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List of Publications by Year in descending order

Version: 2024-02-01

117 papers	5,235 citations	101543 36 h-index	85541 71 g-index
119 all docs	119 docs citations	119 times ranked	4044 citing authors

#	Article	IF	Citations
1	Dielectric permittivity, conductivity and breakdown field of hexagonal boron nitride. Materials Research Express, 2022, 9, 065901.	1.6	21
2	Microwave surface transport in narrow-bandgap PdSe2 -MOSFETs. 2D Materials, 2021, 8, 035035.	4.4	1
3	Optoelectronic Mixing in High-Mobility Graphene. ACS Photonics, 2021, 8, 369-375.	6.6	12
4	Hyperbolic Phonon Polariton Electroluminescence as an Electronic Cooling Pathway. Advanced Functional Materials, 2020, 30, 1904783.	14.9	14
5	DNA Hybridization Measured with Graphene Transistor Arrays. Advanced Healthcare Materials, 2020, 9, e2000260.	7.6	16
6	Ultra-long carrier lifetime in neutral graphene-hBN van der Waals heterostructures under mid-infrared illumination. Nature Communications, 2020, 11, 863.	12.8	34
7	Dynamical Separation of Bulk and Edge Transport in HgTe-Based 2D Topological Insulators. Physical Review Letters, 2020, 124, 076802.	7.8	18
8	High-Frequency Limits of Graphene Field-Effect Transistors with Velocity Saturation. Applied Sciences (Switzerland), 2020, 10, 446.	2.5	20
9	Fractional statistics in anyon collisions. Science, 2020, 368, 173-177.	12.6	225
10	The 2021 quantum materials roadmap. JPhys Materials, 2020, 3, 042006.	4.2	111
11	Characterization of helical Luttinger liquids in microwave stepped-impedance edge resonators. Physical Review Research, 2020, 2, .	3.6	5
12	Ultra-slow recombination of carriers at low density and energy in neutral graphene-hBN van der Waals heterostructures. , 2020, , .		0
13	Quantum tomography of electrical currents. Nature Communications, 2019, 10, 3379.	12.8	35
14	A corner reflector of graphene Dirac fermions as a phonon-scattering sensor. Nature Communications, 2019, 10, 2428.	12.8	7
15	RF compressibility of topological surface and interface states in metalâ€“hBNâ€“Bi2Se3 capacitors. JPhys Materials, 2019, 2, 044003.	4.2	2
16	Microwave photons emitted by fractionally charged quasiparticles. Nature Communications, 2019, 10, 1708.	12.8	13
17	Layering Transition in Superfluid Helium Adsorbed on a Carbon Nanotube Mechanical Resonator. Physical Review Letters, 2019, 122, 165301.	7.8	25
18	Building blocks and concepts for THz remote sensing and communications. , 2019, , .		3

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19	Hot carrier recombination close to the Dirac point in graphene-hBN van der Waals heterostructures. , 2019, , .		0
20	rf Quantum Capacitance of the Topological Insulator <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Bi</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mm in the Bulk Depleted Regime for Field-Effect Transistors. Physical Review Applied, 2018, 9, .	3.8	10
21	Importance of nonlocal electron correlation in the BaNiS2 semimetal from quantum oscillations studies. Physical Review B, 2018, 97, .	3.2	10
22	Landau Velocity for Collective Quantum Hall Breakdown in Bilayer Graphene. Physical Review Letters, 2018, 121, 136804.	7.8	6
23	Ultra-long wavelength Dirac plasmons in graphene capacitors. JPhys Materials, 2018, 1, 01LT02.	4.2	17
24	A graphene Zenerâ€“Klein transistor cooled by a hyperbolic substrate. Nature Nanotechnology, 2018, 13, 47-52.	31.5	64
25	Low frequency Raman spectroscopy of few-atomic-layer thick hBN crystals. 2D Materials, 2017, 4, 031003.	4.4	80
26	Dirac fermion reflector by ballistic graphene sawtooth-shaped npn junctions. Semiconductor Science and Technology, 2017, 32, 045010.	2.0	15
27	Twoâ€particle interferometry in quantum Hall edge channels. Physica Status Solidi (B): Basic Research, 2017, 254, 1600618.	1.5	21
28	Observation of Volkov-Pankratov states in topological HgTe heterojunctions using high-frequency compressibility. Physical Review B, 2017, 96, .	3.2	40
29	Volkov-Pankratov states in topological heterojunctions. Physical Review B, 2017, 96, .	3.2	49
30	Decoherence and relaxation of a single electron in a one-dimensional conductor. Physical Review B, 2016, 94, .	3.2	51
31	Contact gating at GHz frequency in graphene. Scientific Reports, 2016, 6, 21085.	3.3	19
32	Time dependent electronic transport in chiral edge channels. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 76, 12-27.	2.7	6
33	Anomalous metallic state in quasi-two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>BaNiS</mml:mtext><mml:mn>2</mml:mn></mml:msub></mml:math> Physical Review B, 2016, 93, .	3.2	10
34	Reprint of : Time dependent electronic transport in chiral edge channels. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 82, 129-144.	2.7	0
35	Dimensionality effects on the luminescence properties of hBN. Nanoscale, 2016, 8, 6986-6993.	5.6	50
36	Hofstadter Butterfly and Many-Body Effects in Epitaxial Graphene Superlattice. Nano Letters, 2016, 16, 2387-2392.	9.1	36

