

Vincent H Crespi

List of Publications by Year in descending order

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214
papers

17,151
citations

17405

63
h-index

14702

127
g-index

221
all docs

221
docs citations

221
times ranked

18028
citing authors

#	ARTICLE	IF	CITATIONS
1	Catalytic Nanomotors: Autonomous Movement of Striped Nanorods. <i>Journal of the American Chemical Society</i> , 2004, 126, 13424-13431.	6.6	1,805
2	Extraordinary Room-Temperature Photoluminescence in Triangular WS ₂ Monolayers. <i>Nano Letters</i> , 2013, 13, 3447-3454.	4.5	1,375
3	Identification of individual and few layers of WS ₂ using Raman Spectroscopy. <i>Scientific Reports</i> , 2013, 3, .	1.6	1,185
4	Pure Carbon Nanoscale Devices: Nanotube Heterojunctions. <i>Physical Review Letters</i> , 1996, 76, 971-974.	2.9	860
5	Fully collapsed carbon nanotubes. <i>Nature</i> , 1995, 377, 135-138.	13.7	466
6	Microstructured Optical Fibers as High-Pressure Microfluidic Reactors. <i>Science</i> , 2006, 311, 1583-1586.	6.0	442
7	Registry-dependent interlayer potential for graphitic systems. <i>Physical Review B</i> , 2005, 71, .	1.1	413
8	Microscopic determination of the interlayer binding energy in graphite. <i>Chemical Physics Letters</i> , 1998, 286, 490-496.	1.2	358
9	Catalytic Motors for Transport of Colloidal Cargo. <i>Nano Letters</i> , 2008, 8, 1271-1276.	4.5	339
10	Smoothest Bearings: Interlayer Sliding in Multiwalled Carbon Nanotubes. <i>Physical Review Letters</i> , 2000, 85, 4727-4730.	2.9	311
11	In Situ Band Gap Engineering of Carbon Nanotubes. <i>Physical Review Letters</i> , 1997, 79, 2093-2096.	2.9	273
12	Extraordinary Second Harmonic Generation in Tungsten Disulfide Monolayers. <i>Scientific Reports</i> , 2014, 4, 5530.	1.6	262
13	Prediction of a pure-carbon planar covalent metal. <i>Physical Review B</i> , 1996, 53, R13303-R13305.	1.1	252
14	Benzene-derived carbon nanothreads. <i>Nature Materials</i> , 2015, 14, 43-47.	13.3	250
15	Intrinsic Magnetism of Grain Boundaries in Two-Dimensional Metal Dichalcogenides. <i>ACS Nano</i> , 2013, 7, 10475-10481.	7.3	232
16	Plastic Deformations of Carbon Nanotubes. <i>Physical Review Letters</i> , 1998, 81, 5346-5349.	2.9	231
17	Optical identification of sulfur vacancies: Bound excitons at the edges of monolayer tungsten disulfide. <i>Science Advances</i> , 2017, 3, e1602813.	4.7	213
18	Crystallites of magnetic charges in artificial spin ice. <i>Nature</i> , 2013, 500, 553-557.	13.7	197

