David Tomanek

List of Publications by Year
in descending order

243 papers	32,366 citations	9234 74 h-index	3903 177 g-index
247 all docs	247 docs citations	247 times ranked	25554 citing authors

#	Article	IF	Citations
1	Thermal Decomposition of Hydrated Graphite Oxide: A Computational Study. Physical Review Applied, 2022, 17, .	1.5	0
2	Flow of polar and nonpolar liquids through nanotubes: A computational study. Physical Review Materials, 2021, 5, .	0.9	2
3	In-plane breathing and shear modes in low-dimensional nanostructures. Carbon, 2020, 157, 364-370.	5.4	14
4	Catalytic formation of narrow Nb nanowires inside carbon nanotubes. Carbon, 2020, 159, 195-200.	5.4	3
5	Changing the Phosphorus Allotrope from a Square Columnar Structure to a Planar Zigzag Nanoribbon by Increasing the Diameter of Carbon Nanotube Nanoreactors. Nano Letters, 2020, 20, 1280-1285.	4.5	29
6	Liquid Flow through Defective Layered Membranes: A Phenomenological Description. Physical Review Applied, 2020, 14, .	1.5	3
7	Efficient growth and characterization of one-dimensional transition metal tellurides inside carbon nanotubes. Nanoscale, 2020, 12, 17185-17190.	2.8	20
8	Periodically Gated Bilayer Graphene as an Electronic Metamaterial. Physical Review Applied, 2020, 13, .	1.5	4
9	Superior hardness and stiffness of diamond nanoparticles. Carbon, 2020, 162, 497-501.	5.4	7
10	Strain-controlled magnetic ordering in 2D carbon metamaterials. Carbon, 2020, 161, 219-223.	5.4	5
11	Low-symmetry two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BNP</mml:mi><mml:mn>2</mml:mn></mml:msub></mml and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>C</mml:mi><mml:mn>2</mml:mn></mml structures with high and anisotropic carrier mobilities. Physical Review Materials, 2020, 4, .	0.9	5
12	A water-resilient carbon nanotube based strain sensor for monitoring structural integrity. Journal of Materials Chemistry A, 2019, 7, 19996-20005.	5.2	36
13	Designing an All-Carbon Membrane for Water Desalination. Physical Review Applied, 2019, 12, .	1.5	16
14	Effect of Net Charge on the Relative Stability of 2D Boron Allotropes. Nano Letters, 2019, 19, 1359-1365.	4.5	23
15	Degenerately Doped Transition Metal Dichalcogenides as Ohmic Homojunction Contacts to Transition Metal Dichalcogenide Semiconductors. ACS Nano, 2019, 13, 5103-5111.	7.3	39
16	Towards room-temperature superconductivity in low-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mn>60</mml:mn></mml:msub></mml:math> nanoarrays: An ab initio study. Physical Review B, 2018, 97, .	1.1	3
17	Formation Dynamics of Potassium-Based Graphite Intercalation Compounds: An AbÂInitio Study. Physical Review Applied, 2018, 9, .	1.5	7
18	Shear instability in twisted bilayer graphene. Physical Review B, 2018, 98, .	1.1	31