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37	Coupling between electrons and optical phonons in suspended bilayer graphene. Physical Review B, 2015, 91, .	3.2	24
38	Onset of optical-phonon cooling in multilayer graphene revealed by RF noise and black-body radiation thermometries. Journal of Physics Condensed Matter, 2015, 27, 164208.	1.8	10
39	Hong-Ou-Mandel experiment for temporal investigation of single-electron fractionalization. Nature Communications, 2015, 6, 6854.	12.8	101
40	Hot carriers in graphene. Journal of Physics Condensed Matter, 2015, 27, 160301.	1.8	11
41	A Klein-tunneling transistor with ballistic graphene. 2D Materials, 2014, 1, 011006.	4.4	48
42	High-frequency characterization of thermionic charge transport in silicon-on-insulator nanowire transistors. Applied Physics Letters, 2014, 104, 043106.	3.3	11
43	Excitonic recombinations in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>h</mml:mi><mml:mo>â^'</mml:mo><mml:mi>BN</mml:mi></mml:math>: From bulk to exfoliated layers. Physical Review B, 2014, 89, .	3.2	58
44	Electron quantum optics in ballistic chiral conductors. Annalen Der Physik, 2014, 526, 1-30.	2.4	162
45	Graphene-based Klein tunneling transistor. , 2014, , .		0
46	Graphene nanotransistors for RF charge detection. Journal Physics D: Applied Physics, 2014, 47, 094004.	2.8	6
47	FIB patterning of dielectric, metallized and graphene membranes: A comparative study. Microelectronic Engineering, 2014, 121, 87-91.	2.4	25
48	Supercollision cooling in undoped graphene. Nature Physics, 2013, 9, 109-112.	16.7	179
49	Coherence and Indistinguishability of Single Electrons Emitted by Independent Sources. Science, 2013, 339, 1054-1057.	12.6	303
50	Separation of neutral and charge modes in one-dimensional chiral edge channels. Nature Communications, 2013, 4, 1839.	12.8	106
51	Electron Quantum Optics: Partitioning Electrons One by One. Physical Review Letters, 2012, 108, 196803.	7.8	155
52	A coherentRCcircuit. Reports on Progress in Physics, 2012, 75, 126504.	20.1	43
53	Current noise spectrum of a single-particle emitter: Theory and experiment. Physical Review B, 2012, 85, .	3.2	96
54	Hot Electron Cooling by Acoustic Phonons in Graphene. Physical Review Letters, 2012, 109, 056805.	7.8	120

