	100
89	Facile synthesis of multifullerene-OPE hybrids via in situ ethynylation. *Organic Letters*, **2004**, 6, 2129-32	6.2	66
88	Water-soluble, exfoliated, nonroping single-wall carbon nanotubes. *Journal of the American Chemical Society*, **2004**, 126, 11158-9	16.4	200
87	Magnetite (Fe3O4) Core‐Shell Nanowires: Synthesis and Magnetoresistance. *Nano Letters*, **2004**, 4, 2151-2155	12.1	298
86	Electrical Measurements in Molecular Electronics. *Chemistry of Materials*, **2004**, 16, 4423-4435	9.6	184
85	Synthesis and testing of new end-functionalized oligomers for molecular electronics. *Tetrahedron*, **2003**, 59, 8555-8570	2.4	54
84	Synthesis of thiol substituted oligoanilines for molecular device candidates. *Tetrahedron Letters*, **2003**, 44, 6699-6702	2	18
83	Synthesis of nitrile-terminated potential molecular electronic devices. *Tetrahedron*, **2003**, 59, 287-293	2.4	35
82	Improved and new syntheses of potential molecular electronics devices. *Tetrahedron*, **2003**, 59, 2497-2518	2.4	63
81	Biphenyl- and fluorenyl-based potential molecular electronic devices. *Tetrahedron*, **2003**, 59, 3131-3156	2.4	49
80	Glass transition of polymer/single-walled carbon nanotube composite films. *Journal of Polymer Science, Part B: Polymer Physics*, **2003**, 41, 3339-3345	2.6	135
79	Novel flame retardant polyarylethers: synthesis and testing. *Polymer*, **2003**, 44, 3709-3714	3.9	17
78	En route to surface-bound electric field-driven molecular motors. *Journal of Organic Chemistry*, **2003**, 68, 5091-103	4.2	159

77	Self-Assembled Oligo(phenylene-ethynylene) Molecular Electronic Switch Monolayers on Gold: Structures and Chemical Stability. *Langmuir*, **2003**, 19, 8245-8255	4	137
76	NanoCell electronic memories. *Journal of the American Chemical Society*, **2003**, 125, 13279-83	16.4	90
75	Control of alkanethiolate monolayer structure using vapor-phase annealing. *Journal of the American Chemical Society*, **2003**, 125, 11462-3	16.4	60
74	Arts and Sciences Reunite in Nanoput: Communicating Synthesis and the Nanoscale to the Layperson. *Journal of Chemical Education*, **2003**, 80, 395	2.4	7
73	Unbundled and Highly Functionalized Carbon Nanotubes from Aqueous Reactions. *Nano Letters*, **2003**, 3, 1215-1218	11.5	367
72	Electronic structure control of single-walled carbon nanotube functionalization. *Science*, **2003**, 301, 1519-22	333	1179
71	Solvent-free functionalization of carbon nanotubes. *Journal of the American Chemical Society*, **2003**, 125, 1156-7	16.4	465
70	Molecular Electronics **2003**,		170
69	Combinatorial synthesis of oligo(phenylene ethynylene)s. *Tetrahedron*, **2002**, 58, 10387-10405	2.4	59
68	Dispersion of Functionalized Carbon Nanotubes in Polystyrene. *Macromolecules*, **2002**, 35, 8825-8830	5.5	547
67	Charge transport through self-assembled monolayers of compounds of interest in molecular electronics. *Journal of the American Chemical Society*, **2002**, 124, 5550-60	16.4	334
66	Chemical and Potential-Assisted Assembly of Thiolacetyl-Terminated Oligo(phenylene ethynylene)s on Gold Surfaces. *Chemistry of Materials*, **2002**, 14, 2905-2909	9.6	106
65	Ozonation of Single-Walled Carbon Nanotubes and Their Assemblies on Rigid Self-Assembled Monolayers. *Chemistry of Materials*, **2002**, 14, 4235-4241	9.6	145
64	Covalent chemistry of single-wall carbon nanotubes. *Journal of Materials Chemistry*, **2002**, 12, 1952-1958		770
63	Solid-phase approaches toward cyclic oligomers. *Tetrahedron*, **2001**, 57, 9055-9065	2.4	9
62	Synthesis of potential molecular electronic devices containing pyridine units. *Tetrahedron Letters*, **2001**, 42, 3057-3060	2	27
61	Synthesis and preliminary testing of molecular wires and devices. *Chemistry - A European Journal*, **2001**, 7, 5118-34	4.8	219
60	Phenylene Ethynylene Diazonium Salts as Potential Self-Assembling Molecular Devices. *Organic Letters*, **2001**, 3, 993-995	6.2	31

