Andrea C Ferrari

List of Publications by Year
in descending order

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306 papers	115,106 citations	1172 111 h-index	529 266 g-index
313 all docs	313 docs citations	313 times ranked	77803 citing authors

#	Article	IF	Citations
1	Raman Spectrum of Graphene and Graphene Layers. Physical Review Letters, 2006, 97, 187401.	7.8	12,689
2	Interpretation of Raman spectra of disordered and amorphous carbon. Physical Review B, 2000, 61, 14095-14107.	3.2	12,419
3	Graphene photonics and optoelectronics. Nature Photonics, 2010, 4, 611-622.	31.4	6,719
4	Raman spectroscopy of graphene and graphite: Disorder, electronâ€“phonon coupling, doping and nonadiabatic effects. Solid State Communications, 2007, 143, 47-57.	1.9	6,322
5	Raman spectroscopy as a versatile tool for studying the properties of graphene. Nature Nanotechnology, 2013, 8, 235-246.	31.5	5,652
6	High-yield production of graphene by liquid-phase exfoliation of graphite. Nature Nanotechnology, 2008, 3, 563-568.	31.5	5,431
7	Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane. Science, 2009, 323, 610-613.	12.6	3,748
8	Monitoring dopants by Raman scattering in an electrochemically top-gated graphene transistor. Nature Nanotechnology, 2008, 3, 210-215.	31.5	3,125
9	Photodetectors based on graphene, other two-dimensional materials and hybrid systems. Nature Nanotechnology, 2014, 9, 780-793.	31.5	3,017
10	Graphene, related two-dimensional crystals, and hybrid systems for energy conversion and storage. Science, 2015, 347, 1246501.	12.6	2,925
11	Quantifying Defects in Graphene via Raman Spectroscopy at Different Excitation Energies. Nano Letters, 2011, 11, 3190-3196.	9.1	2,807
12	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. Nanoscale, 2015, 7, 4598-4810.	5.6	2,452
13	Resonant Raman spectroscopy of disordered, amorphous, and diamondlike carbon. Physical Review B, 2001, 64, .	3.2	2,435
14	Graphene Mode-Locked Ultrafast Laser. ACS Nano, 2010, 4, 803-810.	14.6	1,795
15	Uniaxial strain in graphene by Raman spectroscopy:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>G</mml:mi></mml:math>peak splitting, GrÃ¼neisen parameters, and sample orientation. Physical Review B, 2009, 79, .	3.2	1,662
16	Breakdown of the adiabatic Bornâ€“Oppenheimer approximation in graphene. Nature Materials, 2007, 6, 198-201.	27.5	1,229
17	Raman spectroscopy of hydrogenated amorphous carbons. Physical Review B, 2005, 72, .	3.2	1,037
18	Growth process conditions of vertically aligned carbon nanotubes using plasma enhanced chemical vapor deposition. Journal of Applied Physics, 2001, 90, 5308-5317.	2.5	1,034

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19	Origin of the1150â^'cmâ^'1Raman mode in nanocrystalline diamond. Physical Review B, 2001, 63, .	3.2	1,027
20	Inkjet-Printed Graphene Electronics. ACS Nano, 2012, 6, 2992-3006.	14.6	1,018
21	Raman Spectroscopy of Graphene Edges. Nano Letters, 2009, 9, 1433-1441.	9.1	933
22	Graphene field-effect transistors as room-temperature terahertz detectors. Nature Materials, 2012, 11, 865-871.	27.5	931
23	Electroluminescence in Single Layer MoS₂. Nano Letters, 2013, 13, 1416-1421.	9.1	905
24	Production and processing of graphene and 2d crystals. Materials Today, 2012, 15, 564-589.	14.2	866
25	Optical trapping and manipulation of nanostructures. Nature Nanotechnology, 2013, 8, 807-819.	31.5	829
26	Flexible Electronics: The Next Ubiquitous Platform. Proceedings of the IEEE, 2012, 100, 1486-1517.	21.3	822
27	Raman fingerprint of charged impurities in graphene. Applied Physics Letters, 2007, 91, .	3.3	802
28	Kohn Anomalies and Electron-Phonon Interactions in Graphite. Physical Review Letters, 2004, 93, 185503.	7.8	779
29	Nanotubeâ€"Polymer Composites for Ultrafast Photonics. Advanced Materials, 2009, 21, 3874-3899.	21.0	778
30	Strong plasmonic enhancement of photovoltage in graphene. Nature Communications, 2011, 2, 458.	12.8	775
31	Interpretation of infrared and Raman spectra of amorphous carbon nitrides. Physical Review B, 2003, 67, .	3.2	659
32	Wideband-tuneable, nanotube mode-locked, fibre laser. Nature Nanotechnology, 2008, 3, 738-742.	31.5	596
33	Rayleigh Imaging of Graphene and Graphene Layers. Nano Letters, 2007, 7, 2711-2717.	9.1	590
34	Making Graphene Luminescent by Oxygen Plasma Treatment. ACS Nano, 2009, 3, 3963-3968.	14.6	587
35	The shear mode of multilayer graphene. Nature Materials, 2012, 11, 294-300.	27.5	568
36	Density,sp3fraction, and cross-sectional structure of amorphous carbon films determined by x-ray reflectivity and electron energy-loss spectroscopy. Physical Review B, 2000, 62, 11089-11103.	3.2	506

