Franois M Peeters

List of Publications by Year in Descending Order

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	Interface-dependent phononic and optical properties of GeO/MoSO heterostructures.. *Nanoscale*, **2022**,	7.7	1
382	Probing the structure and composition of van der Waals heterostructures using the nonlocality of Dirac plasmons in the terahertz regime. *2D Materials*, **2021**, 8, 015014	5.9	1
381	Stability of adsorption of Mg and Na on sulfur-functionalized MXenes. *Physical Chemistry Chemical Physics*, **2021**, 23, 25424-25433	3.6	2
380	Effect of zitterbewegung on the propagation of wave packets in ABC-stacked multilayer graphene: an analytical and computational approach. *Journal of Physics Condensed Matter*, **2021**, 33, 095503	1.8	2
379	Abnormal in-plane permittivity and ferroelectricity of confined water: From sub-nanometer channels to bulk. *Journal of Chemical Physics*, **2021**, 154, 114503	3.9	5
378	Effect of Mismatched Electron-Hole Effective Masses on Superfluidity in Double Layer Solid-State Systems. *Condensed Matter*, **2021**, 6, 14	1.8	1
377	Electron□ole superfluidity in strained Si/Ge type II heterojunctions. *Npj Quantum Materials*, **2021**, 6,	5	3
376	Janus two-dimensional transition metal dichalcogenide oxides: First-principles investigation of WXO monolayers with X=S, Se, and Te. *Physical Review B*, **2021**, 103,	3.3	20
375	Superconducting diode effect via conformal-mapped nanoholes. *Nature Communications*, **2021**, 12, 2703	17.4	7
374	Determining the Molecular Orientation on the Metal Nanoparticle Surface through Surface-Enhanced Raman Spectroscopy and Density Functional Theory Simulations. *Journal of Physical Chemistry C*, **2021**, 125, 16289-16295	3.8	1
373	Hydration effects and negative dielectric constant of nano-confined water between cation intercalated MXenes. *Nanoscale*, **2021**, 13, 922-929	7.7	3
372	Electronic and magnetic properties of single-layer FeCl2 with defects. *Physical Review B*, **2021**, 103,	3.3	3
371	Ultra-thin structures of manganese fluorides: conversion from manganese dichalcogenides by fluorination. *Physical Chemistry Chemical Physics*, **2021**, 23, 10218-10224	3.6	0
370	Two-dimensional oxygen functionalized honeycomb and zigzag dumbbell silicene with robust Dirac cones. *New Journal of Physics*, **2021**, 23, 023007	2.9	1
369	Zitterbewegung of Moir□Excitons in Twisted MoS_{2}/WSe_{2} Heterobilayers. *Physical Review Letters*, **2021**, 127, 106801	7.4	1
368	Tunable effective masses of magneto-excitons in two-dimensional materials. *Solid State Communications*, **2021**, 334-335, 114371	1.6	0
367	Photoluminescence and electronic transition behaviors of single-stranded DNA. *Physical Review E*, **2021**, 104, 034412	2.4	

366	Band-gap formation and morphing in □3 superlattices. *Physical Review B*, **2021**, 104,	3.3	1
365	Terahertz magneto-optical properties of graphene hydrodynamic electron liquid. *Physical Review B*, **2021**, 104,	3.3	2
364	Breakdown of Universal Scaling for Nanometer-Sized Bubbles in Graphene. *Nano Letters*, **2021**, 21, 8103-8110	11.5	5
363	Substrate dependent terahertz magneto-optical properties of monolayer WS. *Optics Letters*, **2021**, 46, 4892-4895	3	
362	Confinement and edge effects on atomic collapse in graphene nanoribbons. *Physical Review B*, **2021**, 103,	3.3	1
361	Exponentially selective molecular sieving through angstrom pores. *Nature Communications*, **2021**, 12, 7170	17.4	3
360	Electronic Properties of Oxidized Graphene: Effects of Strain and an Electric Field on Flat Bands and the Energy Gap.. *Journal of Physical Chemistry Letters*, **2021**, 66-74	6.4	0
359	Prevalence of oxygen defects in an in-plane anisotropic transition metal dichalcogenide. *Physical Review B*, **2020**, 102,	3.3	5
358	Strain and electric field tuning of semi-metallic character WCrCO MXenes with dual narrow band gap. *Journal of Physics Condensed Matter*, **2020**, 32, 355504	1.8	21
