Vincent H Crespi

List of Publications by Year in Descending Order

203 papers	14,221 citations	59 h-index	116 g-index
221 ext. papers	15,803 ext. citations	8.1 avg, IF	6.34 L-index

#	Paper	IF	Citations
203	Mutual information and breakdown of the Perron-Frobenius scenario in zero-temperature triangular Ising antiferromagnets on cylinders.. *Physical Review E*, **2022**, 105, 044105	2.4	
202	Cryogenic Transmission Electron Microscopy Investigation of Carbon Nanothreads. *Microscopy and Microanalysis*, **2021**, 27, 684-685	0.5	1
201	Illuminating Invisible Grain Boundaries in Coalesced Single-Orientation WS Monolayer Films. *Nano Letters*, **2021**, 21, 6487-6495	11.5	7
200	Field-Tunable Interactions and Frustration in Underlayer-Mediated Artificial Spin Ice. *Physical Review Letters*, **2021**, 127, 117203	7.4	3
199	Scalable Synthesis of Crystalline One-Dimensional Carbon Nanothreads through Modest-Pressure Polymerization of Furan. *ACS Nano*, **2021**, 15, 4134-4143	16.7	11
198	Modeling for Structural Engineering and Synthesis of Two-Dimensional WSe2 Using a Newly Developed ReaxFF Reactive Force Field. *Journal of Physical Chemistry C*, **2020**, 124, 28285-28297	3.8	10
197	Tuning transport across MoS2/graphene interfaces via as-grown lateral heterostructures. *Npj 2D Materials and Applications*, **2020**, 4,	8.8	8
196	Multiscale computational understanding and growth of 2D materials: a review. *Npj Computational Materials*, **2020**, 6,	10.9	49
195	Achieving Minimal Heat Conductivity by Ballistic Confinement in Phononic Metalattices. *ACS Nano*, **2020**, 14, 4235-4243	16.7	12
194	Interface-mediated noble metal deposition on transition metal dichalcogenide nanostructures. *Nature Chemistry*, **2020**, 12, 284-293	17.6	42
193	Nanoarchitecture through Strained Molecules: Cubane-Derived Scaffolds and the Smallest Carbon Nanothreads. *Journal of the American Chemical Society*, **2020**, 142, 17944-17955	16.4	16
192	Nondestructive Measurements of the Mechanical and Structural Properties of Nanostructured Metalattices. *Nano Letters*, **2020**, 20, 3306-3312	11.5	7
191	Imaging the stochastic microstructure and dynamic development of correlations in perpendicular artificial spin ice. *Physical Review Research*, **2020**, 2,	3.9	6
190	Nonlinear Dark-Field Imaging of One-Dimensional Defects in Monolayer Dichalcogenides. *Nano Letters*, **2020**, 20, 284-291	11.5	21
189	Unexpected Near-Infrared to Visible Nonlinear Optical Properties from 2-D Polar Metals. *Nano Letters*, **2020**, 20, 8312-8318	11.5	11
188	Monolayer Vanadium-Doped Tungsten Disulfide: A Room-Temperature Dilute Magnetic Semiconductor. *Advanced Science*, **2020**, 7, 2001174	13.6	33
187	Tuning Transport and Chemical Sensitivity via Niobium Doping of Synthetic MoS2. *Advanced Materials Interfaces*, **2020**, 7, 2000856	4.6	5

186	Sacrificial supramolecular assembly and pressure-induced polymerization: toward sequence-defined functionalized nanothreads. *Chemical Science*, **2020**, 11, 11419-11424	9.4	12
185	Coupling Between Colloidal Assemblies Can Drive a Bistable-to-Oscillatory Transition. *ChemSystemsChem*, **2020**, 2, e1900036	3.1	1
184	Ultra-low thermal conductivity and acoustic dynamics of Si nanostructured metalattices probed using ultrafast high harmonic beams. *EPJ Web of Conferences*, **2019**, 205, 04006	0.3	
183	Full orientation control of epitaxial MoS2 on hBN assisted by substrate defects. *Physical Review B*, **2019**, 99,	3.3	28
