Vincent Meunier

List of Publications by Year in Descending Order

296 papers	19,097 citations	68 h-index	132 g-index
317 ext. papers	21,438 ext. citations	8.1 avg, IF	6.78 L-index

#	Paper	IF	Citations
296	Electronic properties of boron-rich graphene nanowiggles. *Computational Materials Science*, **2022**, 201, 110907	3.2	0
295	Exact and many-body perturbation solutions of the Hubbard model applied to linear chains. *AIP Advances*, **2022**, 12, 035238	1.5	
294	Electronic properties of 2D and 1D carbon allotropes based on a triphenylene structural unit. *Physical Chemistry Chemical Physics*, **2021**, 23, 25114-25125	3.6	0
293	Voltage-Dependent Barrier Height of Electron Transport through Iron Porphyrin Molecular Junctions. *Journal of Physical Chemistry C*, **2021**, 125, 7350-7357	3.8	1
292	Semi-empirical many-body formalism of optical absorption in nanosystems and molecules. *Carbon Trends*, **2021**, 4, 100073	0	2
291	Electronic properties of N-rich graphene nano-chevrons. *Physical Chemistry Chemical Physics*, **2021**, 23, 13204-13215	3.6	1
290	Localization of lattice dynamics in low-angle twisted bilayer graphene. *Nature*, **2021**, 590, 405-409	50.4	46
289	Low-frequency Raman signature of Ag-intercalated few-layer MoS2. *2D Materials*, **2021**, 8, 025031	5.9	5
288	Partial charge transfer and absence of induced magnetization in EuS(111)/Bi2Se3 heterostructures. *Physical Review B*, **2021**, 104,	3.3	2
287	Structural and electronic properties of double-walled graphyne nanotubes. *Computational Materials Science*, **2021**, 200, 110768	3.2	
286	Highly Selective, Defect-Induced Photocatalytic CO Reduction to Acetaldehyde by the Nb-Doped TiO Nanotube Array under Simulated Solar Illumination. *ACS Applied Materials & Interfaces*, **2020**, 12, 55982-55993	9.5	11
285	Electronic and structural properties of tetragraphenes. *Carbon*, **2020**, 167, 403-413	10.4	5
284	Substitutional transition metal doping in MoS2: a first-principles study. *Nano Express*, **2020**, 1, 010008	2	6
283	Reversible Pressure-Induced Partial Phase Transition in Few-Layer Black Phosphorus. *Nano Letters*, **2020**, 20, 5929-5935	11.5	7
282	Soliton signature in the phonon spectrum of twisted bilayer graphene. *2D Materials*, **2020**, 7, 025050	5.9	16
281	Massive Dirac Fermion Behavior in a Low Bandgap Graphene Nanoribbon Near a Topological Phase Boundary. *Advanced Materials*, **2020**, 32, e1906054	24	24
280	Carbon science perspective in 2020: Current research and future challenges. *Carbon*, **2020**, 161, 373-391	10.4	35

279	Sculpting Artificial Edges in Monolayer MoS for Controlled Formation of Surface-Enhanced Raman Hotspots. *ACS Nano*, **2020**, 14, 6258-6268	16.7	17
278	An Environmentally Stable and Lead-Free Chalcogenide Perovskite. *Advanced Functional Materials*, **2020**, 30, 2001387	15.6	23
277	Enabling room temperature ferromagnetism in monolayer MoS via in situ iron-doping. *Nature Communications*, **2020**, 11, 2034	17.4	46
276	Naphthylene-□1D and 2D carbon allotropes based on the fusion of phenyl- and naphthyl-like groups. *Physical Review Materials*, **2020**, 4,	3.2	1
275	The effects of substitutional Fe-doping on magnetism in MoS2 and WS2 monolayers. *Nanotechnology*, **2020**,	3.4	6
274	In-plane breathing and shear modes in low-dimensional nanostructures. *Carbon*, **2020**, 157, 364-370	10.4	6
