Vladimir Fal'ko

List of Publications by Year
in descending order

210 papers	32,194 citations	13068 68 h-index	3903 177 g-index
218 all docs	218 docs citations	218 times ranked	29148 citing authors

#	Article	IF	Citations
1	A roadmap for graphene. Nature, 2012, 490, 192-200.	13.7	8,011
2	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. Nanoscale, 2015, 7, 4598-4810.	2.8	2,452
3	Landau-Level Degeneracy and Quantum Hall Effect in a Graphite Bilayer. Physical Review Letters, 2006, 96, 086805.	2.9	1,795
4	Unconventional quantum Hall effect and Berryâ€™s phase of 2Ï€ in bilayer graphene. Nature Physics, 2006, 2, 177-180.	6.5	1,785
5	Cloning of Dirac fermions in graphene superlattices. Nature, 2013, 497, 594-597.	13.7	1,107
6	The Focusing of Electron Flow and a Veselago Lens in Graphene p-n Junctions. Science, 2007, 315, 1252-1255.	6.0	1,018
7	Electrically tunable band gap in silicene. Physical Review B, 2012, 85, .	1.1	997
8	Weak-Localization Magnetoresistance and Valley Symmetry in Graphene. Physical Review Letters, 2006, 97, 146805.	2.9	860
9	Selective transmission of Dirac electrons and ballistic magnetoresistance ofnâ^'pjunctions in graphene. Physical Review B, 2006, 74, .	1.1	709
10	k Â· p theory for two-dimensional transition metal dichalcogenide semiconductors. 2D Materials, 2015, 2, 022001.	2.0	676
11	Resonantly hybridized excitons in moirÃ© superlattices in van der Waals heterostructures. Nature, 2019, 567, 81-86.	13.7	621
12	Tunable metalâ€“insulator transition in double-layer graphene heterostructures. Nature Physics, 2011, 7, 958-961.	6.5	486
13	Twist-controlled resonant tunnelling in graphene/boron nitride/graphene heterostructures. Nature Nanotechnology, 2014, 9, 808-813.	15.6	435
14	Towards a quantum resistance standard based on epitaxial graphene. Nature Nanotechnology, 2010, 5, 186-189.	15.6	405
15	Optical and magneto-optical far-infrared properties of bilayer graphene. Physical Review B, 2007, 75, .	1.1	327
16	High-Sensitivity Photodetectors Based on Multilayer GaTe Flakes. ACS Nano, 2014, 8, 752-760.	7.3	319
17	Friedel Oscillations, Impurity Scattering, and Temperature Dependence of Resistivity in Graphene. Physical Review Letters, 2006, 97, 226801.	2.9	289
18	Electrons and phonons in single layers of hexagonal indium chalcogenides fromab initiocalculations. Physical Review B, 2014, 89, .	1.1	281

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19	Interaction-Driven Spectrum Reconstruction in Bilayer Graphene. Science, 2011, 333, 860-863.	6.0	262
20	Visibility of graphene flakes on a dielectric substrate. Applied Physics Letters, 2007, 91, .	1.5	260
21	Generic miniband structure of graphene on a hexagonal substrate. Physical Review B, 2013, 87, .	1.1	259
22	Atomic reconstruction in twisted bilayers of transition metal dichalcogenides. Nature Nanotechnology, 2020, 15, 592-597.	15.6	245
23	WSe₂ Light-Emitting Tunneling Transistors with Enhanced Brightness at Room Temperature. Nano Letters, 2015, 15, 8223-8228.	4.5	231
24	Adsorbate-Limited Conductivity of Graphene. Physical Review Letters, 2008, 101, 196803.	2.9	201
25	Electrons in bilayer graphene. Solid State Communications, 2007, 143, 110-115.	0.9	194
26	Band structure and optical transitions in atomic layers of hexagonal gallium chalcogenides. Physical Review B, 2013, 87, .	1.1	181
27	Quantum oscillations of the critical current and high-field superconducting proximity in ballisticÂgraphene. Nature Physics, 2016, 12, 318-322.	6.5	179
28	Quantum MonteÂCarlo Calculation of the Binding Energy of Bilayer Graphene. Physical Review Letters, 2015, 115, 115501.	2.9	166
