Viet Hung Nguyen

List of Publications by Citations

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	Enhanced thermoelectric properties in graphene nanoribbons by resonant tunneling of electrons. *Physical Review B*, **2011**, 83,	3.3	130
65	Thermoelectric effects in graphene nanostructures. *Journal of Physics Condensed Matter*, **2015**, 27, 133204	2.8	90
64	Electronic transport and spin-polarization effects of relativisticlike particles in mesoscopic graphene structures. *Journal of Applied Physics*, **2008**, 104, 063708	2.5	56
63	Few-electron edge-state quantum dots in a silicon nanowire field-effect transistor. *Nano Letters*, **2014**, 14, 2094-8	11.5	54
62	Resonant tunnelling diodes based on graphene/h-BN heterostructure. *Journal Physics D: Applied Physics*, **2012**, 45, 325104	3	51
61	Localization of lattice dynamics in low-angle twisted bilayer graphene. *Nature*, **2021**, 590, 405-409	50.4	46
60	Controllable spin-dependent transport in armchair graphene nanoribbon structures. *Journal of Applied Physics*, **2009**, 106, 053710	2.5	44
59	A Klein-tunneling transistor with ballistic graphene. *2D Materials*, **2014**, 1, 011006	5.9	42
58	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
57	Graphene nanomesh transistor with high on/off ratio and good saturation behavior. *Applied Physics Letters*, **2013**, 103, 183509	3.4	34
56	Graphene nanomesh-based devices exhibiting a strong negative differential conductance effect. *Nanotechnology*, **2012**, 23, 065201	3.4	30
55	Klein tunneling and electron optics in Dirac-Weyl fermion systems with tilted energy dispersion. *Physical Review B*, **2018**, 97,	3.3	29
54	Disorder effects on electronic bandgap and transport in graphene-nanomesh-based structures. *Journal of Applied Physics*, **2013**, 113, 013702	2.5	29
53	Valley Filtering and Electronic Optics Using Polycrystalline Graphene. *Physical Review Letters*, **2016**, 117, 247702	7.4	29
52	Thermoelectric performance of disordered and nanostructured graphene ribbons using Green's function method. *Journal of Computational Electronics*, **2012**, 11, 67-77	1.8	28
51	Giant effect of negative differential conductance in graphene nanoribbon p-n hetero-junctions. *Applied Physics Letters*, **2011**, 99, 042105	3.4	27
50	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

49	Enhanced thermoelectric figure of merit in vertical graphene junctions. *Applied Physics Letters*, **2014**, 105, 133105	3.4	24
48	Strain Modulated Superlattices in Graphene. *Nano Letters*, **2020**, 20, 3113-3121	11.5	21
47	Large peak-to-valley ratio of negative-differential-conductance in graphene p-n junctions. *Journal of Applied Physics*, **2011**, 109, 093706	2.5	21
46	Resonant tunneling and negative transconductance in single barrier bilayer graphene structure. *Applied Physics Letters*, **2009**, 95, 232115	3.4	21
45	Quantum Modeling of the Carrier Mobility in FDSOI Devices. *IEEE Transactions on Electron Devices*, **2014**, 61, 3096-3102	2.9	20
44	Pseudosaturation and Negative Differential Conductance in Graphene Field-Effect Transistors. *IEEE Transactions on Electron Devices*, **2013**, 60, 985-991	2.9	20
43	Performances of Strained Nanowire Devices: Ballistic Versus Scattering-Limited Currents. *IEEE Transactions on Electron Devices*, **2013**, 60, 1506-1513	2.9	19
42	Resonant tunneling structures based on epitaxial graphene on SiC. *Semiconductor Science and Technology*, **2011**, 26, 125012	1.8	19
41	Spin-polarized current and tunneling magnetoresistance in ferromagnetic gate bilayer graphene structures. *Journal of Applied Physics*, **2011**, 109, 073717	2.5	17
40	Enhanced Seebeck effect in graphene devices by strain and doping engineering. *Physica E: Low-Dimensional Systems and Nanostructures*, **2015**, 73, 207-212	3	16
39	Imaging Dirac fermions flow through a circular Veselago lens. *Physical Review B*, **2019**, 100,	3.3	13
38	Aharonov-Bohm effect and giant magnetoresistance in graphene nanoribbon rings. *Physical Review B*, **2013**, 88,	3.3	13
37	Gate-controllable negative differential conductance in graphene tunneling transistors. *Semiconductor Science and Technology*, **2012**, 27, 105018	1.8	13
36	Shot noise in metallic double dot structures with a negative differential conductance. *Applied Physics Letters*, **2005**, 87, 123107	3.4	13
35	Transport properties through graphene grain boundaries: strain effects versus lattice symmetry. *Nanoscale*, **2016**, 8, 11658-73	7.7	13
34	Strain-induced modulation of Dirac cones and van Hove singularities in a twisted graphene bilayer. *2D Materials*, **2015**, 2, 035005	5.9	12
33	Improved performance of graphene transistors by strain engineering. *Nanotechnology*, **2014**, 25, 165201	3.4	12
32	Coulomb blockade and negative differential conductance in metallic double-dot devices. *Journal of Applied Physics*, **2004**, 96, 3302-3306	2.5	10