357	Stable single-layers of calcium halides (CaX, X = F, Cl, Br, I). *Journal of Chemical Physics*, **2020**, 152, 164116	3.9	9
356	Substrate dependent terahertz response of monolayer WS2. *Applied Physics Letters*, **2020**, 116, 203108	3.4	9
355	The magnetic, electronic, and light-induced topological properties in two-dimensional hexagonal FeX2 (X = Cl, Br, I) monolayers. *Applied Physics Letters*, **2020**, 116, 192404	3.4	4
354	Terahertz optical Hall effect in monolayer MoS2 in the presence of proximity-induced interactions. *Physical Review B*, **2020**, 101,	3.3	4
353	Doping-dependent switch from one- to two-component superfluidity in coupled electron-hole van der Waals heterostructures. *Physical Review B*, **2020**, 101,	3.3	7
352	Quantum properties and applications of 2D Janus crystals and their superlattices. *Applied Physics Reviews*, **2020**, 7, 011311	17.3	64
351	Circular quantum dots in twisted bilayer graphene. *Physical Review B*, **2020**, 101,	3.3	7
350	Dirac half-metallicity of Thin PdCl Nanosheets: Investigation of the Effects of External Fields, Surface Adsorption and Defect Engineering on the Electronic and Magnetic Properties. *Scientific Reports*, **2020**, 10, 213	4.9	26
349	Double Moir□with a Twist: Supermoir□n Encapsulated Graphene. *Nano Letters*, **2020**, 20, 979-988	11.5	21

348	Experimental conditions for the observation of electron-hole superfluidity in GaAs heterostructures. *Physical Review B*, **2020**, 101,	3.3	7
347	Single-layer Janus black arsenic-phosphorus (b-AsP): Optical dichroism, anisotropic vibrational, thermal, and elastic properties. *Physical Review B*, **2020**, 101,	3.3	20
346	Two-dimensional graphitic carbon nitrides: Strain-tunable ferromagnetic ordering. *Physical Review B*, **2020**, 101,	3.3	30
345	The Electronic, Optical, and Thermoelectric Properties of Monolayer PbTe and the Tunability of the Electronic Structure by External Fields and Defects. *Physica Status Solidi (B): Basic Research*, **2020**, 257, 2000182	1.3	28
344	Band flattening in buckled monolayer graphene. *Physical Review B*, **2020**, 102,	3.3	8
343	Tuning the Electronic, Optical, and Transport Properties of Phosphorene. *NATO Science for Peace and Security Series A: Chemistry and Biology*, **2020**, 3-42	0.1	0
342	Tight-Binding Studio: A technical software package to find the parameters of tight-binding Hamiltonian. *Computer Physics Communications*, **2020**, 254, 107379	4.2	7
341	High performance piezotronic spin transistors using molybdenum disulfide nanoribbon. *Nano Energy*, **2020**, 75, 104953	17.1	13
340	Two-dimensional hydrogenated buckled gallium arsenide: an ab initio study. *Journal of Physics Condensed Matter*, **2020**, 32, 145502	1.8	0
339	PAI-graphene: A new topological semimetallic two-dimensional carbon allotrope with highly tunable anisotropic Dirac cones. *Carbon*, **2020**, 170, 477-486	10.4	19
338	Monolayer 1T-LaN2: Dirac spin-gapless semiconductor of p-state and Chern insulator with a high Chern number. *Applied Physics Letters*, **2020**, 117, 143101	3.4	8
337	Machine learning approach to constructing tight binding models for solids with application to BiTeCl. *Journal of Applied Physics*, **2020**, 128, 215107	2.5	1
336	Blue Energy Conversion from Holey-Graphene-like Membranes with a High Density of Subnanometer Pores. *Nano Letters*, **2020**, 20, 8634-8639	11.5	15
335	Out-of-plane permittivity of confined water. *Physical Review E*, **2020**, 102, 022803	2.4	20
334	Evidence of flat bands and correlated states in buckled graphene superlattices. *Nature*, **2020**, 584, 215-220	50.4	53
333	Insights into Water Permeation through hBN Nanocapillaries by Ab Initio Machine Learning Molecular Dynamics Simulations. *Journal of Physical Chemistry Letters*, **2020**, 11, 7363-7370	6.4	17
332	Optical absorption window in Na3Bi based three-dimensional Dirac electronic system. *Journal of Applied Physics*, **2020**, 128, 155707	2.5	