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37	Edge-functionalized and substitutionally doped graphene nanoribbons: Electronic and spin properties. Physical Review B, 2008, 77, .	3.2	503
38	Ultrafast collinear scattering and carrier multiplication in graphene. Nature Communications, 2013, 4, 1987.	12.8	446
39	Surface-Enhanced Raman Spectroscopy of Graphene. ACS Nano, 2010, 4, 5617-5626.	14.6	433
40	Optical phonons in carbon nanotubes: Kohn anomalies, Peierls distortions, and dynamic effects. Physical Review B, 2007, 75, .	3.2	418
41	Large-scale quantum-emitter arrays in atomically thin semiconductors. Nature Communications, 2017, 8, 15093.	12.8	406
42	Raman spectroscopy of shear and layer breathing modes in multilayer MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 87, .	3.2	404
43	Graphene Q-switched, tunable fiber laser. Applied Physics Letters, 2011, 98, .	3.3	402
44	Subjecting a Graphene Monolayer to Tension and Compression. Small, 2009, 5, 2397-2402.	10.0	400
45	Sub 200 fs pulse generation from a graphene mode-locked fiber laser. Applied Physics Letters, 2010, 97, .	3.3	398
46	Electron-electron interactions and doping dependence of the two-phonon Raman intensity in graphene. Physical Review B, 2009, 80, .	3.2	393
47	Stress reduction and bond stability during thermal annealing of tetrahedral amorphous carbon. Journal of Applied Physics, 1999, 85, 7191-7197.	2.5	390
48	Surface Diffusion: The Low Activation Energy Path for Nanotube Growth. Physical Review Letters, 2005, 95, 036101.	7.8	362
49	Lightâ€“matter interaction in a microcavity-controlled graphene transistor. Nature Communications, 2012, 3, 906.	12.8	355
50	A stable, wideband tunable, near transform-limited, graphene-mode-locked, ultrafast laser. Nano Research, 2010, 3, 653-660.	10.4	351
51	Phonon linewidths and electron-phonon coupling in graphite and nanotubes. Physical Review B, 2006, 73, .	3.2	335
52	Resonant Raman scattering in cubic and hexagonal boron nitride. Physical Review B, 2005, 71, .	3.2	334
53	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	4.4	333
54	Raman spectroscopy of silicon nanowires. Physical Review B, 2003, 68, .	3.2	326

