Viet Hung Nguyen

List of Publications by Year in Descending Order

66 papers	1,198 citations	21 h-index	32 g-index
79 ext. papers	1,470 ext. citations	4.4 avg, IF	4.54 L-index

#	Paper	IF	Citations
66	Localization of lattice dynamics in low-angle twisted bilayer graphene. *Nature*, **2021**, 590, 405-409	50.4	46
65	Computational Atomistic Modeling in Carbon Flatland and Other 2D Nanomaterials. *Applied Sciences (Switzerland)*, **2020**, 10, 1724	2.6	1
64	Strain Modulated Superlattices in Graphene. *Nano Letters*, **2020**, 20, 3113-3121	11.5	21
63	Optimizing Dirac fermions quasi-confinement by potential smoothness engineering. *2D Materials*, **2020**, 7, 025037	5.9	3
62	AharonovBohm interferences in polycrystalline graphene. *Nanoscale Advances*, **2020**, 2, 256-263	5.1	3
61	Stepped graphene-based AharonovBohm interferometers. *2D Materials*, **2019**, 6, 045045	5.9	2
60	Imaging Dirac fermions flow through a circular Veselago lens. *Physical Review B*, **2019**, 100,	3.3	13
59	Ab initio quantum transport in polycrystalline graphene. *Nanoscale*, **2018**, 10, 7759-7768	7.7	7
58	Klein tunneling and electron optics in Dirac-Weyl fermion systems with tilted energy dispersion. *Physical Review B*, **2018**, 97,	3.3	29
57	Optical Hall effect in strained graphene. *2D Materials*, **2017**, 4, 025041	5.9	8
56	Comment on Orientation dependence of the optical spectra in graphene at high frequencies *Physical Review B*, **2016**, 94,	3.3	5
55	Transport gap in vertical devices made of incommensurately misoriented graphene layers. *Journal Physics D: Applied Physics*, **2016**, 49, 045306	3	1
54	Valley Filtering and Electronic Optics Using Polycrystalline Graphene. *Physical Review Letters*, **2016**, 117, 247702	7.4	29
53	Transport properties through graphene grain boundaries: strain effects versus lattice symmetry. *Nanoscale*, **2016**, 8, 11658-73	7.7	13
52	Enhanced Seebeck effect in graphene devices by strain and doping engineering. *Physica E: Low-Dimensional Systems and Nanostructures*, **2015**, 73, 207-212	3	16
51	Strain-induced conduction gap in vertical devices made of misoriented graphene layers. *Nanotechnology*, **2015**, 26, 115201	3.4	9
50	Strain-induced modulation of Dirac cones and van Hove singularities in a twisted graphene bilayer. *2D Materials*, **2015**, 2, 035005	5.9	12

49	Remote surface roughness scattering in fully depleted silicon-on-insulator devices with high-/SiO2 gate stacks. *Applied Physics Letters*, **2015**, 106, 023508	3.4	3
48	High thermoelectric figure of merit in devices made of vertically stacked graphene layers **2015**,		1
47	Strong negative differential resistance in graphene devices with local strain **2015**,		1
46	Strong negative differential conductance in strained graphene devices. *Journal of Applied Physics*, **2015**, 118, 234306	2.5	5
45	Thermoelectric effects in graphene nanostructures. *Journal of Physics Condensed Matter*, **2015**, 27, 133204	2.8	90
44	On the non-linear effects in graphene devices. *Journal Physics D: Applied Physics*, **2014**, 47, 094007	3	1
43	Quantum Modeling of the Carrier Mobility in FDSOI Devices. *IEEE Transactions on Electron Devices*, **2014**, 61, 3096-3102	2.9	20
42	Quantum calculations of the carrier mobility: Methodology, Matthiessen's rule, and comparison with semi-classical approaches. *Journal of Applied Physics*, **2014**, 115, 054512	2.5	38
41	Improved performance of graphene transistors by strain engineering. *Nanotechnology*, **2014**, 25, 165201	3.4	12
40	Few-electron edge-state quantum dots in a silicon nanowire field-effect transistor. *Nano Letters*, **2014**, 14, 2094-8	11.5	54
39	A Klein-tunneling transistor with ballistic graphene. *2D Materials*, **2014**, 1, 011006	5.9	42
38	Enhanced thermoelectric figure of merit in vertical graphene junctions. *Applied Physics Letters*, **2014**, 105, 133105	3.4	24
37	Conduction gap in graphene strain junctions: direction dependence. *Semiconductor Science and Technology*, **2014**, 29, 115024	1.8	8
36	The interplay between the Aharonov-Bohm interference and parity selective tunneling in graphene nanoribbon rings. *Journal of Physics Condensed Matter*, **2014**, 26, 205301	1.8	1
35	Aharonov-Bohm effect and giant magnetoresistance in graphene nanoribbon rings. *Physical Review B*, **2013**, 88,	3.3	13
34	Bandgap nanoengineering of graphene tunnel diodes and tunnel transistors to control the negative differential resistance. *Journal of Computational Electronics*, **2013**, 12, 85-93	1.8	25
33	Graphene nanomesh transistor with high on/off ratio and good saturation behavior. *Applied Physics Letters*, **2013**, 103, 183509	3.4	34
32	Multi-scale strategy for high-k/metal-gate UTBB-FDSOI devices modeling with emphasis on back bias impact on mobility. *Journal of Computational Electronics*, **2013**, 12, 675-684	1.8	6