331	Assessment of Sulfur-Functionalized MXenes for Li-Ion Battery Applications. *Journal of Physical Chemistry C*, **2020**, 124, 21293-21304	3.8	8

330	Asymmetric versus symmetric HgTe / Cd x Hg 1 □x Te double quantum wells: Bandgap tuning without electric field. *Journal of Applied Physics*, **2020**, 128, 064301	2.5	1
329	Three-dimensional electron-hole superfluidity in a superlattice close to room temperature. *Physical Review B*, **2020**, 102,	3.3	2
328	Bandgap engineering of two-dimensional semiconductor materials. *Npj 2D Materials and Applications*, **2020**, 4,	8.8	152
327	Transition Metal Dichalcogenides as Strategy for High Temperature Electron-Hole Superfluidity. *Condensed Matter*, **2020**, 5, 22	1.8	6
326	Introducing novel electronic and magnetic properties in CN nanosheets by defect engineering and atom substitution. *Physical Chemistry Chemical Physics*, **2019**, 21, 21070-21083	3.6	52
325	Confined electron states in two-dimensional HgTe in magnetic field: Quantum dot versus quantum ring behavior. *Physical Review B*, **2019**, 100,	3.3	3
324	Alkali Metal Intercalation in MXene/Graphene Heterostructures: A New Platform for Ion Battery Applications. *Journal of Physical Chemistry Letters*, **2019**, 10, 727-734	6.4	60
323	Intense-terahertz-laser-modulated magnetopolaron effect on shallow-donor states in the presence of magnetic field in the Voigt configuration. *Physical Review B*, **2019**, 99,	3.3	2
322	Quantum and transport mobilities of a Na3Bi-based three-dimensional Dirac system. *Physical Review B*, **2019**, 99,	3.3	1
321	Strain engineered linear dichroism and Faraday rotation in few-layer phosphorene. *Applied Physics Letters*, **2019**, 114, 243102	3.4	11
320	Single-layer structures of a- and b-Gallenene: a tight-binding approach. *Physical Chemistry Chemical Physics*, **2019**, 21, 15798-15804	3.6	6
319	C3N Monolayer: Exploring the Emerging of Novel Electronic and Magnetic Properties with Adatom Adsorption, Functionalizations, Electric Field, Charging, and Strain. *Journal of Physical Chemistry C*, **2019**, 123, 12485-12499	3.8	57
318	Multicomponent screening and superfluidity in gapped electron-hole double bilayer graphene with realistic bands. *Physical Review B*, **2019**, 99,	3.3	9
317	Acoustic plasmons at the crossover between the collisionless and hydrodynamic regimes in two-dimensional electron liquids. *Physical Review B*, **2019**, 99,	3.3	7
316	Raman fingerprint of stacking order in HfS2□a(OH)2 heterobilayer. *Physical Review B*, **2019**, 99,	3.3	22
315	Conductance fluctuations of monolayer GeSnH2 in the topological phase using a low-energy effective tight-binding Hamiltonian. *Physical Review B*, **2019**, 99,	3.3	1
314	Electronic, vibrational, elastic, and piezoelectric properties of monolayer Janus MoSTe phases: A first-principles study. *Physical Review B*, **2019**, 100,	3.3	65
313	Adsorption of molecules on C3N nanosheet: A first-principles calculations. *Chemical Physics*, **2019**, 526, 110442	2.3	40

312	Electron collimation at van der Waals domain walls in bilayer graphene. *Physical Review B*, **2019**, 100,	3.3	7
311	Inner and outer ring states of MoS 2 quantum rings: Energy spectrum, charge and spin currents. *Journal of Applied Physics*, **2019**, 125, 244303	2.5	8
310	Exploiting the Novel Electronic and Magnetic Structure of C3N via Functionalization and Conformation. *Advanced Electronic Materials*, **2019**, 5, 1900459	6.4	33
309	Tuning the bandgap and introducing magnetism into monolayer BC3 by strain/defect engineering and adatom/molecule adsorption. *Journal of Applied Physics*, **2019**, 126, 144304	2.5	44
308	Molecular collapse in monolayer graphene. *2D Materials*, **2019**, 6, 045047	5.9	3
307	Strain fields in graphene induced by nanopillar mesh. *Journal of Applied Physics*, **2019**, 125, 082534	2.5	4
306	Coulomb drag in strongly coupled quantum wells: Temperature dependence of the many-body correlations. *Applied Physics Letters*, **2019**, 115, 202105	3.4	
