

# Giovanni Vignale

## List of Publications by Year in descending order

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290  
papers

12,309  
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28190

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40881

93  
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302  
docs citations

302  
times ranked

7608  
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly confined low-loss plasmons in graphene-boron nitride heterostructures. <i>Nature Materials</i> , 2015, 14, 421-425.	13.3	847
2	Current-Dependent Exchange-Correlation Potential for Dynamical Linear Response Theory. <i>Physical Review Letters</i> , 1996, 77, 2037-2040.	2.9	453
3	Density-functional theory in strong magnetic fields. <i>Physical Review Letters</i> , 1987, 59, 2360-2363.	2.9	445
4	Current- and spin-density-functional theory for inhomogeneous electronic systems in strong magnetic fields. <i>Physical Review B</i> , 1988, 37, 10685-10696.	1.1	410
5	Time-Dependent Density Functional Theory Beyond the Adiabatic Local Density Approximation. <i>Physical Review Letters</i> , 1997, 79, 4878-4881.	2.9	226
6	Microscopic Theory of the Inverse Edelstein Effect. <i>Physical Review Letters</i> , 2014, 112, 096601.	2.9	224
7	Quantum Theory of Orbital Magnetization and Its Generalization to Interacting Systems. <i>Physical Review Letters</i> , 2007, 99, 197202.	2.9	195
8	Two-Dimensional Mott-Hubbard Electrons in an Artificial Honeycomb Lattice. <i>Science</i> , 2011, 332, 1176-1179.	6.0	187
9	Engineering artificial graphene in a two-dimensional electron gas. <i>Physical Review B</i> , 2009, 79, .	1.1	180
10	Dynamical Corrections to the DFT-LDA Electron Conductance in Nanoscale Systems. <i>Physical Review Letters</i> , 2005, 94, 186810.	2.9	160
11	Drude weight, plasmon dispersion, and ac conductivity in doped graphene sheets. <i>Physical Review B</i> , 2011, 84, .	1.1	153
12	Unipolar spin diodes and transistors. <i>Applied Physics Letters</i> , 2001, 78, 1273-1275.	1.5	148
13	Theory of spin Coulomb drag in spin-polarized transport. <i>Physical Review B</i> , 2000, 62, 4853-4857.	1.1	135
14	Center of Mass and Relative Motion in Time Dependent Density Functional Theory. <i>Physical Review Letters</i> , 1995, 74, 3233-3236.	2.9	120
15	Drag in Paired Electron-Hole Layers. <i>Physical Review Letters</i> , 1996, 76, 2786-2789.	2.9	118
16	Bulk and shear viscosities of the two-dimensional electron liquid in a doped graphene sheet. <i>Physical Review B</i> , 2016, 93, .	1.1	118
17	Current-density-functional theory of quantum dots in a magnetic field. <i>Physical Review B</i> , 1994, 50, 14722-14725.	1.1	116
18	Bilinear magnetoelectric resistance as a probe of three-dimensional spin texture in topological surface states. <i>Nature Physics</i> , 2018, 14, 495-499.	6.5	108

