Viet Hung Nguyen

List of Publications by Year
in descending order

79	1,675	236925 25	302126 39
papers	citations	h-index	g-index

79	79	79	1878
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhanced thermoelectric properties in graphene nanoribbons by resonant tunneling of electrons. Physical Review B, 2011, 83, .	3.2	167
2	Localization of lattice dynamics in low-angle twisted bilayer graphene. Nature, 2021, 590, 405-409.	27.8	139
3	Thermoelectric effects in graphene nanostructures. Journal of Physics Condensed Matter, 2015, 27, 133204.	1.8	137
4	Few-Electron Edge-State Quantum Dots in a Silicon Nanowire Field-Effect Transistor. Nano Letters, 2014, 14, 2094-2098.	9.1	72
5	Electronic transport and spin-polarization effects of relativisticlike particles in mesoscopic graphene structures. Journal of Applied Physics, 2008, 104, .	2.5	66
6	Resonant tunnelling diodes based on graphene/h-BN heterostructure. Journal Physics D: Applied Physics, 2012, 45, 325104.	2.8	61
7	Klein tunneling and electron optics in Dirac-Weyl fermion systems with tilted energy dispersion. Physical Review B, 2018, 97, .	3.2	51
8	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
9	Controllable spin-dependent transport in armchair graphene nanoribbon structures. Journal of Applied Physics, 2009, 106, 053710.	2.5	49
10	A Klein-tunneling transistor with ballistic graphene. 2D Materials, 2014, 1, 011006.	4.4	48
11	Strain Modulated Superlattices in Graphene. Nano Letters, 2020, 20, 3113-3121.	9.1	46
12	Valley Filtering and Electronic Optics Using Polycrystalline Graphene. Physical Review Letters, 2016, 117, 247702.	7.8	44
13	Graphene nanomesh transistor with high on/off ratio and good saturation behavior. Applied Physics Letters, 2013, 103, .	3.3	39
14	Thermoelectric performance of disordered and nanostructured graphene ribbons using Greenâ€™s function method. Journal of Computational Electronics, 2012, 11, 67-77.	2.5	35
15	Graphene nanomesh-based devices exhibiting a strong negative differential conductance effect. Nanotechnology, 2012, 23, 065201.	2.6	34
16	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
17	Disorder effects on electronic bandgap and transport in graphene-nanomesh-based structures. Journal of Applied Physics, 2013, 113, .	2.5	31
18	Imaging Dirac fermions flow through a circular Veselago lens. Physical Review B, 2019, 100, .	3.2	31

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19	Giant effect of negative differential conductance in graphene nanoribbon p-n hetero-junctions. Applied Physics Letters, 2011, 99, 042105.	3.3	28
20	Enhanced thermoelectric figure of merit in vertical graphene junctions. Applied Physics Letters, 2014, 105, 133105.	3.3	28
21	Quantum Modeling of the Carrier Mobility in FDSOI Devices. IEEE Transactions on Electron Devices, 2014, 61, 3096-3102.	3.0	27
22	Performances of Strained Nanowire Devices: Ballistic Versus Scattering-Limited Currents. IEEE Transactions on Electron Devices, 2013, 60, 1506-1513.	3.0	26
23	Resonant tunneling and negative transconductance in single barrier bilayer graphene structure. Applied Physics Letters, 2009, 95, .	3.3	25
24	Pseudosaturation and Negative Differential Conductance in Graphene Field-Effect Transistors. IEEE Transactions on Electron Devices, 2013, 60, 985-991.	3.0	25
25	Electronic localization in small-angle twisted bilayer graphene. 2D Materials, 2021, 8, 035046.	4.4	25
26	Resonant tunneling structures based on epitaxial graphene on SiC. Semiconductor Science and Technology, 2011, 26, 125012.	2.0	24
27	Large peak-to-valley ratio of negative-differential-conductance in graphene p-n junctions. Journal of Applied Physics, 2011, 109, 093706.	2.5	22
28	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
29	Spin-polarized current and tunneling magnetoresistance in ferromagnetic gate bilayer graphene structures. Journal of Applied Physics, 2011, 109, 073717.	2.5	19
30	Strain-induced modulation of Dirac cones and van Hove singularities in a twisted graphene bilayer. 2D Materials, 2015, 2, 035005.	4.4	18
31	Aharonov-Bohm effect and giant magnetoresistance in graphene nanoribbon rings. Physical Review B, 2013, 88, .	3.2	16
32	Improved performance of graphene transistors by strain engineering. Nanotechnology, 2014, 25, 165201.	2.6	16
33	Transport properties through graphene grain boundaries: strain effects versus lattice symmetry. Nanoscale, 2016, 8, 11658-11673.	5.6	15
34	Shot noise in metallic double dot structures with a negative differential conductance. Applied Physics Letters, 2005, 87, 123107.	3.3	14
35	Gate-controllable negative differential conductance in graphene tunneling transistors. Semiconductor Science and Technology, 2012, 27, 105018.	2.0	13
36	Strain-induced conduction gap in vertical devices made of misoriented graphene layers. Nanotechnology, 2015, 26, 115201.	2.6	12