273	Engineering Three-Dimensional (3D) Out-of-Plane Graphene Edge Sites for Highly Selective Two-Electron Oxygen Reduction Electrocatalysis. *ACS Catalysis*, **2020**, 10, 1993-2008	13.1	57
272	Machine-learning models for Raman spectra analysis of twisted bilayer graphene. *Carbon*, **2020**, 169, 455-464	10.4	8
271	Tripentaphenes: two-dimensional acepentalene-based nanocarbon allotropes. *Physical Chemistry Chemical Physics*, **2020**, 22, 23195-23206	3.6	2
270	Optimized Substrates and Measurement Approaches for Raman Spectroscopy of Graphene Nanoribbons. *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1900343	1.3	13
269	Theoretical analysis of spectral lineshapes from molecular dynamics. *Npj Computational Materials*, **2019**, 5,	10.9	5
268	Magnetic Proximity Coupling of Quantum Emitters in WSe to van der Waals Ferromagnets. *Nano Letters*, **2019**, 19, 7301-7308	11.5	12
267	A Universal Length-Dependent Vibrational Mode in Graphene Nanoribbons. *ACS Nano*, **2019**, 13, 13083-13091	13.7	15
266	Excitation to defect-bound band edge states in two-dimensional semiconductors and its effect on carrier transport. *Npj Computational Materials*, **2019**, 5,	10.9	13
265	Isotope-Engineering the Thermal Conductivity of Two-Dimensional MoS. *ACS Nano*, **2019**, 13, 2481-2489	16.7	32
264	Improved model of ionic transport in 2-D MoS2 membranes with sub-5 nm pores. *Applied Physics Letters*, **2019**, 114, 023107	3.4	15
263	Modeling the Kondo effect of a magnetic atom adsorbed on graphene. *2D Materials*, **2019**, 6, 035038	5.9	3
262	On-Surface Synthesis and Characterization of Acene-Based Nanoribbons Incorporating Four-Membered Rings. *Chemistry - A European Journal*, **2019**, 25, 12074-12082	4.8	18

261	Vanadium disulfide flakes with nanolayered titanium disulfide coating as cathode materials in lithium-ion batteries. *Nature Communications*, **2019**, 10, 1764	17.4	42
260	An unexpected organometallic intermediate in surface-confined Ullmann coupling. *Nanoscale*, **2019**, 11, 7682-7689	7.7	19
259	Surface-Synthesized Graphene Nanoribbons for Room Temperature Switching Devices: Substrate Transfer and ex Situ Characterization. *ACS Applied Nano Materials*, **2019**, 2, 2184-2192	5.6	49
258	Carbon nanotube knots. *AIP Advances*, **2019**, 9, 025030	1.5	5
257	Phonon Anharmonicity in Few-Layer Black Phosphorus. *ACS Nano*, **2019**, 13, 10456-10468	16.7	18
256	Naphthylenes: 1D and 2D carbon allotropes based on naphthyl units. *Carbon*, **2019**, 153, 792-803	10.4	7
255	Effect of substitutional impurities on vibrational properties of zircon: a first-principles study. *Journal of Physics Condensed Matter*, **2019**, 31, 455402	1.8	1
254	Direct Observation of Symmetry-Dependent Electron-Phonon Coupling in Black Phosphorus. *Journal of the American Chemical Society*, **2019**, 141, 18994-19001	16.4	10
253	Electronic properties of tetragraphene nanoribbons. *Physical Review Materials*, **2019**, 3,	3.2	7
252	Structural and electronic properties of nanotubes constructed from fragmented fullerenes. *Carbon*, **2019**, 147, 616-627	10.4	4
251	Molecular Dynamics Investigation of Polylysine Peptide Translocation through MoS Nanopores. *Journal of Physical Chemistry B*, **2019**, 123, 2342-2353	3.4	11
250	First-principles study of the thermodynamic and vibrational properties of ReS2 under pressure. *Physical Review B*, **2019**, 100,	3.3	5