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55	Doping Dependence of the Raman Spectrum of Defected Graphene. ACS Nano, 2014, 8, 7432-7441.	14.6	312
56	Catalytic Chemical Vapor Deposition of Single-Wall Carbon Nanotubes at Low Temperatures. Nano Letters, 2006, 6, 1107-1112.	9.1	297
57	Raman Spectroscopy of Single-Wall Boron Nitride Nanotubes. Nano Letters, 2006, 6, 1812-1816.	9.1	296
58	The Ultrasmoothness of Diamond-like Carbon Surfaces. Science, 2005, 309, 1545-1548.	12.6	286
59	Graphene-based integrated photonics for next-generation datacom and telecom. Nature Reviews Materials, 2018, 3, 392-414.	48.7	286
60	High Responsivity, Large-Area Graphene/MoS₂ Flexible Photodetectors. ACS Nano, 2016, 10, 8252-8262.	14.6	275
61	Tm-doped fiber laser mode-locked by graphene-polymer composite. Optics Express, 2012, 20, 25077.	3.4	272
62	Photo-Induced Bandgap Renormalization Governs the Ultrafast Response of Single-Layer MoS₂. ACS Nano, 2016, 10, 1182-1188.	14.6	272
63	Cleaning interfaces in layered materials heterostructures. Nature Communications, 2018, 9, 5387.	12.8	272
64	On-Chip Integrated, Siliconâ€“Graphene Plasmonic Schottky Photodetector with High Responsivity and Avalanche Photogain. Nano Letters, 2016, 16, 3005-3013.	9.1	265
65	Grapheneâ€“silicon phase modulators with gigahertz bandwidth. Nature Photonics, 2018, 12, 40-44.	31.4	261
66	Microfluidization of Graphite and Formulation of Graphene-Based Conductive Inks. ACS Nano, 2017, 11, 2742-2755.	14.6	257
67	Evolution of sp2 bonding with deposition temperature in tetrahedral amorphous carbon studied by Raman spectroscopy. Applied Physics Letters, 2000, 76, 1419-1421.	3.3	250
68	Electron Transport and Hot Phonons in Carbon Nanotubes. Physical Review Letters, 2005, 95, 236802.	7.8	250
69	Gold catalyzed growth of silicon nanowires by plasma enhanced chemical vapor deposition. Journal of Applied Physics, 2003, 94, 6005-6012.	2.5	247
70	Atomically thin quantum light-emitting diodes. Nature Communications, 2016, 7, 12978.	12.8	242
71	Intercalation of Few-Layer Graphite Flakes with FeCl₃: Raman Determination of Fermi Level, Layer by Layer Decoupling, and Stability. Journal of the American Chemical Society, 2011, 133, 5941-5946.	13.7	239
72	Phonon renormalization in doped bilayer graphene. Physical Review B, 2009, 79, .	3.2	238

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73	Diamond-like carbon for data and beer storage. Materials Today, 2007, 10, 44-53.	14.2	222
74	Broadband, electrically tunable third-harmonic generation in graphene. Nature Nanotechnology, 2018, 13, 583-588.	31.5	211
75	Controlling Subnanometer Gaps in Plasmonic Dimers Using Graphene. Nano Letters, 2013, 13, 5033-5038.	9.1	210
76	Graphene-Based Interfaces Do Not Alter Target Nerve Cells. ACS Nano, 2016, 10, 615-623.	14.6	208
77	Thermal conductivity of diamond-like carbon films. Applied Physics Letters, 2006, 89, 161921.	3.3	202
78	Resonant Raman spectroscopy of twisted multilayer graphene. Nature Communications, 2014, 5, 5309.	12.8	197
79	Brownian Motion of Graphene. ACS Nano, 2010, 4, 7515-7523.	14.6	194
80	Raman and infrared modes of hydrogenated amorphous carbon nitride. Journal of Applied Physics, 2001, 89, 5425-5430.	2.5	190
81	Ink-jet printing of carbon nanotube thin film transistors. Journal of Applied Physics, 2007, 102, .	2.5	189
82	Charge-tuneable biexciton complexes in monolayer WSe2. Nature Communications, 2018, 9, 3721.	12.8	185
83	Photoluminescence Spectroscopy of Carbon Nanotube Bundles: Evidence for Exciton Energy Transfer. Physical Review Letters, 2007, 99, 137402.	7.8	181
84	First-Principles Prediction of Doped Graphane as a High-Temperature Electron-Phonon Superconductor. Physical Review Letters, 2010, 105, 037002.	7.8	178
85	Ultra-strong nonlinear optical processes and trigonal warping in MoS2 layers. Nature Communications, 2017, 8, 893.	12.8	177
86	Effect of sp2-phase nanostructure on field emission from amorphous carbons. Applied Physics Letters, 2000, 76, 2627-2629.	3.3	175
87	Graphene and Related Materials for Resistive Random Access Memories. Advanced Electronic Materials, 2017, 3, 1600195.	5.1	175
88	Elastic constants of tetrahedral amorphous carbon films by surface Brillouin scattering. Applied Physics Letters, 1999, 75, 1893-1895.	3.3	172
89	Development of a universal stress sensor for graphene and carbon fibres. Nature Communications, 2011, 2, .	12.8	172
90	Solutionâ€phase exfoliation of graphite for ultrafast photonics. Physica Status Solidi (B): Basic Research, 2010, 247, 2953-2957.	1.5	170

