

Andrea C Ferrari

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

275 papers	96,689 citations	103 h-index	310 g-index
313 ext. papers	106,806 ext. citations	10 avg, IF	8.45 L-index

#	Paper	IF	Citations
275	Raman spectrum of graphene and graphene layers. <i>Physical Review Letters</i> , 2006 , 97, 187401	7.4	11029
274	Interpretation of Raman spectra of disordered and amorphous carbon. <i>Physical Review B</i> , 2000 , 61, 14095-14107	3.3	10583
273	Graphene photonics and optoelectronics. <i>Nature Photonics</i> , 2010 , 4, 611-622	33.9	5678
272	Raman spectroscopy of graphene and graphite: Disorder, electron-phonon coupling, doping and nonadiabatic effects. <i>Solid State Communications</i> , 2007 , 143, 47-57	1.6	5375
271	High-yield production of graphene by liquid-phase exfoliation of graphite. <i>Nature Nanotechnology</i> , 2008 , 3, 563-8	28.7	4715
270	Raman spectroscopy as a versatile tool for studying the properties of graphene. <i>Nature Nanotechnology</i> , 2013 , 8, 235-46	28.7	4466
269	Control of graphene's properties by reversible hydrogenation: evidence for graphane. <i>Science</i> , 2009 , 323, 610-3	33.3	3338
268	Monitoring dopants by Raman scattering in an electrochemically top-gated graphene transistor. <i>Nature Nanotechnology</i> , 2008 , 3, 210-5	28.7	2756
267	2D materials. Graphene, related two-dimensional crystals, and hybrid systems for energy conversion and storage. <i>Science</i> , 2015 , 347, 1246501	33.3	2450
266	Photodetectors based on graphene, other two-dimensional materials and hybrid systems. <i>Nature Nanotechnology</i> , 2014 , 9, 780-93	28.7	2318
265	Quantifying defects in graphene via Raman spectroscopy at different excitation energies. <i>Nano Letters</i> , 2011 , 11, 3190-6	11.5	2228
264	Resonant Raman spectroscopy of disordered, amorphous, and diamondlike carbon. <i>Physical Review B</i> , 2001 , 64,	3.3	2119
263	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. <i>Nanoscale</i> , 2015 , 7, 4598-810	7.7	2015
262	Graphene mode-locked ultrafast laser. <i>ACS Nano</i> , 2010 , 4, 803-10	16.7	1547
261	Uniaxial strain in graphene by Raman spectroscopy: G peak splitting, Grüneisen parameters, and sample orientation. <i>Physical Review B</i> , 2009 , 79,	3.3	1422
260	Breakdown of the adiabatic Born-Oppenheimer approximation in graphene. <i>Nature Materials</i> , 2007 , 6, 198-201	27	1077
259	Origin of the 1150 cm^{-1} Raman mode in nanocrystalline diamond. <i>Physical Review B</i> , 2001 , 63,	3.3	952

258	Growth process conditions of vertically aligned carbon nanotubes using plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2001 , 90, 5308-5317	2.5	902
257	Raman spectroscopy of hydrogenated amorphous carbons. <i>Physical Review B</i> , 2005 , 72,	3.3	879
256	Inkjet-printed graphene electronics. <i>ACS Nano</i> , 2012 , 6, 2992-3006	16.7	864
255	Raman spectroscopy of graphene edges. <i>Nano Letters</i> , 2009 , 9, 1433-41	11.5	821
254	Electroluminescence in single layer MoS ₂ . <i>Nano Letters</i> , 2013 , 13, 1416-21	11.5	787
253	Production and processing of graphene and 2d crystals. <i>Materials Today</i> , 2012 , 15, 564-589	21.8	745
252	Graphene field-effect transistors as room-temperature terahertz detectors. <i>Nature Materials</i> , 2012 , 11, 865-71	27	725
251	Raman fingerprint of charged impurities in graphene. <i>Applied Physics Letters</i> , 2007 , 91, 233108	3.4	717
250	Kohn anomalies and electron-phonon interactions in graphite. <i>Physical Review Letters</i> , 2004 , 93, 185503	7.4	709
249	Strong plasmonic enhancement of photovoltage in graphene. <i>Nature Communications</i> , 2011 , 2, 458	17.4	679
248	Nanotube Polymer Composites for Ultrafast Photonics. <i>Advanced Materials</i> , 2009 , 21, 3874-3899	24	659
247	. <i>Proceedings of the IEEE</i> , 2012 , 100, 1486-1517	14.3	649
246	Optical trapping and manipulation of nanostructures. <i>Nature Nanotechnology</i> , 2013 , 8, 807-19	28.7	629
245	Interpretation of infrared and Raman spectra of amorphous carbon nitrides. <i>Physical Review B</i> , 2003 , 67,	3.3	582
244	Making graphene luminescent by oxygen plasma treatment. <i>ACS Nano</i> , 2009 , 3, 3963-8	16.7	541
243	Rayleigh imaging of graphene and graphene layers. <i>Nano Letters</i> , 2007 , 7, 2711-7	11.5	513
242	Wideband-tuneable, nanotube mode-locked, fibre laser. <i>Nature Nanotechnology</i> , 2008 , 3, 738-42	28.7	498
241	The shear mode of multilayer graphene. <i>Nature Materials</i> , 2012 , 11, 294-300	27	482