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19	Two-Dimensional Mechanical Metamaterials with Unusual Poisson Ratio Behavior. Physical Review Applied, 2018, 10, .	1.5	17
20	Microscopic Mechanism of the Helix-to-Layer Transformation in Elemental Group VI Solids. Nano Letters, 2018, 18, 4908-4913.	4.5	19
21	Minimum model for the electronic structure of twisted bilayer graphene and related structures. Physical Review B, 2018, 98, .	1.1	34
22	Assembly of Ringâ€Shaped Phosphorus within Carbon Nanotube Nanoreactors. Angewandte Chemie, 2017, 129, 1876-1880.	1.6	21
23	Assembly of Ringâ€Shaped Phosphorus within Carbon Nanotube Nanoreactors. Angewandte Chemie - International Edition, 2017, 56, 1850-1854.	7.2	64
24	Control of Surface and Edge Oxidation on Phosphorene. ACS Applied Materials & Interfaces, 2017, 9, 9126-9135.	4.0	135
25	Can CF₃-Functionalized La@C₆₀ Be Isolated Experimentally and Become Superconducting?. Nano Letters, 2017, 17, 3402-3408.	4.5	22
26	Optimizing Charge Injection across Transition Metal Dichalcogenide Heterojunctions: Theory and Experiment. ACS Nano, 2017, 11, 3904-3910.	7.3	29
27	Long-wavelength deformations and vibrational modes in empty and liquid-filled microtubules and nanotubes: A theoretical study. Physical Review B, 2017, 95, .	1.1	8
28	Chemical and Electronic Repair Mechanism of Defects in MoS₂ Monolayers. ACS Nano, 2017, 11, 9989-9996.	7.3	80
29	Origin of Unusually High Rigidity in Selected Helical Coil Structures. Physical Review Applied, 2017, 8, .	1.5	1
30	Unusually Stable Helical Coil Allotrope of Phosphorus. Nano Letters, 2016, 16, 7865-7869.	4.5	29
31	Continuum approach for long-wavelength acoustic phonons in quasi-two-dimensional structures. Physical Review B, 2016, 94, .	1.1	45
32	Strain-controlled fundamental gap and structure of bulk black phosphorus. Physical Review B, 2016, 94, .	1.1	40
33	Two-Dimensional Phosphorus Carbide: Competition between sp² and sp³ Bonding. Nano Letters, 2016, 16, 3247-3252.	4.5	137
34	A metallic mosaic phase and the origin of Mott-insulating state in 1T-TaS2. Nature Communications, 2016, 7, 10956.	5.8	196
35	Low-Resistance 2D/2D Ohmic Contacts: A Universal Approach to High-Performance WSe₂, MoS₂, and MoSe₂ Transistors. Nano Letters, 2016, 16, 1896-1902.	4.5	334
36	Interpreting core-level spectra of oxidizing phosphorene: Theory and experiment. Physical Review B, 2015, 92, .	1.1	35

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37	Administration's grand victory over academia. Materials Express, 2015, 5, 79-81.	0.2	0
38	Simulated scanning tunneling microscopy images of few-layer phosphorus capped by graphene and hexagonal boron nitride monolayers. Physical Review B, 2015, 91, .	1.1	27
39	Designing Isoelectronic Counterparts to Layered Group V Semiconductors. ACS Nano, 2015, 9, 8284-8290.	7.3	128
40	Relative stability and local curvature analysis in carbon nanotori. Physical Review B, 2015, 91, .	1.1	9
41	Strain-induced metal-semiconductor transition in monolayers and bilayers of gray arsenic: A computational study. Physical Review B, 2015, 91, .	1.1	178
42	Interfacing graphene and related 2D materials with the 3D world. Journal of Physics Condensed Matter, 2015, 27, 133203.	0.7	24
43	Electronic structure and transport in graphene/haeckelite hybrids: an ab initio study. 2D Materials, 2015, 2, 035001.	2.0	18
44	Structural Transition in Layered As_{1â€“x}P_x Compounds: A Computational Study. Nano Letters, 2015, 15, 6042-6046.	4.5	74
45	Enhancing mechanical toughness of aluminum surfaces by nano-boron implantation: An ab initio study. Chemical Physics Letters, 2015, 620, 25-28.	1.2	3
46	2014 symposium on phosphorene: An emerging 2D semiconductor. Materials Express, 2014, 4, 545-547.	0.2	5
47	Topologically Protected Conduction State at Carbon Foam Surfaces: AnAb initioStudy. Physical Review Letters, 2014, 112, 026803.	2.9	32
48	Local curvature and stability of two-dimensional systems. Physical Review B, 2014, 90, .	1.1	24
49	High Stability of Faceted Nanotubes and Fullerenes of Multiphase Layered Phosphorus: A Computational Study. Physical Review Letters, 2014, 113, 226801.	2.9	91
50	Tiling Phosphorene. ACS Nano, 2014, 8, 12763-12768.	7.3	122
51	Effect of structural defects on the thermal conductivity of graphene: From point to line defects to haeckelites. Physical Review B, 2014, 89, .	1.1	64
52	Spontaneous Graphitization of Ultrathin Cubic Structures: A Computational Study. Nano Letters, 2014, 14, 7126-7130.	4.5	31
53	Graphitic Phase of NaCl. Bulk Properties and Nanoscale Stability. Journal of Physical Chemistry Letters, 2014, 5, 4014-4019.	2.1	16
54	Semiconducting Layered Blue Phosphorus: A Computational Study. Physical Review Letters, 2014, 112, 176802.	2.9	996