182	Local Structure and Bonding of Carbon Nanothreads Probed by High-Resolution Transmission Electron Microscopy. *Journal of the American Chemical Society*, **2019**, 141, 6937-6945	16.4	19
181	Dynamics of cleaning, passivating and doping monolayer MoS 2 by controlled laser irradiation. *2D Materials*, **2019**, 6, 045031	5.9	24
180	Evidence for Orientational Order in Nanothreads Derived from Thiophene. *Journal of Physical Chemistry Letters*, **2019**, 10, 7164-7171	6.4	21
179	Defect-Controlled Nucleation and Orientation of WSe on hBN: A Route to Single-Crystal Epitaxial Monolayers. *ACS Nano*, **2019**, 13, 3341-3352	16.7	70
178	Probing the origin of lateral heterogeneities in synthetic monolayer molybdenum disulfide. *2D Materials*, **2019**, 6, 025008	5.9	2
177	Controllable Edge Exposure of MoS2 for Efficient Hydrogen Evolution with High Current Density. *ACS Applied Energy Materials*, **2018**, 1, 1268-1275	6.1	26
176	Dual-Sided Adsorption: Devil's Staircase of Coverage Fractions. *Physical Review Letters*, **2018**, 120, 056101	7.4	1
175	All the Ways To Have Substituted Nanothreads. *Journal of Chemical Theory and Computation*, **2018**, 14, 1131-1140	6.4	11
174	Carbon Nitride Nanothread Crystals Derived from Pyridine. *Journal of the American Chemical Society*, **2018**, 140, 4969-4972	16.4	56
173	Research Update: Recent progress on 2D materials beyond graphene: From ripples, defects, intercalation, and valley dynamics to straintronics and power dissipation. *APL Materials*, **2018**, 6, 080701	5.7	22
172	Communicating through a sea of frustration: Zero-temperature triangular Ising antiferromagnet on a cylinder. *Physical Review E*, **2018**, 98,	2.4	1
171	The Chemical Structure of Carbon Nanothreads Analyzed by Advanced Solid-State NMR. *Journal of the American Chemical Society*, **2018**, 140, 7658-7666	16.4	33
170	Constraining Carbon Nanothread Structures by Experimental and Calculated Nuclear Magnetic Resonance Spectra. *Nano Letters*, **2018**, 18, 4934-4942	11.5	18
169	ReaxFF Reactive Force-Field Study of Molybdenum Disulfide (MoS). *Journal of Physical Chemistry Letters*, **2017**, 8, 631-640	6.4	94

168	Intervalley scattering by acoustic phonons in two-dimensional MoS revealed by double-resonance Raman spectroscopy. *Nature Communications*, **2017**, 8, 14670	17.4	141
167	Chemically Controlled Spatiotemporal Oscillations of Colloidal Assemblies. *Angewandte Chemie - International Edition*, **2017**, 56, 7817-7821	16.4	40
166	Optical identification of sulfur vacancies: Bound excitons at the edges of monolayer tungsten disulfide. *Science Advances*, **2017**, 3, e1602813	14.3	154
165	Chemically Controlled Spatiotemporal Oscillations of Colloidal Assemblies. *Angewandte Chemie*, **2017**, 129, 7925-7929	3.6	9
164	Defect Coupling and Sub-Angstrom Structural Distortions in WMoS Monolayers. *Nano Letters*, **2017**, 17, 2802-2808	11.5	32
163	Acoustic actuation of bioinspired microswimmers. *Lab on A Chip*, **2017**, 17, 395-400	7.2	85
162	NanoVelcro: Theory of Guided Folding in Atomically Thin Sheets with Regions of Complementary Doping. *Nano Letters*, **2017**, 17, 6708-6714	11.5	5
161	Mechanochemical Synthesis of Carbon Nanothread Single Crystals. *Journal of the American Chemical Society*, **2017**, 139, 16343-16349	16.4	61
160	Distinguishing advective and powered motion in self-propelled colloids. *Journal of Physics Condensed Matter*, **2017**, 29, 445101	1.8	5