240	Edge-functionalized and substitutionally doped graphene nanoribbons: Electronic and spin properties. <i>Physical Review B</i> , 2008 , 77,	3.3	461
239	Density, sp ³ fraction, and cross-sectional structure of amorphous carbon films determined by x-ray reflectivity and electron energy-loss spectroscopy. <i>Physical Review B</i> , 2000 , 62, 11089-11103	3.3	461
238	Optical phonons in carbon nanotubes: Kohn anomalies, Peierls distortions, and dynamic effects. <i>Physical Review B</i> , 2007 , 75,	3.3	393
237	Surface-enhanced Raman spectroscopy of graphene. <i>ACS Nano</i> , 2010 , 4, 5617-26	16.7	384
236	Ultrafast collinear scattering and carrier multiplication in graphene. <i>Nature Communications</i> , 2013 , 4, 1987	17.4	364
235	Stress reduction and bond stability during thermal annealing of tetrahedral amorphous carbon. <i>Journal of Applied Physics</i> , 1999 , 85, 7191-7197	2.5	363
234	Subjecting a graphene monolayer to tension and compression. <i>Small</i> , 2009 , 5, 2397-402	11	352
233	Graphene Q-switched, tunable fiber laser. <i>Applied Physics Letters</i> , 2011 , 98, 073106	3.4	351
232	Electron-electron interactions and doping dependence of the two-phonon Raman intensity in graphene. <i>Physical Review B</i> , 2009 , 80,	3.3	349
231	Sub 200 fs pulse generation from a graphene mode-locked fiber laser. <i>Applied Physics Letters</i> , 2010 , 97, 203106	3.4	344
230	Raman spectroscopy of shear and layer breathing modes in multilayer MoS ₂ . <i>Physical Review B</i> , 2013 , 87,	3.3	343
229	Surface diffusion: the low activation energy path for nanotube growth. <i>Physical Review Letters</i> , 2005 , 95, 036101	7.4	329
228	Light-matter interaction in a microcavity-controlled graphene transistor. <i>Nature Communications</i> , 2012 , 3, 906	17.4	297
227	A stable, wideband tunable, near transform-limited, graphene-mode-locked, ultrafast laser. <i>Nano Research</i> , 2010 , 3, 653-660	10	295
226	Phonon linewidths and electron-phonon coupling in graphite and nanotubes. <i>Physical Review B</i> , 2006 , 73,	3.3	290
225	Raman spectroscopy of silicon nanowires. <i>Physical Review B</i> , 2003 , 68,	3.3	286
224	Resonant Raman scattering in cubic and hexagonal boron nitride. <i>Physical Review B</i> , 2005 , 71,	3.3	279
223	Large-scale quantum-emitter arrays in atomically thin semiconductors. <i>Nature Communications</i> , 2017 , 8, 15093	17.4	275