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55	Phase Coexistence and Metal-Insulator Transition in Few-Layer Phosphorene: A Computational Study. Physical Review Letters, 2014, 113, 046804.	2.9	556
56	Magic numbers in small iron clusters: A first-principles study. Chemical Physics Letters, 2014, 613, 59-63.	1.2	36
57	Phosphorene: An Unexplored 2D Semiconductor with a High Hole Mobility. ACS Nano, 2014, 8, 4033-4041.	7.3	5,474
58	High Mobility WSe₂ p- and n-Type Field-Effect Transistors Contacted by Highly Doped Graphene for Low-Resistance Contacts. Nano Letters, 2014, 14, 3594-3601.	4.5	399
59	Evidence of Diamond Nanowires Formed inside Carbon Nanotubes from Diamantane Dicarboxylic Acid. Angewandte Chemie - International Edition, 2013, 52, 3717-3721.	7.2	71
60	Conducting linear chains of sulphur inside carbon nanotubes. Nature Communications, 2013, 4, 2162.	5.8	228
61	Improved Carrier Mobility in Few-Layer MoS₂ Field-Effect Transistors with Ionic-Liquid Gating. ACS Nano, 2013, 7, 4449-4458.	7.3	301
62	Formation and Properties of Selenium Double-Helices inside Double-Wall Carbon Nanotubes: Experiment and Theory. ACS Nano, 2013, 7, 5607-5613.	7.3	57
63	Theoretical investigation of the electronic structure and quantum transport in the grapheneâ€“C(111) diamond surface system. Journal of Physics Condensed Matter, 2013, 25, 435302.	0.7	13
64	Limits of mechanical energy storage and structural changes in twisted carbon nanotube ropes. Physical Review B, 2013, 88, .	1.1	16
65	Optimizing Electronic Structure and Quantum Transport at the Graphene-Si(111) Interface: AnAbÂInitioDensity-Functional Study. Physical Review Letters, 2013, 110, 176805.	2.9	23
66	Nanomechanical Energy Storage in Twisted Nanotube Ropes. Physical Review Letters, 2012, 109, 255501.	2.9	18
67	Selective probe of the morphology and local vibrations at carbon nanoasperities. Journal of Chemical Physics, 2012, 136, 064505.	1.2	8
68	Formation and Stability of Cellular Carbon Foam Structures: AnAbÂInitioStudy. Physical Review Letters, 2012, 109, 135501.	2.9	27
69	Designing Electrical Contacts to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Monolayers: A Computational Study. Physical Review Letters, 2012, 108, 156802.	2.9	475
70	Synthesis and Transformation of Linear Adamantane Assemblies inside Carbon Nanotubes. ACS Nano, 2012, 6, 8674-8683.	7.3	70
71	Computational study of the thermal conductivity in defective carbon nanostructures. Physical Review B, 2012, 86, .	1.1	38
72	Helicity in Ropes of Chiral Nanotubes: Calculations and Observation. Physical Review Letters, 2012, 108, 235501.	2.9	6