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19	Intervalley scattering by acoustic phonons in two-dimensional MoS ₂ revealed by double-resonance Raman spectroscopy. <i>Nature Communications</i> , 2017, 8, 14670.	5.8	196
20	Non-oxidative intercalation and exfoliation of graphite by Brønsted acids. <i>Nature Chemistry</i> , 2014, 6, 957-963.	6.6	175
21	Selectively manipulable acoustic-powered microswimmers. <i>Scientific Reports</i> , 2015, 5, 9744.	1.6	168
22	Fabrication of three-dimensional polymer photonic crystal structures using single diffraction element interference lithography. <i>Applied Physics Letters</i> , 2003, 82, 1667-1669.	1.5	162
23	Anisotropic electron-beam damage and the collapse of carbon nanotubes. <i>Physical Review B</i> , 1996, 54, 5927-5931.	1.1	147
24	Fractional quantum Hall effect in graphene. <i>Physical Review B</i> , 2006, 74, .	1.1	127
25	ReaxFF Reactive Force-Field Study of Molybdenum Disulfide (MoS ₂). <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 631-640.	2.1	126
26	Topological Phases in Graphitic Cones. <i>Physical Review Letters</i> , 2000, 85, 5190-5193.	2.9	124
27	Acoustic actuation of bioinspired microswimmers. <i>Lab on A Chip</i> , 2017, 17, 395-400.	3.1	124
28	Gapping by Squashing: Metal-Insulator and Insulator-Metal Transitions in Collapsed Carbon Nanotubes. <i>Physical Review Letters</i> , 2000, 84, 2453-2456.	2.9	121
29	Effective Temperature in an Interacting Vertex System: Theory and Experiment on Artificial Spin Ice. <i>Physical Review Letters</i> , 2010, 105, 047205.	2.9	117
30	Static conductivity and superconductivity of carbon nanotubes: Relations between tubes and sheets. <i>Physical Review B</i> , 1995, 52, 14935-14940.	1.1	116
31	Condensation of Helium in Nanotube Bundles. <i>Physical Review Letters</i> , 2000, 84, 3883-3886.	2.9	113
32	Chemically Doped Double-Walled Carbon Nanotubes: Cylindrical Molecular Capacitors. <i>Physical Review Letters</i> , 2003, 90, 257403.	2.9	112
33	Effect of Pressure on the Magnetoresistance of Single Crystal Nd _{0.5} Sr _{0.36} Pb _{0.14} MnO ₃ . <i>Physical Review Letters</i> , 1996, 76, 295-298.	2.9	110
34	Computational design of direct-bandgap semiconductors that lattice-match silicon. <i>Nature</i> , 2001, 409, 69-71.	13.7	110
35	Graphene cones: Classification by fictitious flux and electronic properties. <i>Physical Review B</i> , 2004, 69, .	1.1	109
36	Emergent, Collective Oscillations of Self-Mobile Particles and Patterned Surfaces under Redox Conditions. <i>ACS Nano</i> , 2010, 4, 4845-4851.	7.3	109

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37	Ground State Lost but Degeneracy Found: The Effective Thermodynamics of Artificial Spin Ice. <i>Physical Review Letters</i> , 2007, 98, 217203.	2.9	108
38	Defect-Controlled Nucleation and Orientation of WSe_2 on hBN: A Route to Single-Crystal Epitaxial Monolayers. <i>ACS Nano</i> , 2019, 13, 3341-3352.	7.3	107
39	Dynamic Interactions between Fast Microscale Rotors. <i>Journal of the American Chemical Society</i> , 2009, 131, 9926-9927.	6.6	106
40	Monolayer Vanadium-Doped Tungsten Disulfide: A Room-Temperature Dilute Magnetic Semiconductor. <i>Advanced Science</i> , 2020, 7, 2001174.	5.6	104
41	Smallest Nanotube: Breaking the Symmetry of sp^3 Bonds in Tubular Geometries. <i>Physical Review Letters</i> , 2001, 87, 125502.	2.9	102
42	Multiscale computational understanding and growth of 2D materials: a review. <i>Npj Computational Materials</i> , 2020, 6, .	3.5	89
43	Single-Wall Carbon Nanohorns and Nanocones. <i>Topics in Applied Physics</i> , 2007, , 605-629.	0.4	88
44	Reversible Intercalation of Hexagonal Boron Nitride with Brønsted Acids. <i>Journal of the American Chemical Society</i> , 2013, 135, 8372-8381.	6.6	88
45	Mechanochemical Synthesis of Carbon Nanothread Single Crystals. <i>Journal of the American Chemical Society</i> , 2017, 139, 16343-16349.	6.6	88
46	Molecular dynamics simulation study of xyloglucan adsorption on cellulose surfaces: effects of surface hydrophobicity and side-chain variation. <i>Cellulose</i> , 2014, 21, 1025-1039.	2.4	86
47	Linearly Polymerized Benzene Arrays As Intermediates, Tracing Pathways to Carbon Nanothreads. <i>Journal of the American Chemical Society</i> , 2015, 137, 14373-14386.	6.6	86
48	Theory of Carbon Nanocones: Mechanical Chiral Inversion of a Micron-Scale Three-Dimensional Object. <i>Physical Review Letters</i> , 2004, 93, 255504.	2.9	85
49	Low-Temperature Solution Synthesis of Few-Layer $\text{1T}'\text{-MoTe}_2$ Nanostructures Exhibiting Lattice Compression. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2830-2834.	7.2	84
50	Carbon Nitride Nanothread Crystals Derived from Pyridine. <i>Journal of the American Chemical Society</i> , 2018, 140, 4969-4972.	6.6	81
51	Systematic Enumeration of sp^3 Nanothreads. <i>Nano Letters</i> , 2015, 15, 5124-5130.	4.5	80
52	Cellulose Microfibril Twist, Mechanics, and Implication for Cellulose Biosynthesis. <i>Journal of Physical Chemistry A</i> , 2013, 117, 2580-2589.	1.1	79
53	Doping effects on the electronic and structural properties of CoO_2 : An LSDA+U study. <i>Physical Review B</i> , 2004, 70, .	1.1	77
54	Nondispersive Raman $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\rangle \langle \text{mml:mi} \rangle \text{D} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ band activated by well-ordered interlayer interactions in rotationally stacked bilayer graphene. <i>Physical Review B</i> , 2010, 82, .	1.1	76