31	Strain-induced conduction gap in vertical devices made of misoriented graphene layers. *Nanotechnology*, **2015**, 26, 115201	3.4	9
30	The conduction gap in double gate bilayer graphene structures. *Journal of Physics Condensed Matter*, **2010**, 22, 115304	1.8	9
29	Optical Hall effect in strained graphene. *2D Materials*, **2017**, 4, 025041	5.9	8
28	Conduction gap in graphene strain junctions: direction dependence. *Semiconductor Science and Technology*, **2014**, 29, 115024	1.8	8
27	Negative differential conductance in metallic double quantum dot structures. *Journal of Physics Condensed Matter*, **2005**, 17, 1157-1166	1.8	8
26	Ab initio quantum transport in polycrystalline graphene. *Nanoscale*, **2018**, 10, 7759-7768	7.7	7
25	Graphene nanomesh-based devices exhibiting a strong negative differential conductance effect. *Nanotechnology*, **2012**, 23, 289502	3.4	7
24	Super-Poissonian noise in a Coulomb-blockade metallic quantum dot structure. *Physical Review B*, **2006**, 73,	3.3	7
23	Electronic localization in small-angle twisted bilayer graphene. *2D Materials*,	5.9	7
22	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
21	Comment on □Orientation dependence of the optical spectra in graphene at high frequencies□ *Physical Review B*, **2016**, 94,	3.3	5
20	Strong negative differential conductance in strained graphene devices. *Journal of Applied Physics*, **2015**, 118, 234306	2.5	5
19	Spin-dependent transport in armchair graphene nanoribbon structures with edge roughness effects. *Journal of Physics: Conference Series*, **2009**, 193, 012100	0.3	4
18	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
17	Optimizing Dirac fermions quasi-confinement by potential smoothness engineering. *2D Materials*, **2020**, 7, 025037	5.9	3
16	Aharonov□Bohm interferences in polycrystalline graphene. *Nanoscale Advances*, **2020**, 2, 256-263	5.1	3
15	Stepped graphene-based Aharonov□Bohm interferometers. *2D Materials*, **2019**, 6, 045045	5.9	2
14	Quantum transport of Dirac fermions in graphene field effect transistors **2010**,		2

13	Spin-dependent transport in double ferromagnetic-gate graphene structures. *Journal of Physics: Conference Series*, **2009**, 187, 012037	0.3	2
12	High thermoelectric figure of merit in devices made of vertically stacked graphene layers **2015**,		1
11	Strong negative differential resistance in graphene devices with local strain **2015**,		1
10	Computational Atomistic Modeling in Carbon Flatland and Other 2D Nanomaterials. *Applied Sciences (Switzerland)*, **2020**, 10, 1724	2.6	1
9	Transport gap in vertical devices made of incommensurately misoriented graphene layers. *Journal Physics D: Applied Physics*, **2016**, 49, 045306	3	1
8	On the non-linear effects in graphene devices. *Journal Physics D: Applied Physics*, **2014**, 47, 094007	3	1
7	Strain effects on transport properties of Si nanowire devices **2013**,		1
6	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
5	Transport behaviors in graphene field effect transistors on boron nitride substrate **2012**,		1
4	Current and shot noise in double barrier resonant tunneling structures in a longitudinal magnetic field. *Physical Review B*, **2007**, 76,	3.3	1
3	Coulomb blockade, current and shot noise in parallel double metallic quantum dot structures. *Journal of Physics Condensed Matter*, **2007**, 19, 026220	1.8	1
2	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	
1	Cotunnelling versus sequential tunnelling in Coulomb blockade metallic double quantum dot structures. *Journal of Physics Condensed Matter*, **2006**, 18, 2729-2740	1.8	