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73	Calling to Be Your Best: Your Calling to Science. Materials Express, 2011, 1, 86-87.	0.2	0
74	Fame on Sale: Pitfalls of the Ranking Game. Materials Express, 2011, 1, 355-356.	0.2	2
75	Nanoconfinement effects on the reversibility of hydrogen storage in ammonia borane: A first-principles study. Journal of Chemical Physics, 2011, 134, 214501.	1.2	15
76	Search for the largest two-dimensional aggregates of boron: Anab initiostudy. Physical Review B, 2011, 83, .	1.1	31
77	Photoexfoliation of Graphene from Graphite: AnAbÂInitioStudy. Physical Review Letters, 2010, 104, 208302.	2.9	75
78	Effect of bundling on the stability, equilibrium geometry, and electronic structure of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Mo</mml:mtext></mml:mrow><mml:mn>6</mml:mn></mml:msu Physical Review B, 2010, 82, .	1.1	8
79	Reinforcing multiwall carbon nanotubes by electron beam irradiation. Journal of Applied Physics, 2010, 108, 084314.	1.1	16
80	Structural and magnetic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Tc</mml:mtext></mml:mrow><mml:mi>n</mml:mi></mml:msub> metalofullerenes: First-principles predictions. Physical Review B, 2010, 81, .	1.1	19
81	Interplay between structural and electronic properties of bundled Mo₆S_{9 â^'x}I_xnanowires. Journal of Physics Condensed Matter, 2010, 22, 505301.	0.7	5
82	Designing rigid carbon foams. Journal of Physics Condensed Matter, 2010, 22, 334220.	0.7	29
83	Equilibrium structure of ferrofluid aggregates. Journal of Physics Condensed Matter, 2010, 22, 455105.	0.7	12
84	Hydrogen-induced disintegration of fullerenes and nanotubes: Anab initiostudy. Physical Review B, 2009, 80, .	1.1	18
85	Trapping cold atoms using surface-grown carbon nanotubes. Physical Review A, 2009, 79, .	1.0	22
86	Revealing Subsurface Vibrational Modes by Atom-Resolved Damping Force Spectroscopy. Physical Review Letters, 2009, 102, 195503.	2.9	14
87	Molecular Self-Assembly of Functionalized Fullerenes on a Metal Surface. Physical Review Letters, 2009, 102, 056102.	2.9	26
88	Modeling extended contacts for nanotube and graphene devices. Physical Review B, 2008, 77, .	1.1	71
89	Modeling the destruction of realistic nanotube emitters: Relative role of charging and temperature. Physical Review B, 2008, 77, .	1.1	2
90	Hydrogenation of Single-Wall Carbon Nanotubes Using Polyamine Reagents:â€‰ Combined Experimental and Theoretical Study. Journal of the American Chemical Society, 2008, 130, 2296-2303.	6.6	55

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91	Direct Observation of Optically Induced Transient Structures in Graphite Using Ultrafast Electron Crystallography. Physical Review Letters, 2008, 101, 077401.	2.9	128
92	Self-assembly of long chain alkanes and their derivatives on graphite. Journal of Chemical Physics, 2008, 128, 124709.	1.2	99
93	Origin of torsion-induced conductance oscillations in carbon nanotubes. Physical Review B, 2008, 78, .	1.1	33
94	Compositional ordering and quantum transport in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Mo</mml:mi><mml:mn>6</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mrow><mml:mn>9</mml:mn><mml:mo>âˆ’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:mrow></mml:math>nanowires:Ab initiocalculations. Physical Review B, 2008, 77, .	1.1	16
95	Spin Currents in Rough Graphene Nanoribbons: Universal Fluctuations and Spin Injection. Physical Review Letters, 2008, 100, 177207.	2.9	288
96	Transforming Carbon Nanotubes by Silylation: AnAbÂInitioStudy. Physical Review Letters, 2008, 100, 236102.	2.9	11
97	Mechanism of fullerene hydrogenation by polyamines:Ab initiodensity functional calculations. Physical Review B, 2008, 78, .	1.1	45
98	Targeted medication delivery using magnetic nanostructures. Journal of Physics Condensed Matter, 2007, 19, 086210.	0.7	4
99	Unique Structural and Transport Properties of Molybdenum Chalcohalide Nanowires. Physical Review Letters, 2007, 99, 085503.	2.9	30
100	Effect of electron and hole doping on the structure of C, Si, and S nanowires. Physical Review B, 2007, 75, .	1.1	15
101	Role of Electronic Excitations in Ion Collisions with Carbon Nanostructures. Physical Review Letters, 2007, 99, 016104.	2.9	142
102	A novel hybrid carbon material. Nature Nanotechnology, 2007, 2, 156-161.	15.6	369
103	Introduction to the Important and Exciting Aspects of Carbon-Nanotube Science and Technology. Topics in Applied Physics, 2007, , 1-12.	0.4	18
104	Real-TimeAbÂInitioSimulations of Excited Carrier Dynamics in Carbon Nanotubes. Physical Review Letters, 2006, 97, 126104.	2.9	47
105	Interplay between Structure and Magnetism inMo12S9I9Nanowires. Physical Review Letters, 2006, 96, 125502.	2.9	37
106	Toward uniform nanotubular compounds: Synthetic approach and ab initio calculations. Journal of Chemical Physics, 2006, 124, 121102.	1.2	6
107	Contact Dependence of Carrier Injection in Carbon Nanotubes: AnAbÂInitioStudy. Physical Review Letters, 2006, 96, 076802.	2.9	194
108	Computational Nanotechnology: From Clusters to Devices. AIP Conference Proceedings, 2005, , .	0.3	0

