

Francois M Peeters

List of Publications by Citations

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383 papers	15,361 citations	63 h-index	108 g-index
407 ext. papers	17,594 ext. citations	4.6 avg, IF	7.15 L-index

#	Paper	IF	Citations
383	From graphene to graphite: Electronic structure around the K point. <i>Physical Review B</i> , 2006 , 74,	3.3	729
382	Monolayer behaviour in bulk ReS ₂ due to electronic and vibrational decoupling. <i>Nature Communications</i> , 2014 , 5, 3252	17.4	728
381	Phase transitions in individual sub-micrometre superconductors. <i>Nature</i> , 1997 , 390, 259-262	50.4	353
380	First-principles investigation of graphene fluoride and graphane. <i>Physical Review B</i> , 2010 , 82,	3.3	342
379	Anomalous Raman spectra and thickness-dependent electronic properties of WSe ₂ . <i>Physical Review B</i> , 2013 , 87,	3.3	341
378	Graphene: A perfect nanoballoon. <i>Applied Physics Letters</i> , 2008 , 93, 193107	3.4	296
377	Tuning the optical, magnetic, and electrical properties of ReSe ₂ by nanoscale strain engineering. <i>Nano Letters</i> , 2015 , 15, 1660-6	11.5	293
376	Tuning of energy levels and optical properties of graphene quantum dots. <i>Physical Review B</i> , 2008 , 77,	3.3	276
375	Valley-dependent Brewster angles and Goos-Hänchen effect in strained graphene. <i>Physical Review Letters</i> , 2011 , 106, 176802	7.4	210
374	Confined states and direction-dependent transmission in graphene quantum wells. <i>Physical Review B</i> , 2006 , 74,	3.3	209
373	Extra Dirac points in the energy spectrum for superlattices on single-layer graphene. <i>Physical Review B</i> , 2010 , 81,	3.3	204
372	Energy levels of two- and three-dimensional polarons in a magnetic field. <i>Physical Review B</i> , 1985 , 31, 3689-3695	3.3	201
371	Direction-dependent tunneling through nanostructured magnetic barriers in graphene. <i>Physical Review B</i> , 2008 , 77,	3.3	187
370	Dirac and Klein-Gordon particles in one-dimensional periodic potentials. <i>Physical Review B</i> , 2008 , 77,	3.3	186
369	Mo ₂ C as a high capacity anode material: a first-principles study. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 6029-6035	13	179
368	Electrically controlled water permeation through graphene oxide membranes. <i>Nature</i> , 2018 , 559, 236-240	50.4	177
367	Phonon softening and direct to indirect band gap crossover in strained single-layer MoSe ₂ . <i>Physical Review B</i> , 2013 , 87,	3.3	162