222	Catalytic chemical vapor deposition of single-wall carbon nanotubes at low temperatures. <i>Nano Letters</i> , 2006 , 6, 1107-12	11.5	267
221	The ultrasmoothness of diamond-like carbon surfaces. <i>Science</i> , 2005 , 309, 1545-8	33.3	262
220	Raman spectroscopy of single-wall boron nitride nanotubes. <i>Nano Letters</i> , 2006 , 6, 1812-6	11.5	259
219	Doping dependence of the Raman spectrum of defected graphene. <i>ACS Nano</i> , 2014 , 8, 7432-41	16.7	249
218	Tm-doped fiber laser mode-locked by graphene-polymer composite. <i>Optics Express</i> , 2012 , 20, 25077-84	3.3	233
217	Gold catalyzed growth of silicon nanowires by plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2003 , 94, 6005-6012	2.5	225
216	Evolution of sp ² bonding with deposition temperature in tetrahedral amorphous carbon studied by Raman spectroscopy. <i>Applied Physics Letters</i> , 2000 , 76, 1419-1421	3.4	225
215	Electron transport and hot phonons in carbon nanotubes. <i>Physical Review Letters</i> , 2005 , 95, 236802	7.4	224
214	Phonon renormalization in doped bilayer graphene. <i>Physical Review B</i> , 2009 , 79,	3.3	212
213	Photo-Induced Bandgap Renormalization Governs the Ultrafast Response of Single-Layer MoS ₂ . <i>ACS Nano</i> , 2016 , 10, 1182-8	16.7	209
212	High Responsivity, Large-Area Graphene/MoS ₂ Flexible Photodetectors. <i>ACS Nano</i> , 2016 , 10, 8252-62	16.7	206
211	Intercalation of few-layer graphite flakes with FeCl ₃ : Raman determination of Fermi level, layer by layer decoupling, and stability. <i>Journal of the American Chemical Society</i> , 2011 , 133, 5941-6	16.4	205
210	On-Chip Integrated, Silicon-Graphene Plasmonic Schottky Photodetector with High Responsivity and Avalanche Photogain. <i>Nano Letters</i> , 2016 , 16, 3005-13	11.5	199
209	Microfluidization of Graphite and Formulation of Graphene-Based Conductive Inks. <i>ACS Nano</i> , 2017 , 11, 2742-2755	16.7	192
208	Diamond-like carbon for data and beer storage. <i>Materials Today</i> , 2007 , 10, 44-53	21.8	186
207	Production and processing of graphene and related materials. <i>2D Materials</i> , 2020 , 7, 022001	5.9	179
206	Controlling subnanometer gaps in plasmonic dimers using graphene. <i>Nano Letters</i> , 2013 , 13, 5033-8	11.5	179
205	Thermal conductivity of diamond-like carbon films. <i>Applied Physics Letters</i> , 2006 , 89, 161921	3.4	178

204	Raman and infrared modes of hydrogenated amorphous carbon nitride. <i>Journal of Applied Physics</i> , 2001 , 89, 5425-5430	2.5	176
203	Atomically thin quantum light-emitting diodes. <i>Nature Communications</i> , 2016 , 7, 12978	17.4	174
202	Graphene-Based Interfaces Do Not Alter Target Nerve Cells. <i>ACS Nano</i> , 2016 , 10, 615-23	16.7	172
201	Graphene-based integrated photonics for next-generation datacom and telecom. <i>Nature Reviews Materials</i> , 2018 , 3, 392-414	73.3	170
200	Graphene/Silicon phase modulators with gigahertz bandwidth. <i>Nature Photonics</i> , 2018 , 12, 40-44	33.9	169
199	Ink-jet printing of carbon nanotube thin film transistors. <i>Journal of Applied Physics</i> , 2007 , 102, 043710	2.5	165
198	Effect of sp ² -phase nanostructure on field emission from amorphous carbons. <i>Applied Physics Letters</i> , 2000 , 76, 2627-2629	3.4	163
197	Photoluminescence spectroscopy of carbon nanotube bundles: evidence for exciton energy transfer. <i>Physical Review Letters</i> , 2007 , 99, 137402	7.4	161
196	Resonant Raman spectroscopy of twisted multilayer graphene. <i>Nature Communications</i> , 2014 , 5, 5309	17.4	160
195	Brownian motion of graphene. <i>ACS Nano</i> , 2010 , 4, 7515-23	16.7	160
194	Elastic constants of tetrahedral amorphous carbon films by surface Brillouin scattering. <i>Applied Physics Letters</i> , 1999 , 75, 1893-1895	3.4	156
193	Development of a universal stress sensor for graphene and carbon fibres. <i>Nature Communications</i> , 2011 , 2,	17.4	152
192	Solution-phase exfoliation of graphite for ultrafast photonics. <i>Physica Status Solidi (B): Basic Research</i> , 2010 , 247, 2953-2957	1.3	152
191	Cleaning interfaces in layered materials heterostructures. <i>Nature Communications</i> , 2018 , 9, 5387	17.4	152
190	Broadband, electrically tunable third-harmonic generation in graphene. <i>Nature Nanotechnology</i> , 2018 , 13, 583-588	28.7	143
189	Stabilization and Debundling of Single-Wall Carbon Nanotube Dispersions in N-Methyl-2-pyrrolidone (NMP) by Polyvinylpyrrolidone (PVP). <i>Journal of Physical Chemistry C</i> , 2007 , 111, 12594-12602	3.8	142
188	First-principles prediction of doped graphane as a high-temperature electron-phonon superconductor. <i>Physical Review Letters</i> , 2010 , 105, 037002	7.4	140
187	Graphene and Related Materials for Resistive Random Access Memories. <i>Advanced Electronic Materials</i> , 2017 , 3, 1600195	6.4	137