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55	Prediction that Uniaxial Tension along $\langle 111 \rangle$ Produces a Direct Band Gap in Germanium. <i>Physical Review Letters</i> , 2009, 102, 156401.	2.9	74
56	Three-dimensional fluctuation conductivity in superconducting single crystal K_3C_{60} and Rb_3C_{60} . <i>Nature</i> , 1993, 361, 54-56.	13.7	73
57	Interface-mediated noble metal deposition on transition metal dichalcogenide nanostructures. <i>Nature Chemistry</i> , 2020, 12, 284-293.	6.6	73
58	Magnetotransport properties of $La_{0.6}Pb_{0.4}MnO_3$ and $Nd_{0.6}(Sr_{0.7}Pb_{0.3})_{0.4}MnO_3$ single crystals. <i>Physical Review B</i> , 1995, 52, 9147-9150.	1.1	70
59	Theory of B_2O and BeB_2 Nanotubes: New Semiconductors and Metals in One Dimension. <i>Physical Review Letters</i> , 2002, 89, 056403.	2.9	70
60	Collective stabilization of hydrogen chemisorption on graphenic surfaces. <i>Physical Review B</i> , 2003, 68, .	1.1	68
61	Direct entropy determination and application to artificial spin ice. <i>Nature Physics</i> , 2010, 6, 786-789.	6.5	66
62	Intricate Resonant Raman Response in Anisotropic ReS_2 . <i>Nano Letters</i> , 2017, 17, 5897-5907.	4.5	66
63	Interstitial He and Ne in Nanotube Bundles. <i>Journal of Low Temperature Physics</i> , 1998, 113, 447-452.	0.6	63
64	Universal Behavior of Nearly Free Electron States in Carbon Nanotubes. <i>Physical Review Letters</i> , 2006, 96, 196803.	2.9	63
65	Electron-scattering mechanisms in single-crystal K_3C_{60} . <i>Physical Review B</i> , 1992, 46, 12064-12067.	1.1	60
66	Stochastic Heterostructures and Diodium in B/N-Doped Carbon Nanotubes. <i>Physical Review Letters</i> , 2001, 87, 136402.	2.9	59
67	The Chemical Structure of Carbon Nanothreads Analyzed by Advanced Solid-State NMR. <i>Journal of the American Chemical Society</i> , 2018, 140, 7658-7666.	6.6	59
68	Perpendicular Magnetization and Generic Realization of the Ising Model in Artificial Spin Ice. <i>Physical Review Letters</i> , 2012, 109, 087201.	2.9	58
69	Chemically Controlled Spatiotemporal Oscillations of Colloidal Assemblies. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7817-7821.	7.2	55
70	Nucleation of Carbon Nanotubes without Pentagonal Rings. <i>Physical Review Letters</i> , 1999, 83, 1791-1794.	2.9	53
71	Acoustofluidic actuation of in situ fabricated microrotors. <i>Lab on A Chip</i> , 2016, 16, 3532-3537.	3.1	51
72	Relations between global and local topology in multiple nanotube junctions. <i>Physical Review B</i> , 1998, 58, 12671-12671.	1.1	49