29	Spontaneous symmetry breaking and Lifshitz transition in bilayer graphene. Physical Review B, 2010, 82, .	1.1	163
30	Hierarchy of Hofstadter states and replica quantum Hall ferromagnetism in graphene superlattices. Nature Physics, 2014, 10, 525-529.	6.5	161
31	The direct-to-indirect band gap crossover in two-dimensional van der Waals Indium Selenide crystals. Scientific Reports, 2016, 6, 39619.	1.6	150
32	Charge transfer between epitaxial graphene and silicon carbide. Applied Physics Letters, 2010, 97, .	1.5	145
33	Influence of Trigonal Warping on Interference Effects in Bilayer Graphene. Physical Review Letters, 2007, 98, .	2.9	139
34	Characterization of graphene through anisotropy of constant-energy maps in angle-resolved photoemission. Physical Review B, 2008, 77, .	1.1	139
35	Random Resistor Network Model of Minimal Conductivity in Graphene. Physical Review Letters, 2007, 99, 176801.	2.9	138
36	Nonâ€Volatile Photochemical Gating of an Epitaxial Graphene/Polymer Heterostructure. Advanced Materials, 2011, 23, 878-882.	11.1	130

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37	Nuclear Spin Switch in Semiconductor Quantum Dots. Physical Review Letters, 2007, 98, 026806.	2.9	122
38	Gigahertz quantized charge pumping in graphene quantum dots. Nature Nanotechnology, 2013, 8, 417-420.	15.6	117
39	High-temperature quantum oscillations caused by recurring Bloch states in graphene superlattices. Science, 2017, 357, 181-184.	6.0	117
40	Ballistic miniband conduction in a graphene superlattice. Science, 2016, 353, 1526-1529.	6.0	116
41	The low energy electronic band structure of bilayer graphene. European Physical Journal: Special Topics, 2007, 148, 91-103.	1.2	115
42	Interfacial ferroelectricity in marginally twisted 2D semiconductors. Nature Nanotechnology, 2022, 17, 390-395.	15.6	115
43	Observation of Even Denominator Fractional Quantum Hall Effect in Suspended Bilayer Graphene. Nano Letters, 2014, 14, 2135-2139.	4.5	113
44	Anomalously strong pinning of the filling factor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î½</mml:mi><mml:mo>=</mml:mo><mml:mn>2</mml:mn></mml:mrow></mml:math>in epitaxial graphene. Physical Review B, 2011, 83, .	1.1	110
45	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>z</mml:mi><mml:mo>â†’</mml:mo><mml:mo>â^’</mml:mo><mml:mi>z</mml:mi></mml:math> Symmetry of Spin-Orbit Coupling and Weak Localization in Graphene. Physical Review Letters, 2012, 108, 166606.	2.9	110
46	Broken mirror symmetry in excitonic response of reconstructed domains in twisted MoSe2/MoSe2 bilayers. Nature Nanotechnology, 2020, 15, 750-754.	15.6	106
47	Design of van der Waals interfaces for broad-spectrum optoelectronics. Nature Materials, 2020, 19, 299-304.	13.3	106
48	Tunable van Hove singularities and correlated states in twisted monolayerâ€“bilayer graphene. Nature Physics, 2021, 17, 619-626.	6.5	103
49	Statistics of prelocalized states in disordered conductors. Physical Review B, 1995, 52, 17413-17429.	1.1	100
50	Stacking Domains and Dislocation Networks in Marginally Twisted Bilayers of Transition Metal Dichalcogenides. Physical Review Letters, 2020, 124, 206101.	2.9	100
51	Strained bilayer graphene: Band structure topology and Landau level spectrum. Physical Review B, 2011, 84, .	1.1	99
52	Weak localization in monolayer and bilayer graphene. European Physical Journal: Special Topics, 2007, 148, 39-54.	1.2	98
53	Tunable graphene system with two decoupled monolayers. Applied Physics Letters, 2008, 93, .	1.5	98
54	Multispectral graphene-based electro-optical surfaces with reversible tunability from visible to microwave wavelengths. Nature Photonics, 2021, 15, 493-498.	15.6	97

