Philippe Lambin

List of Publications by Citations

278 papers	10,476 citations	55 h-index	93 g-index
293 ext. papers	11,079 ext. citations	3.9 avg, IF	6.02 L-index

#	Paper	IF	Citations
278	Tailoring the atomic structure of graphene nanoribbons by scanning tunnelling microscope lithography. *Nature Nanotechnology*, **2008**, 3, 397-401	28.7	779
277	The study of carbon nanotubules produced by catalytic method. *Chemical Physics Letters*, **1994**, 223, 329-335	2.5	400
276	Structural and electronic properties of pentagon-heptagon pair defects in carbon nanotubes. *Physical Review B*, **1996**, 53, 11108-11113	3.3	316
275	Characterization of tin oxides by x-ray-photoemission spectroscopy. *Physical Review B*, **1992**, 46, 2460-2466	3.3	295
274	High-resolution electron-energy-loss spectroscopy of thin films of C60 on Si(100). *Physical Review Letters*, **1991**, 67, 2171-2174	7.4	273
273	Evidence of fano-like interference phenomena in locally resonant materials. *Physical Review Letters*, **2002**, 88, 225502	7.4	268
272	The Texture of Catalytically Grown Coil-Shaped Carbon Nanotubules. *Europhysics Letters*, **1994**, 27, 141-146	1.6	205
271	Structural and electronic properties of bent carbon nanotubes. *Chemical Physics Letters*, **1995**, 245, 85-89	2.5	181
270	Tuning the electronic structure of graphene by ion irradiation. *Physical Review B*, **2008**, 78,	3.3	179
269	Electron-energy-loss spectroscopy of multilayered materials: Theoretical aspects and study of interface optical phonons in semiconductor superlattices. *Physical Review B*, **1985**, 32, 8203-8215	3.3	161
268	Born effective charges of barium titanate: Band-by-band decomposition and sensitivity to structural features. *Physical Review B*, **1995**, 51, 6765-6768	3.3	159
267	Scanning tunneling microscopy fingerprints of point defects in graphene: A theoretical prediction. *Physical Review B*, **2007**, 76,	3.3	146
266	Atomic structure of carbon nanotubes from scanning tunneling microscopy. *Physical Review B*, **2000**, 61, 2991-2996	3.3	144
265	STM study of a grain boundary in graphite. *Surface Science*, **2002**, 511, 319-322	1.8	140
264	Electronic structure of carbon nanotubes with chiral symmetry. *Physical Review B*, **1998**, 57, R15037-R15039	3.3	131
263	Phononic crystal with low filling fraction and absolute acoustic band gap in the audible frequency range: a theoretical and experimental study. *Physical Review E*, **2002**, 65, 056608	2.4	125
262	Radius and chirality dependence of the radial breathing mode and the G-band phonon modes of single-walled carbon nanotubes. *Physical Review B*, **2006**, 73,	3.3	117