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91	Nonequilibrium dynamics of photoexcited electrons in graphene: Collinear scattering, Auger processes, and the impact of screening. Physical Review B, 2013, 88, .	3.2	164
92	Surface Plasmon Polariton Graphene Photodetectors. Nano Letters, 2016, 16, 8-20.	9.1	161
93	Stabilization and â€œDebundlingâ€•of Single-Wall Carbon Nanotube Dispersions in N-Methyl-2-pyrrolidone (NMP) by Polyvinylpyrrolidone (PVP). Journal of Physical Chemistry C, 2007, 111, 12594-12602.	3.1	158
94	Photothermoelectric and Photoelectric Contributions to Light Detection in Metalâ€“Grapheneâ€“Metal Photodetectors. Nano Letters, 2014, 14, 3733-3742.	9.1	153
95	Graphene-based mid-infrared room-temperature pyroelectric bolometers with ultrahigh temperature coefficient of resistance. Nature Communications, 2017, 8, 14311.	12.8	151
96	High performance bilayer-graphene terahertz detectors. Applied Physics Letters, 2014, 104, .	3.3	149
97	Carbon Nanotube Polycarbonate Composites for Ultrafast Lasers. Advanced Materials, 2008, 20, 4040-4043.	21.0	148
98	Density Gradient Ultracentrifugation of Nanotubes: Interplay of Bundling and Surfactants Encapsulation. Journal of Physical Chemistry C, 2010, 114, 17267-17285.	3.1	144
99	Ultrafast stretched-pulse fiber laser mode-locked by carbon nanotubes. Nano Research, 2010, 3, 404-411.	10.4	133
100	Molar Extinction Coefficient of Single-Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2011, 115, 14682-14686.	3.1	132
101	High-Mobility, Wet-Transferred Graphene Grown by Chemical Vapor Deposition. ACS Nano, 2019, 13, 8926-8935.	14.6	132
102	Electron and Phonon Properties of Graphene: Their Relationship with Carbon Nanotubes. Topics in Applied Physics, 2007, , 673-709.	0.8	131
103	Nanosecond-pulse fiber lasers mode-locked with nanotubes. Applied Physics Letters, 2009, 95, .	3.3	130
104	Out-of-plane heat transfer in van der Waals stacks through electronâ€“hyperbolic phonon coupling. Nature Nanotechnology, 2018, 13, 41-46.	31.5	128
105	Interface Coupling in Twisted Multilayer Graphene by Resonant Raman Spectroscopy of Layer Breathing Modes. ACS Nano, 2015, 9, 7440-7449.	14.6	127
106	Influence of nitrogen and temperature on the deposition of tetrahedrally bonded amorphous carbon. Journal of Applied Physics, 2000, 88, 1149-1157.	2.5	123
107	74-fs nanotube-mode-locked fiber laser. Applied Physics Letters, 2012, 101, 153107.	3.3	122
108	2â€‰Î¼m solid-state laser mode-locked by single-layer graphene. Applied Physics Letters, 2013, 102, 013113.	3.3	120