249	Spin dependent transport in hybrid one dimensional BNC systems. *Semiconductor Science and Technology*, **2019**, 34, 015004	1.8	1
248	Shell model extension to the valence force field: application to single-layer black phosphorus. *Physical Chemistry Chemical Physics*, **2018**, 21, 322-328	3.6	5
247	A carbon science perspective in 2018: Current achievements and future challenges. *Carbon*, **2018**, 132, 785-801	10.4	59
246	Quantum oscillation in carrier transport in two-dimensional junctions. *Nanoscale*, **2018**, 10, 7912-7917	7.7	5
245	Electronic characterization of silicon intercalated chevron graphene nanoribbons on Au(111). *Chemical Communications*, **2018**, 54, 1619-1622	5.8	14
244	First-principles simulation of local response in transition metal dichalcogenides under electron irradiation. *Nanoscale*, **2018**, 10, 2388-2397	7.7	22

243	Revealing out-of-equilibrium hidden phases in Sr3Ru2O7 by applying stress. *Physical Review B*, **2018**, 97,	3.3	1
242	Stochasticity in materials structure, properties, and processing-A review. *Applied Physics Reviews*, **2018**, 5,	17.3	10
241	Effect of pressure on the Raman-active modes of zircon (ZrSiO4): a first-principles study. *Physics and Chemistry of Minerals*, **2018**, 45, 173-184	1.6	8
240	Engineering of robust topological quantum phases in graphene nanoribbons. *Nature*, **2018**, 560, 209-213	50.4	227
239	Finite temperature stability of single-layer black and blue phosphorus adsorbed on Au(1 1 1): a first-principles study. *2D Materials*, **2018**, 5, 035044	5.9	11
238	High efficiency spin-valve and spin-filter in a doped rhombic graphene quantum dot device. *Journal of Magnetism and Magnetic Materials*, **2018**, 451, 532-539	2.8	3
237	Theoretical and Experimental Insight into the Mechanism for Spontaneous Vertical Growth of ReS2 Nanosheets. *Advanced Functional Materials*, **2018**, 28, 1801286	15.6	23
236	On-Surface Synthesis and Characterization of 9-Atom Wide Armchair Graphene Nanoribbons. *ACS Nano*, **2017**, 11, 1380-1388	16.7	196
235	Quantum-Confined Stark Effect of Individual Defects in a van der Waals Heterostructure. *Nano Letters*, **2017**, 17, 2253-2258	11.5	55
234	Pressure Tuning of Bromine Ionic States in Double-Walled Carbon Nanotubes. *Journal of Physical Chemistry C*, **2017**, 121, 10609-10619	3.8	6
233	Nonmagnetic Quantum Emitters in Boron Nitride with Ultranarrow and Sideband-Free Emission Spectra. *ACS Nano*, **2017**, 11, 6652-6660	16.7	78
232	Nanowire-Mesh-Templated Growth of Out-of-Plane Three-Dimensional Fuzzy Graphene. *ACS Nano*, **2017**, 11, 6301-6311	16.7	31
231	Quantum Dots in Graphene Nanoribbons. *Nano Letters*, **2017**, 17, 4277-4283	11.5	74
230	Quantum confinement in black phosphorus-based nanostructures. *Journal of Physics Condensed Matter*, **2017**, 29, 283001	1.8	15
229	Heteroatom-Doped Perihexacene from a Double Helicene Precursor: On-Surface Synthesis and Properties. *Journal of the American Chemical Society*, **2017**, 139, 4671-4674	16.4	44
228	Revealing the Electronic Structure of Silicon Intercalated Armchair Graphene Nanoribbons by Scanning Tunneling Spectroscopy. *Nano Letters*, **2017**, 17, 2197-2203	11.5	72
227	Charged defects in two-dimensional semiconductors of arbitrary thickness and geometry: Formulation and application to few-layer black phosphorus. *Physical Review B*, **2017**, 96,	3.3	20