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109	Energetics and packing of fullerenes in nanotube peapods. Physical Review B, 2005, 71, .	1.1	48
110	Effect of SOCl2 Treatment on Electrical and Mechanical Properties of Single-Wall Carbon Nanotube Networks. Journal of the American Chemical Society, 2005, 127, 5125-5131.	6.6	330
111	Carbon-based nanotechnology on a supercomputer. Journal of Physics Condensed Matter, 2005, 17, R413-R459.	0.7	18
112	Kwon, Berber, and TomÃ¡nek Reply:. Physical Review Letters, 2005, 94, .	2.9	8
113	Stability differences and conversion mechanism between nanotubes and scrolls. Physical Review B, 2004, 69, .	1.1	22
114	Quantum Size Effects in the Polarizability of Carbon Fullerenes. Physical Review Letters, 2004, 92, 215501.	2.9	62
115	Zipper Mechanism of Nanotube Fusion: Theory and Experiment. Physical Review Letters, 2004, 92, 075504.	2.9	78
116	Photodesorption of oxygen from carbon nanotubes. Physical Review B, 2004, 70, .	1.1	19
117	Microscopic mechanism of fullerene fusion. Physical Review B, 2004, 70, .	1.1	62
118	Diamond fragments as building blocks of functional nanostructures. Physical Review B, 2004, 70, .	1.1	137
119	Can photo excitations heal defects in carbon nanotubes?. Chemical Physics Letters, 2004, 392, 209-213.	1.2	23
120	Thermal Contraction of Carbon Fullerenes and Nanotubes. Physical Review Letters, 2004, 92, 015901.	2.9	195
121	Spectroscopic characterization of Stone-Wales defects in nanotubes. Physical Review B, 2004, 69, .	1.1	134
122	Rigid crystalline phases of polymerized fullerenes. Physical Review B, 2004, 70, .	1.1	36
123	Energetics and Bandstructure for a Polyacetylene Chain Enclosed inside a Carbon Nanotube. Synthetic Metals, 2003, 135-136, 729-730.	2.1	2
124	Bonding and Energy Dissipation in a Nanohook Assembly. Physical Review Letters, 2003, 91, 165503.	2.9	26
125	Magnetism in All-Carbon Nanostructures with Negative Gaussian Curvature. Physical Review Letters, 2003, 91, 237204.	2.9	200
126	Energetics and electronic structure of a polyacetylene chain contained in a carbon nanotube. Physical Review B, 2003, 67, .	1.1	52