#	ARTICLE	IF	CITATIONS
19	Linear response of doped graphene sheets to vector potentials. <i>Physical Review B</i> , 2009, 80, .	1.1	107
20	Ten Years of Spin Hall Effect. <i>Journal of Superconductivity and Novel Magnetism</i> , 2010, 23, 3-10.	0.8	107
21	Nonuniqueness of the Potentials of Spin-Density-Functional Theory. <i>Physical Review Letters</i> , 2001, 86, 5546-5549.	2.9	104
22	Mapping from current densities to vector potentials in time-dependent current density functional theory. <i>Physical Review B</i> , 2004, 70, .	1.1	99
23	Magnetic Fields and Density Functional Theory. <i>Advances in Quantum Chemistry</i> , 1990, , 235-253.	0.4	94
24	Elasticity of an electron liquid. <i>Physical Review B</i> , 1999, 60, 7966-7980.	1.1	92
25	Origin of inverse Rashba-Edelstein effect detected at the Cu/Bi interface using lateral spin valves. <i>Physical Review B</i> , 2016, 93, .	1.1	87
26	Spin Currents and Spin Dynamics in Time-Dependent Density-Functional Theory. <i>Physical Review Letters</i> , 2001, 87, 206403.	2.9	85
27	Density-Functional Theory for Strongly Interacting Electrons. <i>Physical Review Letters</i> , 2009, 103, 166402.	2.9	83
28	Plasmon losses due to electron-phonon scattering: The case of graphene encapsulated in hexagonal boron nitride. <i>Physical Review B</i> , 2014, 90, .	1.1	83
29	Electric Control of Spin Currents and Spin-Wave Logic. <i>Physical Review Letters</i> , 2011, 106, 247203.	2.9	81
30	Electronic Zero-Point Oscillations in the Strong-Interaction Limit of Density Functional Theory. <i>Journal of Chemical Theory and Computation</i> , 2009, 5, 743-753.	2.3	79
31	Corbino Disk Viscometer for 2D Quantum Electron Liquids. <i>Physical Review Letters</i> , 2014, 113, 235901.	2.9	78
32	Coexistence of large conventional and planar spin Hall effect with long spin diffusion length in a low-symmetry semimetal at room temperature. <i>Nature Materials</i> , 2020, 19, 292-298.	13.3	77
33	Spin-orbit interaction in a two-dimensional electron gas: A $SU(2)$ formulation. <i>Annalen Der Physik</i> , 2012, 524, .	0.9	75
34	Intrinsic lifetime of Dirac plasmons in graphene. <i>Physical Review B</i> , 2013, 88, .	1.1	75
35	Effective two-body interaction in Coulomb Fermi liquids. <i>Physical Review B</i> , 1985, 32, 2156-2166.	1.1	72
36	Diamagnetic susceptibility of a dense electron gas. <i>Physical Review B</i> , 1988, 37, 2502-2507.	1.1	72

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37	Real-time resolution of the causality paradox of time-dependent density-functional theory. <i>Physical Review A</i> , 2008, 77, .	1.0	72
38	Theory of the Linewidth of Intersubband Plasmons in Quantum Wells. <i>Physical Review Letters</i> , 2001, 87, 037402.	2.9	70
39	Violation of the Wiedemann-Franz Law in Hydrodynamic Electron Liquids. <i>Physical Review Letters</i> , 2015, 115, 056603.	2.9	69
40	Time-dependent current-density-functional theory for the linear response of weakly disordered systems. <i>Physical Review B</i> , 2002, 65, .	1.1	68
41	Optics of Semiconductors from Meta-Generalized-Gradient-Approximation-Based Time-Dependent Density-Functional Theory. <i>Physical Review Letters</i> , 2011, 107, 216402.	2.9	68
42	Nonlinear Planar Hall Effect. <i>Physical Review Letters</i> , 2019, 123, 016801.	2.9	67
43	Spin diffusion in doped semiconductors: The role of Coulomb interactions. <i>Europhysics Letters</i> , 2001, 55, 566-572.	0.7	66
44	Dynamical exchange-correlation potentials for an electron liquid. <i>Physical Review B</i> , 2002, 65, .	1.1	66
45	Coulomb interaction effects in spin-polarized transport. <i>Physical Review B</i> , 2002, 65, .	1.1	66
46	Nonuniqueness and derivative discontinuities in density-functional theories for current-carrying and superconducting systems. <i>Physical Review B</i> , 2002, 65, .	1.1	63
47	Anisotropic plasmons in a two-dimensional electron gas with spin-orbit interaction. <i>Physical Review B</i> , 2009, 79, .	1.1	63
48	Incompleteness of the Landauer formula for electronic transport. <i>Physical Review B</i> , 2009, 79, .	1.1	63
49	Theory of unidirectional spin Hall magnetoresistance in heavy-metal/ferromagnetic-metal bilayers. <i>Physical Review B</i> , 2016, 94, .	1.1	62
50	Exchange-correlation energy of a three-dimensional electron gas in a magnetic field. <i>Physical Review B</i> , 1993, 48, 8547-8559.	1.1	61
51	Quasiparticle self-energy and many-body effective mass enhancement in a two-dimensional electron liquid. <i>Physical Review B</i> , 2005, 71, .	1.1	60
52	Engineering superfluidity in electron-hole double layers. <i>Physical Review B</i> , 1998, 57, R6846-R6849.	1.1	59
53	Spin Drag and Spin-Charge Separation in Cold Fermi Gases. <i>Physical Review Letters</i> , 2007, 98, 266403.	2.9	59
54	Nonlinear Quasiparticle Tunneling between Fractional Quantum Hall Edges. <i>Physical Review Letters</i> , 2003, 90, 046805.	2.9	58