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55	Competing nematic, antiferromagnetic, and spin-flux orders in the ground state of bilayer graphene. Physical Review B, 2012, 85, .	1.1	92
56	Electronic and optical properties of two-dimensional InSe from a DFT-parametrized tight-binding model. Physical Review B, 2016, 94, .	1.1	89
57	Three-Particle Complexes in Two-Dimensional Semiconductors. Physical Review Letters, 2015, 114, 107401.	2.9	88
58	Tuning the valley and chiral quantum state of Dirac electrons in van der Waals heterostructures. Science, 2016, 353, 575-579.	6.0	88
59	Filling-Factor-Dependent Magnetophonon Resonance in Graphene. Physical Review Letters, 2007, 99, 087402.	2.9	87
60	Ordered states of adatoms on graphene. Physical Review B, 2009, 80, .	1.1	83
61	Binding energies of trions and biexcitons in two-dimensional semiconductors from diffusion quantum Monte Carlo calculations. Physical Review B, 2017, 95, .	1.1	83
62	Electronic phase separation in multilayer rhombohedral graphite. Nature, 2020, 584, 210-214.	13.7	81
63	Quantum resistance metrology using graphene. Reports on Progress in Physics, 2013, 76, 104501.	8.1	79
64	Nano-imaging of intersubband transitions in van der Waals quantum wells. Nature Nanotechnology, 2018, 13, 1035-1041.	15.6	75
65	Disordered Fermi Liquid in Epitaxial Graphene from Quantum Transport Measurements. Physical Review Letters, 2011, 107, 166602.	2.9	74
66	Composite super-moirÃ© lattices in double-aligned graphene heterostructures. Science Advances, 2019, 5, eaay8897.	4.7	74
67	Quantum information on chicken wire. Nature Physics, 2007, 3, 151-152.	6.5	70
68	Anomalous Sequence of Quantum Hall Liquids Revealing a Tunable Lifshitz Transition in Bilayer Graphene. Physical Review Letters, 2014, 113, 116602.	2.9	69
69	Giant oscillations in a triangular network of one-dimensional states in marginally twisted graphene. Nature Communications, 2019, 10, 4008.	5.8	67
70	Quantum kinetic equation and universal conductance fluctuations in graphene. Physical Review B, 2008, 77, .	1.1	64
71	Precision comparison of the quantum Hall effect in graphene and gallium arsenide. Metrologia, 2012, 49, 294-306.	0.6	64
72	Resonant tunnelling between the chiral Landau states of twisted graphene lattices. Nature Physics, 2015, 11, 1057-1062.	6.5	64

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73	Weak localization in graphene. Solid State Communications, 2007, 143, 33-38.	0.9	63
74	High-order fractal states in graphene superlattices. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5135-5139.	3.3	63
75	Indirect to Direct Gap Crossover in Two-Dimensional InSe Revealed by Angle-Resolved Photoemission Spectroscopy. ACS Nano, 2019, 13, 2136-2142.	7.3	63
76	Gauge fields and interferometry in folded graphene. Physical Review B, 2011, 83, .	1.1	62
77	Silicane and germanane: tight-binding and first-principles studies. 2D Materials, 2014, 1, 011005.	2.0	59
78	Spin-Orbit Coupling and Anisotropy of Spin Splitting in Quantum Dots. Physical Review Letters, 2005, 94, 226404.	2.9	57
79	Infrared-to-violet tunable optical activity in atomic films of GaSe, InSe, and their heterostructures. 2D Materials, 2018, 5, 041009.	2.0	52
80	Upconverted electroluminescence via Auger scattering of interlayer excitons in van der Waals heterostructures. Nature Communications, 2019, 10, 2335.	5.8	51
81	Thermally excited spin current and giant magnetothermopower in metals with embedded ferromagnetic nanoclusters. Physical Review B, 2006, 74, .	1.1	48
82	Signature of electronic excitations in the Raman spectrum of graphene. Physical Review B, 2009, 80, .	1.1	47