226	Interlayer bond polarizability model for stacking-dependent low-frequency Raman scattering in layered materials. *Nanoscale*, **2017**, 9, 15340-15355	7.7	32

225	Predicting hidden bulk phases from surface phases in bilayered SrRuO. *Scientific Reports*, **2017**, 7, 10265	4.9	3
224	Seamless Staircase Electrical Contact to Semiconducting Graphene Nanoribbons. *Nano Letters*, **2017**, 17, 6241-6247	11.5	51
223	One- and two-dimensional carbon nanostructures based on unfolded buckyballs: An ab initio investigation of their electronic properties. *Physical Review B*, **2017**, 95,	3.3	10
222	Anomalous vibrational modes in few layer WTe 2 revealed by polarized Raman scattering and first-principles calculations. *2D Materials*, **2017**, 4, 035024	5.9	21
221	Half-metallic ferromagnetism in Sr3Ru2O7. *Physical Review B*, **2017**, 95,	3.3	8
220	On-Surface Cyclization of ortho-Dihalotetracenes to Four- and Six-Membered Rings. *Journal of the American Chemical Society*, **2017**, 139, 17617-17623	16.4	52
219	Low-Frequency Shear and Layer-Breathing Modes in Raman Scattering of Two-Dimensional Materials. *ACS Nano*, **2017**, 11, 11777-11802	16.7	109
218	Periodic Arrays of Phosphorene Nanopores as Antidot Lattices with Tunable Properties. *ACS Nano*, **2017**, 11, 7494-7507	16.7	29
217	Atomic-layered MoS2 on SiO2 under high pressure: Bimodal adhesion and biaxial strain effects. *Physical Review Materials*, **2017**, 1,	3.2	16
216	Charged iodide in chains behind the highly efficient iodine doping in carbon nanotubes. *Physical Review Materials*, **2017**, 1,	3.2	19
215	Phonon-Enabled Carrier Transport of Localized States at Non-Polar Semiconductor Surfaces: A First-Principles-Based Prediction. *Journal of Physical Chemistry Letters*, **2016**, 7, 3548-53	6.4	5
214	Mechanistic Picture and Kinetic Analysis of Surface-Confined Ullmann Polymerization. *Journal of the American Chemical Society*, **2016**, 138, 16696-16702	16.4	63
213	Electronic, vibrational, Raman, and scanning tunneling microscopy signatures of two-dimensional boron nanomaterials. *Physical Review B*, **2016**, 94,	3.3	11
212	Transition-Metal Substitution Doping in Synthetic Atomically Thin Semiconductors. *Advanced Materials*, **2016**, 28, 9735-9743	24	145
211	Electronic, structural, and magnetic properties of LaMnO3 phase transition at high temperature. *Physical Review B*, **2016**, 93,	3.3	27
210	Uniaxial pressure-induced half-metallic ferromagnetic phase transition in LaMnO3. *Physical Review B*, **2016**, 93,	3.3	15
209	Physical properties of low-dimensional sp2-based carbon nanostructures. *Reviews of Modern Physics*, **2016**, 88,	40.5	127
208	Catalytic Dealkylation of Ethers to Alcohols on Metal Surfaces. *Angewandte Chemie - International Edition*, **2016**, 55, 9881-5	16.4	17

207	The role of collective motion in the ultrafast charge transfer in van der Waals heterostructures. *Nature Communications*, **2016**, 7, 11504	17.4	79
206	Catalytic Dealkylation of Ethers to Alcohols on Metal Surfaces. *Angewandte Chemie*, **2016**, 128, 10035-10039	3.8	6
205	Low-Frequency Interlayer Raman Modes to Probe Interface of Twisted Bilayer MoS2. *Nano Letters*, **2016**, 16, 1435-44	11.5	130
204	Twisted MoSe□Bilayers with Variable Local Stacking and Interlayer Coupling Revealed by Low-Frequency Raman Spectroscopy. *ACS Nano*, **2016**, 10, 2736-44	16.7	95