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73	Guiding Chiral Self-Propellers in a Periodic Potential. <i>Physical Review Letters</i> , 2015, 115, 118101.	2.9	49
74	Predictions of New Crystalline States for Assemblies of Nanoparticles: Perovskite Analogues and 3-D Arrays of Self-Assembled Nanowires. <i>Nano Letters</i> , 2003, 3, 1183-1186.	4.5	48
75	Spontaneous Formation of Atomically Thin Stripes in Transition Metal Dichalcogenide Monolayers. <i>Nano Letters</i> , 2016, 16, 6982-6987.	4.5	48
76	Determination of superconducting and normal state parameters of single crystal K3C60. <i>Solid State Communications</i> , 1993, 86, 643-646.	0.9	47
77	Magneto-optical Kerr effect studies of square artificial spin ice. <i>Physical Review B</i> , 2011, 84, .	1.1	47
78	Rubidium isotope effect in superconducting Rb3C60. <i>Physical Review Letters</i> , 1994, 72, 3706-3709.	2.9	46
79	Localization in single-walled carbon nanotubes. <i>Solid State Communications</i> , 1998, 109, 105-109.	0.9	46
80	Effects of Intrinsic Fano Interference on Surface Enhanced Raman Spectroscopy: Comparison between Platinum and Gold. <i>Journal of Physical Chemistry C</i> , 2010, 114, 18059-18066.	1.5	46
81	Plastic deformations of boron-nitride nanotubes: An unexpected weakness. <i>Physical Review B</i> , 2000, 62, 11050-11053.	1.1	45
82	Controllable Edge Exposure of MoS ₂ for Efficient Hydrogen Evolution with High Current Density. <i>ACS Applied Energy Materials</i> , 2018, 1, 1268-1275.	2.5	44
83	Anharmonic phonons and high-temperature superconductivity. <i>Physical Review B</i> , 1993, 48, 398-406.	1.1	43
84	Helium in One-Dimensional Nanopores: Free Dispersion, Localization, and Commensurate/Incommensurate Transitions with Nonrigid Orbitals. <i>Physical Review Letters</i> , 2001, 86, 3360-3363.	2.9	42
85	1-Adamantanethiolate Monolayer Displacement Kinetics Follow a Universal Form. <i>Journal of the American Chemical Society</i> , 2007, 129, 10741-10746.	6.6	42
86	Prediction of a multicenter-bonded solid boron hydride for hydrogen storage. <i>Physical Review B</i> , 2011, 83, .	1.1	42
87	Defect Coupling and Sub-Angstrom Structural Distortions in W _{1-x} Mo _x S ₂ Monolayers. <i>Nano Letters</i> , 2017, 17, 2802-2808.	4.5	42
88	Thermopower of single-crystal Nd _{1-x} (Sr,Pb) _x MnO ₃ . <i>Physical Review B</i> , 1996, 53, 14303-14308.	1.1	40
89	Dynamics of cleaning, passivating and doping monolayer MoS ₂ by controlled laser irradiation. <i>2D Materials</i> , 2019, 6, 045031.	2.0	40
90	Analyzing the Motion of Benzene on Au{111}: Single Molecule Statistics from Scanning Probe Images. <i>Journal of Physical Chemistry C</i> , 2007, 111, 6167-6182.	1.5	39

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91	Anharmonic phonons and the isotope effect in superconductivity. Physical Review B, 1991, 43, 12921-12924.	1.1	37
92	Full orientation control of epitaxial MoS_2 on hBN assisted by substrate defects. Physical Review B, 2019, 99, .	1.1	37
93	Nanotube-Substrate Interactions: Distinguishing Carbon Nanotubes by the Helical Angle. Physical Review Letters, 2004, 92, 085503.	2.9	36
94	Evidence for Ambient-Temperature Reversible Catalytic Hydrogenation in Pt-doped Carbons. Nano Letters, 2013, 13, 137-141.	4.5	36
95	Evidence for Orientational Order in Nanothreads Derived from Thiophene. Journal of Physical Chemistry Letters, 2019, 10, 7164-7171.	2.1	36
96	Carbon Isotope Effect in Single-Crystal $\text{Rb}_3\text{C}_6\text{O}$. Physical Review Letters, 1999, 83, 404-407.	2.9	35
97	Nonlinear Dark-Field Imaging of One-Dimensional Defects in Monolayer Dichalcogenides. Nano Letters, 2020, 20, 284-291.	4.5	34
98	Reversible Lability by <i>In Situ</i> Reaction of Self-Assembled Monolayers. Journal of the American Chemical Society, 2009, 131, 2252-2259.	6.6	33
99	Nanoarchitecture through Strained Molecules: Cubane-Derived Scaffolds and the Smallest Carbon Nanothreads. Journal of the American Chemical Society, 2020, 142, 17944-17955.	6.6	32
100	Scalable Synthesis of Crystalline One-Dimensional Carbon Nanothreads through Modest-Pressure Polymerization of Furan. ACS Nano, 2021, 15, 4134-4143.	7.3	32
101	$\text{ZrTe}_2/\text{CrTe}_2$: an epitaxial van der Waals platform for spintronics. Nature Communications, 2022, 13, .	5.8	32
102	Photoluminescence from nanocrystalline graphite monofluoride. Applied Physics Letters, 2010, 97, .	1.5	31
103	Site-selective radiation damage of collapsed carbon nanotubes. Applied Physics Letters, 1998, 73, 2435-2437.	1.5	30
104	Discrete transverse superconducting modes in nanocylinders. Physical Review B, 2004, 69, .	1.1	30
105	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, .	2.2	30
106	Anharmonic phonons and the anomalous isotope effect in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$. Physical Review B, 1991, 44, 4712-4715.	1.1	29
107	Resistivity saturation in alkali-doped C_{60} . Solid State Communications, 1995, 93, 973-977.	0.9	29
108	Chiral diffusion of rotary nanomotors. Physical Review E, 2013, 87, 050301.	0.8	29