83	Heterostructures of bilayer graphene and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>h</mml:mi></mml:math>-BN: Interplay between misalignment, interlayer asymmetry, and trigonal warping. Physical Review B, 2013, 88, .	1.1	47
84	Excess resistivity in graphene superlattices caused by umklapp electronâ€“electron scattering. Nature Physics, 2019, 15, 32-36.	6.5	46
85	Control of electron-electron interaction in graphene by proximity screening. Nature Communications, 2020, 11, 2339.	5.8	46
86	Tunable Valley Splitting due to Topological Orbital Magnetic Moment in Bilayer Graphene Quantum Point Contacts. Physical Review Letters, 2020, 124, 126802.	2.9	46
87	Raman spectroscopy of GaSe and InSe post-transition metal chalcogenides layers. Faraday Discussions, 2021, 227, 163-170.	1.6	43
88	Dirac edges of fractal magnetic minibands in graphene with hexagonal moirÃ© superlattices. Physical Review B, 2014, 89, .	1.1	42
89	Evidence of the triangular lattice of crystallized electrons from time resolved luminescence. Physical Review Letters, 1994, 72, 3594-3597.	2.9	41
90	Acoustoelectric drag effect in the two-dimensional electron gas at strong magnetic field. Physical Review B, 1993, 47, 9910-9912.	1.1	40

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91	Topologically Nontrivial Valley States in Bilayer Graphene Quantum Point Contacts. Physical Review Letters, 2018, 121, 257702.	2.9	39
92	Dimensional reduction, quantum Hall effect and layer parity in graphite films. Nature Physics, 2019, 15, 437-442.	6.5	39
93	Anisotropy of Spin Splitting and Spin Relaxation in Lateral Quantum Dots. Physical Review Letters, 2005, 95, 076603.	2.9	38
94	Quantum Transport Thermometry for Electrons in Graphene. Physical Review Letters, 2009, 102, 066801.	2.9	38
95	Auger recombination of dark excitons in WS ₂ and WSe ₂ monolayers. 2D Materials, 2016, 3, 035011.	2.0	38
96	Sublattice ordering in a dilute ensemble of monovalent adatoms on graphene. Europhysics Letters, 2010, 89, 56003.	0.7	37
97	Influence of minivalleys and Berry curvature on electrostatically induced quantum wires in gapped bilayer graphene. Physical Review B, 2018, 98, .	1.1	37
98	Piezoelectric networks and ferroelectric domains in twistronic superlattices in WS₂/MoS₂ and WSe₂/MoSe₂ bilayers. 2D Materials, 2021, 8, 025030.	2.0	36
99	Tunable Valley Splitting and Bipolar Operation in Graphene Quantum Dots. Nano Letters, 2021, 21, 1068-1073.	4.5	35
100	Spin-orbit coupling assisted by flexural phonons in graphene. Physical Review B, 2012, 86, .	1.1	34
101	Spin memory and spin-lattice relaxation in two-dimensional hexagonal crystals. Physical Review B, 2013, 88, .	1.1	34
102	Out-of-equilibrium criticalities in graphene superlattices. Science, 2022, 375, 430-433.	6.0	34
103	Cyclotron and electric-dipole spin resonances in a two-dimensional electron gas in the vicinity of the crossing of spin-split Landau levels. Physical Review B, 1992, 46, 4320-4323.	1.1	33
104	Tunnel spectroscopy of localised electronic states in hexagonal boron nitride. Communications Physics, 2018, 1, .	2.0	33
105	Ultra-thin van der Waals crystals as semiconductor quantum wells. Nature Communications, 2020, 11, 125.	5.8	33
106	Spectroscopy of local density of states fluctuations in a disordered conductor. Europhysics Letters, 1996, 36, 61-66.	0.7	32
107	Subgap transport in ferromagnet-superconductor junctions due to magnon-assisted Andreev reflection. Physical Review B, 2001, 65, .	1.1	32
108	Transport Signatures of Pseudomagnetic Landau Levels in Strained Graphene Ribbons. Physical Review Letters, 2013, 110, 266801.	2.9	32