203	Raman Shifts in Electron-Irradiated Monolayer MoS2. *ACS Nano*, **2016**, 10, 4134-42	16.7	226
202	Anisotropic Electron-Photon and Electron-Phonon Interactions in Black Phosphorus. *Nano Letters*, **2016**, 16, 2260-7	11.5	266
201	Investigating Orientational Defects in Energetic Material RDX Using First-Principles Calculations. *Journal of Physical Chemistry A*, **2016**, 120, 1917-24	2.8	6
200	Ultrathin nanosheets of CrSiTe3: a semiconducting two-dimensional ferromagnetic material. *Journal of Materials Chemistry C*, **2016**, 4, 315-322	7.1	171
199	Quasi one-dimensional band dispersion and surface metallization in long-range ordered polymeric wires. *Nature Communications*, **2016**, 7, 10235	17.4	79
198	Electronic, transport, and magnetic properties of punctured carbon nanotubes. *Physical Review B*, **2016**, 94,	3.3	2
197	Controlled Sculpture of Black Phosphorus Nanoribbons. *ACS Nano*, **2016**, 10, 5687-95	16.7	84
196	Width and Crystal Orientation Dependent Band Gap Renormalization in Substrate-Supported Graphene Nanoribbons. *Journal of Physical Chemistry Letters*, **2016**, 7, 1526-33	6.4	40
195	Graphene ripples as a realization of a two-dimensional Ising model: A scanning tunneling microscope study. *Physical Review B*, **2015**, 91,	3.3	19
194	Improved all-carbon spintronic device design. *Scientific Reports*, **2015**, 5, 7634	4.9	38
193	Low-Frequency Raman Fingerprints of Two-Dimensional Metal Dichalcogenide Layer Stacking Configurations. *ACS Nano*, **2015**, 9, 6333-42	16.7	121
192	Low-Frequency Interlayer Breathing Modes in Few-Layer Black Phosphorus. *Nano Letters*, **2015**, 15, 4080-8	11.5	154
191	Temperature-dependent and bistable current-voltage measurements in zinc porphyrin molecular junctions. *ACS Applied Materials & Interfaces*, **2015**, 7, 10085-90	9.5	4
190	Molecular selectivity of graphene-enhanced Raman scattering. *Nano Letters*, **2015**, 15, 2892-901	11.5	136

189	Ultrasensitive gas detection of large-area boron-doped graphene. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 14527-32	11.5	146
188	Recent Advances in Two-Dimensional Materials beyond Graphene. *ACS Nano*, **2015**, 9, 11509-39	16.7	1581
187	Charge carrier transport and separation in pristine and nitrogen-doped graphene nanowiggle heterostructures. *Carbon*, **2015**, 95, 833-842	10.4	13
186	On-Surface Synthesis of BN-Substituted Heteroaromatic Networks. *ACS Nano*, **2015**, 9, 9228-35	16.7	64
185	Elastic, plastic, and fracture mechanisms in graphene materials. *Journal of Physics Condensed Matter* , **2015**, 27, 373002	1.8	22
184	Enhanced Raman Scattering on In-Plane Anisotropic Layered Materials. *Journal of the American Chemical Society*, **2015**, 137, 15511-7	16.4	97
183	Up and down translocation events and electric double-layer formation inside solid-state nanopores. *Physical Review E*, **2015**, 92, 022715	2.4	3
182	(Invited) Microscopic Studies of Black Phosphorus and Its Field-Effect Transistors. *ECS Transactions*, **2015**, 69, 93-104	1	
181	Electronic, structural, and substrate effect properties of single-layer covalent organic frameworks. *Journal of Chemical Physics*, **2015**, 142, 184708	3.9	15
180	DNA Translocation in Nanometer Thick Silicon Nanopores. *ACS Nano*, **2015**, 9, 6555-64	16.7	62
179	Electronic transport of recrystallized freestanding graphene nanoribbons. *ACS Nano*, **2015**, 9, 3510-20	16.7	43