159	Characterization of switching field distributions in Ising-like magnetic arrays. *Physical Review B*, **2017**, 95,	3.3	6
158	Intricate Resonant Raman Response in Anisotropic ReS. *Nano Letters*, **2017**, 17, 5897-5907	11.5	49
157	Theory of Finite-Length Grain Boundaries of Controlled Misfit Angle in Two-Dimensional Materials. *Nano Letters*, **2017**, 17, 5297-5303	11.5	13
156	Adsorption-induced shape transitions in bistable nanopores with atomically thin walls. *Physical Review E*, **2017**, 95, 012804	2.4	1
155	Bypassing slip velocity: rotational and translational velocities of autophoretic colloids in terms of surface flux. *Journal of Fluid Mechanics*, **2016**, 802, 294-304	3.7	6
154	Low-Temperature Solution Synthesis of Few-Layer 1T ?-MoTe2 Nanostructures Exhibiting Lattice Compression. *Angewandte Chemie*, **2016**, 128, 2880-2884	3.6	15
153	Observation of a Quasi-ordered Structure in Monolayer W x Mo (1-x) S 2 Alloys. *Microscopy and Microanalysis*, **2016**, 22, 1548-1549	0.5	1
152	Low-Temperature Solution Synthesis of Few-Layer 1T RMoTe2 Nanostructures Exhibiting Lattice Compression. *Angewandte Chemie - International Edition*, **2016**, 55, 2830-4	16.4	63
151	Spontaneous Formation of Atomically Thin Stripes in Transition Metal Dichalcogenide Monolayers. *Nano Letters*, **2016**, 16, 6982-6987	11.5	40

150	Acoustofluidic actuation of in situ fabricated microrotors. *Lab on A Chip*, **2016**, 16, 3532-7	7.2	37
149	Examination of biological hotspot hypothesis of primary cell wall using a computational cell wall network model. *Cellulose*, **2015**, 22, 1027-1038	5.5	13
148	Selectively manipulable acoustic-powered microswimmers. *Scientific Reports*, **2015**, 5, 9744	4.9	123
147	Linearly Polymerized Benzene Arrays As Intermediates, Tracing Pathways to Carbon Nanothreads. *Journal of the American Chemical Society*, **2015**, 137, 14373-86	16.4	69
146	Systematic Enumeration of sp(3) Nanothreads. *Nano Letters*, **2015**, 15, 5124-30	11.5	61
145	Anomalous phonon stiffening associated with the (1 1 1) antiphase boundary in L12 Ni3Al. *Acta Materialia*, **2015**, 82, 287-294	8.4	23
144	Benzene-derived carbon nanothreads. *Nature Materials*, **2015**, 14, 43-7	27	207
143	Self-consistent nonlocal feedback theory for electrocatalytic swimmers with heterogeneous surface chemical kinetics. *Physical Review E*, **2015**, 91, 062303	2.4	12
142	Guiding chiral self-propellers in a periodic potential. *Physical Review Letters*, **2015**, 115, 118101	7.4	36
141	Self-electrophoresis of spheroidal electrocatalytic swimmers. *Physics of Fluids*, **2015**, 27, 092002	4.4	20
140	A general flux-based analysis for spherical electrocatalytic nanomotors. *Physics of Fluids*, **2015**, 27, 012001	4.4	24
139	Extraordinary Second Harmonic Generation in tungsten disulfide monolayers. *Scientific Reports*, **2014**, 4, 5530	4.9	214
138	Non-oxidative intercalation and exfoliation of graphite by Br□sted acids. *Nature Chemistry*, **2014**, 6, 957-63	17.6	154
137	Kinematic matrix theory and universalities in self-propellers and active swimmers. *Physical Review E* , **2014**, 89, 062304	2.4	14
136	Molecular dynamics simulation study of xyloglucan adsorption on cellulose surfaces: effects of surface hydrophobicity and side-chain variation. *Cellulose*, **2014**, 21, 1025-1039	5.5	69
135	Gaussian memory in kinematic matrix theory for self-propellers. *Physical Review E*, **2014**, 90, 062304	2.4	10