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109	Statistics of fluctuations of wave functions of chaotic electrons in a quantum dot in an arbitrary magnetic field. Physical Review B, 1994, 50, 11267-11270.	1.1	31
110	Magnetic field influence on the proximity effect in semiconductor-superconductor hybrid structures and their thermal conductance. Physical Review B, 2004, 69, .	1.1	30
111	MoirÃ© minibands in graphene heterostructures with almost commensurate3Ã—3hexagonal crystals. Physical Review B, 2013, 88, .	1.1	30
112	Fast Relaxation of Photo-Excited Carriers in 2-D Transition Metal Dichalcogenides. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 168-172.	1.9	30
113	Quartet states in two-electron quantum dots in bilayer graphene. Physical Review B, 2020, 101, .	1.1	30
114	Quantum Hall Effect and Quantum Point Contact in Bilayer-Patched Epitaxial Graphene. Nano Letters, 2014, 14, 3369-3373.	4.5	29
115	Weak ferroelectric charge transfer in layer-asymmetric bilayers of 2D semiconductors. Scientific Reports, 2021, 11, 13422.	1.6	29
116	Spectral features due to inter-Landau-level transitions in the Raman spectrum of bilayer graphene. Physical Review B, 2010, 82, .	1.1	28
117	Measurement of Filling-Factor-Dependent Magnetophonon Resonances in Graphene Using Raman Spectroscopy. Physical Review Letters, 2013, 110, 227402.	2.9	28
118	Surface Acoustic-Wave-Induced Magnetoresistance Oscillations in a Two-Dimensional Electron Gas. Physical Review Letters, 2004, 93, 036804.	2.9	27
119	Tunable Fermi surface topology and Lifshitz transition in bilayer graphene. Synthetic Metals, 2015, 210, 19-31.	2.1	27
120	Kondo effect and spinâ€“orbit coupling in graphene quantum dots. Nature Communications, 2021, 12, 6004.	5.8	27
121	Long nuclear spin polarization decay times controlled by optical pumping in individual quantum dots. Physical Review B, 2008, 77, .	1.1	25
122	Evidence for spin memory in the electron phase coherence in graphene. Physical Review B, 2012, 86, .	1.1	25
123	Long-range ballistic transport of Brown-Zak fermions in graphene superlattices. Nature Communications, 2020, 11, 5756.	5.8	25
124	Superposition of intra- and inter-layer excitons in twistronic MoSe₂/WSe₂ bilayers probed by resonant Raman scattering. 2D Materials, 2021, 8, 035009.	2.0	25
125	On spectral properties of bilayer graphene: the effect of an SiC substrate and infrared magneto-spectroscopy. Journal of Physics Condensed Matter, 2009, 21, 344206.	0.7	24
126	Out-of-Plane Dielectric Susceptibility of Graphene in Twistronic and Bernal Bilayers. Nano Letters, 2021, 21, 6678-6683.	4.5	24

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127	Engineering and metrology of epitaxial graphene. Solid State Communications, 2011, 151, 1094-1099.	0.9	23
128	Multifaceted moirÃ© superlattice physics in twisted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mn>2</mml:mn> bilayers. Physical Review B, 2021, 104, .	1.1	23
129	Crossing of cyclotron and spin resonances in two-dimensional Coulomb gas. Physical Review Letters, 1993, 71, 141-144.	2.9	22
130	Degeneracy breaking and intervalley scattering due to short-ranged impurities in finite single-wall carbon nanotubes. Physical Review B, 2005, 71, .	1.1	22
131	Films of rhombohedral graphite as two-dimensional topological semimetals. Communications Physics, 2019, 2, .	2.0	22
132	Orbital effect of an in-plane magnetic field on quantum transport in chaotic lateral dots. Physical Review B, 2002, 65, .	1.1	21
133	Orbital effects of in-plane magnetic fields probed by mesoscopic conductance fluctuations. Physical Review B, 2004, 69, .	1.1	21