178	Atomically Precise Graphene Nanoribbon Heterojunctions for Excitonic Solar Cells. *Journal of Physical Chemistry C*, **2015**, 119, 775-783	3.8	28
177	Electrolyte Diffusion in Gyroidal Nanoporous Carbon. *Journal of Physical Chemistry C*, **2015**, 119, 2896-2908	3.8	6
176	First-principles Raman spectra of MoS2, WS2 and their heterostructures. *Nanoscale*, **2014**, 6, 5394-401	7.7	261
175	Electronic transport properties in graphene oxide frameworks. *Physical Review B*, **2014**, 89,	3.3	9
174	Nonlinear photon-assisted tunneling transport in optical gap antennas. *Nano Letters*, **2014**, 14, 2330-8	11.5	53
173	Electronic bandgap and edge reconstruction in phosphorene materials. *Nano Letters*, **2014**, 14, 6400-6	11.5	365
172	Reply to "comment on 'insight into organometallic intermediate and its evolution to covalent bonding in surface-confined Ullmann polymerization'". *ACS Nano*, **2014**, 8, 1969-71	16.7	17

171	Graphene nanoribbon heterojunctions. *Nature Nanotechnology*, **2014**, 9, 896-900	28.7	443
170	Electronic and magnetic structures of coronene-based graphitic nanoribbons. *Physical Chemistry Chemical Physics*, **2014**, 16, 3603-9	3.6	8
169	Interfacial properties and design of functional energy materials. *Accounts of Chemical Research*, **2014**, 47, 3395-405	24.3	13
168	Carbon kagome lattice and orbital-frustration-induced metal-insulator transition for optoelectronics. *Physical Review Letters*, **2014**, 113, 085501	7.4	38
167	Emergent magnetism in irradiated graphene nanostructures. *Carbon*, **2014**, 78, 196-203	10.4	7
166	Probing the interlayer coupling of twisted bilayer MoS2 using photoluminescence spectroscopy. *Nano Letters*, **2014**, 14, 5500-8	11.5	168
165	Tunable water desalination across graphene oxide framework membranes. *Physical Chemistry Chemical Physics*, **2014**, 16, 8646-54	3.6	159
164	Heterospin Junctions in Zigzag-Edged Graphene Nanoribbons. *Applied Sciences (Switzerland)*, **2014**, 4, 351-365	2.6	1
163	Electronic transport in three-terminal triangular carbon nanopatches. *Nanotechnology*, **2014**, 25, 045706	3.4	3
162	Quantifying energetics of topological frustration in carbon nanostructures. *Physical Review B*, **2014**, 89,	3.3	9
161	Electronic properties of three-terminal graphitic nanowiggles. *Physical Review B*, **2014**, 90,	3.3	2
160	Role of antiferromagnetic ordering in the (1□) surface reconstruction of Ca(Fe(1-x)Co(x))2As2. *Physical Review Letters*, **2014**, 112, 077205	7.4	6
159	Nanoribbons: Nitrogen-Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport (Adv. Funct. Mater. 30/2013). *Advanced Functional Materials*, **2013**, 23, 3714-3714	15.6	
158	Electronic and thermoelectric properties of assembled graphene nanoribbons with elastic strain and structural dislocation. *Applied Physics Letters*, **2013**, 102, 143101	3.4	25
157	A reversible strain-induced electrical conductivity in cup-stacked carbon nanotubes. *Nanoscale*, **2013**, 5, 10212-8	7.7	10
156	Quasiparticle band gaps of graphene nanowiggles and their magnetism on Au(111). *Physical Review B*, **2013**, 88,	3.3	14
155	Nitrogen-Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport. *Advanced Functional Materials*, **2013**, 23, 3755-3762	15.6	28
154	Electronic Transport in Graphitic Carbon Nanoribbons **2013**, 319-346		2