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55	Many-Body Orbital Paramagnetism in Doped Graphene Sheets. <i>Physical Review Letters</i> , 2010, 104, 225503.	2.9	57
56	Lorentz shear modulus of a two-dimensional electron gas at high magnetic field. <i>Physical Review B</i> , 2007, 76, .	1.1	56
57	Including nonlocality in the exchange-correlation kernel from time-dependent current density functional theory: Application to the stopping power of electron liquids. <i>Physical Review B</i> , 2007, 76, .	1.1	56
58	Spin Dynamics from Time-Dependent Spin-Density-Functional Theory. <i>Physical Review Letters</i> , 2002, 88, 056404.	2.9	55
59	Spin Coulomb drag in the two-dimensional electron liquid. <i>Physical Review B</i> , 2003, 68, .	1.1	55
60	Transverse spin diffusion in ferromagnets. <i>Physical Review B</i> , 2009, 79, .	1.1	54
61	Observation of Out-of-Plane Spin Texture in a $\text{SrTiO}_3$ thin film. <i>Physical Review Letters</i> , 2018, 120, 266802.	2.9	53
62	Lorentz shear modulus of fractional quantum Hall states. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 275603.	0.7	52
63	Impact of disorder on Dirac plasmon losses. <i>Physical Review B</i> , 2013, 88, .	1.1	51
64	Possibility of superconductivity in the electron-hole liquid. <i>Physical Review B</i> , 1985, 31, 2729-2749.	1.1	47
65	Anisotropic magnetoresistance driven by surface spin-orbit scattering. <i>Physical Review B</i> , 2015, 92, .	1.1	47
66	Inhomogeneous Gilbert damping from impurities and electron-electron interactions. <i>Physical Review B</i> , 2008, 78, .	1.1	46
67	Relaxation in Time-Dependent Current-Density-Functional Theory. <i>Physical Review Letters</i> , 2006, 96, 016405.	2.9	44
68	Long-lived spin plasmons in a spin-polarized two-dimensional electron gas. <i>Physical Review B</i> , 2014, 90, .	1.1	44
69	Orbital Hall effect as an alternative to valley Hall effect in gapped graphene. <i>Physical Review B</i> , 2021, 103, .	1.1	44
70	Motion of a single hole in an itinerant-electron antiferromagnet. <i>Physical Review B</i> , 1990, 42, 786-797.	1.1	42
71	Sum rule for the linear density response of a driven electronic system. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1995, 209, 206-210.	0.9	42
72	Ambipolar spin diffusion and D'yakonov-Perel' spin relaxation in GaAs quantum wells. <i>Physical Review B</i> , 2009, 79, .	1.1	42

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73	Theory of coupled spin-charge transport due to spin-orbit interaction in inhomogeneous two-dimensional electron liquids. <i>Physical Review B</i> , 2014, 90, .	1.1	42
74	Quantum Stress Focusing in Descriptive Chemistry. <i>Physical Review Letters</i> , 2008, 100, 206405.	2.9	41
75	Plasmon mass and Drude weight in strongly spin-orbit-coupled two-dimensional electron gases. <i>Physical Review B</i> , 2011, 83, .	1.1	39
76	Coulomb corrections to the extrinsic spin-Hall effect of a two-dimensional electron gas. <i>Physical Review B</i> , 2006, 73, .	1.1	38
77	Spin Drag in an Ultracold Fermi Gas on the Verge of Ferromagnetic Instability. <i>Physical Review Letters</i> , 2010, 104, 220403.	2.9	38
78	Kondo effect and non-Fermi-liquid behavior in Dirac and Weyl semimetals. <i>Physical Review B</i> , 2015, 92, .	1.1	38
79	Probing the Topological Exciton Condensate via Coulomb Drag. <i>Physical Review Letters</i> , 2012, 108, 186402.	2.9	37
80	Collective modes and electronic spectral function in smooth edges of quantum hall systems. <i>Physical Review B</i> , 1996, 54, R14309-R14312.	1.1	35
81	Side jumps in the spin Hall effect: Construction of the Boltzmann collision integral. <i>Physical Review B</i> , 2010, 81, .	1.1	35
82	Beating of Friedel oscillations induced by spin-orbit interaction. <i>Physical Review B</i> , 2010, 81, .	1.1	35
83	Luttinger-field approach to thermoelectric transport in nanoscale conductors. <i>Physical Review B</i> , 2014, 90, .	1.1	35
84	How Many-Body Effects Modify the van der Waals Interaction between Graphene Sheets. <i>Physical Review X</i> , 2014, 4, .	2.8	35
85	Edge structure of fractional quantum Hall systems from density-functional theory. <i>Physical Review B</i> , 1995, 52, 16357-16360.	1.1	33
86	Lifetime of a quasiparticle in an electron liquid. <i>Physical Review B</i> , 2005, 71, .	1.1	33
87	Spin-Hall Effect in a [110] GaAs Quantum Well. <i>Physical Review Letters</i> , 2006, 97, 266601.	2.9	33
88	Phase Diagram of the Spin Hall Effect. <i>Physical Review Letters</i> , 2008, 100, 026602.	2.9	33
89	Spin-Hall effect and spin-Coulomb drag in doped semiconductors. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 253202.	0.7	33
90	Spin gaps and spin-flip energies in density-functional theory. <i>Physical Review B</i> , 2010, 81, .	1.1	33