366	Tunable quantum dots in bilayer graphene. <i>Nano Letters</i> , 2007 , 7, 946-9	11.5	153
365	Bandgap engineering of two-dimensional semiconductor materials. <i>Npj 2D Materials and Applications</i> , 2020 , 4,	8.8	152
364	Quasibound states of quantum dots in single and bilayer graphene. <i>Physical Review B</i> , 2008 , 77,	3.3	150
363	Graphene-based resonant-tunneling structures. <i>Applied Physics Letters</i> , 2007 , 90, 132122	3.4	145
362	Environmental Changes in MoTe2 Excitonic Dynamics by Defects-Activated Molecular Interaction. <i>ACS Nano</i> , 2015 , 9, 5326-32	16.7	144
361	Commensurability Effects in Viscosity of Nanoconfined Water. <i>ACS Nano</i> , 2016 , 10, 3685-92	16.7	141
360	Significant effect of stacking on the electronic and optical properties of few-layer black phosphorus. <i>Physical Review B</i> , 2015 , 92,	3.3	135
359	Ground-state energy of a polaron in n dimensions. <i>Physical Review B</i> , 1986 , 33, 3926-3934	3.3	130
358	Normal and Dirac fermions in graphene multilayers: Tight-binding description of the electronic structure. <i>Physical Review B</i> , 2007 , 75,	3.3	129
357	Energy levels of triangular and hexagonal graphene quantum dots: A comparative study between the tight-binding and Dirac equation approach. <i>Physical Review B</i> , 2011 , 84,	3.3	126
356	MXenes/graphene heterostructures for Li battery applications: a first principles study. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 2337-2345	13	119
355	Formation and stability of point defects in monolayer rhenium disulfide. <i>Physical Review B</i> , 2014 , 89,	3.3	118
354	Promising Piezoelectric Performance of Single Layer Transition-Metal Dichalcogenides and Dioxides. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 23231-23237	3.8	114
353	Thermal properties of black and blue phosphorenes from a first-principles quasiharmonic approach. <i>Physical Review B</i> , 2015 , 92,	3.3	111
352	Hall magnetometer in the ballistic regime. <i>Applied Physics Letters</i> , 1998 , 72, 572-574	3.4	111
351	Mechanical and thermal properties of h-MX ₂ (M = Cr, Mo, W; X = O, S, Se, Te) monolayers: A comparative study. <i>Applied Physics Letters</i> , 2014 , 104, 203110	3.4	110
350	Landau levels and oscillator strength in a biased bilayer of graphene. <i>Physical Review B</i> , 2007 , 76,	3.3	109
349	Direct Coulomb and phonon-mediated coupling between spatially separated electron gases. <i>Physical Review Letters</i> , 1992 , 68, 2516-2519	7.4	101

- 348 Wave-packet dynamics and valley filter in strained graphene. *Physical Review B*, **2010**, 82, 3.3 93
- 347 Effect of the confining potential on the magneto-optical spectrum of a quantum dot. *Journal of Applied Physics*, **1990**, 68, 3435-3438 2.5 93
- 346 Dirac electrons in a Kronig-Penney potential: Dispersion relation and transmission periodic in the strength of the barriers. *Physical Review B*, **2009**, 80, 3.3 92
- 345 Statistical properties of polarons in a magnetic field. I. Analytic results. *Physical Review B*, **1982**, 25, 7281-7301 3.3 92
- 344 Wavevector filtering through single-layer and bilayer graphene with magnetic barrier structures. *Applied Physics Letters*, **2008**, 93, 242103 3.4 89
- 343 Realization of a tunable artificial atom at a supercritically charged vacancy in graphene. *Nature Physics*, **2016**, 12, 545-549 16.2 87
- 342 Stone-Wales defects in silicene: Formation, stability, and reactivity of defect sites. *Physical Review B*, **2013**, 88, 3.3 86
- 341 Hexagonal AlN: Dimensional-crossover-driven band-gap transition. *Physical Review B*, **2015**, 91, 3.3 86
- 340 Anisotropic exciton Stark shift in black phosphorus. *Physical Review B*, **2015**, 91, 3.3 85
- 339 Spin-valley filtering in strained graphene structures with artificially induced carrier mass and spin-orbit coupling. *Physical Review Letters*, **2014**, 113, 046601 7.4 84
- 338 Extended Ginzburg-Landau formalism for two-band superconductors. *Physical Review Letters*, **2011**, 106, 047005 7.4 83
- 337 Minigaps and Novel Giant Negative Magnetoresistance in InAs/GaSb Semimetallic Superlattices. *Physical Review Letters*, **1997**, 79, 3034-3037 7.4 82
- 336 Mechanical properties of monolayer GaS and GaSe crystals. *Physical Review B*, **2016**, 94, 3.3 82
- 335 Mechanical properties of monolayer sulphides: a comparative study between MoS₂, HfS₂ and TiS₃. *Physical Chemistry Chemical Physics*, **2015**, 17, 27742-9 3.6 78
- 334 Stable half-metallic monolayers of FeCl₂. *Applied Physics Letters*, **2015**, 106, 192404 3.4 77
- 333 Oscillations of the superconducting temperature induced by quantum well states in thin metallic films: Numerical solution of the Bogoliubov-De Gennes equations. *Physical Review B*, **2007**, 75, 3.3 77
- 332 Realization of free-standing silicene using bilayer graphene. *Applied Physics Letters*, **2013**, 103, 261904 3.4 75
- 331 Electronic and optical properties of a circular graphene quantum dot in a magnetic field: Influence of the boundary conditions. *Physical Review B*, **2011**, 84, 3.3 75