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37	Optical Hall effect in strained graphene. 2D Materials, 2017, 4, 025041.	4.4	12
38	Coulomb blockade and negative differential conductance in metallic double-dot devices. Journal of Applied Physics, 2004, 96, 3302-3306.	2.5	11
39	Electronic properties of twisted multilayer graphene. JPhys Materials, 2022, 5, 034003.	4.2	11
40	The conduction gap in double gate bilayer graphene structures. Journal of Physics Condensed Matter, 2010, 22, 115304.	1.8	10
41	Super-Poissonian noise in a Coulomb-blockade metallic quantum dot structure. Physical Review B, 2006, 73, .	3.2	9
42	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
43	Conduction gap in graphene strain junctions: direction dependence. Semiconductor Science and Technology, 2014, 29, 115024.	2.0	9
44	Negative differential conductance in metallic double quantum dot structures. Journal of Physics Condensed Matter, 2005, 17, 1157-1166.	1.8	8
45	Graphene nanomesh-based devices exhibiting a strong negative differential conductance effect. Nanotechnology, 2012, 23, 289502.	2.6	8
46	Ab initioquantum transport in polycrystalline graphene. Nanoscale, 2018, 10, 7759-7768.	5.6	8
47	Quantum transport of Dirac fermions in graphene field effect transistors. , 2010, , .		7
48	Aharonovâ€“Bohm interferences in polycrystalline graphene. Nanoscale Advances, 2020, 2, 256-263.	4.6	7
49	Optimizing Dirac fermions quasi-confinement by potential smoothness engineering. 2D Materials, 2020, 7, 025037.	4.4	7
50	Spin-dependent transport in armchair graphene nanoribbon structures with edge roughness effects. Journal of Physics: Conference Series, 2009, 193, 012100.	0.4	6
51	Strong negative differential conductance in strained graphene devices. Journal of Applied Physics, 2015, 118, .	2.5	6
52	Comment on â€œOrientation dependence of the optical spectra in graphene at high frequenciesâ€• Physical Review B, 2016, 94, .	3.2	6
53	Graphene Whisperitronics: Transducing Whispering Gallery Modes into Electronic Transport. Nano Letters, 2022, 22, 128-134.	9.1	6
54	Stepped graphene-based Aharonovâ€“Bohm interferometers. 2D Materials, 2019, 6, 045045.	4.4	5

#	Article	IF	Citations
55	Spin-dependent transport in double ferromagnetic-gate graphene structures. Journal of Physics: Conference Series, 2009, 187, 012037.	0.4	3
56	Strain effects on transport properties of Si nanowire devices. , 2013, , .		3
57	Remote surface roughness scattering in fully depleted silicon-on-insulator devices with high-Î²/SiO2 gate stacks. Applied Physics Letters, 2015, 106, .	3.3	3
58	Toward Optimized Charge Transport in Multilayer Reduced Graphene Oxides. Nano Letters, 2022, , .	9.1	3
59	Thermoelectric effects in graphene and graphene-based nanostructures using atomistic simulation. , 2016, , .		2
60	Computational Atomistic Modeling in Carbon Flatland and Other 2D Nanomaterials. Applied Sciences (Switzerland), 2020, 10, 1724.	2.5	2
61	Coulomb blockade, current and shot noise in parallel double metallic quantum dot structures. Journal of Physics Condensed Matter, 2007, 19, 026220.	1.8	1
62	Current and shot noise in double barrier resonant tunneling structures in a longitudinal magnetic field. Physical Review B, 2007, 76, .	3.2	1
63	Phonon and electron transport in graphene nanoribbons. , 2010, , .		1
64	Nanostructuration of Graphene Nanoribbons for thermoelectric applications. , 2011, , .		1
65	Transport behaviors of graphene 2D field-effect transistors on boron nitride substrate. , 2012, , .		1
66	Transport behaviors in graphene field effect transistors on boron nitride substrate. , 2012, , .		1
67	On the non-linear effects in graphene devices. Journal Physics D: Applied Physics, 2014, 47, 094007.	2.8	1
68	High thermoelectric figure of merit in devices made of vertically stacked graphene layers. , 2015, , .		1
69	Strong negative differential resistance in graphene devices with local strain. , 2015, , .		1
70	Transport gap in vertical devices made of incommensurately misoriented graphene layers. Journal Physics D: Applied Physics, 2016, 49, 045306.	2.8	1
71	Cotunnelling versus sequential tunnelling in Coulomb blockade metallic double quantum dot structures. Journal of Physics Condensed Matter, 2006, 18, 2729-2740.	1.8	0
72	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

#	ARTICLE	IF	CITATIONS
73	Quantum transport of Dirac fermions in graphene nanostructures. , 2010, , .		0
74	Transport properties of strained silicon nanowires. , 2012, , .		0
75	Conduction gap of strained/unstrained graphene junctions: Direction dependence. , 2014, , .		0
76	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
77	Graphene-based Klein tunneling transistor. , 2014, , .		0
78	Strain effects on the electronic properties of devices made of twisted graphene layers. , 2015, , .		0
79	(Invited) Scanning Gate Imaging of Charge Transport in Graphene Nanodevices. ECS Meeting Abstracts, 2020, MA2020-01, 738-738.	0.0	0