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91	Superconductivity from collective excitations in magic-angle twisted bilayer graphene. Physical Review Research, 2020, 2, .	1.3	33
92	Currents in the compressible and incompressible regions of the two-dimensional electron gas. Physical Review B, 1994, 50, 11714-11722.	1.1	32
93	Exact exchange-correlation potential for a time-dependent two-electron system. Physical Review B, 1999, 59, 7876-7887.	1.1	32
94	Nonlinear Spin-Polarized Transport through a Ferromagnetic Domain Wall. Physical Review Letters, 2002, 89, 098302.	2.9	32
95	Electron-Electron Interactions in Artificial Graphene. Physical Review Letters, 2012, 108, 246803.	2.9	32
96	Orbital paramagnetism of electrons in a two-dimensional lattice. Physical Review Letters, 1991, 67, 358-361.	2.9	31
97	Persistent current in a rotating mesoscopic ring. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 197, 444-448.	0.9	31
98	Transverse and longitudinal gradients of the spin magnetization in spin-density-functional theory. Physical Review B, 2013, 88, .	1.1	31
99	Plasmon modes of a massive Dirac plasma, and their superlattices. Physical Review B, 2015, 91, .	1.1	31
100	Density-functional theory of the phase diagram of maximum-density droplets in two-dimensional quantum dots in a magnetic field. Physical Review B, 1997, 56, 12108-12111.	1.1	30
101	Continuum mechanics for quantum many-body systems: Linear response regime. Physical Review B, 2010, 81, .	1.1	30
102	Spin Hall and Edelstein effects in metallic films: From two to three dimensions. Physical Review B, 2014, 89, .	1.1	30
103	Theory of current-induced spin polarization in an electron gas. Physical Review B, 2017, 95, .	1.1	30
104	Gauge-phonon dominated resistivity in twisted bilayer graphene near magic angle. Physical Review B, 2019, 99, .	1.1	30
105	Dynamics of dissipative quantum Hall edges. Physical Review B, 2003, 67, .	1.1	29
106	Fine structure in the dynamic form factor of an electron liquid. Physical Review B, 1984, 30, 6951-6959.	1.1	28
107	Hall viscosity and electromagnetic response of electrons in graphene. Physical Review B, 2016, 94, .	1.1	28
108	Quantum electron glass. Physical Review B, 1987, 36, 8192-8195.	1.1	27