330	Klein tunneling in single and multiple barriers in graphene. <i>Semiconductor Science and Technology</i> , 2010 , 25, 033002	1.8	73
329	Efficient numerical approach to inhomogeneous superconductivity: the Chebyshev-Bogoliubov-de Gennes method. <i>Physical Review Letters</i> , 2010 , 105, 167006	7.4	73
328	Thermomechanical properties of a single hexagonal boron nitride sheet. <i>Physical Review B</i> , 2013 , 87,	3.3	72
327	Pseudo magnetic field in strained graphene: Revisited. <i>Solid State Communications</i> , 2013 , 175-176, 76-82	1.6	70
326	Strain-induced topological phase transition in phosphorene and in phosphorene nanoribbons. <i>Physical Review B</i> , 2016 , 94,	3.3	66
325	Bilayer graphene with single and multiple electrostatic barriers: Band structure and transmission. <i>Physical Review B</i> , 2009 , 79,	3.3	66
324	Tuning Carrier Confinement in the MoS ₂ /WS ₂ Lateral Heterostructure. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 9580-9586	3.8	65
323	Electronic, vibrational, elastic, and piezoelectric properties of monolayer Janus MoSTe phases: A first-principles study. <i>Physical Review B</i> , 2019 , 100,	3.3	65
322	Quantum properties and applications of 2D Janus crystals and their superlattices. <i>Applied Physics Reviews</i> , 2020 , 7, 011311	17.3	64
321	Optical Aharonov-Bohm effect in stacked type-II quantum dots. <i>Physical Review B</i> , 2007 , 76,	3.3	63
320	Single-layer and bilayer graphene superlattices: collimation, additional Dirac points and Dirac lines. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010 , 368, 5499-5243		62
319	Alkali Metal Intercalation in MXene/Graphene Heterostructures: A New Platform for Ion Battery Applications. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 727-734	6.4	60
318	Influence of vacancy defects on the thermal stability of silicene: a reactive molecular dynamics study. <i>RSC Advances</i> , 2014 , 4, 1133-1137	3.7	60
317	Graphene on boron-nitride: Moiré pattern in the van der Waals energy. <i>Applied Physics Letters</i> , 2014 , 104, 041909	3.4	60
316	Vibrational properties of graphene fluoride and graphane. <i>Applied Physics Letters</i> , 2011 , 98, 051914	3.4	60
315	Ginzburg-Landau theory for multiband superconductors: Microscopic derivation. <i>Physical Review B</i> , 2013 , 87,	3.3	59
314	C ₃ N Monolayer: Exploring the Emerging of Novel Electronic and Magnetic Properties with Adatom Adsorption, Functionalizations, Electric Field, Charging, and Strain. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 12485-12499	3.8	57
313	Doping of rhenium disulfide monolayers: a systematic first principles study. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 16771-9	3.6	56