153	Patchwork algorithm for the parallel computation of the Green function in open systems. *Journal of Computational Electronics*, **2013**, 12, 123-133	1.8	14
152	Molecular Dynamics Simulations of Graphene Oxide Frameworks. *Journal of Chemical Theory and Computation*, **2013**, 9, 4890-900	6.4	27
151	Iron Particle Nanodrilling of Few Layer Graphene at Low Electron Beam Accelerating Voltages. *Particle and Particle Systems Characterization*, **2013**, 30, 76-82	3.1	8
150	Nanodrilling: Iron Particle Nanodrilling of Few Layer Graphene at Low Electron Beam Accelerating Voltages (Part. Part. Syst. Charact. 1/2013). *Particle and Particle Systems Characterization*, **2013**, 30, 75-75	3.1	
149	Opening a large band gap for graphene by covalent addition. *Chemical Physics Letters*, **2013**, 555, 1-6	2.5	15
148	Modern Theories of Carbon-Based Electrochemical Capacitors **2013**, 167-206		6
147	Electronic, Thermal, and Structural Properties of Graphene Oxide Frameworks. *Journal of Physical Chemistry C*, **2013**, 117, 8276-8281	3.8	22
146	Edge-edge interactions in stacked graphene nanoplatelets. *ACS Nano*, **2013**, 7, 2834-41	16.7	25
145	Electronic structure and transport properties of N2(AA)-doped armchair and zigzag graphene nanoribbons. *Nanotechnology*, **2013**, 24, 235701	3.4	9
144	Self-organized and cu-coordinated surface linear polymerization. *Scientific Reports*, **2013**, 3, 2102	4.9	23
143	Insight into organometallic intermediate and its evolution to covalent bonding in surface-confined ullmann polymerization. *ACS Nano*, **2013**, 7, 8190-8	16.7	164
142	Defect-Driven Restructuring of TiO2 Surface and Modified Reactivity Toward Deposited Gold Atoms. *Catalysts*, **2013**, 3, 276-287	4	4
141	Electronic and transport properties of graphene nanoribbon barbell-shaped heterojunctions. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 2417-2423	1.3	3
140	Dynamical properties of carbon nanotube welding into X junctions. *Physical Review B*, **2013**, 88,	3.3	6
139	Asymmetric electron transport and highest occupied molecular orbital assisted tunneling through Zn-porphyrin molecular junctions. *Applied Physics Letters*, **2013**, 103, 173101	3.4	6
138	Modeling and Simulation of Electron Transport at the Nanoscale: Illustrations in Low-Dimensional Carbon Nanostructures. *Advances in Atom and Single Molecule Machines*, **2013**, 123-133	0	
137	Electronic transport properties of assembled carbon nanoribbons. *ACS Nano*, **2012**, 6, 6483-91	16.7	25
136	Voltage Dependent Charge Storage Modes and Capacity in Subnanometer Pores. *Journal of Physical Chemistry Letters*, **2012**, 3, 1732-7	6.4	63

135	Electronic properties of two-dimensional covalent organic frameworks. *Journal of Chemical Physics*, **2012**, 137, 244703	3.9	44
134	Topographic and spectroscopic characterization of electronic edge states in CVD grown graphene nanoribbons. *Nano Letters*, **2012**, 12, 1928-33	11.5	97
133	Electronic structure of assembled graphene nanoribbons: Substrate and many-body effects. *Physical Review B*, **2012**, 86,	3.3	42
132	Clean nanotube unzipping by abrupt thermal expansion of molecular nitrogen: graphene nanoribbons with atomically smooth edges. *ACS Nano*, **2012**, 6, 2261-72	16.7	48
131	Structural and electronic properties of graphitic nanowiggles. *Physical Review B*, **2012**, 85,	3.3	21
130	Advancing Understanding and Design of Functional Materials Through Theoretical and Computational Chemical Physics **2012**, 209-278		3