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109	Anomalous phonon stiffening associated with the (1 1 1) antiphase boundary in L12 Ni3Al. <i>Acta Materialia</i> , 2015, 82, 287-294.	3.8	29
110	A general flux-based analysis for spherical electrocatalytic nanomotors. <i>Physics of Fluids</i> , 2015, 27, .	1.6	28
111	Lithiation induced corrosive fracture in defective carbon nanotubes. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	27
112	Examination of biological hotspot hypothesis of primary cell wall using a computational cell wall network model. <i>Cellulose</i> , 2015, 22, 1027-1038.	2.4	26
113	Local Structure and Bonding of Carbon Nanothreads Probed by High-Resolution Transmission Electron Microscopy. <i>Journal of the American Chemical Society</i> , 2019, 141, 6937-6945.	6.6	26
114	Illuminating Invisible Grain Boundaries in Coalesced Single-Orientation WS ₂ Monolayer Films. <i>Nano Letters</i> , 2021, 21, 6487-6495.	4.5	26
115	Curvature-induced D-band Raman scattering in folded graphene. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 334205.	0.7	25
116	Self-electrophoresis of spheroidal electrocatalytic swimmers. <i>Physics of Fluids</i> , 2015, 27, .	1.6	25
117	Comparing frustrated and unfrustrated clusters of single-domain ferromagnetic islands. <i>Physical Review B</i> , 2010, 82, .	1.1	24
118	Constraining Carbon Nanowire Structures by Experimental and Calculated Nuclear Magnetic Resonance Spectra. <i>Nano Letters</i> , 2018, 18, 4934-4942.	4.5	24
119	Tuning magnetic frustration of nanomagnets in triangular-lattice geometry. <i>Applied Physics Letters</i> , 2008, 93, 252504.	1.5	23
120	Characterization of complementary patterned metallic membranes produced simultaneously by a dual fabrication process. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	23
121	Magnetic perturbation and associated energies of the antiphase boundaries in ordered Ni3Al. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	23
122	Local Temperature during the Growth of Multiwalled Carbon Nanotubes. <i>Physical Review Letters</i> , 1999, 82, 2908-2910.	2.9	22
123	Low-temperature Solution Synthesis of Few-layer 1T ₂ MoTe ₂ Nanostructures Exhibiting Lattice Compression. <i>Angewandte Chemie</i> , 2016, 128, 2880-2884.	1.6	22
124	Unexpected Near-Infrared to Visible Nonlinear Optical Properties from 2-D Polar Metals. <i>Nano Letters</i> , 2020, 20, 8312-8318.	4.5	22
125	“Sacrificial” supramolecular assembly and pressure-induced polymerization: toward sequence-defined functionalized nanothreads. <i>Chemical Science</i> , 2020, 11, 11419-11424.	3.7	22
126	Clathrates join the covalent club. <i>Nature Materials</i> , 2003, 2, 650-651.	13.3	21