59	Accoutrements of a molecular computer: switches, memory components and alligator clips. *Tetrahedron*, **2001**, 57, 5109-5121	2.4	47
58	Highly Functionalized Carbon Nanotubes Using in Situ Generated Diazonium Compounds. *Chemistry of Materials*, **2001**, 13, 3823-3824	9.6	609
57	Functionalization of carbon nanotubes by electrochemical reduction of aryl diazonium salts: a bucky paper electrode. *Journal of the American Chemical Society*, **2001**, 123, 6536-42	16.4	1257
56	Determination of the molecular electrical properties of self-assembled monolayers of compounds of interest in molecular electronics. *Journal of the American Chemical Society*, **2001**, 123, 2454-5	16.4	78
55	Dissolution of small diameter single-wall carbon nanotubes in organic solvents?. *Chemical Communications*, **2001**, 193-194	5.8	487
54	Benzyltriethylammonium Dichloroiodate/Sodium Bicarbonate Combination as an Inexpensive, Environmentally Friendly, and Mild Iodinating Reagent for Anilines. *Organic Letters*, **2001**, 3, 991-992	6.2	10
53	Electrochemical Testing of Potential Molecular Devices. *Materials Research Society Symposia Proceedings*, **2000**, 636, 741		
52	Computing with molecules. *Scientific American*, **2000**, 282, 86-93	0.5	206
51	Self-Assembly of Phenylene Ethynylene Diazonium Salts on Metal Surfaces as Potential Molecular Wires. *Materials Research Society Symposia Proceedings*, **2000**, 660, 1		
50	Molecular electronics. Synthesis and testing of components. *Accounts of Chemical Research*, **2000**, 33, 791-804	24.3	1168
49	Oxidation of electron-deficient anilines by HOF. A route to nitro-containing compounds for molecular electronic devices. *Organic Letters*, **2000**, 2, 3405-6	6.2	22
48	Theoretical Study of a Molecular Resonant Tunneling Diode. *Journal of the American Chemical Society*, **2000**, 122, 3015-3020	16.4	403
47	Synthesis and Self-Assembly of an Oligonucleotide-Modified Cyclobutadiene Complex. *Organometallics*, **2000**, 19, 368-370	3.8	14
46	Synthesis of porphyrins bearing trans-thiols. *Organic Letters*, **2000**, 2, 111-3	6.2	28
45	Electrochemical Testing of Potential Molecular Devices. *Materials Research Society Symposia Proceedings*, **2000**, 660, 1		
44	Synthesis and testing of nonhalogenated alkyne/phosphorus-containing polymer additives: Potent condensed-phase flame retardants. *Journal of Applied Polymer Science*, **1999**, 73, 707-718	2.9	21
43	Self-Assembling Supramolecular Nanostructures from a C(60) Derivative: Nanorods and Vesicles. *Angewandte Chemie - International Edition*, **1999**, 38, 2403-2405	16.4	137
42	Synthesis of Imine-Bridged Phenylenepyridine Ladder Polymers. Optical Band Gap Widening through Intramolecular Charge Transfer in Planar Polymers. *Macromolecules*, **1999**, 32, 2455-2461	5.5	37

41	Rapid Solid-Phase Synthesis of Oligo(1,4-phenylene ethynylene)s by a Divergent/Convergent Tripling Strategy. *Journal of the American Chemical Society*, **1999**, 121, 4908-4909	16.4	68
40	Lowest Energy States of Small Pd Clusters Using Density Functional Theory and Standard ab Initio Methods. A Route to Understanding Metallic Nanoprobes. *Journal of Physical Chemistry A*, **1999**, 103, 7692-7700	2.8	58
39	Rapid Solid-Phase Syntheses of Conjugated Homooligomers and [AB] Alternating Block Cooligomers of Precise Length and Constitution. *Journal of Organic Chemistry*, **1999**, 64, 8898-8906	4.2	62
38	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	16.4	135
37	Molecular Current□Voltage Characteristics. *Journal of Physical Chemistry A*, **1999**, 103, 7883-7887	2.8	78
36	Ab initio Methods for the Study of Molecular Systems for Nanometer Technology: Toward the First-Principles Design of Molecular Computers. *Annals of the New York Academy of Sciences*, **1998**, 852, 68-94	6.5	13
35	Recent Advances in Molecular Scale Electronics. *Annals of the New York Academy of Sciences*, **1998**, 852, 197-204	6.5	28
34	The Coordination and Structure of a Thiolate-Terminated □Molecular-Scale Wire□Linked to a Triosmium Cluster. *European Journal of Inorganic Chemistry*, **1998**, 1998, 429-431	2.3	9
33	Assembly of DNA/Fullerene Hybrid Materials. *Angewandte Chemie - International Edition*, **1998**, 37, 1528-1531	16.4	96
32	Molecular Scale Electronics: A Synthetic/Computational Approach to Digital Computing. *Journal of the American Chemical Society*, **1998**, 120, 8486-8493	16.4	233
31	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	16.4	276
30	Theoretical Interpretation of Conductivity Measurements of a Thiotolane Sandwich. A Molecular Scale Electronic Controller. *Journal of the American Chemical Society*, **1998**, 120, 3970-3974	16.4	153
29	Protecting Groups for Organoselenium Compounds. *Journal of Organic Chemistry*, **1998**, 63, 2397-2400	4.2	37
28	Preparative Benchtop Enrichment of C(60), C(70), and the Higher Fullerene Allotropes Using a Brominated Polystyrene Stationary Phase. *Journal of Organic Chemistry*, **1997**, 62, 2310-2311	4.2	7
27	Rapid Syntheses of Oligo(2,5-thiophene ethynylene)s with Thioester Termini: Potential Molecular Scale Wires with Alligator Clips. *Journal of Organic Chemistry*, **1997**, 62, 1376-1387	4.2	183
26	Rapid Solution and Solid Phase Syntheses of Oligo(1,4-phenylene ethynylene)s with Thioester Termini: Molecular Scale Wires with Alligator Clips. Derivation of Iterative Reaction Efficiencies on a Polymer Support. *Journal of Organic Chemistry*, **1997**, 62, 1388-1410	4.2	209
25	Systematic study of the lowest energy states of Aun (n=1□4) using DFT. *International Journal of Quantum Chemistry*, **1997**, 65, 749-758	2.1	45
24	Potential molecular wires and molecular alligator clips. *Nanotechnology*, **1996**, 7, 430-433	3.4	13