186	Carbon Nanotube Polycarbonate Composites for Ultrafast Lasers. <i>Advanced Materials</i> , 2008 , 20, 4040-4043	4.3	129
185	Nonequilibrium dynamics of photoexcited electrons in graphene: Collinear scattering, Auger processes, and the impact of screening. <i>Physical Review B</i> , 2013 , 88,	3.3	128
184	Density Gradient Ultracentrifugation of Nanotubes: Interplay of Bundling and Surfactants Encapsulation. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 17267-17285	3.8	125
183	Photothermoelectric and photoelectric contributions to light detection in metal-graphene-metal photodetectors. <i>Nano Letters</i> , 2014 , 14, 3733-42	11.5	124
182	High performance bilayer-graphene terahertz detectors. <i>Applied Physics Letters</i> , 2014 , 104, 061111	3.4	124
181	Ultra-strong nonlinear optical processes and trigonal warping in MoS layers. <i>Nature Communications</i> , 2017 , 8, 893	17.4	123
180	Surface Plasmon Polariton Graphene Photodetectors. <i>Nano Letters</i> , 2016 , 16, 8-20	11.5	119
179	Molar Extinction Coefficient of Single-Wall Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 14682-14686	3.8	117
178	Nanosecond-pulse fiber lasers mode-locked with nanotubes. <i>Applied Physics Letters</i> , 2009 , 95, 111108	3.4	115
177	Influence of nitrogen and temperature on the deposition of tetrahedrally bonded amorphous carbon. <i>Journal of Applied Physics</i> , 2000 , 88, 1149-1157	2.5	115
176	Charge-tuneable biexciton complexes in monolayer WSe. <i>Nature Communications</i> , 2018 , 9, 3721	17.4	113
175	Ultrafast stretched-pulse fiber laser mode-locked by carbon nanotubes. <i>Nano Research</i> , 2010 , 3, 404-411	11.0	111
174	Electron and Phonon Properties of Graphene: Their Relationship with Carbon Nanotubes. <i>Topics in Applied Physics</i> , 2007 , 673-709	0.5	106
173	Interface Coupling in Twisted Multilayer Graphene by Resonant Raman Spectroscopy of Layer Breathing Modes. <i>ACS Nano</i> , 2015 , 9, 7440-9	16.7	105
172	Graphene-based mid-infrared room-temperature pyroelectric bolometers with ultrahigh temperature coefficient of resistance. <i>Nature Communications</i> , 2017 , 8, 14311	17.4	101
171	2 Th solid-state laser mode-locked by single-layer graphene. <i>Applied Physics Letters</i> , 2013 , 102, 013113	3.4	101
170	74-fs nanotube-mode-locked fiber laser. <i>Applied Physics Letters</i> , 2012 , 101, 153107	3.4	101
169	1.5 GHz picosecond pulse generation from a monolithic waveguide laser with a graphene-film saturable output coupler. <i>Optics Express</i> , 2013 , 21, 7943-50	3.3	98