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127	Static and Dynamical Phyllotaxis in a Magnetic Cactus. <i>Physical Review Letters</i> , 2009, 102, 186103.	2.9	20
128	Nanomotor mechanisms and motive force distributions from nanorotor trajectories. <i>Physical Review E</i> , 2013, 88, 062317.	0.8	20
129	Theory of Finite-Length Grain Boundaries of Controlled Misfit Angle in Two-Dimensional Materials. <i>Nano Letters</i> , 2017, 17, 5297-5303.	4.5	20
130	Modeling for Structural Engineering and Synthesis of Two-Dimensional WSe ₂ Using a Newly Developed ReaxFF Reactive Force Field. <i>Journal of Physical Chemistry C</i> , 2020, 124, 28285-28297.	1.5	20
131	Tuning Transport and Chemical Sensitivity via Niobium Doping of Synthetic MoS ₂ . <i>Advanced Materials Interfaces</i> , 2020, 7, 2000856.	1.9	19
132	Metal-insulator transition in AC60:RbC60 and KC60. <i>Physical Review B</i> , 1997, 56, 6627-6630.	1.1	18
133	Tuning Fermi-Surface Properties through Quantum Confinement in Metallic Metalattices: New Metals from Old Atoms. <i>Physical Review Letters</i> , 2001, 86, 696-699.	2.9	18
134	Online Study Behavior of 100,000 Students Preparing for the SAT, ACT, and GRE. <i>Journal of Educational Computing Research</i> , 2004, 30, 255-262.	3.6	18
135	Electronic Bisection of a Single-Wall Carbon Nanotube by Controlled Chemisorption. <i>Physical Review Letters</i> , 2007, 99, 026802.	2.9	18
136	Ignoring Your Neighbors: Moment Correlations Dominated by Indirect or Distant Interactions in an Ordered Nanomagnet Array. <i>Physical Review Letters</i> , 2011, 107, 117204.	2.9	18
137	Geometrical perturbation of graphene electronic structure. <i>Physical Review B</i> , 2000, 61, 7308-7311.	1.1	17
138	Asymmetry in negative differential resistance driven by electron-electron interactions in two-site molecular devices. <i>Applied Physics Letters</i> , 2001, 79, 2829-2831.	1.5	17
139	Metallic Membranes with Subwavelength Complementary Patterns: Distinct Substrates for Surface-Enhanced Raman Scattering. <i>ACS Nano</i> , 2011, 5, 5472-5477.	7.3	17
140	Stabilizing the Zigzag Edge: Graphene Nanoribbons with Sterically Constrained Terminations. <i>Physical Review Letters</i> , 2012, 109, 076802.	2.9	17
141	Heat capacity and vibrational spectra of monolayer films adsorbed in nanotubes. <i>Physical Review B</i> , 1998, 58, R13426-R13429.	1.1	16
142	Carbon Nanostructures as an Electromechanical Bicontinuum. <i>Physical Review Letters</i> , 2007, 99, 045501.	2.9	16
143	Kinematic matrix theory and universalities in self-propellers and active swimmers. <i>Physical Review E</i> , 2014, 89, 062304.	0.8	16
144	Possible discrepancies between transport and superconducting electron-phonon coupling due to anisotropic Fermi surface nesting. <i>Solid State Communications</i> , 1992, 81, 187-189.	0.9	15

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145	Annealing a magnetic cactus into phyllotaxis. <i>Physical Review E</i> , 2010, 81, 046107.	0.8	15
146	Modeling Electrostatically Induced Collapse Transitions in Carbon Nanotubes. <i>Physical Review Letters</i> , 2011, 106, 155501.	2.9	15
147	Theory of genus reduction in alkali-induced graphitization of nanoporous carbon. <i>Physical Review B</i> , 2007, 76, .	1.1	14
148	Constraints on η cellulose twist from DFT calculations of ^{13}C NMR chemical shifts. <i>Cellulose</i> , 2014, 21, 3979-3991.	2.4	14
149	All the Ways To Have Substituted Nanothreads. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 1131-1140.	2.3	14
150	Achieving Minimal Heat Conductivity by Ballistic Confinement in Phononic Metalattices. <i>ACS Nano</i> , 2020, 14, 4235-4243.	7.3	14
151	Magnetotransport in single-crystal Rb ₃ C ₆₀ . <i>Physica C: Superconductivity and Its Applications</i> , 1994, 228, 175-180.	0.6	13
152	Universal Form of Hall Coefficient in K and Rb Doped Single Crystal C ₆₀ . <i>Physical Review Letters</i> , 1995, 74, 1637-1640.	2.9	13
153	Gibbsianizing nonequilibrium dynamics of artificial spin ice and other spin systems. <i>New Journal of Physics</i> , 2012, 14, 045009.	1.2	13
154	Self-consistent nonlocal feedback theory for electrocatalytic swimmers with heterogeneous surface chemical kinetics. <i>Physical Review E</i> , 2015, 91, 062303.	0.8	13
155	Helium mixtures in nanotube bundles. <i>Physical Review B</i> , 2000, 61, 7288-7290.	1.1	12
156	Theory of metastable group-IV alloys formed from CVD precursors. <i>Physical Review B</i> , 2001, 64, .	1.1	12
157	Abrupt Topological Transitions in the Hysteresis Curves of Ferromagnetic Metalattices. <i>Physical Review Letters</i> , 2002, 89, 197203.	2.9	12
158	Electronic properties of mixed-phase graphene/h-BN sheets using real-space pseudopotentials. <i>Physical Review B</i> , 2013, 88, .	1.1	12
159	Chemically Controlled Spatiotemporal Oscillations of Colloidal Assemblies. <i>Angewandte Chemie</i> , 2017, 129, 7925-7929.	1.6	12
160	Tuning transport across MoS ₂ /graphene interfaces via as-grown lateral heterostructures. <i>Npj 2D Materials and Applications</i> , 2020, 4, .	3.9	12
161	Theory of Carbomorph Cycles. <i>Physical Review Letters</i> , 2013, 110, 156803.	2.9	11
162	Gaussian memory in kinematic matrix theory for self-propellers. <i>Physical Review E</i> , 2014, 90, 062304.	0.8	11