261	Computation of the ultraviolet absorption and electron inelastic scattering cross section of multishell fullerenes. *Physical Review B*, **1994**, 49, 2888-2896	3.3	111
260	Tight-Binding Computation of the STM Image of Carbon Nanotubes. *Physical Review Letters*, **1998**, 81, 5588-5591	7.4	110
259	Polarization waves and van der Waals cohesion of C60 fullerite. *Physical Review B*, **1992**, 46, 1794-1803	3.3	105
258	Grain boundaries in graphene grown by chemical vapor deposition. *New Journal of Physics*, **2013**, 15, 035024	2.9	103
257	Flexible transparent graphene/polymer multilayers for efficient electromagnetic field absorption. *Scientific Reports*, **2014**, 4, 7191	4.9	102
256	Electronic transport properties of carbon nanotube based metal/semiconductor/metal intramolecular junctions. *Nanotechnology*, **2005**, 16, 230-3	3.4	101
255	Computation of crystal Green's functions in the complex-energy plane with the use of the analytical tetrahedron method. *Physical Review B*, **1984**, 29, 3430-3437	3.3	99
254	Graphene: nanoscale processing and recent applications. *Nanoscale*, **2012**, 4, 1824-39	7.7	98
253	Elementary excitations of C60 from the far infrared to the far vacuum ultraviolet studied by high-resolution electron-energy-loss spectroscopy. *Physical Review B*, **1992**, 45, 13694-13702	3.3	91
252	Observation of long-wavelength interface phonons in a GaAs/AlGaAs superlattice. *Physical Review Letters*, **1986**, 56, 1842-1845	7.4	89
251	On the energetics of tubular fullerenes. *Journal of Physics and Chemistry of Solids*, **1993**, 54, 587-593	3.9	87
250	Scattering-theoretic approach to elastic one-electron tunneling through localized barriers: Application to scanning tunneling microscopy. *Physical Review B*, **1988**, 37, 10708-10720	3.3	84
249	Long-range interactions between substitutional nitrogen dopants in graphene: Electronic properties calculations. *Physical Review B*, **2012**, 86,	3.3	83
248	Electron-phonon and electron-photon interactions and resonant Raman scattering from the radial-breathing mode of single-walled carbon nanotubes. *Physical Review B*, **2005**, 72,	3.3	80
247	Adsorption of C60 molecules. *Physical Review B*, **1996**, 53, 1622-1629	3.3	80
246	Computation of the surface electron-energy-loss spectrum in specular geometry for an arbitrary plane-stratified medium. *Computer Physics Communications*, **1990**, 60, 351-364	4.2	80
245	Tight-binding density of electronic states of pregraphitic carbon. *Physical Review B*, **1992**, 46, 4540-4543	3.3	78
244	Quantitative theory of diffraction by carbon nanotubes. *Physical Review B*, **1997**, 56, 3571-3574	3.3	76

243	Enhanced microwave-to-terahertz absorption in graphene. *Applied Physics Letters*, **2016**, 108, 123101	3.4	75
242	Theoretical study of the vibrational edge modes in graphene nanoribbons. *Physical Review B*, **2008**, 78,	3.3	74
241	Atomic and electronic structures of large and small carbon tori. *Physical Review B*, **1998**, 57, 14886-14890	3.3	74
240	Model structure of perfectly graphitizable coiled carbon nanotubes. *Carbon*, **1995**, 33, 1759-1775	10.4	72
239	Physisorption in confined geometry. *Journal of Chemical Physics*, **1991**, 94, 4620-4627	3.9	72
238	Calculation of the energy loss for an electron passing near giant fullerenes. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **1996**, 29, 5127-5141	1.3	69
237	Analysis of the density of states of binary alloys. II. Surface segregation. *Journal of Physics F: Metal Physics*, **1980**, 10, 2413-2428		68
236	Electronic structure of polychiral carbon nanotubes. *Physical Review B*, **2000**, 62, 5129-5135	3.3	66
235	Stopping of acoustic waves by sonic polymer-fluid composites. *Physical Review E*, **2001**, 63, 066605	2.4	65
234	Rings of Double-Walled Carbon Nanotube Bundles. *Nano Letters*, **2003**, 3, 685-689	11.5	64
233	Structure and properties of carbon onion layers deposited onto various substrates. *Journal of Applied Physics*, **2002**, 91, 1560-1567	2.5	62
232	Electronic band structure of multilayered carbon tubules. *Computational Materials Science*, **1994**, 2, 350-356	3.2	62
231	Nanopatterning of graphene with crystallographic orientation control. *Carbon*, **2010**, 48, 2677-2689	10.4	61
230	Resonant Raman Intensity of the Radial Breathing Mode of Single-Walled Carbon Nanotubes within a Nonorthogonal Tight-Binding Model. *Nano Letters*, **2004**, 4, 1795-1799	11.5	61
229	Carbon nanotube Y junctions: growth and properties. *Diamond and Related Materials*, **2004**, 13, 241-249	3.5	60
228	Optical simulations of electron diffraction by carbon nanotubes. *Reviews of Modern Physics*, **2002**, 74, 1-10	40.5	59
227	Epoxy composites filled with high surface area-carbon fillers: Optimization of electromagnetic shielding, electrical, mechanical, and thermal properties. *Journal of Applied Physics*, **2013**, 114, 164304	2.5	58
226	Energetics of bent carbon nanotubes. *Physical Review B*, **1998**, 57, 2586-2591	3.3	56

