Viet Hung Nguyen

List of Publications by Year
in descending order

79 papers	1,675 citations	236925 25 h-index	302126 39 g-index
79 all docs	79 docs citations	79 times ranked	1878 citing authors

#	Article	IF	Citations
1	Toward Optimized Charge Transport in Multilayer Reduced Graphene Oxides. Nano Letters, 2022, , .	9.1	3
2	Graphene Whisperitronics: Transducing Whispering Gallery Modes into Electronic Transport. Nano Letters, 2022, 22, 128-134.	9.1	6
3	Electronic properties of twisted multilayer graphene. JPhys Materials, 2022, 5, 034003.	4.2	11
4	Localization of lattice dynamics in low-angle twisted bilayer graphene. Nature, 2021, 590, 405-409.	27.8	139
5	Electronic localization in small-angle twisted bilayer graphene. 2D Materials, 2021, 8, 035046.	4.4	25
6	Aharonovâ€“Bohm interferences in polycrystalline graphene. Nanoscale Advances, 2020, 2, 256-263.	4.6	7
7	Computational Atomistic Modeling in Carbon Flatland and Other 2D Nanomaterials. Applied Sciences (Switzerland), 2020, 10, 1724.	2.5	2
8	Strain Modulated Superlattices in Graphene. Nano Letters, 2020, 20, 3113-3121.	9.1	46
9	Optimizing Dirac fermions quasi-confinement by potential smoothness engineering. 2D Materials, 2020, 7, 025037.	4.4	7
10	(Invited) Scanning Gate Imaging of Charge Transport in Graphene Nanodevices. ECS Meeting Abstracts, 2020, MA2020-01, 738-738.	0.0	0
11	Stepped graphene-based Aharonovâ€“Bohm interferometers. 2D Materials, 2019, 6, 045045.	4.4	5
12	Imaging Dirac fermions flow through a circular Veselago lens. Physical Review B, 2019, 100, .	3.2	31
13	Ab initioquantum transport in polycrystalline graphene. Nanoscale, 2018, 10, 7759-7768.	5.6	8
14	Klein tunneling and electron optics in Dirac-Weyl fermion systems with tilted energy dispersion. Physical Review B, 2018, 97, .	3.2	51
15	Optical Hall effect in strained graphene. 2D Materials, 2017, 4, 025041.	4.4	12
16	Valley Filtering and Electronic Optics Using Polycrystalline Graphene. Physical Review Letters, 2016, 117, 247702.	7.8	44
17	Thermoelectric effects in graphene and graphene-based nanostructures using atomistic simulation. , 2016, , .		2
18	Transport properties through graphene grain boundaries: strain effects versus lattice symmetry. Nanoscale, 2016, 8, 11658-11673.	5.6	15

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19	Comment on â€œOrientation dependence of the optical spectra in graphene at high frequenciesâ€. Physical Review B, 2016, 94, .	3.2	6
20	Transport gap in vertical devices made of incommensurately misoriented graphene layers. Journal Physics D: Applied Physics, 2016, 49, 045306.	2.8	1
21	Strong negative differential conductance in strained graphene devices. Journal of Applied Physics, 2015, 118, .	2.5	6
22	Thermoelectric effects in graphene nanostructures. Journal of Physics Condensed Matter, 2015, 27, 133204.	1.8	137
23	Enhanced Seebeck effect in graphene devices by strain and doping engineering. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 73, 207-212.	2.7	20
24	Strain-induced conduction gap in vertical devices made of misoriented graphene layers. Nanotechnology, 2015, 26, 115201.	2.6	12
25	Strain effects on the electronic properties of devices made of twisted graphene layers. , 2015, , .		0
26	Strain-induced modulation of Dirac cones and van Hove singularities in a twisted graphene bilayer. 2D Materials, 2015, 2, 035005.	4.4	18
27	Remote surface roughness scattering in fully depleted silicon-on-insulator devices with high-<i>Îº</i>/SiO2 gate stacks. Applied Physics Letters, 2015, 106, .	3.3	3
28	High thermoelectric figure of merit in devices made of vertically stacked graphene layers. , 2015, , .		1
29	Strong negative differential resistance in graphene devices with local strain. , 2015, , .		1
30	A Klein-tunneling transistor with ballistic graphene. 2D Materials, 2014, 1, 011006.	4.4	48
31	Enhanced thermoelectric figure of merit in vertical graphene junctions. Applied Physics Letters, 2014, 105, 133105.	3.3	28
32	Conduction gap of strained/unstrained graphene junctions: Direction dependence. , 2014, , .		0
33	Conduction gap in graphene strain junctions: direction dependence. Semiconductor Science and Technology, 2014, 29, 115024.	2.0	9
34	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	0
35	On the non-linear effects in graphene devices. Journal Physics D: Applied Physics, 2014, 47, 094007.	2.8	1
36	Graphene-based Klein tunneling transistor. , 2014, , .		0