134	Constraints on ({rm I}beta) cellulose twist from DFT calculations of (^{13}hbox {C}) NMR chemical shifts. *Cellulose*, **2014**, 21, 3979-3991	5.5	13
133	Theory of electrocaloric effect in a shape-changing container: gas in a nanotube. *Physical Review Letters*, **2014**, 113, 265501	7.4	

132	Crystallites of magnetic charges in artificial spin ice. *Nature*, **2013**, 500, 553-7	50.4	166
131	Intrinsic magnetism of grain boundaries in two-dimensional metal dichalcogenides. *ACS Nano*, **2013**, 7, 10475-81	16.7	186
130	Evidence for ambient-temperature reversible catalytic hydrogenation in Pt-doped carbons. *Nano Letters*, **2013**, 13, 137-41	11.5	28
129	Extraordinary room-temperature photoluminescence in triangular WS2 monolayers. *Nano Letters*, **2013**, 13, 3447-54	11.5	1145
128	Theory of carbomorph cycles. *Physical Review Letters*, **2013**, 110, 156803	7.4	10
127	Cellulose microfibril twist, mechanics, and implication for cellulose biosynthesis. *Journal of Physical Chemistry A*, **2013**, 117, 2580-9	2.8	67
126	Reversible intercalation of hexagonal boron nitride with Br□sted acids. *Journal of the American Chemical Society*, **2013**, 135, 8372-81	16.4	69
125	Identification of individual and few layers of WS2 using Raman Spectroscopy. *Scientific Reports*, **2013**, 3,	4.9	911
124	Lithiation induced corrosive fracture in defective carbon nanotubes. *Applied Physics Letters*, **2013**, 103, 153901	3.4	25
123	Nanomotor mechanisms and motive force distributions from nanorotor trajectories. *Physical Review E*, **2013**, 88, 062317	2.4	19
122	Electronic properties of mixed-phase graphene/h-BN sheets using real-space pseudopotentials. *Physical Review B*, **2013**, 88,	3.3	12
121	Chiral diffusion of rotary nanomotors. *Physical Review E*, **2013**, 87, 050301	2.4	26
120	Perpendicular magnetization and generic realization of the Ising model in artificial spin ice. *Physical Review Letters*, **2012**, 109, 087201	7.4	47
119	Gibbsianizing nonequilibrium dynamics of artificial spin ice and other spin systems. *New Journal of Physics*, **2012**, 14, 045009	2.9	13
118	Stabilizing the zigzag edge: graphene nanoribbons with sterically constrained terminations. *Physical Review Letters*, **2012**, 109, 076802	7.4	15
117	Magnetization states and switching in narrow-gapped ferromagnetic nanorings. *AIP Advances*, **2012**, 2, 012136	1.5	6
116	Ignoring your neighbors: moment correlations dominated by indirect or distant interactions in an ordered nanomagnet array. *Physical Review Letters*, **2011**, 107, 117204	7.4	17
115	Metallic membranes with subwavelength complementary patterns: distinct substrates for surface-enhanced Raman scattering. *ACS Nano*, **2011**, 5, 5472-7	16.7	13

114	Prediction of a multicenter-bonded solid boron hydride for hydrogen storage. *Physical Review B*, **2011**, 83,	3.3	32
113	Modeling electrostatically induced collapse transitions in carbon nanotubes. *Physical Review Letters* , **2011**, 106, 155501	7.4	15
112	Magneto-optical Kerr effect studies of square artificial spin ice. *Physical Review B*, **2011**, 84,	3.3	44
111	Direct entropy determination and application to artificial spin ice. *Nature Physics*, **2010**, 6, 786-789	16.2	60
110	Effective temperature in an interacting vertex system: theory and experiment on artificial spin ice. *Physical Review Letters*, **2010**, 105, 047205	7.4	98
109	Characterization of complementary patterned metallic membranes produced simultaneously by a dual fabrication process. *Applied Physics Letters*, **2010**, 97, 193101	3.4	22