23	Conjugated Macromolecules of Precise Length and Constitution. Organic Synthesis for the Construction of Nanoarchitectures. *Chemical Reviews*, **1996**, 96, 537-554	68.1	889
22	Convergent Synthetic Routes to Orthogonally Fused Conjugated Oligomers Directed toward Molecular Scale Electronic Device Applications. *Journal of Organic Chemistry*, **1996**, 61, 6906-6921	4.2	243
21	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	16.4	660
20	Solid-Phase Synthesis of Potential Molecular Wires. Attachment of Molecular Alligator Clips. *Materials Research Society Symposia Proceedings*, **1995**, 413, 401		
19	Iterative Divergent/Convergent Approach to Linear Conjugated Oligomers by Successive Doubling of the Molecular Length: A Rapid Route to a 128-Å-Long Potential Molecular Wire. *Angewandte Chemie International Edition in English*, **1994**, 33, 1360-1363		229
18	Synthese linearer konjugierter Oligomere mit einer iterativen, divergenten/konvergenten Methode zur Verdopplung der Monomereinheiten: ein rascher Zugang zu einem 128 Å langen, potentiell leitenden molekularen Draht. *Angewandte Chemie*, **1994**, 106, 1445-1448	3.6	61
17	ESR Characterization of Oligomeric Thiophene Materials. *Chemistry of Materials*, **1994**, 6, 327-332	9.6	17
16	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	16.4	137
15	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	16.4	209
14	Synthesis of a chiral nonracemic segmented screwlike oligomer. An unusual form of molecular chirality. *Macromolecules*, **1994**, 27, 622-624	5.5	23
13	Single Column Purification of Gram Quantities of C70. *Journal of the American Chemical Society*, **1994**, 116, 6939-6940	16.4	33
12	Synthesis of planar poly(p-phenylene) derivatives for maximization of extended .pi.-conjugation. *Journal of the American Chemical Society*, **1993**, 115, 4935-4936	16.4	83
11	Electrochemical and electronic properties of neutral and oxidized soluble orthogonally fused thiophene oligomers. *Journal of the American Chemical Society*, **1993**, 115, 1869-1874	16.4	66
10	High surface area silica xerogels produced using triethoxysilane under non-supercritical conditions. Molecular hydrogen proposed as the high surface area promoter. *Advanced Materials*, **1993**, 5, 47-49	24	7
9	Purification of gram quantities of C60. A new inexpensive and facile method. *Journal of the American Chemical Society*, **1992**, 114, 7917-7919	16.4	175
8	Orthogonally fused conducting oligomers for molecular electronic devices. *AIP Conference Proceedings*, **1992**,	0	3
7	Synthesis of gram quantities of C60 by plasma discharge in a modified round-bottomed flask. Key parameters for yield optimization and purification. *Journal of Organic Chemistry*, **1992**, 57, 6932-6936	4.2	47
6	Metal-catalyzed alkynylation of (bromophenyl)-oligophenylene. A rapid route to thermoset precursors of high density monolithic glass-like carbon. *Advanced Materials*, **1992**, 4, 570-572	24	10

5	Extended orthogonally fused conducting oligomers for molecular electronic devices. *Journal of the American Chemical Society*, **1991**, 113, 7064-7066	16.4	100
4	Approaches to orthogonally fused conducting polymers for molecular electronics. *Journal of the American Chemical Society*, **1990**, 112, 5662-5663	16.4	95
3	A zirconium-promoted methylenation of aldehydes, ketones, and enones. *Tetrahedron Letters*, **1989** , 30, 3927-3930	2	33
2	Molecular Computing: Integration of Molecules for Nanocomputing295-326		
1	Sounds of Synthesis: Acoustic Real-Time Analysis of Laser-Induced Graphene. *Advanced Functional Materials*,2110198	15.6	0