31	Strain effects on transport properties of Si nanowire devices **2013**,		1
30	Disorder effects on electronic bandgap and transport in graphene-nanomesh-based structures. *Journal of Applied Physics*, **2013**, 113, 013702	2.5	29
29	Performances of Strained Nanowire Devices: Ballistic Versus Scattering-Limited Currents. *IEEE Transactions on Electron Devices*, **2013**, 60, 1506-1513	2.9	19
28	Pseudosaturation and Negative Differential Conductance in Graphene Field-Effect Transistors. *IEEE Transactions on Electron Devices*, **2013**, 60, 985-991	2.9	20
27	Gate-controllable negative differential conductance in graphene tunneling transistors. *Semiconductor Science and Technology*, **2012**, 27, 105018	1.8	13
26	Resonant tunnelling diodes based on graphene/h-BN heterostructure. *Journal Physics D: Applied Physics*, **2012**, 45, 325104	3	51
25	Transport behaviors in graphene field effect transistors on boron nitride substrate **2012**,		1
24	Graphene nanomesh-based devices exhibiting a strong negative differential conductance effect. *Nanotechnology*, **2012**, 23, 065201	3.4	30
23	Thermoelectric performance of disordered and nanostructured graphene ribbons using Greens function method. *Journal of Computational Electronics*, **2012**, 11, 67-77	1.8	28
22	Graphene nanomesh-based devices exhibiting a strong negative differential conductance effect. *Nanotechnology*, **2012**, 23, 289502	3.4	7
21	Enhanced thermoelectric properties in graphene nanoribbons by resonant tunneling of electrons. *Physical Review B*, **2011**, 83,	3.3	130
20	Giant effect of negative differential conductance in graphene nanoribbon p-n hetero-junctions. *Applied Physics Letters*, **2011**, 99, 042105	3.4	27
19	Large peak-to-valley ratio of negative-differential-conductance in graphene p-n junctions. *Journal of Applied Physics*, **2011**, 109, 093706	2.5	21
18	Resonant tunneling structures based on epitaxial graphene on SiC. *Semiconductor Science and Technology*, **2011**, 26, 125012	1.8	19
17	Spin-polarized current and tunneling magnetoresistance in ferromagnetic gate bilayer graphene structures. *Journal of Applied Physics*, **2011**, 109, 073717	2.5	17
16	Quantum transport of Dirac fermions in graphene field effect transistors **2010**,		2
15	The conduction gap in double gate bilayer graphene structures. *Journal of Physics Condensed Matter*, **2010**, 22, 115304	1.8	9
14	Spin-dependent transport in double ferromagnetic-gate graphene structures. *Journal of Physics: Conference Series*, **2009**, 187, 012037	0.3	2

13	Spin-dependent transport in armchair graphene nanoribbon structures with edge roughness effects. *Journal of Physics: Conference Series*, **2009**, 193, 012100	0.3	4
12	Resonant tunneling and negative transconductance in single barrier bilayer graphene structure. *Applied Physics Letters*, **2009**, 95, 232115	3.4	21
11	Controllable spin-dependent transport in armchair graphene nanoribbon structures. *Journal of Applied Physics*, **2009**, 106, 053710	2.5	44
10	Electronic transport and spin-polarization effects of relativisticlike particles in mesoscopic graphene structures. *Journal of Applied Physics*, **2008**, 104, 063708	2.5	56
9	Phonon-assisted tunneling and shot noise in double barrier structures in a longitudinal magnetic field. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2008**, 372, 4947-4952	2.3	
8	Current and shot noise in double barrier resonant tunneling structures in a longitudinal magnetic field. *Physical Review B*, **2007**, 76,	3.3	1
7	Coulomb blockade, current and shot noise in parallel double metallic quantum dot structures. *Journal of Physics Condensed Matter*, **2007**, 19, 026220	1.8	1
6	Cotunnelling versus sequential tunnelling in Coulomb blockade metallic double quantum dot structures. *Journal of Physics Condensed Matter*, **2006**, 18, 2729-2740	1.8	
5	Super-Poissonian noise in a Coulomb-blockade metallic quantum dot structure. *Physical Review B*, **2006**, 73,	3.3	7
4	Negative differential conductance in metallic double quantum dot structures. *Journal of Physics Condensed Matter*, **2005**, 17, 1157-1166	1.8	8
3	Shot noise in metallic double dot structures with a negative differential conductance. *Applied Physics Letters*, **2005**, 87, 123107	3.4	13
2	Coulomb blockade and negative differential conductance in metallic double-dot devices. *Journal of Applied Physics*, **2004**, 96, 3302-3306	2.5	10
1	Electronic localization in small-angle twisted bilayer graphene. *2D Materials*,	5.9	7