134	Minibands in twisted bilayer graphene probed by magnetic focusing. Science Advances, 2020, 6, eaay7838.	4.7	21
135	Band energy landscapes in twisted homobilayers of transition metal dichalcogenides. Applied Physics Letters, 2021, 118, .	1.5	21
136	Energy Dependence of Quasiparticle Relaxation in a Disordered Fermi Liquid. Physical Review Letters, 2001, 86, 276-279.	2.9	20
137	Intra-Landau-level magnetoexcitons and the transition between quantum Hall states in undoped bilayer graphene. Physical Review B, 2011, 83, .	1.1	20
138	Statistics of wave functions in mesoscopic systems. Journal of Mathematical Physics, 1996, 37, 4935-4967.	0.5	19
139	Manifestation of LOâ€“LA phonons in Raman scattering in graphene. Solid State Communications, 2011, 151, 1071-1074.	0.9	19
140	Twist-controlled resonant tunnelling between monolayer and bilayer graphene. Applied Physics Letters, 2015, 107, .	1.5	19
141	Conductance fluctuations in systems with random-magnetic-field scattering. Physical Review B, 1994, 50, 17406-17410.	1.1	18
142	Correlation-function spectroscopy of inelastic lifetime in heavily doped GaAs heterostructures. Physical Review B, 2001, 64, .	1.1	18
143	MoirÃ© miniband features in the angle-resolved photoemission spectra of graphene/hBNheterostructures. Physical Review B, 2016, 93, .	1.1	18
144	Engineering of the topological magnetic moment of electrons in bilayer graphene using strain and electrical bias. Physical Review B, 2020, 101, .	1.1	17

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145	Electromechanical Sensing of Substrate Charge Hidden under Atomic 2D Crystals. Nano Letters, 2014, 14, 3400-3404.	4.5	16
146	Influence of Impurity Spin Dynamics on Quantum Transport in Epitaxial Graphene. Physical Review Letters, 2015, 115, 106602.	2.9	16
147	Hybrid <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="bold">k</mml:mi><mml:mo>Â·</mml:mo><mml:mi mathvariant="bold">p</mml:mi></mml:mrow></mml:math> tight-binding model for intersubband optics in atomically thin InSe films. Physical Review B, 2018, 97, .	1.1	16
148	The Aharonov-Bohm effect in a mesoscopic ring of diluted magnetic alloy. Journal of Physics Condensed Matter, 1992, 4, 3943-3954.	0.7	15
149	Inter-Landau-level relaxation in two-dimensional electron gases at high magnetic fields. Journal of Physics Condensed Matter, 1993, 5, 3945-3950.	0.7	15
150	Magnetoresistance in Co-hBN-NiFe Tunnel Junctions Enhanced by Resonant Tunneling through Single Defects in Ultrathin hBN Barriers. Nano Letters, 2018, 18, 6954-6960.	4.5	15
151	A Scalable Network Model for Electrically Tunable Ferroelectric Domain Structure in Twistronic Bilayers of Two-Dimensional Semiconductors. Nano Letters, 2022, 22, 1534-1540.	4.5	15
152	Probing Two-Electron Multiplets in Bilayer Graphene Quantum Dots. Physical Review Letters, 2021, 127, 256802.	2.9	15
153	Quantum and classical surface-acoustic-wave-induced magnetoresistance oscillations in a two-dimensional electron gas. Physical Review B, 2005, 71, .	1.1	14
154	Graphene: Emerging matter in two dimensions. European Physical Journal: Special Topics, 2007, 148, 1-4.	1.2	14
155	Control of Giant Topological Magnetic Moment and Valley Splitting in Trilayer Graphene. Physical Review Letters, 2021, 127, 136402.	2.9	14
156	Electron-phonon drag effect at 2D Landau levels. Journal of Physics Condensed Matter, 1992, 4, 9201-9212.	0.7	13
157	Nuclear spin pumping under resonant optical excitation in a quantum dot. Applied Physics Letters, 2008, 93, 073113.	1.5	13
158	Landau levels in deformed bilayer graphene at low magnetic fields. Solid State Communications, 2011, 151, 1088-1093.	0.9	13