108	Theory of a three-dimensional nanoporous silicon lattice with unsaturated bonding. *Applied Physics Letters*, **2010**, 97, 121906	3.4	3
107	Annealing a magnetic cactus into phyllotaxis. *Physical Review E*, **2010**, 81, 046107	2.4	11
106	Magnetic perturbation and associated energies of the antiphase boundaries in ordered Ni3Al. *Journal of Applied Physics*, **2010**, 108, 103509	2.5	21
105	Emergent, collective oscillations of self-mobile particles and patterned surfaces under redox conditions. *ACS Nano*, **2010**, 4, 4845-51	16.7	93
104	Photoluminescence from nanocrystalline graphite monofluoride. *Applied Physics Letters*, **2010**, 97, 141915	3.4	29
103	Effects of Intrinsic Fano Interference on Surface Enhanced Raman Spectroscopy: Comparison between Platinum and Gold. *Journal of Physical Chemistry C*, **2010**, 114, 18059-18066	3.8	43
102	Nondispersive Raman D band activated by well-ordered interlayer interactions in rotationally stacked bilayer graphene. *Physical Review B*, **2010**, 82,	3.3	70
101	Structural, electronic, optical and vibrational properties of nanoscale carbons and nanowires: a colloquial review. *Journal of Physics Condensed Matter*, **2010**, 22, 334201	1.8	7
100	Comparing frustrated and unfrustrated clusters of single-domain ferromagnetic islands. *Physical Review B*, **2010**, 82,	3.3	23
99	Peter Clay Eklund: a scientific biography. *Journal of Physics Condensed Matter*, **2010**, 22, 330301	1.8	
98	Curvature-induced D-band Raman scattering in folded graphene. *Journal of Physics Condensed Matter*, **2010**, 22, 334205	1.8	22
97	Effect of bending on single-walled carbon nanotubes: A Raman scattering study. *Physical Review B*, **2010**, 81,	3.3	9

96	Prediction that uniaxial tension along produces a direct band gap in germanium. *Physical Review Letters*, **2009**, 102, 156401	7.4	65
95	An algorithm to sculpt photon dispersion in a subwavelength nanostructure. *Applied Physics Letters*, **2009**, 94, 041115	3.4	1
94	Static and dynamical phyllotaxis in a magnetic cactus. *Physical Review Letters*, **2009**, 102, 186103	7.4	14
93	Reversible lability by in situ reaction of self-assembled monolayers. *Journal of the American Chemical Society*, **2009**, 131, 2252-9	16.4	32
92	Dynamic interactions between fast microscale rotors. *Journal of the American Chemical Society*, **2009**, 131, 9926-7	16.4	97
91	Catalytic motors for transport of colloidal cargo. *Nano Letters*, **2008**, 8, 1271-6	11.5	304
90	Lithographically Fabricated 10-Micron Scale Autonomous Motors. *Materials Research Society Symposia Proceedings*, **2008**, 1135, 30901		
89	Tuning magnetic frustration of nanomagnets in triangular-lattice geometry. *Applied Physics Letters*, **2008**, 93, 252504	3.4	22
88	Spin Control Without Magnetic Fields. *Physics Magazine*, **2008**, 1,	1.1	3
87	Analyzing the Motion of Benzene on Au{111}: Single Molecule Statistics from Scanning Probe Images. *Journal of Physical Chemistry C*, **2007**, 111, 6167-6182	3.8	38
86	Single-Wall Carbon Nanohorns and Nanocones. *Topics in Applied Physics*, **2007**, 605-629	0.5	75
85	Electronic bisection of a single-wall carbon nanotube by controlled chemisorption. *Physical Review Letters*, **2007**, 99, 026802	7.4	18
84	Carbon nanostructures as an electromechanical bicontinuum. *Physical Review Letters*, **2007**, 99, 045501	7.4	15