129	Geometric and Electronic Structure of Closed Graphene Edges. *Journal of Physical Chemistry Letters* , **2012**, 3, 2097-2102	6.4	16
128	Can computational approaches aid in untangling the inherent complexity of practical organic photovoltaic systems?. *Journal of Polymer Science, Part B: Polymer Physics*, **2012**, 50, 1071-1089	2.6	28
127	Covalently bonded three-dimensional carbon nanotube solids via boron induced nanojunctions. *Scientific Reports*, **2012**, 2, 363	4.9	300
126	Nanoscale Ferroelectricity in Crystalline Glycine. *Advanced Functional Materials*, **2012**, 22, 2996-3003	15.6	94
125	Enhanced thermoelectric figure of merit in assembled graphene nanoribbons. *Physical Review B*, **2012**, 86,	3.3	68
124	Facet-insensitive graphene growth on copper. *Physical Review B*, **2012**, 85,	3.3	43
123	Millimeter-long carbon nanotubes: outstanding electron-emitting sources. *ACS Nano*, **2011**, 5, 5072-7	16.7	44
122	Complex capacitance scaling in ionic liquids-filled nanopores. *ACS Nano*, **2011**, 5, 9044-51	16.7	161
121	Structural, magnetic, and transport properties of substitutionally doped graphene nanoribbons from first principles. *Physical Review B*, **2011**, 83,	3.3	117
120	Emergence of atypical properties in assembled graphene nanoribbons. *Physical Review Letters*, **2011**, 107, 135501	7.4	65
119	Quantum transport in graphene nanonetworks. *Nano Letters*, **2011**, 11, 3058-64	11.5	55
118	Ultrathin planar graphene supercapacitors. *Nano Letters*, **2011**, 11, 1423-7	11.5	1020

117	A "counter-charge layer in generalized solvents" framework for electrical double layers in neat and hybrid ionic liquid electrolytes. *Physical Chemistry Chemical Physics*, **2011**, 13, 14723-34	3.6	75
116	Theory of zwitterionic molecular-based organic magnets. *Chemical Physics Letters*, **2011**, 511, 294-298	2.5	7
115	Graphene edges: a review of their fabrication and characterization. *Nanoscale*, **2011**, 3, 86-95	7.7	353
114	The importance of ion size and electrode curvature on electrical double layers in ionic liquids. *Physical Chemistry Chemical Physics*, **2011**, 13, 1152-61	3.6	151
113	Phosphorus and phosphorus-nitrogen doped carbon nanotubes for ultrasensitive and selective molecular detection. *Nanoscale*, **2011**, 3, 1008-13	7.7	74
112	Cyclo-biphenalenyl Biradicaloid Molecular Materials: Conformation, Tautomerization, Magnetism, and Thermochromism *Chemistry of Materials*, **2011**, 23, 874-885	9.6	15
111	Electronic transport properties of carbon nanotoroids. *Nanotechnology*, **2011**, 22, 075701	3.4	6
110	Evaluating the characteristics of multiwall carbon nanotubes. *Carbon*, **2011**, 49, 2581-2602	10.4	769
109	Electronic transmission selectivity in multiterminal graphitic nanorings. *Applied Physics Letters*, **2011**, 98, 112111	3.4	5
108	Evidence of Coulomb blockade behavior in a quasi-zero-dimensional quantum well on TiO2 surface. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 14968-72	11.5	1
107	Effect of diffuse layer and pore shapes in mesoporous carbon supercapacitors. *Journal of Materials Research*, **2010**, 25, 1469-1475	2.5	46
106	Electron transport in multiterminal molecular devices: A density functional theory study. *Physical Review B*, **2010**, 81,	3.3	11
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