305	Composite super-moir□lattices in double-aligned graphene heterostructures. *Science Advances*, **2019**, 5, eaay8897	14.3	36
304	Two-dimensional carbon nitride (2DCN) nanosheets: Tuning of novel electronic and magnetic properties by hydrogenation, atom substitution and defect engineering. *Journal of Applied Physics*, **2019**, 126, 215104	2.5	49
303	Vibrational properties of germanane and fluorinated germanene in the chair, boat, and zigzag-line configurations. *Journal of Physics Condensed Matter*, **2019**, 31, 075301	1.8	7
302	Correlation functions in electron-electron and electron-hole double quantum wells: Temperature, density, and barrier-width dependence. *Physical Review B*, **2019**, 99,	3.3	4
301	New nanoporous graphyne monolayer as nodal line semimetal: Double Dirac points with an ultrahigh Fermi velocity. *Carbon*, **2019**, 141, 712-718	10.4	30
300	Electric-field modulation of linear dichroism and Faraday rotation in few-layer phosphorene. *2D Materials*, **2019**, 6, 015032	5.9	20
299	Magnetic field dependence of electronic properties of MoS2 quantum dots with different edges. *Physical Review B*, **2018**, 97,	3.3	14
298	Electrostrictive behavior of confined water subjected to GPa pressure. *Physical Review B*, **2018**, 97,	3.3	7
297	Quantum transport in defective phosphorene nanoribbons: Effects of atomic vacancies. *Physical Review B*, **2018**, 97,	3.3	21
296	Ballistic electron channels including weakly protected topological states in delaminated bilayer graphene. *Physical Review B*, **2018**, 97,	3.3	9
295	MXenes/graphene heterostructures for Li battery applications: a first principles study. *Journal of Materials Chemistry A*, **2018**, 6, 2337-2345	13	119

294	High-temperature electron-hole superfluidity with strong anisotropic gaps in double phosphorene monolayers. *Physical Review B*, **2018**, 97,	3.3	11
293	Quantum anomalous Hall effect in a stable 1T-YN monolayer with a large nontrivial bandgap and a high Chern number. *Nanoscale*, **2018**, 10, 8153-8161	7.7	21
292	Tight-binding model for borophene and borophane. *Physical Review B*, **2018**, 97,	3.3	36
291	Terahertz magneto-optical properties of bi- and tri-layer graphene. *Journal of Physics Condensed Matter*, **2018**, 30, 175701	1.8	10
290	Transport of hydrogen isotopes through interlayer spacing in van der Waals crystals. *Nature Nanotechnology*, **2018**, 13, 468-472	28.7	26
289	Magnetic field dependence of the atomic collapse state in graphene. *2D Materials*, **2018**, 5, 015017	5.9	9
288	Enhancement of plasmon-photon coupling in grating coupled graphene inside a Fabry-P□ot cavity. *Solid State Communications*, **2018**, 280, 45-49	1.6	2
287	Electrically controlled water permeation through graphene oxide membranes. *Nature*, **2018**, 559, 236-240	50.4	177
286	Multiband Mechanism for the Sign Reversal of Coulomb Drag Observed in Double Bilayer Graphene Heterostructures. *Physical Review Letters*, **2018**, 121, 036601	7.4	5
285	Excitons, trions, and biexcitons in transition-metal dichalcogenides: Magnetic-field dependence. *Physical Review B*, **2018**, 97,	3.3	28
284	Electronic and vibrational properties of PbI2: From bulk to monolayer. *Physical Review B*, **2018**, 98,	3.3	33
283	Ab initio and semiempirical modeling of excitons and trions in monolayer TiS3. *Physical Review B*, **2018**, 98,	3.3	7
282	Fast water flow through graphene nanocapillaries: A continuum model approach involving the microscopic structure of confined water. *Applied Physics Letters*, **2018**, 113, 083101	3.4	23
281	Magneto-polarons in monolayer transition-metal dichalcogenides. *Journal of Applied Physics*, **2018**, 123, 214303	2.5	14
280	Self-assembly and clustering of magnetic peapod-like rods with tunable directional interaction. *PLoS ONE*, **2018**, 13, e0195552	3.7	1
279	Topological Dirac semimetal phase in GexSny alloys. *Applied Physics Letters*, **2018**, 112, 251601	3.4	6