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109	Deep reactive ion etching as a tool for nanostructure fabrication. Journal of Vacuum Science & Technology B, 2009, 27, 1520-1526.	1.3	119
110	Transform-Limited Photons From a Coherent Tin-Vacancy Spin in Diamond. Physical Review Letters, 2020, 124, 023602.	7.8	119
111	Femtonewton Force Sensing with Optically Trapped Nanotubes. Nano Letters, 2008, 8, 3211-3216.	9.1	118
112	A compact, high power, ultrafast laser mode-locked by carbon nanotubes. Applied Physics Letters, 2009, 95, .	3.3	114
113	Waveguide-Integrated, Plasmonic Enhanced Graphene Photodetectors. Nano Letters, 2019, 19, 7632-7644.	9.1	113
114	Rotation Detection in Light-Driven Nanorotors. ACS Nano, 2009, 3, 3077-3084.	14.6	112
115	15 GHz picosecond pulse generation from a monolithic waveguide laser with a graphene-film saturable output coupler. Optics Express, 2013, 21, 7943.	3.4	111
116	Ultrafast and widely tuneable vertical-external-cavity surface-emitting laser, mode-locked by a graphene-integrated distributed Bragg reflector. Optics Express, 2013, 21, 31548.	3.4	111
117	L -band ultrafast fiber laser mode locked by carbon nanotubes. Applied Physics Letters, 2008, 93, .	3.3	106
118	Vertically Illuminated, Resonant Cavity Enhanced, Grapheneâ€“Silicon Schottky Photodetectors. ACS Nano, 2017, 11, 10955-10963.	14.6	101
119	Properties of amorphous carbonâ€“silicon alloys deposited by a high plasma density source. Journal of Applied Physics, 2001, 90, 5002-5012.	2.5	97
120	Light-enhanced liquid-phase exfoliation and current photoswitching in grapheneâ€“azobenzene composites. Nature Communications, 2016, 7, 11090.	12.8	97
121	Role of sp2 phase in field emission from nanostructured carbons. Journal of Applied Physics, 2001, 90, 2024-2032.	2.5	94
122	Dynamic Roughening of Tetrahedral Amorphous Carbon. Physical Review Letters, 2003, 91, 226104.	7.8	94
123	Generation and direct measurement of giant chirp in a passively mode-locked laser. Optics Letters, 2009, 34, 3526.	3.3	94
124	Terahertz saturable absorbers from liquid phase exfoliation of graphite. Nature Communications, 2017, 8, 15763.	12.8	93
125	Passive mode locking by carbon nanotubes in a femtosecond laser written waveguide laser. Applied Physics Letters, 2006, 89, 231115.	3.3	91
126	Optical trapping of nanotubes with cylindrical vector beams. Optics Letters, 2012, 37, 3381.	3.3	91

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127	Ultrafast valley relaxation dynamics in monolayer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> by nonequilibrium optical techniques. Physical Review B, 2015, 92, .	3.2	89
128	Low-temperature synthesis of ZnSe nanowires and nanosaws by catalyst-assisted molecular-beam epitaxy. Applied Physics Letters, 2005, 86, 153103.	3.3	87
129	Bonding and mechanical properties of ultrathin diamond-like carbon films. Applied Physics Letters, 2002, 81, 3804-3806.	3.3	85
130	Effect of the sp2 carbon phase on n-type conduction in nanodiamond films. Journal of Applied Physics, 2008, 104, .	2.5	84
131	Anomalous low-temperature Coulomb drag in graphene-GaAs heterostructures. Nature Communications, 2014, 5, 5824.	12.8	84
132	Ion Beam Doping of Silicon Nanowires. Nano Letters, 2008, 8, 2188-2193.	9.1	83
133	Sorting Nanoparticles by Centrifugal Fields in Clean Media. Journal of Physical Chemistry C, 2013, 117, 13217-13229.	3.1	83
134	Raman Fingerprints of Atomically Precise Graphene Nanoribbons. Nano Letters, 2016, 16, 3442-3447.	9.1	83
135	Photonics with Multiwall Carbon Nanotube Arrays. ACS Nano, 2009, 3, 1238-1248.	14.6	82
136	Raman scattering efficiency of graphene. Physical Review B, 2013, 87, .	3.2	82
137	Intravalley Spinâ€“Flip Relaxation Dynamics in Single-Layer WS₂. Nano Letters, 2018, 18, 6882-6891.	9.1	82
138	Thermal and chemical vapor deposition of Si nanowires: Shape control, dispersion, and electrical properties. Journal of Applied Physics, 2007, 102, .	2.5	80
139	p-wave triggered superconductivity in single-layer graphene on an electron-doped oxide superconductor. Nature Communications, 2017, 8, 14024.	12.8	79
140	Phonon-Assisted Electroluminescence from Metallic Carbon Nanotubes and Graphene. Nano Letters, 2010, 10, 1589-1594.	9.1	77
141	Dielectrophoretic Assembly of High-Density Arrays of Individual Graphene Devices for Rapid Screening. ACS Nano, 2009, 3, 1729-1734.	14.6	76
142	Wafer-Scale Integration of Graphene-Based Photonic Devices. ACS Nano, 2021, 15, 3171-3187.	14.6	75
143	Mid-infrared Raman-soliton continuum pumped by a nanotube-mode-locked sub-picosecond Tm-doped MOPFA. Optics Express, 2013, 21, 23261.	3.4	74
144	Covalently interconnected transition metal dichalcogenide networks via defect engineering for high-performance electronic devices. Nature Nanotechnology, 2021, 16, 592-598.	31.5	74