168	A compact, high power, ultrafast laser mode-locked by carbon nanotubes. <i>Applied Physics Letters</i> , 2009 , 95, 253102	3.4	98
167	Femtonewton force sensing with optically trapped nanotubes. <i>Nano Letters</i> , 2008 , 8, 3211-6	11.5	95
166	Ultrafast and widely tuneable vertical-external-cavity surface-emitting laser, mode-locked by a graphene-integrated distributed Bragg reflector. <i>Optics Express</i> , 2013 , 21, 31548-59	3.3	91
165	Deep reactive ion etching as a tool for nanostructure fabrication. <i>Journal of Vacuum Science & Technology B</i> , 2009 , 27, 1520		91
164	L-band ultrafast fiber laser mode locked by carbon nanotubes. <i>Applied Physics Letters</i> , 2008 , 93, 061114	3.4	91
163	Dynamic roughening of tetrahedral amorphous carbon. <i>Physical Review Letters</i> , 2003 , 91, 226104	7.4	90
162	Role of sp ² phase in field emission from nanostructured carbons. <i>Journal of Applied Physics</i> , 2001 , 90, 2024-2032	2.5	90
161	Properties of amorphous carbon-silicon alloys deposited by a high plasma density source. <i>Journal of Applied Physics</i> , 2001 , 90, 5002-5012	2.5	89
160	Out-of-plane heat transfer in van der Waals stacks through electron-hyperbolic phonon coupling. <i>Nature Nanotechnology</i> , 2018 , 13, 41-46	28.7	87
159	Rotation detection in light-driven nanorotors. <i>ACS Nano</i> , 2009 , 3, 3077-84	16.7	87
158	Light-enhanced liquid-phase exfoliation and current photoswitching in graphene-azobenzene composites. <i>Nature Communications</i> , 2016 , 7, 11090	17.4	85
157	Low-temperature synthesis of ZnSe nanowires and nanosaws by catalyst-assisted molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2005 , 86, 153103	3.4	82
156	Passive mode locking by carbon nanotubes in a femtosecond laser written waveguide laser. <i>Applied Physics Letters</i> , 2006 , 89, 231115	3.4	79
155	Ion beam doping of silicon nanowires. <i>Nano Letters</i> , 2008 , 8, 2188-93	11.5	77
154	Generation and direct measurement of giant chirp in a passively mode-locked laser. <i>Optics Letters</i> , 2009 , 34, 3526-8	3	76
153	Bonding and mechanical properties of ultrathin diamond-like carbon films. <i>Applied Physics Letters</i> , 2002 , 81, 3804-3806	3.4	75
152	Effect of the sp ² carbon phase on n-type conduction in nanodiamond films. <i>Journal of Applied Physics</i> , 2008 , 104, 073720	2.5	73
151	Thermal and chemical vapor deposition of Si nanowires: Shape control, dispersion, and electrical properties. <i>Journal of Applied Physics</i> , 2007 , 102, 034302	2.5	72