312	Coulomb coupling between spatially separated electron and hole layers: Generalized random-phase approximation. <i>Physical Review Letters</i> , 1993 , 70, 2146-2149	7.4	56
311	Anisotropic electronic, mechanical, and optical properties of monolayer WTe ₂ . <i>Journal of Applied Physics</i> , 2016 , 119, 074307	2.5	56
310	Tunable spin and charge transport in silicene nanoribbons. <i>Physical Review B</i> , 2015 , 92,	3.3	55
309	Electron tunneling through double magnetic barriers on the surface of a topological insulator. <i>Physical Review B</i> , 2010 , 82,	3.3	55
308	Nanoribbons: From fundamentals to state-of-the-art applications. <i>Applied Physics Reviews</i> , 2016 , 3, 041302	3.3	55
307	Unusual lattice vibration characteristics in whiskers of the pseudo-one-dimensional titanium trisulfide TiS ₃ . <i>Nature Communications</i> , 2016 , 7, 12952	17.4	54
306	Carbon clusters: From ring structures to nanographene. <i>Physical Review B</i> , 2010 , 81,	3.3	54
305	Evidence of flat bands and correlated states in buckled graphene superlattices. <i>Nature</i> , 2020 , 584, 215-220	30.4	53
304	Introducing novel electronic and magnetic properties in CN nanosheets by defect engineering and atom substitution. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 21070-21083	3.6	52
303	Resonant valley filtering of massive Dirac electrons. <i>Physical Review B</i> , 2012 , 86,	3.3	52
302	Magnetic field tuning of the effective g factor in a diluted magnetic semiconductor quantum dot. <i>Applied Physics Letters</i> , 2003 , 82, 2661-2663	3.4	52
301	TiS ₃ nanoribbons: Width-independent band gap and strain-tunable electronic properties. <i>Physical Review B</i> , 2015 , 92,	3.3	51
300	Landau levels above the optical-phonon continuum in two and three dimensions. <i>Physical Review B</i> , 1986 , 33, 4338-4340	3.3	51
299	Tuning a circular p-n junction in graphene from quantum confinement to optical guiding. <i>Nature Nanotechnology</i> , 2017 , 12, 1045-1049	28.7	50
298	Nitrogenated, phosphorated and arsenicated monolayer holey graphenes. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 3144-50	3.6	49
297	Spin and valley polarization of plasmons in silicene due to external fields. <i>Physical Review B</i> , 2014 , 90,	3.3	49
296	Nanoengineered nonuniform strain in graphene using nanopillars. <i>Physical Review B</i> , 2012 , 86,	3.3	49
295	Two-dimensional carbon nitride (2DCN) nanosheets: Tuning of novel electronic and magnetic properties by hydrogenation, atom substitution and defect engineering. <i>Journal of Applied Physics</i> , 2019 , 126, 215104	2.5	49

294	Strong dichroic emission in the pseudo one dimensional material ZrS. <i>Nanoscale</i> , 2016 , 8, 16259-16265	7.7	48
293	Vacancy Formation and Oxidation Characteristics of Single Layer TiS ₃ . <i>Journal of Physical Chemistry C</i> , 2015 , 119, 10709-10715	3.8	44
292	Tuning the bandgap and introducing magnetism into monolayer BC ₃ by strain/defect engineering and adatom/molecule adsorption. <i>Journal of Applied Physics</i> , 2019 , 126, 144304	2.5	44
291	Strain controlled valley filtering in multi-terminal graphene structures. <i>Applied Physics Letters</i> , 2016 , 109, 203108	3.4	44
290	Electronic and magnetic properties of superlattices of graphene/graphane nanoribbons with different edge hydrogenation. <i>Physical Review B</i> , 2010 , 82,	3.3	43
289	Stabilized silicene within bilayer graphene: A proposal based on molecular dynamics and density-functional tight-binding calculations. <i>Physical Review B</i> , 2014 , 89,	3.3	42
288	Electronic states in a graphene flake strained by a Gaussian bump. <i>Physical Review B</i> , 2013 , 88,	3.3	42
287	Chiral states in bilayer graphene: Magnetic field dependence and gap opening. <i>Physical Review B</i> , 2011 , 84,	3.3	42
286	Electronic properties of triangular and hexagonal MoS ₂ quantum dots. <i>Physical Review B</i> , 2015 , 91,	3.3	41
285	AA-stacked bilayer square ice between graphene layers. <i>Physical Review B</i> , 2015 , 92,	3.3	41
284	Graphene ribbons with a line of impurities: Opening of a gap. <i>Physical Review B</i> , 2007 , 76,	3.3	41
283	Adsorption of molecules on C ₃ N nanosheet: A first-principles calculations. <i>Chemical Physics</i> , 2019 , 526, 110442	2.3	40
282	Wave packet dynamics in semiconductor quantum rings of finite width. <i>Physical Review B</i> , 2009 , 80,	3.3	40
281	Dependence of the shape of graphene nanobubbles on trapped substance. <i>Nature Communications</i> , 2017 , 8, 15844	17.4	39
280	The work function of few-layer graphene. <i>Journal of Physics Condensed Matter</i> , 2017 , 29, 035003	1.8	39
279	Anomalous Dynamical Behavior of Freestanding Graphene Membranes. <i>Physical Review Letters</i> , 2016 , 117, 126801	7.4	39
278	Electronic structure of a hexagonal graphene flake subjected to triaxial stress. <i>Physical Review B</i> , 2013 , 88,	3.3	39
277	Graphane. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2015 , 5, 255-272	7.9	39