159	Transport anomaly at the ordering transition for adatoms on graphene. Physical Review B, 2011, 83, .	1.1	13
160	Ballistic electron channels including weakly protected topological states in delaminated bilayer graphene. Physical Review B, 2018, 97, .	1.1	13
161	Magnetothermopower and magnon-assisted transport in ferromagnetic tunnel junctions. Applied Physics Letters, 2002, 81, 3609-3611.	1.5	12
162	Longitudinal magnetoresistance of ultrathin films and two-dimensional electron layers. Journal of Physics Condensed Matter, 1990, 2, 3797-3802.	0.7	11

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163	Electrostatics of inter-Landau-level diodes. Physical Review B, 1994, 50, 4571-4576.	1.1	11
164	Applicability of the ergodicity hypothesis to mesoscopic fluctuations. Physical Review B, 2003, 68, .	1.1	11
165	Detection of the Electron Spin Resonance of Two-Dimensional Electrons at Large Wave Vectors. Physical Review Letters, 2006, 96, 126807.	2.9	11
166	Graphitic platform for self-catalysed InAs nanowires growth by molecular beam epitaxy. Nanoscale Research Letters, 2014, 9, 321.	3.1	11
167	Spectroscopic Signatures of Electronic Excitations in Raman Scattering in Thin Films of Rhombohedral Graphite. Nano Letters, 2019, 19, 6152-6156.	4.5	11
168	Scattering between Minivalleys in Twisted Double Bilayer Graphene. Physical Review Letters, 2022, 128, 057702.	2.9	11
169	Magnon-assisted Andreev reflection in a ferromagnet-superconductor junction. Europhysics Letters, 2001, 56, 583-589.	0.7	10
170	Graphene-Driven Revolutions in ICT and Beyond. Procedia Computer Science, 2011, 7, 30-33.	1.2	10
171	Gapped Bilayer Graphene: A Tunable Strongly Correlated Band Insulator. Physical Review Letters, 2012, 109, 106801.	2.9	10
172	Electronic Raman Scattering in Twistronic Few-Layer Graphene. Physical Review Letters, 2020, 125, 197401.	2.9	10
173	Tunable spin-orbit coupling in two-dimensional InSe. Physical Review B, 2021, 104, .	1.1	9
174	Ghost anti-crossings caused by interlayer umklapp hybridization of bands in 2D heterostructures. 2D Materials, 2021, 8, 015016.	2.0	8
175	On resonant oscillations in current-voltage characteristics of double-barrier heterostructures. Semiconductor Science and Technology, 1991, 6, 196-200.	1.0	7
176	On the relaxation of nuclear polarization near 2D electron gas. Journal of Physics Condensed Matter, 1991, 3, 5079-5083.	0.7	7
177	Bistability of optically induced nuclear spin orientation in quantum dots. Physical Review B, 2007, 76, .	1.1	7
178	Electron transport in dual-gated three-layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Research, 2021, 3, .	1.3	7
179	Tunneling theory for a bilayer graphene quantum dotâ€™s single- and two-electron states. New Journal of Physics, 2022, 24, 043003.	1.2	7
180	Triplet pairing due to spin-orbit-assisted electron-phonon coupling. Physical Review B, 2006, 74, .	1.1	6

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181	0â^Ï€transition in superconductor-ferromagnet-superconductor junctions with strongly spin-dependent scattering. Physical Review B, 2007, 75, .	1.1	6
182	Zero-energy modes and valley asymmetry in the Hofstadter spectrum of bilayer graphene van der Waals heterostructures with hBN. Physical Review B, 2016, 94, .	1.1	6
183	Intersubband relaxation of two-dimensional electrons in heterostructures. Physical Review B, 1993, 47, 13585-13589.	1.1	5
184	Weak localization correction to the ferromagnet-superconductor interface resistance. Physical Review B, 2000, 62, 6015-6020.	1.1	5
185	Rabi oscillations of two-photon states in nonlinear optical resonators. Physical Review A, 2016, 93, .	1.0	5