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163	Perfect and Defective ¹³ C-Furan-Derived Nanothreads from Modest-Pressure Synthesis Analyzed by ¹³ C NMR. <i>Journal of the American Chemical Society</i> , 2021, 143, 9529-9542.	6.6	11
164	Simple estimate of electron-phonon coupling in small fullerenes. <i>Physical Review B</i> , 1999, 60, 100-101.	1.1	10
165	Effect of bending on single-walled carbon nanotubes: A Raman scattering study. <i>Physical Review B</i> , 2010, 81, .	1.1	10
166	Structural, electronic, optical and vibrational properties of nanoscale carbons and nanowires: a colloquial review. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 334201.	0.7	10
167	Nondestructive Measurements of the Mechanical and Structural Properties of Nanostructured Metalattices. <i>Nano Letters</i> , 2020, 20, 3306-3312.	4.5	10
168	Bypassing slip velocity: rotational and translational velocities of autophoretic colloids in terms of surface flux. <i>Journal of Fluid Mechanics</i> , 2016, 802, 294-304.	1.4	9
169	Field-Tunable Interactions and Frustration in Underlayer-Mediated Artificial Spin Ice. <i>Physical Review Letters</i> , 2021, 127, 117203.	2.9	9
170	Anharmonic phonons and superconductivity in Pd H(D). <i>Solid State Communications</i> , 1992, 83, 427-429.	0.9	8
171	Alkali-metal isotope effect in Rb3C60. <i>Physica C: Superconductivity and Its Applications</i> , 1994, 235-240, 2493-2494.	0.6	8
172	NanoVelcro: Theory of Guided Folding in Atomically Thin Sheets with Regions of Complementary Doping. <i>Nano Letters</i> , 2017, 17, 6708-6714.	4.5	8
173	Scattering mechanisms in Rb-doped single-crystal C60. <i>Physical Review B</i> , 1995, 52, 3619-3623.	1.1	7
174	Pressure dependence of the resistivity and magnetoresistance in single-crystal. <i>Journal of Physics Condensed Matter</i> , 1996, 8, 7723-7731.	0.7	7
175	Characterization of switching field distributions in Ising-like magnetic arrays. <i>Physical Review B</i> , 2017, 95, .	1.1	7
176	Magnetization states and switching in narrow-gapped ferromagnetic nanorings. <i>AIP Advances</i> , 2012, 2, .	0.6	7
177	Imaging the stochastic microstructure and dynamic development of correlations in perpendicular artificial spin ice. <i>Physical Review Research</i> , 2020, 2, .	1.3	7
178	Reciprocal Space Constraints Create Real-Space Anomalies in Doped Carbon Nanotubes. <i>Physical Review Letters</i> , 2007, 99, 196803.	2.9	6
179	Soggy origami. <i>Nature</i> , 2009, 462, 858-859.	13.7	6
180	Probing the origin of lateral heterogeneities in synthetic monolayer molybdenum disulfide. <i>2D Materials</i> , 2019, 6, 025008.	2.0	6