83	Ground state lost but degeneracy found: the effective thermodynamics of artificial spin ice. *Physical Review Letters*, **2007**, 98, 217203	7.4	98
82	Theory of genus reduction in alkali-induced graphitization of nanoporous carbon. *Physical Review B*, **2007**, 76,	3.3	12
81	Reciprocal space constraints create real-space anomalies in doped carbon nanotubes. *Physical Review Letters*, **2007**, 99, 196803	7.4	6
80	1-Adamantanethiolate monolayer displacement kinetics follow a universal form. *Journal of the American Chemical Society*, **2007**, 129, 10741-6	16.4	42
79	Fractional quantum Hall effect in graphene. *Physical Review B*, **2006**, 74,	3.3	114

78	High pressure CVD inside microstructured optical fibres **2006**,		2
77	Universal behavior of nearly free electron states in carbon nanotubes. *Physical Review Letters*, **2006** , 96, 196803	7.4	60
76	Microstructured optical fibers as high-pressure microfluidic reactors. *Science*, **2006**, 311, 1583-6	33.3	345
75	Registry-dependent interlayer potential for graphitic systems. *Physical Review B*, **2005**, 71,	3.3	333
74	Uperconductivity in Fulleride **2005**, 231-253		
73	The Geometry of Nanoscale Carbon. *Nanostructure Science and Technology*, **2004**, 103-118	0.9	1
72	Nanotube-substrate interactions: distinguishing carbon nanotubes by the helical angle. *Physical Review Letters*, **2004**, 92, 085503	7.4	34
71	Graphene cones: Classification by fictitious flux and electronic properties. *Physical Review B*, **2004**, 69,	3.3	96
70	Online Study Behavior of 100,000 Students Preparing for the SAT, ACT, and GRE. *Journal of Educational Computing Research*, **2004**, 30, 255-262	3.8	14
69	Catalytic Nanomotors: Autonomous Movement of Striped Nanorods.. *ChemInform*, **2004**, 35, no		1
68	Catalytic nanomotors: autonomous movement of striped nanorods. *Journal of the American Chemical Society*, **2004**, 126, 13424-31	16.4	1506
67	Theory of carbon nanocones: mechanical chiral inversion of a micron-scale three-dimensional object. *Physical Review Letters*, **2004**, 93, 255504	7.4	74
66	Discrete transverse superconducting modes in nanocylinders. *Physical Review B*, **2004**, 69,	3.3	30
65	Doping effects on the electronic and structural properties of CoO2: An LSDA+U study. *Physical Review B*, **2004**, 70,	3.3	73
64	Predictions of New Crystalline States for Assemblies of Nanoparticles: Perovskite Analogues and 3-D Arrays of Self-Assembled Nanowires. *Nano Letters*, **2003**, 3, 1183-1186	11.5	46
63	Chemically doped double-walled carbon nanotubes: cylindrical molecular capacitors. *Physical Review Letters*, **2003**, 90, 257403	7.4	101
62	Collective stabilization of hydrogen chemisorption on graphenic surfaces. *Physical Review B*, **2003**, 68,	3.3	62
61	Fabrication of three-dimensional polymer photonic crystal structures using single diffraction element interference lithography. *Applied Physics Letters*, **2003**, 82, 1667-1669	3.4	124

60	Abrupt topological transitions in the hysteresis curves of ferromagnetic metalattices. *Physical Review Letters*, **2002**, 89, 197203	7.4	9
59	Theory of B(2)O and BeB(2) nanotubes: new semiconductors and metals in one dimension. *Physical Review Letters*, **2002**, 89, 056403	7.4	62
58	Computational design of direct-bandgap semiconductors that lattice-match silicon. *Nature*, **2001**, 409, 69-71	50.4	99
57	Tuning Fermi-surface properties through quantum confinement in metallic metalattices: new metals from old atoms. *Physical Review Letters*, **2001**, 86, 696-9	7.4	16