225	Scanning tunneling spectroscopy signature of finite-size and connected nanotubes: A tight-binding study. *Physical Review B*, **1999**, 60, 7792-7795	3.3	56
224	van der Waals attraction between two C60 fullerene molecules and physical adsorption of C60 on graphite and other substrates. *Physical Review B*, **1994**, 49, 11425-11432	3.3	56
223	Theoretical Raman fingerprints of □ and □graphyne. *Physical Review B*, **2013**, 88,	3.3	55
222	Transmission coefficient for one-dimensional potential barriers using continued fractions. *Journal of Physics A*, **1980**, 13, 1135-1144		55
221	Structure of carbon nanotubes probed by local and global probes. *Carbon*, **2002**, 40, 1635-1648	10.4	54
220	Coiled carbon nanotube structures with supraunitary nonhexagonal to hexagonal ring ratio. *Physical Review B*, **2002**, 66,	3.3	53
219	High resolution electron energy loss spectroscopy of epitaxial films of C60 grown on GaSe. *Journal of Physics and Chemistry of Solids*, **1992**, 53, 1427-1432	3.9	52
218	Effect of nitrogen doping on the electromagnetic properties of carbon nanotube-based composites. *Journal of Applied Physics*, **2013**, 113, 144315	2.5	51
217	Polaritons in semiconductor multilayered materials. *Physical Review B*, **1988**, 38, 5438-5452	3.3	51
216	Cooperative magnetic properties in single- and two-phase 3d metallic alloys relevant to exchange and magnetocrystalline anisotropy. *Journal of Magnetism and Magnetic Materials*, **1984**, 44, 1-19	2.8	50
215	Continued-fraction technique for tight-binding systems. A generalized-moments method. *Physical Review B*, **1982**, 26, 4356-4368	3.3	50
214	Scanning tunnelling microscopy (STM) imaging of carbon nanotubes. *Carbon*, **1998**, 36, 689-696	10.4	48
213	Attenuation of electromagnetic waves in onion-like carbon composites. *Diamond and Related Materials*, **2007**, 16, 1231-1235	3.5	47
212	van der Waals coupling in atomically doped carbon nanotubes. *Physical Review B*, **2005**, 72,	3.3	47
211	Elastic Properties and Stability of Physisorbed Graphene. *Applied Sciences (Switzerland)*, **2014**, 4, 282-304	2.6	46
210	Scanning tunneling microscope investigation of carbon nanotubes produced by catalytic decomposition of acetylene. *Physical Review B*, **1997**, 56, 12490-12498	3.3	46
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208	Calculating the diffraction of electrons or X-rays by carbon nanotubes. *Europhysics Letters*, **1996**, 35, 355-360	1.6	46