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145	2021 roadmap on lithium sulfur batteries. JPhys Energy, 2021, 3, 031501.	5.3	74
146	Liquid-Phase Exfoliation of Graphite into Single- and Few-Layer Graphene with Î±-Functionalized Alkanes. Journal of Physical Chemistry Letters, 2016, 7, 2714-2721.	4.6	73
147	Raman spectroscopy of graphene under ultrafast laser excitation. Nature Communications, 2018, 9, 308.	12.8	70
148	Thermal conductivity of ultrathin tetrahedral amorphous carbon films. Applied Physics Letters, 2008, 93, .	3.3	68
149	HBN-Encapsulated, Graphene-based, Room-temperature Terahertz Receivers, with High Speed and Low Noise. Nano Letters, 2020, 20, 3169-3177.	9.1	67
150	Double-Wall Carbon Nanotubes for Wide-Band, Ultrafast Pulse Generation. ACS Nano, 2014, 8, 4836-4847.	14.6	66
151	Graphene is on track to deliver on its promises. Nature Nanotechnology, 2019, 14, 907-910.	31.5	61
152	Ultrafast Raman laser mode-locked by nanotubes. Optics Letters, 2011, 36, 3996.	3.3	60
153	Multi-Valley Superconductivity in Ion-Gated MoS₂ Layers. Nano Letters, 2018, 18, 4821-4830.	9.1	58
154	Spider silk reinforced by graphene or carbon nanotubes. 2D Materials, 2017, 4, 031013.	4.4	57
155	High-responsivity graphene photodetectors integrated on silicon microring resonators. Nature Communications, 2021, 12, 3733.	12.8	57
156	Layered material platform for surface plasmon resonance biosensing. Scientific Reports, 2019, 9, 20286.	3.3	55
157	320 fs pulse generation from an ultrafast laser inscribed waveguide laser mode-locked by a nanotube saturable absorber. Applied Physics Letters, 2010, 97, 111114.	3.3	53
158	Enhanced performance of polymer:fullerene bulk heterojunction solar cells upon graphene addition. Applied Physics Letters, 2014, 105, .	3.3	52
159	Electron field emission from cluster-assembled carbon thin films. Europhysics Letters, 1999, 46, 245-250.	2.0	51
160	Effect of graphitic inclusions on the optical gap of tetrahedral amorphous carbon films. Journal of Applied Physics, 2001, 89, 3706-3710.	2.5	50
161	Characterization of carbon nanotubeâ€“thermotropic nematic liquid crystal composites. Journal Physics D: Applied Physics, 2008, 41, 125106.	2.8	50
162	Few-cycle pulses from a graphene mode-locked all-fiber laser. Applied Physics Letters, 2015, 106, .	3.3	50