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37	Quantum Modeling of the Carrier Mobility in FDSOI Devices. IEEE Transactions on Electron Devices, 2014, 61, 3096-3102.	3.0	27
38	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	50
39	Improved performance of graphene transistors by strain engineering. Nanotechnology, 2014, 25, 165201.	2.6	16
40	Few-Electron Edge-State Quantum Dots in a Silicon Nanowire Field-Effect Transistor. Nano Letters, 2014, 14, 2094-2098.	9.1	72
41	Aharonov-Bohm effect and giant magnetoresistance in graphene nanoribbon rings. Physical Review B, 2013, 88, .	3.2	16
42	Bandgap nanoengineering of graphene tunnel diodes and tunnel transistors to control the negative differential resistance. Journal of Computational Electronics, 2013, 12, 85-93.	2.5	31
43	Graphene nanomesh transistor with high on/off ratio and good saturation behavior. Applied Physics Letters, 2013, 103, .	3.3	39
44	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.	2.5	9
45	Strain effects on transport properties of Si nanowire devices. , 2013, , .		3
46	Disorder effects on electronic bandgap and transport in graphene-nanomesh-based structures. Journal of Applied Physics, 2013, 113, .	2.5	31
47	Performances of Strained Nanowire Devices: Ballistic Versus Scattering-Limited Currents. IEEE Transactions on Electron Devices, 2013, 60, 1506-1513.	3.0	26
48	Pseudosaturation and Negative Differential Conductance in Graphene Field-Effect Transistors. IEEE Transactions on Electron Devices, 2013, 60, 985-991.	3.0	25
49	Graphene nanomesh-based devices exhibiting a strong negative differential conductance effect. Nanotechnology, 2012, 23, 289502.	2.6	8
50	Transport behaviors of graphene 2D field-effect transistors on boron nitride substrate. , 2012, , .		1
51	Transport properties of strained silicon nanowires. , 2012, , .		0
52	Gate-controllable negative differential conductance in graphene tunneling transistors. Semiconductor Science and Technology, 2012, 27, 105018.	2.0	13
53	Resonant tunnelling diodes based on graphene/h-BN heterostructure. Journal Physics D: Applied Physics, 2012, 45, 325104.	2.8	61
54	Transport behaviors in graphene field effect transistors on boron nitride substrate. , 2012, , .		1

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55	Graphene nanomesh-based devices exhibiting a strong negative differential conductance effect. Nanotechnology, 2012, 23, 065201.	2.6	34
56	Thermoelectric performance of disordered and nanostructured graphene ribbons using Greenâ€™s function method. Journal of Computational Electronics, 2012, 11, 67-77.	2.5	35
57	Nanostructuration of Graphene Nanoribbons for thermoelectric applications. , 2011, , .		1
58	Enhanced thermoelectric properties in graphene nanoribbons by resonant tunneling of electrons. Physical Review B, 2011, 83, .	3.2	167
59	Giant effect of negative differential conductance in graphene nanoribbon p-n hetero-junctions. Applied Physics Letters, 2011, 99, 042105.	3.3	28
60	Large peak-to-valley ratio of negative-differential-conductance in graphene p-n junctions. Journal of Applied Physics, 2011, 109, 093706.	2.5	22
61	Resonant tunneling structures based on epitaxial graphene on SiC. Semiconductor Science and Technology, 2011, 26, 125012.	2.0	24
62	Spin-polarized current and tunneling magnetoresistance in ferromagnetic gate bilayer graphene structures. Journal of Applied Physics, 2011, 109, 073717.	2.5	19
63	Quantum transport of Dirac fermions in graphene field effect transistors. , 2010, , .		7
64	Quantum transport of Dirac fermions in graphene nanostructures. , 2010, , .		0
65	Phonon and electron transport in graphene nanoribbons. , 2010, , .		1
66	The conduction gap in double gate bilayer graphene structures. Journal of Physics Condensed Matter, 2010, 22, 115304.	1.8	10
67	Spin-dependent transport in double ferromagnetic-gate graphene structures. Journal of Physics: Conference Series, 2009, 187, 012037.	0.4	3
68	Spin-dependent transport in armchair graphene nanoribbon structures with edge roughness effects. Journal of Physics: Conference Series, 2009, 193, 012100.	0.4	6
69	Resonant tunneling and negative transconductance in single barrier bilayer graphene structure. Applied Physics Letters, 2009, 95, .	3.3	25
70	Controllable spin-dependent transport in armchair graphene nanoribbon structures. Journal of Applied Physics, 2009, 106, 053710.	2.5	49
71	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.	2.1	0
72	Electronic transport and spin-polarization effects of relativisticlike particles in mesoscopic graphene structures. Journal of Applied Physics, 2008, 104, .	2.5	66

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73	Coulomb blockade, current and shot noise in parallel double metallic quantum dot structures. Journal of Physics Condensed Matter, 2007, 19, 026220.	1.8	1
74	Current and shot noise in double barrier resonant tunneling structures in a longitudinal magnetic field. Physical Review B, 2007, 76, .	3.2	1
75	Cotunnelling versus sequential tunnelling in Coulomb blockade metallic double quantum dot structures. Journal of Physics Condensed Matter, 2006, 18, 2729-2740.	1.8	0
76	Super-Poissonian noise in a Coulomb-blockade metallic quantum dot structure. Physical Review B, 2006, 73, .	3.2	9
77	Negative differential conductance in metallic double quantum dot structures. Journal of Physics Condensed Matter, 2005, 17, 1157-1166.	1.8	8
78	Shot noise in metallic double dot structures with a negative differential conductance. Applied Physics Letters, 2005, 87, 123107.	3.3	14
79	Coulomb blockade and negative differential conductance in metallic double-dot devices. Journal of Applied Physics, 2004, 96, 3302-3306.	2.5	11