56	Stochastic heterostructures and diodium in B/N-doped carbon nanotubes. *Physical Review Letters*, **2001**, 87, 136402	7.4	57
55	Smallest nanotube: breaking the symmetry of sp(3) bonds in tubular geometries. *Physical Review Letters*, **2001**, 87, 125502	7.4	89
54	Asymmetry in negative differential resistance driven by electron-electron interactions in two-site molecular devices. *Applied Physics Letters*, **2001**, 79, 2829-2831	3.4	15
53	Theory of metastable group-IV alloys formed from CVD precursors. *Physical Review B*, **2001**, 64,	3.3	11
52	Helium in one-dimensional nanopores: free dispersion, localization, and commensurate/incommensurate transitions with nonrigid orbitals. *Physical Review Letters*, **2001**, 86, 3360-3	7.4	35
51	Validity of the BCS model Hamiltonian in the limit of small sizes. *Physical Review B*, **2000**, 62, 8669-8670	3.3	2
50	Condensation of helium in nanotube bundles. *Physical Review Letters*, **2000**, 84, 3883-6	7.4	103
49	Smoothest bearings: interlayer sliding in multiwalled carbon nanotubes. *Physical Review Letters*, **2000**, 85, 4727-30	7.4	282
48	Geometrical perturbation of graphene electronic structure. *Physical Review B*, **2000**, 61, 7308-7311	3.3	16
47	Helium mixtures in nanotube bundles. *Physical Review B*, **2000**, 61, 7288-7290	3.3	10
46	Plastic deformations of boron-nitride nanotubes: An unexpected weakness. *Physical Review B*, **2000** , 62, 11050-11053	3.3	41
45	Topological phases in graphitic cones. *Physical Review Letters*, **2000**, 85, 5190-3	7.4	110
44	Gapping by squashing: metal-insulator and insulator-metal transitions in collapsed carbon nanotubes. *Physical Review Letters*, **2000**, 84, 2453-6	7.4	116
43	Nucleation of Carbon Nanotubes without Pentagonal Rings. *Physical Review Letters*, **1999**, 83, 1791-1794	7.4	49

42	Simple estimate of electron-phonon coupling in small fullerenes. *Physical Review B*, **1999**, 60, 100-101	3.3	10
41	Local Temperature during the Growth of Multiwalled Carbon Nanotubes. *Physical Review Letters*, **1999**, 82, 2908-2910	7.4	21
40	Carbon Isotope Effect in Single-Crystal Rb3C60. *Physical Review Letters*, **1999**, 83, 404-407	7.4	31
39	Rankings of Research-Active Departments. *Science*, **1999**, 285, 1355-1355	33.3	
38	Microscopic determination of the interlayer binding energy in graphite. *Chemical Physics Letters*, **1998**, 286, 490-496	2.5	326
37	Interstitial He and Ne in Nanotube Bundles. *Journal of Low Temperature Physics*, **1998**, 113, 447-452	1.3	60
36	Localization in single-walled carbon nanotubes. *Solid State Communications*, **1998**, 109, 105-109	1.6	40
35	Site-selective radiation damage of collapsed carbon nanotubes. *Applied Physics Letters*, **1998**, 73, 2435-2437	3.4	27
34	Plastic Deformations of Carbon Nanotubes. *Physical Review Letters*, **1998**, 81, 5346-5349	7.4	216
33	Relations between global and local topology in multiple nanotube junctions. *Physical Review B*, **1998**, 58, 12671-12671	3.3	46
32	Heat capacity and vibrational spectra of monolayer films adsorbed in nanotubes. *Physical Review B*, **1998**, 58, R13426-R13429	3.3	16
31	Metal-insulator transition in AC60: RbC60 and KC60. *Physical Review B*, **1997**, 56, 6627-6630	3.3	18
30	In Situ Band Gap Engineering of Carbon Nanotubes. *Physical Review Letters*, **1997**, 79, 2093-2096	7.4	250
29	Pressure dependence of the resistivity and magnetoresistance in single-crystal. *Journal of Physics Condensed Matter*, **1996**, 8, 7723-7731	1.8	7