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127	Defective fullerenes and nanotubes as molecular magnets:â€,Anab initiostudy. Physical Review B, 2003, 68, .	1.1	114
128	Itinerant ferromagnetism in heterostructured C/BN nanotubes. Physical Review B, 2003, 67, .	1.1	75
129	MAGNETO-CONDUCTANCE IN TWISTED CARBON NANOTUBES. , 2003, , .		0
130	Hierarchical assembly of nanostructured carbon foam. Molecular Crystals and Liquid Crystals, 2002, 386, 189-195.	0.4	9
131	Microscopic Formation Mechanism of Nanotube Peapods. Physical Review Letters, 2002, 88, 185502.	2.9	101
132	Giant magneto-conductance in twisted carbon nanotubes. Europhysics Letters, 2002, 59, 75-80.	0.7	11
133	Onset of nanotube decay under extreme thermal and electronic excitations. Physica B: Condensed Matter, 2002, 323, 78-85.	1.3	37
134	Mesoscopic origami with graphite: scrolls, nanotubes, peapods. Physica B: Condensed Matter, 2002, 323, 86-89.	1.3	52
135	Ballistic conductance in quantum devices: from organic polymers to nanotubes. Current Applied Physics, 2002, 2, 47-49.	1.1	8
136	Scrolls and nested tubes in multiwall carbon nanotubes. Carbon, 2002, 40, 1123-1130.	5.4	84
137	Effect of van der Waals Interactions on the Raman Modes in Single Walled Carbon Nanotubes. Physical Review Letters, 2001, 86, 3895-3898.	2.9	340
138	Synthesis of high-density carbon nanotube films by microwave plasma chemical vapor deposition. Diamond and Related Materials, 2001, 10, 1947-1951.	1.8	22
139	Optical current injection in carbon and boron nitride nanotubes. AIP Conference Proceedings, 2001, , .	0.3	0
140	Photo-galvano-mechanical phenomena in nanotubes. AIP Conference Proceedings, 2001, , .	0.3	0
141	Paradoxical magnetic cooling in a structural transition model. European Physical Journal B, 2001, 19, 117-119.	0.6	1
142	Carbon foam: Spanning the phase space between graphite and diamond. Physical Review B, 2001, 64, .	1.1	74
143	Electronic interwall interactions and charge redistribution in multiwall nanotubes. Physical Review B, 2001, 65, .	1.1	103
144	Imaging the interlayer interactions of multiwall carbon nanotubes using scanning tunneling microscopy and spectroscopy. Applied Physics Letters, 2001, 79, 4210-4212.	1.5	19

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145	Electronic structure and properties of rhombohedrally polymerized C60. Journal of Chemical Physics, 2001, 115, 5637-5641.	1.2	22
146	Thermal and Electrical Conductance of Carbon Nanostructures. , 2001, , 263-272.		0
147	Electrical and thermal transport in carbon nanotubes. AIP Conference Proceedings, 2000, , .	0.3	1
148	Stability, electronic structure and reactivity of the polymerized fullerite forms. Journal of Physics and Chemistry of Solids, 2000, 61, 1901-1911.	1.9	17
149	Electronic and structural properties of carbon nanohorns. Physical Review B, 2000, 62, R2291-R2294.	1.1	90
150	Coherent control of photocurrents in graphene and carbon nanotubes. Physical Review B, 2000, 61, 7669-7677.	1.1	54
151	Fractional Quantum Conductance in Carbon Nanotubes. Physical Review Letters, 2000, 84, 1974-1977.	2.9	166
152	Unusually High Thermal Conductivity of Carbon Nanotubes. Physical Review Letters, 2000, 84, 4613-4616.	2.9	2,775
153	Photogalvanic Effects in Heteropolar Nanotubes. Physical Review Letters, 2000, 85, 1512-1515.	2.9	85
154	Orientational Melting in Carbon Nanotube Ropes. Physical Review Letters, 2000, 84, 1483-1486.	2.9	45
155	Thermodynamics of finite magnetic two-isomer systems. Journal of Chemical Physics, 1999, 111, 10689-10693.	1.2	7
156	â€œBucky Shuttleâ€•Memory Device: Synthetic Approach and Molecular Dynamics Simulations. Physical Review Letters, 1999, 82, 1470-1473.	2.9	155
157	Laser-Driven Atomic Pump. Physical Review Letters, 1999, 82, 5373-5376.	2.9	93
158	X-ray spectroscopic and quantumâ€“chemical study of carbon tubes produced in arc-discharge. Chemical Physics Letters, 1998, 289, 341-349.	1.2	18
159	Electronic Structure of (n,0) Zigzag Carbon Nanotubes:Â Cluster and Crystal Approach. Journal of Physical Chemistry A, 1998, 102, 975-981.	1.1	66
160	Electronic and structural properties of multiwall carbon nanotubes. Physical Review B, 1998, 58, R16001-R16004.	1.1	241
161	Do Carbon Nanotubes Spin When Bundled?. Journal of Materials Research, 1998, 13, 2363-2367.	1.2	13
162	Effect of intertube coupling on the electronic structure of carbon nanotube ropes. Physical Review B, 1998, 58, R13314-R13317.	1.1	130