#	ARTICLE	IF	CITATIONS
181	Near constancy of the pressure dependence of T_c across families of organic and fullerene superconductors. <i>Physical Review B</i> , 1996, 53, 56-58.	1.1	5
182	Distinguishing advective and powered motion in self-propelled colloids. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 445101.	0.7	5
183	Mechanistic insights into the pressure-induced polymerization of aryl/perfluoroaryl co-crystals. <i>Polymer Chemistry</i> , 2022, 13, 1359-1368.	1.9	5
184	Theoretical Studies of Furan and Thiophene Nanothreads: Structures, Cycloaddition Barriers, and Activation Volumes. <i>Journal of the American Chemical Society</i> , 2022, 144, 9044-9056.	6.6	5
185	Anharmonic phonons and site selective isotope effects in $YBa_2\hat{x}MxCu_3O_7$ ($M = La, Sr$). <i>Solid State Communications</i> , 1993, 86, 161-164.	0.9	3
186	Inverse isotope effects and models for high- T_c superconductivity. <i>Physical Review B</i> , 1993, 47, 5528-5530.	1.1	3
187	Flatland exposed. <i>Physics Magazine</i> , 2008, 1, .	0.1	3
188	Theory of a three-dimensional nanoporous silicon lattice with unsaturated bonding. <i>Applied Physics Letters</i> , 2010, 97, 121906.	1.5	3
189	Superconducting Properties of K_3C_{60} and Rb_3C_{60} Single Crystals in High Fields. <i>Molecular Crystals and Liquid Crystals</i> , 1994, 245, 333-337.	0.3	2
190	Validity of the BCS model Hamiltonian in the limit of small sizes. <i>Physical Review B</i> , 2000, 62, 8669-8670.	1.1	2
191	Catalytic Nanomotors: Autonomous Movement of Striped Nanorods.. <i>ChemInform</i> , 2004, 35, no.	0.1	2
192	High pressure CVD inside microstructured optical fibres. , 2006, , .		2
193	Coupling Between Colloidal Assemblies Can Drive a Bistableâ€toâ€Oscillatory Transition. <i>ChemSystemsChem</i> , 2020, 2, e1900036.	1.1	2
194	Synthesizing carbon nanothreads from benzene. <i>SPIE Newsroom</i> , 0, , .	0.1	2
195	Sliding, stretching, and tapering: recent structural results for carbon nanotubes. , 1999, , .		1
196	The Geometry of Nanoscale Carbon. <i>Nanostructure Science and Technology</i> , 2004, , 103-118.	0.1	1
197	An algorithm to sculpt photon dispersion in a subwavelength nanostructure. <i>Applied Physics Letters</i> , 2009, 94, 041115.	1.5	1
198	Observation of a Quasi-ordered Structure in Monolayer $W_xMo_{(1-x)}S_2$ Alloys. <i>Microscopy and Microanalysis</i> , 2016, 22, 1548-1549.	0.2	1

#	ARTICLE	IF	CITATIONS
199	Adsorption-induced shape transitions in bistable nanopores with atomically thin walls. Physical Review E, 2017, 95, 012804.	0.8	1
200	Dual-Sided Adsorption: Devil's Staircase of Coverage Fractions. Physical Review Letters, 2018, 120, 056101.	2.9	1
201	Communicating through a sea of frustration: Zero-temperature triangular Ising antiferromagnet on a cylinder. Physical Review E, 2018, 98, .	0.8	1
202	Cryogenic Transmission Electron Microscopy Investigation of Carbon Nanothreads. Microscopy and Microanalysis, 2021, 27, 684-685.	0.2	1
203	Identification of individual and few layers of WS ₂ using Raman Spectroscopy. , 0, .		1
204	Superconductivity in Fulleride. , 2005, , 231-253.		0
205	Deposition of electronic materials inside microstructured optical fibres for novel device applications. , 2008, , .		0
206	Lithographically Fabricated 10-Micron Scale Autonomous Motors. Materials Research Society Symposia Proceedings, 2008, 1135, 30901.	0.1	0
207	Peter Clay Eklund: a scientific biography. Journal of Physics Condensed Matter, 2010, 22, 330301.	0.7	0
208	Editorial: Welcome to AIP Advances—a new open-access journal from the American Institute of Physics. AIP Advances, 2011, 1, 010401.	0.6	0
209	Theory of Electrocaloric Effect in a Shape-Changing Container: Gas in a Nanotube. Physical Review Letters, 2014, 113, 265501.	2.9	0
210	Ultra-low thermal conductivity and acoustic dynamics of Si nanostructured metalattices probed using ultrafast high harmonic beams. EPJ Web of Conferences, 2019, 205, 04006.	0.1	0
211	Electronic and Plasmonic Materials Inside Microstructured Optical Fibers. , 2007, , .		0
212	Rankings of Research-Active Departments. Science, 1999, 285, 1355-1355.	6.0	0
213	Mutual information and breakdown of the Perron-Frobenius scenario in zero-temperature triangular Ising antiferromagnets on cylinders. Physical Review E, 2022, 105, 044105.	0.8	0
214	Direct observation of topological magnetic monopoles using soft x-ray vector ptychography at 10 nm resolution. , 2022, , .		0