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127	Exact behavior of the density and spin susceptibilities of a Fermi liquid for large wave vectors: Derivation from diagrammatic many-body theory. <i>Physical Review B</i> , 1988, 38, 6445-6451.	1.1	20
128	Comment on "Universal persistent current in mesoscopic metal rings due to long-range Coulomb interactions". <i>Physical Review Letters</i> , 1994, 72, 433-433.	2.9	20
129	Dynamics of the two-dimensional electron gas in the lowest Landau level: a continuum elasticity approach. <i>Journal of Physics Condensed Matter</i> , 1998, 10, L779-L786.	0.7	20
130	New Collective Mode in the Fractional Quantum Hall Liquid. <i>Physical Review Letters</i> , 2007, 98, 026805.	2.9	20
131	Flexoelectric phase shifter for spin waves. <i>Journal of Applied Physics</i> , 2012, 111, 083907.	1.1	20
132	Disorder-enabled hydrodynamics of charge and heat transport in monolayer graphene. <i>2D Materials</i> , 2019, 6, 035024.	2.0	20
133	Ground-state energy of the one- and two-dimensional Hubbard model calculated by the method of Singwi, Tosi, Land, and Sjölander. <i>Physical Review B</i> , 1989, 40, 9044-9051.	1.1	19
134	Time-dependent density functional theory: Derivation of gradient-corrected dynamical exchange-correlational potentials. <i>Physical Review B</i> , 2007, 76, .	1.1	19
135	Finite Width and Local Field Corrections to Spin Coulomb Drag in a Quasi-Two-Dimensional Electron Gas. <i>Physical Review Letters</i> , 2008, 100, 016603.	2.9	19
136	Dyakonov-Perel spin relaxation for degenerate electrons in the electron-hole liquid. <i>Physical Review B</i> , 2011, 83, .	1.1	19
137	Plasmons in spin-polarized graphene: A way to measure spin polarization. <i>Physical Review B</i> , 2015, 91, .	1.1	19
138	Exact Dynamical Exchange-Correlation Kernel of a Weakly Inhomogeneous Electron Gas. <i>Physical Review Letters</i> , 2009, 102, 113001.	2.9	18
139	Relation between current and density profiles of interacting electronic systems in a magnetic field. <i>Physical Review B</i> , 1992, 46, 10232-10238.	1.1	17
140	Coulomb interaction and persistent currents in ensembles of mesoscopic metal rings. <i>Physical Review B</i> , 1994, 50, 7668-7679.	1.1	17
141	Linewidths of collective excitations of the inhomogeneous electron gas: Application to two-dimensional quantum strips. <i>Physical Review B</i> , 1998, 58, 7141-7150.	1.1	17
142	Observing the spin Coulomb drag in spin-valve devices. <i>Physical Review B</i> , 2005, 71, .	1.1	17
143	Theory of the Pseudospin Resonance in Semiconductor Bilayers. <i>Physical Review Letters</i> , 2007, 99, 206802.	2.9	17
144	Time-Dependent Current-Density-Functional Theory of Spin-Charge Separation and Spin Drag in One-Dimensional Ultracold Fermi Gases. <i>Physical Review Letters</i> , 2008, 101, 206402.	2.9	17

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145	Spin-drag relaxation time in one-dimensional spin-polarized Fermi gases. <i>Physical Review B</i> , 2008, 77, .	1.1	17
146	Carrier transport theory for twisted bilayer graphene in the metallic regime. <i>Nature Communications</i> , 2021, 12, 5737.	5.8	17
147	Self-induced effective gauge fields in the copper-oxygen plane of high-T <sub>c</sub> perovskites: A lattice and a continuum formulation. <i>Physical Review Letters</i> , 1990, 65, 1498-1501.	2.9	16
148	Universal equilibrium currents in the quantum Hall fluid. <i>Physical Review B</i> , 1995, 52, 14137-14143.	1.1	16
149	RKKY range function of a one-dimensional noninteracting electron gas. <i>Physical Review B</i> , 2005, 72, .	1.1	16
150	Spin Hall Drag in Electronic Bilayers. <i>Physical Review Letters</i> , 2009, 103, 196601.	2.9	16
151	Spin-Orbit Twisted Spin Waves: Group Velocity Control. <i>Physical Review Letters</i> , 2016, 117, 137204.	2.9	16
152	Breakdown of the Wiedemann-Franz law in $\langle \mathbf{v} \cdot \mathbf{v} \rangle$ stacked bilayer graphene. <i>Physical Review B</i> , 2019, 99, .	1.0	16
153	Acoustic plasmons in a two-dimensional, two-component electron liquid. <i>Physical Review B</i> , 1988, 38, 811-814.	1.1	15
154	Current-density-functional theory of the two-dimensional Wigner crystal in a strong magnetic field. <i>Physical Review B</i> , 1993, 47, 10105-10111.	1.1	15
155	Collective charge-density excitations of noncircular quantum dots in a magnetic field. <i>Physical Review B</i> , 2000, 61, 2729-2736.	1.1	15
156	Degenerate ground states and nonunique potentials: Breakdown and restoration of density functionals. <i>Physical Review A</i> , 2007, 76, .	1.0	15
157	Current reversals in rapidly rotating ultracold Fermi gases. <i>Physical Review A</i> , 2014, 89, .	1.0	15
158	Functional theories of thermoelectric phenomena. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 063001.	0.7	15
159	Effect of quantum hopping on the Coulomb gap of localized electrons in disordered systems. <i>Physical Review B</i> , 1986, 34, 3003-3006.	1.1	14
160	Gauge-invariant formulation of spin-current density-functional theory. <i>Physical Review B</i> , 2010, 81, .	1.1	14
161	Effective mass of quasiparticles from thermodynamics. <i>Physical Review B</i> , 2017, 96, .	1.1	14
162	Collective modes in electron-hole liquids. <i>Solid State Communications</i> , 1982, 44, 259-261.	0.9	13