150	Raman scattering efficiency of graphene. <i>Physical Review B</i> , 2013 , 87,	3.3	71
149	Ultrafast valley relaxation dynamics in monolayer MoS ₂ probed by nonequilibrium optical techniques. <i>Physical Review B</i> , 2015 , 92,	3.3	71
148	Phonon-assisted electroluminescence from metallic carbon nanotubes and graphene. <i>Nano Letters</i> , 2010 , 10, 1589-94	11.5	71
147	Optical trapping of nanotubes with cylindrical vector beams. <i>Optics Letters</i> , 2012 , 37, 3381-3	3	71
146	Vertically Illuminated, Resonant Cavity Enhanced, Graphene-Silicon Schottky Photodetectors. <i>ACS Nano</i> , 2017 , 11, 10955-10963	16.7	70
145	High-Mobility, Wet-Transferred Graphene Grown by Chemical Vapor Deposition. <i>ACS Nano</i> , 2019 , 13, 8926-8935	16.7	70
144	Anomalous low-temperature Coulomb drag in graphene-GaAs heterostructures. <i>Nature Communications</i> , 2014 , 5, 5824	17.4	70
143	Terahertz saturable absorbers from liquid phase exfoliation of graphite. <i>Nature Communications</i> , 2017 , 8, 15763	17.4	69
142	Dielectrophoretic assembly of high-density arrays of individual graphene devices for rapid screening. <i>ACS Nano</i> , 2009 , 3, 1729-34	16.7	69
141	Raman Fingerprints of Atomically Precise Graphene Nanoribbons. <i>Nano Letters</i> , 2016 , 16, 3442-7	11.5	67
140	Sorting Nanoparticles by Centrifugal Fields in Clean Media. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 13217-13229	3.8	66
139	Liquid-Phase Exfoliation of Graphite into Single- and Few-Layer Graphene with π -Functionalized Alkanes. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 2714-21	6.4	64
138	Mid-infrared Raman-soliton continuum pumped by a nanotube-mode-locked sub-picosecond Tm-doped MOPFA. <i>Optics Express</i> , 2013 , 21, 23261-71	3.3	64
137	Photonics with multiwall carbon nanotube arrays. <i>ACS Nano</i> , 2009 , 3, 1238-48	16.7	64
136	p-wave triggered superconductivity in single-layer graphene on an electron-doped oxide superconductor. <i>Nature Communications</i> , 2017 , 8, 14024	17.4	62
135	Thermal conductivity of ultrathin tetrahedral amorphous carbon films. <i>Applied Physics Letters</i> , 2008 , 93, 043115	3.4	61
134	Waveguide-Integrated, Plasmonic Enhanced Graphene Photodetectors. <i>Nano Letters</i> , 2019 , 19, 7632-7644	11.5	60
133	Transform-Limited Photons From a Coherent Tin-Vacancy Spin in Diamond. <i>Physical Review Letters</i> , 2020 , 124, 023602	7.4	56

132	Double-wall carbon nanotubes for wide-band, ultrafast pulse generation. <i>ACS Nano</i> , 2014 , 8, 4836-47	16.7	54
131	Ultrafast Raman laser mode-locked by nanotubes. <i>Optics Letters</i> , 2011 , 36, 3996-8	3	52
130	Intravalley Spin-Flip Relaxation Dynamics in Single-Layer WS. <i>Nano Letters</i> , 2018 , 18, 6882-6891	11.5	50
129	Enhanced performance of polymer:fullerene bulk heterojunction solar cells upon graphene addition. <i>Applied Physics Letters</i> , 2014 , 105, 083306	3.4	49
128	The Preparation, Characterization and Tribological Properties of TA-C:H Deposited Using an Electron Cyclotron Wave Resonance Plasma Beam Source. <i>Physica Status Solidi A</i> , 1999 , 172, 79-90		48
127	Raman spectroscopy of graphene under ultrafast laser excitation. <i>Nature Communications</i> , 2018 , 9, 308	17.4	47
126	320 fs pulse generation from an ultrafast laser inscribed waveguide laser mode-locked by a nanotube saturable absorber. <i>Applied Physics Letters</i> , 2010 , 97, 111114	3.4	46
125	Effect of graphitic inclusions on the optical gap of tetrahedral amorphous carbon films. <i>Journal of Applied Physics</i> , 2001 , 89, 3706-3710	2.5	46
124	Multiwall nanotubes, multilayers, and hybrid nanostructures: new frontiers for technology and Raman spectroscopy. <i>ACS Nano</i> , 2013 , 7, 1838-44	16.7	45
123	Scanning gate microscopy of current-annealed single layer graphene. <i>Applied Physics Letters</i> , 2010 , 96, 113501	3.4	44
122	Characterization of carbon nanotube/thermotropic nematic liquid crystal composites. <i>Journal of Physics D: Applied Physics</i> , 2008 , 41, 125106	3	44
121	Polymer-Assisted Isolation of Single Wall Carbon Nanotubes in Organic Solvents for Optical-Quality Nanotube/Polymer Composites. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 20227-20232	3.8	44
120	Electron field emission from cluster-assembled carbon thin films. <i>Europhysics Letters</i> , 1999 , 46, 245-250	1.6	44
119	Raman scattering on silicon nanowires: The thermal conductivity of the environment determines the optical phonon frequency. <i>Applied Physics Letters</i> , 2006 , 88, 233114	3.4	42
118	Spider silk reinforced by graphene or carbon nanotubes. <i>2D Materials</i> , 2017 , 4, 031013	5.9	40
117	Role of Cooperative Interactions in the Intercalation of Heteroatoms between Graphene and a Metal Substrate. <i>Journal of the American Chemical Society</i> , 2015 , 137, 7099-103	16.4	38
116	Raman Radiation Patterns of Graphene. <i>ACS Nano</i> , 2016 , 10, 1756-63	16.7	38
115	Ultrafast pseudospin dynamics in graphene. <i>Physical Review B</i> , 2015 , 92,	3.3	38