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275	Unusual dimensionality effects and surface charge density in 2D Mg(OH)2. <i>Scientific Reports</i> , 2016 , 6, 20525	4.9	38
274	Rippling, buckling, and melting of single- and multilayer MoS2. <i>Physical Review B</i> , 2015 , 91,	3.3	37
273	Continuous structural transitions in quasi-one-dimensional classical Wigner crystals. <i>Physical Review B</i> , 2010 , 81,	3.3	37
272	Magnetic interface states in graphene-based quantum wires. <i>Physical Review B</i> , 2007 , 75,	3.3	37
271	Tight-binding model for borophene and borophane. <i>Physical Review B</i> , 2018 , 97,	3.3	36
270	Induced polarization and electronic properties of carbon-doped boron nitride nanoribbons. <i>Physical Review B</i> , 2012 , 86,	3.3	36
269	Composite super-moiré lattices in double-aligned graphene heterostructures. <i>Science Advances</i> , 2019 , 5, eaay8897	14.3	36
268	Enhancement of the Stability of Fluorine Atoms on Defective Graphene and at Graphene/Fluorographene Interface. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 19659-65	9.5	35
267	Mg(OH)2/WS2 van der Waals heterobilayer: Electric field tunable band-gap crossover. <i>Physical Review B</i> , 2016 , 94,	3.3	35
266	Enhancement of electron-hole superfluidity in double few-layer graphene. <i>Scientific Reports</i> , 2014 , 4, 7319	4.9	34
265	Peculiar half-metallic state in zigzag nanoribbons of MoS2: Spin filtering. <i>Physical Review B</i> , 2016 , 94,	3.3	33
264	Bilayer SnS2: Tunable stacking sequence by charging and loading pressure. <i>Physical Review B</i> , 2016 , 93,	3.3	33
263	Electronic and vibrational properties of PbI2: From bulk to monolayer. <i>Physical Review B</i> , 2018 , 98,	3.3	33
262	Exploiting the Novel Electronic and Magnetic Structure of C3N via Functionalization and Conformation. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900459	6.4	33
261	Tuning the magnetic anisotropy in single-layer crystal structures. <i>Physical Review B</i> , 2015 , 92,	3.3	33
260	Atypical BCS-BEC crossover induced by quantum-size effects. <i>Physical Review A</i> , 2012 , 86,	2.6	33
259	Extended Ginzburg-Landau formalism: Systematic expansion in small deviation from the critical temperature. <i>Physical Review B</i> , 2012 , 85,	3.3	33