278	DC conductivity of twisted bilayer graphene: Angle-dependent transport properties and effects of disorder. *Physical Review Materials*, **2018**, 2,	3.2	20
277	Slippage dynamics of confined water in graphene oxide capillaries. *Physical Review Materials*, **2018**, 2,	3.2	6

276	Confined states in graphene quantum blisters. *Journal of Physics Condensed Matter*, **2018**, 30, 385301	1.8	4
275	Enhanced Stability of Single-Layer w-Gallenene through Hydrogenation. *Journal of Physical Chemistry C*, **2018**, 122, 28302-28309	3.8	14
274	Electrical dipole on gapped graphene: Bound states and atomic collapse. *Physical Review B*, **2018**, 98,	3.3	5
273	Dirac nodal line in bilayer borophene: Tight-binding model and low-energy effective Hamiltonian. *Physical Review B*, **2018**, 98,	3.3	17
272	Monitoring the effect of asymmetrical vertical strain on Janus single layers of MoSSe via vibrational spectrum. *Journal of Chemical Physics*, **2018**, 149, 084707	3.9	7
271	Interlayer excitons in transition metal dichalcogenide heterostructures. *Physical Review B*, **2018**, 98,	3.3	30
270	Graphene quantum blisters: A tunable system to confine charge carriers. *Applied Physics Letters*, **2018**, 112, 213101	3.4	8
269	Veselago focusing of anisotropic massless Dirac fermions. *Physical Review B*, **2018**, 97,	3.3	8
268	Edge states in gated bilayer-monolayer graphene ribbons and bilayer domain walls. *Journal of Applied Physics*, **2018**, 123, 204301	2.5	3
267	Exciton states in a circular graphene quantum dot: Magnetic field induced intravalley to intervalley transition. *Physical Review B*, **2017**, 95,	3.3	8
266	Reversible structural transition in nanoconfined ice. *Physical Review B*, **2017**, 95,	3.3	21
265	Fundamental mechanisms responsible for the temperature coefficient of resonant frequency in microwave dielectric ceramics. *Journal of the American Ceramic Society*, **2017**, 100, 1508-1516	3.8	8
264	Gallium bismuth halide GaBi-X2 (X = I, Br, Cl) monolayers with distorted hexagonal framework: Novel room-temperature quantum spin Hall insulators. *Nano Research*, **2017**, 10, 2168-2180	10	12
263	Quantum transport in graphene Hall bars: Effects of side gates. *Solid State Communications*, **2017**, 257, 20-26	1.6	
262	Stress dependence of the suspended graphene work function: Vacuum Kelvin probe force microscopy and density functional theory. *Applied Physics Letters*, **2017**, 110, 193101	3.4	7
261	Valley filtering in graphene due to substrate-induced mass potential. *Journal of Physics Condensed Matter*, **2017**, 29, 215502	1.8	11
260	Dependence of the shape of graphene nanobubbles on trapped substance. *Nature Communications*, **2017**, 8, 15844	17.4	39
259	Electronic and transport properties of n-type monolayer black phosphorus at low temperatures. *Physical Review B*, **2017**, 95,	3.3	10

258	Carbon-rich carbon nitride monolayers with Dirac cones: Dumbbell C4N. *Carbon*, **2017**, 118, 285-290	10.4	30
257	The work function of few-layer graphene. *Journal of Physics Condensed Matter*, **2017**, 29, 035003	1.8	39
256	Electric- and magnetic-field dependence of the electronic and optical properties of phosphorene quantum dots. *Nanotechnology*, **2017**, 28, 085702	3.4	22
255	Electronic properties of bilayer phosphorene quantum dots in the presence of perpendicular electric and magnetic fields. *Physical Review B*, **2017**, 96,	3.3	21
254	Normal and skewed phosphorene nanoribbons in combined magnetic and electric fields. *Physical Review B*, **2017**, 96,	3.3	7
253	Wigner crystallization in transition metal dichalcogenides: A new approach to correlation energy. *Physical Review B*, **2017**, 95,	3.3	12
252	Tight-binding model investigation of the biaxial strain induced topological phase transition in GeCH3. *Physical Review B*, **2017**, 96,	3.3	9
251	Inhomogeneous phases in coupled electron-hole bilayer graphene sheets: Charge Density Waves and Coupled Wigner Crystals. *Scientific Reports*, **2017**, 7, 11510	4.9	7