114	Generation of ultra-fast laser pulses using nanotube mode-locks. <i>Physica Status Solidi (B): Basic Research</i> , 2006 , 243, 3551-3555	1.3	38
113	Top-gated silicon nanowire transistors in a single fabrication step. <i>ACS Nano</i> , 2009 , 3, 1587-93	16.7	37
112	Multi-Valley Superconductivity in Ion-Gated MoS Layers. <i>Nano Letters</i> , 2018 , 18, 4821-4830	11.5	36
111	Synthesis of YBa ₂ Cu ₃ O(7- δ) and Y ₂ BaCuO ₅ nanocrystalline powders for YBCO superconductors using carbon nanotube templates. <i>ACS Nano</i> , 2012 , 6, 5395-403	16.7	35
110	Nanowire lithography on silicon. <i>Nano Letters</i> , 2008 , 8, 1358-62	11.5	35
109	HBN-Encapsulated, Graphene-based, Room-temperature Terahertz Receivers, with High Speed and Low Noise. <i>Nano Letters</i> , 2020 , 20, 3169-3177	11.5	35
108	Few-cycle pulses from a graphene mode-locked all-fiber laser. <i>Applied Physics Letters</i> , 2015 , 106, 253101	3.4	34
107	Atomic force microscope nanolithography of graphene: Cuts, pseudocuts, and tip current measurements. <i>Applied Physics Letters</i> , 2011 , 98, 133120	3.4	34
106	Graphene is on track to deliver on its promises. <i>Nature Nanotechnology</i> , 2019 , 14, 907-910	28.7	34
105	Electron-beam-induced direct etching of graphene. <i>Carbon</i> , 2013 , 64, 84-91	10.4	33
104	Layered material platform for surface plasmon resonance biosensing. <i>Scientific Reports</i> , 2019 , 9, 20286	4.9	33
103	Excitonic Emission of Monolayer Semiconductors Near-Field Coupled to High-Q Microresonators. <i>Nano Letters</i> , 2018 , 18, 3138-3146	11.5	32
102	2021 roadmap on lithium sulfur batteries. <i>JPhys Energy</i> , 2021 , 3, 031501	4.9	32
101	Selective growth of ZnSe and ZnCdSe nanowires by molecular beam epitaxy. <i>Nanotechnology</i> , 2005 , 16, S139-S142	3.4	30
100	Stable, Surfactant-Free Graphene/Styrene Methylmethacrylate Composite for Ultrafast Lasers. <i>Advanced Optical Materials</i> , 2016 , 4, 1088-1097	8.1	29
99	7.8-GHz Graphene-Based 2- μ m Monolithic Waveguide Laser. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015 , 21, 395-400	3.8	29
98	Optical phonons of graphene and nanotubes. <i>European Physical Journal: Special Topics</i> , 2007 , 148, 159-170	10.5	29
97	Long Spin Diffusion Length in Few-Layer Graphene Flakes. <i>Physical Review Letters</i> , 2016 , 117, 147201	7.4	29

96	Magnetophonon resonance in graphite: High-field Raman measurements and electron-phonon coupling contributions. <i>Physical Review B</i> , 2012 , 85,	3.3	28
95	Tilted potential induced coupling of localized states in a graphene nanoconstriction. <i>Physical Review B</i> , 2011 , 83,	3.3	27
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