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55	Graphene microwave transistors on sapphire substrates. Applied Physics Letters, 2011, 99, 113502.	3.3	42
56	Single-electron quantum tomography in quantum Hall edge channels. New Journal of Physics, 2011, 13, 093007.	2.9	96
57	Transport scattering time probed through rf admittance of a graphene capacitor. Physical Review B, 2011, 83, .	3.2	33
58	A high sensitivity ultralow temperature RF conductance and noise measurement setup. Review of Scientific Instruments, 2011, 82, 013904.	1.3	15
59	Le graphÃ¨ne. , 2011, , 4-9.	0.1	5
60	Noise of a single electron emitter: Experiment. , 2011, , .		0
61	Conserved spin and orbital phase along carbon nanotubes connected with multiple ferromagnetic contacts. Physical Review B, 2010, 81, .	3.2	29
62	Thermal shot noise in top-gated single carbon nanotube field effect transistors. Applied Physics Letters, 2010, 96, .	3.3	9
63	Current correlations of an on-demand single-electron emitter. Physical Review B, 2010, 82, .	3.2	115
64	Electron-phonon coupling in single-walled carbon nanotubes determined by shot noise. Applied Physics Letters, 2010, 97, 262115.	3.3	10
65	Effect of vortices on the spin-flip lifetime of atoms in superconducting atom-chips. Europhysics Letters, 2009, 87, 13002.	2.0	24
66	Noisy Kondo impurities. Nature Physics, 2009, 5, 208-212.	16.7	91
67	Subnanosecond Single Electron Source inÂtheÂTime-Domain. Journal of Low Temperature Physics, 2008, 153, 339-349.	1.4	17
68	Realization of a time-controlled subnanosecond single electron source for ballistic qubits. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 954-960.	2.7	7
69	Single Carbon Nanotube Transistor at GHz Frequency. Nano Letters, 2008, 8, 525-528.	9.1	68
70	Shot Noise in Fabry-Perot Interferometers Based on Carbon Nanotubes. Physical Review Letters, 2007, 99, 156804.	7.8	66
71	An On-Demand Coherent Single-Electron Source. Science, 2007, 316, 1169-1172.	12.6	460
72	Relaxation Time of a Chiral QuantumRâ^'LCircuit. Physical Review Letters, 2007, 98, 166806.	7.8	65

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73	Violation of Kirchhoff's Laws for a Coherent RC Circuit. Science, 2006, 313, 499-502.	12.6	305
74	A quantum mesoscopic RC circuit realized in a 2D electron gas. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 576-579.	2.7	4
75	Cotunneling and one-dimensional localization in individual disordered single-wall carbon nanotubes: Temperature dependence of the intrinsic resistance. Physical Review B, 2006, 74, .	3.2	29
76	Hanbury Brown and Twiss Noise Correlations to Probe the Statistics of GHz Photons Emitted by Quantum Conductors. AIP Conference Proceedings, 2005, , .	0.4	0
77	Peak effect and surface crystal-glass transition for surface-pinned vortex array. Europhysics Letters, 2004, 67, 655-661.	2.0	4
78	Hanbury Brownâ€“Twiss Correlations to Probe the Population Statistics of GHz Photons Emitted by Conductors. Physical Review Letters, 2004, 93, 056801.	7.8	51
79	Geometrical Dependence of High-Bias Current in Multiwalled Carbon Nanotubes. Physical Review Letters, 2004, 92, 026804.	7.8	88
80	Comment on â€œCollapse of the vortex-lattice inductance and shear modulus at the melting transition in untwinnedYBa2Cu3O7â€• Physical Review B, 2003, 67, .	3.2	1
81	Critical currents in the anisotropic superconductor2Hâ^'NbSe2:Evidence for an upper bound of the surface critical-current density. Physical Review B, 2002, 65, .	3.2	12
82	Granularity-induced gapless superconductivity in NbN films: Evidence of thermal phase fluctuations. Physical Review B, 2002, 65, .	3.2	19
83	Gapless state in low- and high-Tc superconductors: evidence for thermal phase fluctuations. Physica C: Superconductivity and Its Applications, 2001, 364-365, 235-238.	1.2	0
84	Evidence for vortex surface pinning inYBa2Cu3O7â^Ί´from the frequency dependence of the complex penetration depth. Physical Review B, 2001, 63, .	3.2	15
85	Flux-flow resistivity inUPt3:Evidence for nonsingular vortex-core structure. Physical Review B, 2001, 64, .	3.2	5
86	High-frequency vortex dynamics and flux-flow resistivity in UPt3. Physica B: Condensed Matter, 2000, 284-288, 527-528.	2.7	2
87	High-frequency linear AC response of a pinned vortex lattice. Physica B: Condensed Matter, 2000, 284-288, 719-720.	2.7	3
88	Small angle neutron scattering and vortex lattice dynamical phase diagram. Physica C: Superconductivity and Its Applications, 2000, 341-348, 999-1002.	1.2	9
89	Vortex pinning in untwinned YBCO. Physica C: Superconductivity and Its Applications, 2000, 341-348, 1059-1060.	1.2	0
90	Evidence for vortex pinning by surface irregularities in untwinned YBaCuO crystals. Physica C: Superconductivity and Its Applications, 2000, 332, 61-65.	1.2	4