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206	Facile and scalable fabrication of highly thermal conductive polyethylene/graphene nanocomposites by combining solid-state shear milling and FDM 3D-printing aligning methods. *Chemical Engineering Journal*, **2020**, 402, 126218	14.7	44
205	Growth mechanism of coiled carbon nanotubes. *Synthetic Metals*, **1996**, 77, 235-242	3.6	43
204	The interface formation as studied by electron spectroscopies. *Surface Science*, **1990**, 235, 5-14	1.8	43
203	Charge-dipole model to compute the polarization of fullerenes. *Applied Physics Letters*, **2006**, 89, 063117	3.4	42
202	Carbon Onions as Possible Carriers of the 2175 A Interstellar Absorption Bump. *Astrophysical Journal*, **1997**, 487, 719-727	4.7	41
201	Intraband electron-phonon scattering in single-walled carbon nanotubes. *Physical Review B*, **2006**, 74,	3.3	41
200	Measurements and calculations of the sound attenuation by a phononic band gap structure suitable for an insulating partition application. *Applied Physics Letters*, **2003**, 83, 281-283	3.4	41
199	Spontaneous-decay dynamics in atomically doped carbon nanotubes. *Physical Review B*, **2004**, 70,	3.3	41
198	Main principles of passive devices based on graphene and carbon films in microwave–THz frequency range. *Journal of Nanophotonics*, **2017**, 11, 032504	1.1	40
197	Catalytically assisted tip growth mechanism for single-wall carbon nanotubes. *ACS Nano*, **2007**, 1, 202-7	16.7	40
196	Validity of the dielectric approximation in describing electron-energy-loss spectra of surface and interface phonons in thin films of ionic crystals. *Physical Review B*, **1991**, 44, 6416-6428	3.3	40
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194	Resonant Raman intensity of the totally symmetric phonons of single-walled carbon nanotubes. *Physical Review B*, **2006**, 73,	3.3	39
193	On the 2175 A absorption band of hollow, onion-like carbon particles. *Astrophysical Journal*, **1993**, 406, 92	4.7	39
192	Simulation of current in the scanning tunneling microscope. *Physical Review B*, **1993**, 47, 7508-7518	3.3	38
191	Theory of near-field optics with applications to SNOM and optical binding. *Physica B: Condensed Matter*, **1991**, 175, 65-67	2.8	38
190	Computation of the static polarizabilities of multi-wall carbon nanotubes and fullerites using a Gaussian regularized point dipole interaction model. *Carbon*, **2006**, 44, 2883-2895	10.4	37

189	Measuring the helicity of carbon nanotubes. *Carbon*, **2000**, 38, 1713-1721	10.4	37
188	Transfer-matrix simulations of field emission from bundles of open and closed (5,5) carbon nanotubes. *Physical Review B*, **2003**, 68,	3.3	35
187	Electromagnetic shielding properties of MWCNT/PMMA composites in Ka-band. *Physica Status Solidi (B): Basic Research*, **2009**, 246, 2662-2666	1.3	34
186	Dipole polarizability of onion-like carbons and electromagnetic properties of their composites. *Nanotechnology*, **2008**, 19, 115706	3.4	34
185	Comparison of the sound attenuation efficiency of locally resonant materials and elastic band-gap structures. *Physical Review B*, **2004**, 70,	3.3	34
184	Electronic states of disordered grain boundaries in graphene prepared by chemical vapor deposition. *Carbon*, **2013**, 64, 178-186	10.4	33
183	Terahertz probing of onion-like carbon-PMMA composite films. *Diamond and Related Materials*, **2008**, 17, 1608-1612	3.5	33
182	Scanning tunneling microscopy observation of tightly wound, single-wall coiled carbon nanotubes. *Europhysics Letters*, **2000**, 50, 494-500	1.6	32
181	Structural origin of coiling in coiled carbon nanotubes. *Carbon*, **2005**, 43, 1628-1633	10.4	31
180	Electron diffraction study of small bundles of single-wall carbon nanotubes with unique helicity. *Physical Review B*, **2001**, 64,	3.3	31
179	Resonant Raman spectra of graphene with point defects. *Carbon*, **2009**, 47, 2448-2455	10.4	30
178	Improved continued fraction treatment of the one-dimensional scattering problem. *Journal of Physics A*, **1981**, 14, 1815-1819		30
177	Controllable electromagnetic response of onion-like carbon based materials. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 2051-2054	1.3	28
176	Structural and electronic properties of coiled and curled carbon nanotubes having a large number of pentagon–heptagon pairs. *Physical Review B*, **2003**, 67,	3.3	28
175	Electron-energy-loss spectroscopy of plasmon excitations in concentric-shell fullerenes. *Physical Review B*, **1999**, 59, 5832-5836	3.3	28
174	Theory of electron energy loss spectroscopy at the surface of a planar stratified medium, application to semiconductor superlattices. *Solid State Communications*, **1985**, 54, 257-260	1.6	28
173	Perfect electromagnetic absorption using graphene and epsilon-near-zero metamaterials. *Physical Review B*, **2016**, 93,	3.3	27
172	Electronic transport through ordered and disordered graphene grain boundaries. *Carbon*, **2013**, 64, 101-107	10.4	27