250	Tuning a circular p-n junction in graphene from quantum confinement to optical guiding. *Nature Nanotechnology*, **2017**, 12, 1045-1049	28.7	50
249	Landau levels in biased graphene structures with monolayer-bilayer interfaces. *Physical Review B*, **2017**, 96,	3.3	4
248	Graphene membrane as a pressure gauge. *Applied Physics Letters*, **2017**, 111, 043101	3.4	6
247	Electrostatically confined trilayer graphene quantum dots. *Physical Review B*, **2017**, 95,	3.3	6
246	Self-assembly of rigid magnetic rods consisting of single dipolar beads in two dimensions. *Physical Review E*, **2017**, 96, 012603	2.4	7
245	Quantum transport across van der Waals domain walls in bilayer graphene. *Journal of Physics Condensed Matter*, **2017**, 29, 425303	1.8	11
244	Spatial design and control of graphene flake motion. *Physical Review B*, **2017**, 96,	3.3	2
243	Strong anisotropic optical conductivity in two-dimensional puckered structures: The role of the Rashba effect. *Physical Review B*, **2017**, 96,	3.3	10
242	Free surfaces recast superconductivity in few-monolayer MgB: Combined first-principles and ARPES demonstration. *Scientific Reports*, **2017**, 7, 14458	4.9	16
241	New group-V elemental bilayers: A tunable structure model with four-, six-, and eight-atom rings. *Physical Review B*, **2017**, 96,	3.3	12

240	Aharonov-Bohm oscillations in phosphorene quantum rings. *Physical Review B*, **2017**, 95,	3.3	12
239	Structure and reentrant percolation in an inverse patchy colloidal system. *Physical Review E*, **2017**, 95, 062606	2.4	5
238	Monolayer alkali and transition-metal monoxides: MgO, CaO, MnO, and NiO. *Physical Review B*, **2017**, 95,	3.3	19
237	Multicomponent Electron-Hole Superfluidity and the BCS-BEC Crossover in Double Bilayer Graphene. *Physical Review Letters*, **2017**, 119, 257002	7.4	14
236	Piezoelectricity in asymmetrically strained bilayer graphene. *2D Materials*, **2016**, 3, 035015	5.9	10
235	All-strain based valley filter in graphene nanoribbons using snake states. *Physical Review B*, **2016**, 94,	3.3	23
234	Strain-induced topological phase transition in phosphorene and in phosphorene nanoribbons. *Physical Review B*, **2016**, 94,	3.3	66
233	Strong dichroic emission in the pseudo one dimensional material ZrS. *Nanoscale*, **2016**, 8, 16259-16265	7.7	48
232	Anomalous Dynamical Behavior of Freestanding Graphene Membranes. *Physical Review Letters*, **2016**, 117, 126801	7.4	39
231	Peculiar half-metallic state in zigzag nanoribbons of MoS2: Spin filtering. *Physical Review B*, **2016**, 94,	3.3	33
230	Electric-field-induced structural changes in water confined between two graphene layers. *Physical Review B*, **2016**, 94,	3.3	28
229	New family of graphene-based organic semiconductors: An investigation of photon-induced electronic structure manipulation in half-fluorinated graphene. *Physical Review B*, **2016**, 93,	3.3	4
228	Magnetic field dependence of energy levels in biased bilayer graphene quantum dots. *Physical Review B*, **2016**, 93,	3.3	17
227	Bilayer SnS2: Tunable stacking sequence by charging and loading pressure. *Physical Review B*, **2016**, 93,	3.3	33
226	Energy levels of hybrid monolayer-bilayer graphene quantum dots. *Physical Review B*, **2016**, 93,	3.3	20
225	N-doped graphene: Polarization effects and structural properties. *Physical Review B*, **2016**, 93,	3.3	15
224	Hexagonal-shaped monolayer-bilayer quantum disks in graphene: A tight-binding approach. *Physical Review B*, **2016**, 94,	3.3	6
223	Tunable skewed edges in puckered structures. *Physical Review B*, **2016**, 93,	3.3	26

222	Unusual lattice vibration characteristics in whiskers of the pseudo-one-dimensional titanium trisulfide TiS. *Nature Communications*, **2016**, 7, 12952	17.4	54
221	Large gap electron-hole superfluidity and shape resonances in coupled graphene nanoribbons. *Scientific Reports*, **2016**, 6, 24860	4.9	7