258	Peculiar Piezoelectric Properties of Soft Two-Dimensional Materials. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 13948-13953	3.8	32
257	Kronig-Penney model on bilayer graphene: Spectrum and transmission periodic in the strength of the barriers. <i>Physical Review B</i> , 2010 , 82,	3.3	32
256	Theoretical study of the stable states of small carbon clusters C_n ($n=2-10$). <i>Physical Review B</i> , 2008 , 78,	3.3	32
255	Theory of anharmonic phonons in two-dimensional crystals. <i>Physical Review B</i> , 2015 , 91,	3.3	31
254	Wavepacket scattering of Dirac and Schrödinger particles on potential and magnetic barriers. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 275801	1.8	31
253	Carbon-rich carbon nitride monolayers with Dirac cones: Dumbbell C_4N . <i>Carbon</i> , 2017 , 118, 285-290	10.4	30
252	Two-dimensional graphitic carbon nitrides: Strain-tunable ferromagnetic ordering. <i>Physical Review B</i> , 2020 , 101,	3.3	30
251	Antiferromagnetism in hexagonal graphene structures: Rings versus dots. <i>Physical Review B</i> , 2013 , 87,	3.3	30
250	Spin and momentum filtering of electrons on the surface of a topological insulator. <i>Applied Physics Letters</i> , 2011 , 98, 162101	3.4	30
249	New nanoporous graphyne monolayer as nodal line semimetal: Double Dirac points with an ultrahigh Fermi velocity. <i>Carbon</i> , 2019 , 141, 712-718	10.4	30
248	Interlayer excitons in transition metal dichalcogenide heterostructures. <i>Physical Review B</i> , 2018 , 98,	3.3	30
247	Analytical study of the energy levels in bilayer graphene quantum dots. <i>Carbon</i> , 2014 , 78, 392-400	10.4	29
246	Optoelectronic properties of graphene in the presence of optical phonon scattering. <i>Physical Review B</i> , 2010 , 82,	3.3	29
245	The Electronic, Optical, and Thermoelectric Properties of Monolayer PbTe and the Tunability of the Electronic Structure by External Fields and Defects. <i>Physica Status Solidi (B): Basic Research</i> , 2020 , 257, 2000182	1.3	28
244	Electric-field-induced structural changes in water confined between two graphene layers. <i>Physical Review B</i> , 2016 , 94,	3.3	28
243	Excitons, trions, and biexcitons in transition-metal dichalcogenides: Magnetic-field dependence. <i>Physical Review B</i> , 2018 , 97,	3.3	28
242	Quantum tunneling through graphene nanorings. <i>Nanotechnology</i> , 2010 , 21, 185201	3.4	28
241	Quantum and transport conductivities in monolayer graphene. <i>Physical Review B</i> , 2008 , 77,	3.3	28

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239	Dependence of resistivity on electron density and temperature in graphene. <i>Physical Review B</i> , 2009 , 79,	3.3	27
238	Continuum Wannier-Stark Ladders Strongly Coupled by Zener Resonances in Semiconductor Superlattices. <i>Physical Review Letters</i> , 1999 , 82, 3120-3123	7.4	27
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236	Transport of hydrogen isotopes through interlayer spacing in van der Waals crystals. <i>Nature Nanotechnology</i> , 2018 , 13, 468-472	28.7	26
235	Tunable skewed edges in puckered structures. <i>Physical Review B</i> , 2016 , 93,	3.3	26
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233	Portlandite crystal: Bulk, bilayer, and monolayer structures. <i>Physical Review B</i> , 2015 , 91,	3.3	26
232	Field Effect and Strongly Localized Carriers in the Metal-Insulator Transition Material VO(2). <i>Physical Review Letters</i> , 2015 , 115, 196401	7.4	26
231	Heterostructures of graphene and nitrogenated holey graphene: Moiré pattern and Dirac ring. <i>Physical Review B</i> , 2015 , 92,	3.3	26
230	Wave-packet scattering on graphene edges in the presence of a pseudomagnetic field. <i>Physical Review B</i> , 2012 , 86,	3.3	25
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228	Structural, electronic and optical properties of Cu-doped ZnO: experimental and theoretical investigation. <i>Philosophical Magazine</i> , 2016 , 96, 1743-1756	1.6	25
227	Transport detection of quantum Hall fluctuations in graphene. <i>Physical Review B</i> , 2010 , 81,	3.3	24
226	All-strain based valley filter in graphene nanoribbons using snake states. <i>Physical Review B</i> , 2016 , 94,	3.3	23
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224	Resonant tunneling through S- and U-shaped graphene nanoribbons. <i>Nanotechnology</i> , 2009 , 20, 415203	3.4	23
223	Artificial molecular quantum rings: Spin density functional theory calculations. <i>Physical Review B</i> , 2006 , 74,	3.3	23