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164	Morphology and Stability of Growing Multiwall Carbon Nanotubes. Physical Review Letters, 1997, 79, 2065-2068.	2.9	106
165	Hydrogen-Induced Polymorphism of the Pd(110) Surface. Physical Review Letters, 1997, 79, 1329-1332.	2.9	25
166	Noble gas temperature control of metal clusters: A molecular dynamics study. Journal of Chemical Physics, 1997, 107, 3071-3079.	1.2	71
167	Electronic structure of single-wall, multiwall, and filled carbon nanotubes. Physical Review B, 1997, 55, 13980-13988.	1.1	59
168	Tight-binding molecular dynamics simulations of semiconductor alloys: clusters, surfaces, and defects. Journal of Physics Condensed Matter, 1997, 9, 4345-4364.	0.7	6
169	Self-assembly of magnetic nanostructures. Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters, 1997, 40, 539-541.	1.0	16
170	Catalytic Growth of Single-Wall Carbon Nanotubes: AnAb InitioStudy. Physical Review Letters, 1997, 78, 2393-2396.	2.9	320
171	Does hydrogen pre-melt palladium clusters?. Chemical Physics Letters, 1997, 264, 39-43.	1.2	17
172	Disintegration of finite carbon chains in electric fields. Chemical Physics Letters, 1997, 264, 345-350.	1.2	20
173	Field-induced unraveling of carbon nanotubes. Chemical Physics Letters, 1997, 265, 667-672.	1.2	34
174	Crystalline Ropes of Metallic Carbon Nanotubes. Science, 1996, 273, 483-487.	6.0	5,226
175	Cavities and Channels in Electrides. Journal of the American Chemical Society, 1996, 118, 7329-7336.	6.6	91
176	<title>From astrophysics to mesoscopic physics: a sightseeing tour in the world of clusters and fullerenes</title>. , 1996, , .		0
177	MAGNETISM OF SMALL TRANSITION-METAL CLUSTERS AND EFFECTS OF ISOMERIZATION. Surface Review and Letters, 1996, 03, 463-466.	0.5	4
178	Ionicity of the MC60 bond in M@C60 endohedral complexes. Chemical Physics Letters, 1995, 243, 42-44.	1.2	42
179	Self-Assembly of Tubular Fullerenes. The Journal of Physical Chemistry, 1995, 99, 10694-10697.	2.9	499
180	Stability and Fragmentation of Complex Structures in Ferrofluids. Physical Review Letters, 1995, 74, 3049-3052.	2.9	77

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182	How free are encapsulated atoms in C60?. Chemical Physics Letters, 1994, 221, 453-458.	1.2	74
183	Melting the fullerenes: A molecular dynamics study. Physical Review Letters, 1994, 72, 2418-2421.	2.9	185
184	Vibrational spectra of multishell fullerenes. Physical Review B, 1994, 50, 12207-12210.	1.1	9
185	Modifying the buckyball. Computational Materials Science, 1994, 2, 468-474.	1.4	0
186	Collective electronic excitations and their damping in small alkali clusters. Chemical Physics Letters, 1993, 205, 521-528.	1.2	23
187	Stability of M@C60 endohedral complexes. Chemical Physics Letters, 1993, 208, 79-85.	1.2	62
188	Lanthanide- and actinide-based fullerite compounds: potential AxC60 superconductors?. Chemical Physics Letters, 1993, 203, 438-443.	1.2	14
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