186	Kagome network of miniband-edge states in double-aligned grapheneâ€“hexagonal boron nitride structures. Physical Review B, 2022, 105, .	1.1	5
187	Recombination kinetics of acceptor-bound holes in heterostructures: A probe of the local configuration of magnetically frozen electron insulators. Physical Review B, 1994, 49, 2242-2245.	1.1	4
188	QHE and far infra-red properties of bilayer graphene in a strong magnetic field. European Physical Journal: Special Topics, 2007, 148, 105-115.	1.2	4
189	Quantum statistics of four-wave mixing by a nonlinear resonant microcavity. Physical Review A, 2014, 90, .	1.0	4
190	Doping and Theory: general discussion. Faraday Discussions, 2014, 173, 233-256.	1.6	4
191	The fine structure of cyclotron and spin resonances at their crossing: interplay between spin-orbit and Coulomb interactions. Journal of Physics Condensed Matter, 1993, 5, 8725-8740.	0.7	3
192	Phonon-emission-accompanied photoluminescence from a two-dimensional electron system at high magnetic field. Physical Review B, 1993, 47, 3802-3805.	1.1	3
193	Conductance fluctuations due to a bistable scatterer in a weakly connected conductor. Physical Review B, 1995, 51, 5227-5232.	1.1	3
194	ANDREEV REFLECTION AND SUBGAP TRANSPORT DUE TO ELECTRON-MAGNON INTERACTIONS IN FERROMAGNET-SUPERCONDUCTOR JUNCTIONS. International Journal of Modern Physics B, 2003, 17, 5001-5005.	1.0	3
195	Giant magnetothermopower and magnetoresistance in metals with embedded ferromagnetic nanoclusters. Journal of Applied Physics, 2007, 101, 014324.	1.1	2
196	Spin-orbit-assisted electron-phonon interaction and the magnetophonon resonance in semiconductor quantum wells. Physical Review B, 2008, 77, .	1.1	2
197	Light sources with bias tunable spectrum based on van der Waals interface transistors. Nature Communications, 2022, 13, .	5.8	2
198	Commensurability oscillations in the surface-acoustic-wave-induced acoustoelectric effect in a two-dimensional electron gas. Physical Review B, 2005, 71, .	1.1	1

#	Article	IF	Citations
199	Berry phase 2Ï€ quasiparticles, Landau level degeneracy and quantum Hall effect in a bilayer of graphene. AIP Conference Proceedings, 2007, , .	0.3	1
200	Canted magnetization texture in ferromagnetic tunnel junctions. Physical Review B, 2008, 78, .	1.1	1
201	Publisherâ€™s Note: Intra-Landau-level magnetoexcitons and the transition between quantum Hall states in undoped bilayer graphene [Phys. Rev. B83, 115455 (2011)]. Physical Review B, 2011, 83, .	1.1	1
202	Phase transitions in dipolar gases in optical lattices. Physical Review A, 2012, 85, .	1.0	1
203	Introducing 2D Materials â€”a new multidisciplinary journal devoted to all aspects of graphene and related two-dimensional materials. 2D Materials, 2014, 1, 010201.	2.0	1
204	Anisotropy of Zeeman-splitting in quantum dots. AIP Conference Proceedings, 2005, , .	0.3	0
205	Control of nuclear spin in InGaAs quantum dots. , 2006, , .		0
206	Power dependence of the photocurrent lineshape in a semiconductor quantum dot. Applied Physics Letters, 2007, 91, 193107.	1.5	0
207	Practical and Fundamental Impact of Epitaxial Graphene on Quantum Metrology. Mapan - Journal of Metrology Society of India, 2013, 28, 239-250.	1.0	0
208	Nanometre scale 3D nanomechanical imaging of semiconductor structures from few nm to sub-micrometre depths. , 2015, , .		0
209	Position-momentum-entangled photon pairs in nonlinear waveguides and transmission lines. Physical Review A, 2016, 93, .	1.0	0
210	ANDREEV REFLECTION AND SUBGAP TRANSPORT DUE TO ELECTRON-MAGNON INTERACTIONS IN FERROMAGNET-SUPERCONDUCTOR JUNCTIONS. , 2002, , .		0