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163	Role of Cooperative Interactions in the Intercalation of Heteroatoms between Graphene and a Metal Substrate. Journal of the American Chemical Society, 2015, 137, 7099-7103.	13.7	50
164	The Preparation, Characterization and Tribological Properties of TA-C:H Deposited Using an Electron Cyclotron Wave Resonance Plasma Beam Source. Physica Status Solidi A, 1999, 172, 79-90.	1.7	49
165	Multiwall Nanotubes, Multilayers, and Hybrid Nanostructures: New Frontiers for Technology and Raman Spectroscopy. ACS Nano, 2013, 7, 1838-1844.	14.6	49
166	Ultrafast pseudospin dynamics in graphene. Physical Review B, 2015, 92, .	3.2	48
167	Raman Radiation Patterns of Graphene. ACS Nano, 2016, 10, 1756-1763.	14.6	48
168	Excitonic Emission of Monolayer Semiconductors Near-Field Coupled to High-Q Microresonators. Nano Letters, 2018, 18, 3138-3146.	9.1	48
169	Ultrafast, Zero-Bias, Graphene Photodetectors with Polymeric Gate Dielectric on Passive Photonic Waveguides. ACS Nano, 2020, 14, 11190-11204.	14.6	48
170	Scanning gate microscopy of current-annealed single layer graphene. Applied Physics Letters, 2010, 96, .	3.3	46
171	Polymer-Assisted Isolation of Single Wall Carbon Nanotubes in Organic Solvents for Optical-Quality Nanotubeâ^'Polymer Composites. Journal of Physical Chemistry C, 2008, 112, 20227-20232.	3.1	45
172	Raman scattering on silicon nanowires: The thermal conductivity of the environment determines the optical phonon frequency. Applied Physics Letters, 2006, 88, 233114.	3.3	44
173	Strongly Coupled Coherent Phonons in Single-Layer MoS₂. ACS Nano, 2020, 14, 5700-5710.	14.6	44
174	Top-Gated Silicon Nanowire Transistors in a Single Fabrication Step. ACS Nano, 2009, 3, 1587-1593.	14.6	43
175	Synthesis of YBa₂Cu₃O_{7â^'Î´} and Y₂BaCuO₅ Nanocrystalline Powders for YBCO Superconductors Using Carbon Nanotube Templates. ACS Nano, 2012, 6, 5395-5403.	14.6	43
176	Coherent anti-Stokes Raman spectroscopy of single and multi-layer graphene. Nature Communications, 2019, 10, 3658.	12.8	43
177	Raman spectroscopy of GaSe and InSe post-transition metal chalcogenides layers. Faraday Discussions, 2021, 227, 163-170.	3.2	43
178	Thermoelectric graphene photodetectors with sub-nanosecond response times at terahertz frequencies. Nanophotonics, 2020, 10, 89-98.	6.0	43
179	Generation of ultra-fast laser pulses using nanotube mode-lockers. Physica Status Solidi (B): Basic Research, 2006, 243, 3551-3555.	1.5	40
180	Nanowire Lithography on Silicon. Nano Letters, 2008, 8, 1358-1362.	9.1	40

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181	Graphene/Polyelectrolyte Layer-by-Layer Coatings for Electromagnetic Interference Shielding. ACS Applied Nano Materials, 2019, 2, 5272-5281.	5.0	40
182	Transport conductivity of graphene at RF and microwave frequencies. 2D Materials, 2016, 3, 015010.	4.4	39
183	Atomic force microscope nanolithography of graphene: Cuts, pseudocuts, and tip current measurements. Applied Physics Letters, 2011, 98, .	3.3	38
184	Long Spin Diffusion Length in Few-Layer Graphene Flakes. Physical Review Letters, 2016, 117, 147201.	7.8	37
185	Electron-beam-induced direct etching of graphene. Carbon, 2013, 64, 84-91.	10.3	36
186	Optical phonons of graphene and nanotubes. European Physical Journal: Special Topics, 2007, 148, 159-170.	2.6	35
187	Stable, Surfactant-Free Graphene-Styrene Methylmethacrylate Composite for Ultrafast Lasers. Advanced Optical Materials, 2016, 4, 1088-1097.	7.3	35
188	Excitonâ€“phonon coupling strength in single-layer MoSe2 at room temperature. Nature Communications, 2021, 12, 954.	12.8	35
189	Efficient phonon cascades in WSe2 monolayers. Nature Communications, 2021, 12, 538.	12.8	34
190	7.8-GHz Graphene-Based 2-Î¼m Monolithic Waveguide Laser. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 395-400.	2.9	33
191	Selective growth of ZnSe and ZnCdSe nanowires by molecular beam epitaxy. Nanotechnology, 2005, 16, S139-S142.	2.6	32
192	Electronic transport in ambipolar silicon nanowires. Physica Status Solidi (B): Basic Research, 2007, 244, 4161-4164.	1.5	32
193	Magnetophonon resonance in graphite: High-field Raman measurements and electron-phonon coupling contributions. Physical Review B, 2012, 85, .	3.2	32
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