28	Pure carbon nanoscale devices: Nanotube heterojunctions. *Physical Review Letters*, **1996**, 76, 971-974	7.4	767
27	Prediction of a pure-carbon planar covalent metal. *Physical Review B*, **1996**, 53, R13303-R13305	3.3	208
26	Effect of pressure on the magnetoresistance of single crystal Nd0.5Sr0.36Pb0.14MnO3- delta. *Physical Review Letters*, **1996**, 76, 295-298	7.4	105
25	Near constancy of the pressure dependence of Tc across families of organic and fullerene superconductors. *Physical Review B*, **1996**, 53, 56-58	3.3	4

24	Thermopower of single-crystal Nd1-x(Sr,Pb)xMnO3- delta. *Physical Review B*, **1996**, 53, 14303-14308	3.3	33
23	Anisotropic electron-beam damage and the collapse of carbon nanotubes. *Physical Review B*, **1996**, 54, 5927-5931	3.3	142
22	Fully collapsed carbon nanotubes. *Nature*, **1995**, 377, 135-138	50.4	419
21	Resistivity saturation in alkali-doped C60. *Solid State Communications*, **1995**, 93, 973-977	1.6	27
20	Magnetotransport properties of La0.6Pb0.4MnO3- delta and Nd0.6(Sr0.7Pb0.3)0.4MnO3- delta single crystals. *Physical Review B*, **1995**, 52, 9147-9150	3.3	66
19	Universal form of Hall coefficient in K and Rb doped single crystal C60. *Physical Review Letters*, **1995**, 74, 1637-1640	7.4	11
18	Scattering mechanisms in Rb-doped single-crystal C60. *Physical Review B*, **1995**, 52, 3619-3623	3.3	6
17	Static conductivity and superconductivity of carbon nanotubes: Relations between tubes and sheets. *Physical Review B*, **1995**, 52, 14935-14940	3.3	106
16	Rubidium isotope effect in superconducting Rb3C60. *Physical Review Letters*, **1994**, 72, 3706-3709	7.4	41
15	Magnetotransport in single-crystal Rb3C60. *Physica C: Superconductivity and Its Applications*, **1994**, 228, 175-180	1.3	13
14	Alkali-metal isotope effect in Rb3C60. *Physica C: Superconductivity and Its Applications*, **1994**, 235-240, 2493-2494	1.3	6
13	Superconducting Properties of K3C60 and Rb3C60 Single Crystals in High Fields. *Molecular Crystals and Liquid Crystals*, **1994**, 245, 333-337		1
12	Inverse isotope effects and models for high-Tc superconductivity. *Physical Review B*, **1993**, 47, 5528-5530	3.3	3
11	Anharmonic phonons and high-temperature superconductivity. *Physical Review B*, **1993**, 48, 398-406	3.3	40
10	Determination of superconducting and normal state parameters of single crystal K3C60. *Solid State Communications*, **1993**, 86, 643-646	1.6	43
9	Anharmonic phonons and site selective isotope effects in YBa2□MxCu3O7 (M = La, Sr). *Solid State Communications*, **1993**, 86, 161-164	1.6	3
8	Three-dimensional fluctuation conductivity in superconducting single crystal K3C60 and Rb3C60. *Nature*, **1993**, 361, 54-56	50.4	67
7	Electron-scattering mechanisms in single-crystal K3C60. *Physical Review B*, **1992**, 46, 12064-12067	3.3	56

6	Anharmonic phonons and superconductivity in Pd H(D). *Solid State Communications*, **1992**, 83, 427-429	1.6	8
5	Possible discrepancies between transport and superconducting electron-phonon coupling due to anisotropic Fermi surface nesting. *Solid State Communications*, **1992**, 81, 187-189	1.6	14
4	Anharmonic phonons and the anomalous isotope effect in La2-xSrxCuO4. *Physical Review B*, **1991**, 44, 4712-4715	3.3	29
3	Anharmonic phonons and the isotope effect in superconductivity. *Physical Review B*, **1991**, 43, 12921-12924	3.3	36
2	Synthesizing carbon nanothreads from benzene. *SPIE Newsroom*,		2
1			