171	Theoretical Raman intensity of the G and 2D bands of strained graphene. *Carbon*, **2013**, 54, 86-93	10.4	27
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169	Infrared optical constants of orthorhombic IV-VI lamellar semiconductors refined by a combined study using optical and electronic spectroscopies. *Physical Review B*, **1993**, 47, 16222-16228	3.3	25
168	Electronic properties of carbon nanotubes containing defects. *Journal of Physics and Chemistry of Solids*, **1997**, 58, 1833-1837	3.9	24
167	Study of the packing of double-walled carbon nanotubes into bundles by transmission electron microscopy and electron diffraction. *Journal of Materials Chemistry*, **2004**, 14, 603		24
166	Electronic transitions and excitations in solid C70 studied by EELS and XPS C 1s satellite structures. *Physical Review B*, **1995**, 51, 7179-7185	3.3	24
165	Robust electromagnetic absorption by graphene/polymer heterostructures. *Nanotechnology*, **2015**, 26, 285702	3.4	23
164	Dielectric properties of a novel high absorbing onion-like-carbon based polymer composite. *Diamond and Related Materials*, **2010**, 19, 91-99	3.5	23
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157	Atomic structure and electronic properties of a bent carbon nanotube. *Synthetic Metals*, **1996**, 77, 249-252	3.6	21
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154	Simulation of scanning tunneling spectroscopy of supported carbon nanotubes. *Physical Review B*, **2000**, 62, 2797-2805	3.3	20

153	Calculation of the electrostatic forces that act on carbon nanotubes placed in the vicinity of metallic protrusions. *Nanotechnology*, **2005**, 16, 2685-2695	3.4	19
152	van der Waals energy under strong atom–field coupling in doped carbon nanotubes. *Solid State Communications*, **2004**, 132, 203-207	1.6	19
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150	Standing-Wave Optical Phonons Confined in Ultrathin Overlayers of Ionic Materials. *Physical Review Letters*, **1995**, 74, 570-573	7.4	19
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139	Study of the polarizability of fullerenes with a monopole–dipole interaction model. *Diamond and Related Materials*, **2007**, 16, 2145-2149	3.5	17
138	Lateral resolution of the scanning tunnelling microscope. *Journal of Microscopy*, **1988**, 152, 53-63	1.9	17
137	Bilayered graphene as a platform of nanostructures with folded edge holes. *Physical Chemistry Chemical Physics*, **2016**, 18, 27432-27441	3.6	17
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134	Surface and interface optical phonons of a GaAs□AlGaAs superlattice measured by high resolution electron energy loss spectroscopy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1986**, 4, 1028		16
133	Synthesis parameters affecting the bulk composition and superconducting properties of YBaCuO-based compounds. *Solid State Communications*, **1987**, 64, 1137-1140	1.6	15
132	Recent Advances in Electron Energy Loss Spectroscopy of Surface and Interface Vibrations of Layered Materials. *Physica Scripta*, **1986**, T13, 150-154	2.6	15
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120	Optical transmittance spectroscopy of concentric-shell fullerenes layers produced by carbon ion implantation. *European Physical Journal B*, **2000**, 18, 535-540	1.2	12
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96	Long-range resonant effects on electronic transport of nitrogen-doped carbon nanotubes. *Physical Review B*, **2014**, 89,	3.3	7
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