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91	Very high resolution measurement of the penetration depth of superconductors by a novel single-coil inductance technique. Review of Scientific Instruments, 2000, 71, 2147-2153.	1.3	38
92	IMPORTANCE OF PHASE FLUCTUATIONS FOR THE MAGNETIC PENETRATION DEPTH OF CONVENTIONAL AND CUPRATE SUPERCONDUCTORS. International Journal of Modern Physics B, 2000, 14, 2932-2937.	2.0	3
93	Ancrage des vortex dans les supraconducteurs Description phÃ©nomÃ©nologique de la rÃ©ponse linÃ©aire d'un de vortex ancrÃ©. Annales De Physique, 2000, 25, 1-112.	0.2	0
94	Metastability in decelerating rotation of superfluid 3He-B. Physica B: Condensed Matter, 1998, 255, 27-40.	2.7	16
95	RF-studies of vortex dynamics in isotropic type-II superconductors. Physica B: Condensed Matter, 1998, 255, 75-85.	2.7	11
96	La rÃ©ponse Ã un Ã©chelon de champ d'un supraconducteur de type II: un moyen simple de tester l'ancrage des vortex en volume The magnetic-field step response of a type II superconductor as a simple test of the vortex bulk pinning. Journal of Physics Condensed Matter, 1998, 10, 7193-7208.	1.8	0
97	Defect Formation in Quench-Cooled Superfluid Phase Transition. Physical Review Letters, 1998, 80, 1465-1468.	7.8	86
98	Depinning Transition in Type-II Superconductors. Physical Review Letters, 1997, 79, 2538-2541.	7.8	28
99	Critical Velocity of Vortex Nucleation in Rotating Superfluid3He-A. Physical Review Letters, 1997, 79, 5058-5061.	7.8	92
100	Annihilation of vortex lines in rotating superfluid3He. Physical Review B, 1997, 56, 14089-14092.	3.2	14
101	Observation of the ideal low-frequency response of the mixed state and the diamagnetism of a type II superconductor. Physica C: Superconductivity and Its Applications, 1997, 279, 103-112.	1.2	3
102	Critical velocity of continuous vortex formation in rotating3He-A. European Physical Journal D, 1996, 46, 7-8.	0.4	41
103	Annihilation of quantized vortex lines in rotating3He-A. European Physical Journal D, 1996, 46, 9-10.	0.4	2
104	Equilibrium number of quantized vortex lines in rotating3He-B. European Physical Journal D, 1996, 46, 11-12.	0.4	3
105	Nucleation of vortices in superfluid3He-B. European Physical Journal D, 1996, 46, 15-16.	0.4	3
106	Vortex formation in neutron-irradiated superfluid 3He as an analogue of cosmological defect formation. Nature, 1996, 382, 334-336.	27.8	521
107	Continuum electrodynamics of type-II superconductors in the mixed state: The dc and ac response. Physical Review B, 1996, 54, 13083-13096.	3.2	37
108	Simple model for critical currents in anisotropic type-II superconductors. Physical Review B, 1994, 50, 3503-3506.	3.2	12

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109	Magnetic field and voltage noise in type-II superconductors. Physical Review B, 1994, 49, 15813-15829.	3.2	21
110	Critical currents in anisotropic crystalline type-II superconductors. Physica C: Superconductivity and Its Applications, 1994, 235-240, 3049-3050.	1.2	5
111	Critical-current fluctuations and flux-flow noise in type-II superconductors. Physical Review Letters, 1993, 70, 1521-1524.	7.8	15
112	Anomalous transverse voltages in the superconducting surface sheath. Physical Review B, 1993, 48, 7376-7382.	3.2	19
113	Thermal detection of flux-flow noise in type-II superconductors. Physical Review B, 1989, 39, 2151-2154.	3.2	10
114	Critical currents in soft type II superconductors. Solid State Communications, 1989, 71, 177-180.	1.9	11
115	Existe-t-il un troisiÃ¨me coefficient de friction mutuelle B" ?. Journal De Physique (Paris), Lettres, 1985, 46, 233-240.	2.8	0
116	Spatial distribution of vortices and anisotropy of mutual friction in rotating He II. Physical Review B, 1984, 29, 2489-2496.	3.2	30
117	Turn-on delay for Josephson logic devices with high damping. Electronics Letters, 1982, 18, 777.	1.0	5