220	Mg(OH)2⁄WS2 van der Waals heterobilayer: Electric field tunable band-gap crossover. *Physical Review B*, **2016**, 94,	3.3	35
219	Infrared to terahertz optical conductivity of n-type and p-type monolayer MoS2 in the presence of Rashba spin-orbit coupling. *Physical Review B*, **2016**, 94,	3.3	14
218	Energy levels of ABC-stacked trilayer graphene quantum dots with infinite-mass boundary conditions. *Physical Review B*, **2016**, 94,	3.3	8
217	The 30-band k?´p theory of valley splitting in silicon thin layers. *Journal of Physics Condensed Matter* , **2016**, 28, 195303	1.8	1
216	Peculiar Piezoelectric Properties of Soft Two-Dimensional Materials. *Journal of Physical Chemistry C* , **2016**, 120, 13948-13953	3.8	32
215	Computing optical properties of ultra-thin crystals. *Wiley Interdisciplinary Reviews: Computational Molecular Science*, **2016**, 6, 351-368	7.9	13
214	Exciton pumping across type-I gallium chalcogenide heterojunctions. *Nanotechnology*, **2016**, 27, 065203	3.4	19
213	Gate tunable layer selectivity of transport in bilayer graphene nanostructures. *Europhysics Letters*, **2016**, 113, 17006	1.6	14
212	Mo2C as a high capacity anode material: a first-principles study. *Journal of Materials Chemistry A*, **2016**, 4, 6029-6035	13	179
211	Commensurability Effects in Viscosity of Nanoconfined Water. *ACS Nano*, **2016**, 10, 3685-92	16.7	141
210	Characterization of the size and position of electron-hole puddles at a graphene p-n junction. *Nanotechnology*, **2016**, 27, 105203	3.4	2
209	Realization of a tunable artificial atom at a supercritically charged vacancy in graphene. *Nature Physics*, **2016**, 12, 545-549	16.2	87
208	Nitrogenated, phosphorated and arsenicated monolayer holey graphenes. *Physical Chemistry Chemical Physics*, **2016**, 18, 3144-50	3.6	49
207	Mechanical properties of monolayer GaS and GaSe crystals. *Physical Review B*, **2016**, 94,	3.3	82
206	Unusual dimensionality effects and surface charge density in 2D Mg(OH)2. *Scientific Reports*, **2016**, 6, 20525	4.9	38
205	Anisotropic electronic, mechanical, and optical properties of monolayer WTe2. *Journal of Applied Physics*, **2016**, 119, 074307	2.5	56

204	Strain controlled valley filtering in multi-terminal graphene structures. *Applied Physics Letters*, **2016**, 109, 203108	3.4	44
203	Nanoribbons: From fundamentals to state-of-the-art applications. *Applied Physics Reviews*, **2016**, 3, 041302	17.3	55
202	Structural, electronic and optical properties of Cu-doped ZnO: experimental and theoretical investigation. *Philosophical Magazine*, **2016**, 96, 1743-1756	1.6	25
201	Quantum-Transport Characteristics of a p-n Junction on Single-Layer TiS. *ChemPhysChem*, **2016**, 17, 3985-3991	3.2	6
200	Controlled growth mechanism of poly (3-hexylthiophene) nanowires. *Nanotechnology*, **2016**, 27, 455604	3.4	23
199	Tunable spin and charge transport in silicene nanoribbons. *Physical Review B*, **2015**, 92,	3.3	55
198	Terahertz plasmon-polariton modes in graphene driven by electric field inside a Fabry-Pérot cavity. *Journal of Applied Physics*, **2015**, 117, 223104	2.5	11
197	The Split-Operator Technique for the Study of Spinorial Wavepacket Dynamics. *Communications in Computational Physics*, **2015**, 17, 850-866	2.4	21
196	Environmental Changes in MoTe2 Excitonic Dynamics by Defects-Activated Molecular Interaction. *ACS Nano*, **2015**, 9, 5326-32	16.7	144
195	Vacancy Formation and Oxidation Characteristics of Single Layer TiS3. *Journal of Physical Chemistry C*, **2015**, 119, 10709-10715	3.8	44
194	Tuning Carrier Confinement in the MoS2/WS2 Lateral Heterostructure. *Journal of Physical Chemistry C*, **2015**, 119, 9580-9586	3.8	65
193	Mechanical properties of monolayer sulphides: a comparative study between MoS2, HfS2 and TiS3. *Physical Chemistry Chemical Physics*, **2015**, 17, 27742-9	3.6	78
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