222	Diffusion-to-streaming transition in a two-dimensional electron system in a polar semiconductor. <i>Physical Review B</i> , 1991 , 43, 14134-14141	3.3	23
221	Controlled growth mechanism of poly (3-hexylthiophene) nanowires. <i>Nanotechnology</i> , 2016 , 27, 455604	3.4	23
220	Electric- and magnetic-field dependence of the electronic and optical properties of phosphorene quantum dots. <i>Nanotechnology</i> , 2017 , 28, 085702	3.4	22
219	Raman fingerprint of stacking order in HfS ₂ /Ta(OH) ₂ heterobilayer. <i>Physical Review B</i> , 2019 , 99,	3.3	22
218	Piezoelectric surface acoustical phonon limited mobility of electrons in graphene on a GaAs substrate. <i>Physical Review B</i> , 2013 , 87,	3.3	22
217	Reversible structural transition in nanoconfined ice. <i>Physical Review B</i> , 2017 , 95,	3.3	21
216	Electronic properties of bilayer phosphorene quantum dots in the presence of perpendicular electric and magnetic fields. <i>Physical Review B</i> , 2017 , 96,	3.3	21
215	The Split-Operator Technique for the Study of Spinorial Wavepacket Dynamics. <i>Communications in Computational Physics</i> , 2015 , 17, 850-866	2.4	21
214	Strain and electric field tuning of semi-metallic character WCrCO MXenes with dual narrow band gap. <i>Journal of Physics Condensed Matter</i> , 2020 , 32, 355504	1.8	21
213	Double Moiré with a Twist: Supermoiré in Encapsulated Graphene. <i>Nano Letters</i> , 2020 , 20, 979-988	11.5	21
212	Quantum transport in defective phosphorene nanoribbons: Effects of atomic vacancies. <i>Physical Review B</i> , 2018 , 97,	3.3	21
211	Quantum anomalous Hall effect in a stable 1T'-YN monolayer with a large nontrivial bandgap and a high Chern number. <i>Nanoscale</i> , 2018 , 10, 8153-8161	7.7	21
210	Cerenkov emission of terahertz acoustic-phonons from graphene. <i>Applied Physics Letters</i> , 2013 , 102, 222101	3.4	21
209	Engineering electronic properties of metal/MoSe ₂ interfaces using self-assembled monolayers. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 9842-9849	7.1	21
208	Vortex-vortex interaction in bulk superconductors: Ginzburg-Landau theory. <i>Physical Review B</i> , 2011 , 83,	3.3	21
207	Single-layer Janus black arsenic-phosphorus (b-AsP): Optical dichroism, anisotropic vibrational, thermal, and elastic properties. <i>Physical Review B</i> , 2020 , 101,	3.3	20
206	Energy levels of hybrid monolayer-bilayer graphene quantum dots. <i>Physical Review B</i> , 2016 , 93,	3.3	20
205	Role of atomic vacancies and boundary conditions on ballistic thermal transport in graphene nanoribbons. <i>Physical Review B</i> , 2014 , 90,	3.3	20

204	Excitonic Aharonov-Bohm effect: Unstrained versus strained type-I semiconductor nanorings. <i>Physical Review B</i> , 2011 , 84,	3.3	20
203	Structural and dynamical properties of a quasi-one-dimensional classical binary system. <i>Physical Review B</i> , 2008 , 77,	3.3	20
202	Control of the persistent currents in two interacting quantum rings through the Coulomb interaction and interring tunneling. <i>Physical Review B</i> , 2008 , 78,	3.3	20
201	DC conductivity of twisted bilayer graphene: Angle-dependent transport properties and effects of disorder. <i>Physical Review Materials</i> , 2018 , 2,	3.2	20
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