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163	Breakdown of the spin-wave approximation for a Heisenberg ferromagnet. Physical Review B, 1991, 44, 658-674.	1.1	13
164	Transport properties of a two-dimensional electron liquid at high magnetic fields. Physical Review B, 2003, 68, .	1.1	13
165	Comment on "density and physical current density functional theory" by Xiao-Yin Pan and Virah Sahn. International Journal of Quantum Chemistry, 2013, 113, 1422-1423.	1.0	13
166	Magnons in disordered nonstoichiometric low-dimensional magnets. Physical Review B, 2016, 94, .	1.1	13
167	Frequency- and wave-vector-dependent dielectric function of waterlike fluids. Physical Review A, 1992, 46, 7548-7560.	1.0	12
168	Current-density-functional theory of the surface properties of electron-hole droplets in a strong magnetic field. Physical Review B, 1992, 45, 8494-8497.	1.1	12
169	Rigorous upper bound for the persistent current in systems with toroidal geometry. Physical Review B, 1995, 51, 2612-2615.	1.1	12
170	Dynamical exchange-correlation potentials for the electron liquid in the spin channel. Physical Review B, 2003, 68, .	1.1	12
171	Temperature Dependence of the Tunneling Amplitude between Quantum Hall Edges. Physical Review Letters, 2005, 94, 086801.	2.9	12
172	TIME-DEPENDENT CURRENT-DENSITY FUNCTIONAL THEORY FOR THE FRICTION OF IONS IN AN INTERACTING ELECTRON GAS. International Journal of Modern Physics B, 2008, 22, 3813-3839.	1.0	12
173	Persistent Spin Oscillations in a Spin-Orbit-Coupled Superconductor. Physical Review Letters, 2011, 107, 077004.	2.9	12
174	Viscous corrections to the resistance of nanojunctions: A dispersion relation approach. Physical Review B, 2011, 83, .	1.1	12
175	Spin transport in a unitary Fermi gas close to the BCS transition. Physical Review A, 2012, 86, .	1.0	12
176	Intrinsic spin Hall effect at asymmetric oxide interfaces: Role of transverse wave functions. Physical Review B, 2013, 88, .	1.1	12
177	Intrinsic charge and spin conductivities of doped graphene in the Fermi-liquid regime. Physical Review B, 2015, 91, .	1.1	12
178	Equilibrium density of an electron-hole liquid in a strong magnetic field: A possibility of phase separation. Physical Review B, 1993, 47, 16647-16650.	1.1	11
179	Equilibrium current and orbital magnetization in the quantum Hall fluid. Physica B: Condensed Matter, 1995, 212, 283-288.	1.3	11
180	Quantum breathing mode for electrons with $1/r^2$ interaction. Physical Review B, 1996, 53, 6979-6980.	1.1	11

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181	TIME-DEPENDENT DENSITY FUNCTIONAL THEORY BEYOND THE ADIABATIC APPROXIMATION. International Journal of Modern Physics B, 2001, 15, 1714-1723.	1.0	11
182	Dynamical many-body corrections to the residual resistivity of metals. Physical Review B, 2014, 89, .	1.1	11
183	Thermal transport in compensated semimetals: Effect of electron-electron scattering on Lorenz ratio. Physical Review B, 2020, 102, .	1.1	11
184	Orbital Hall effect in bilayer transition metal dichalcogenides: From the intra-atomic approximation to the Bloch states orbital magnetic moment approach. Physical Review B, 2022, 105, .	1.1	11
185	Analytic expression for the diamagnetic susceptibility of a uniform electron gas. Physical Review B, 2006, 74, .	1.1	10
186	Electronic viscosity in a quantum well: A test for the local-density approximation. Physical Review B, 2007, 76, .	1.1	10
187	Magnetic fluctuations driven insulator-to-metal transition in $\text{Ca}(\text{Ir}_{1-x}\text{Ru}_x)\text{O}_3$ . Scientific Reports, 2016, 5, 18047.	1.6	10
188	Enhanced hydrodynamic transport in near magic angle twisted bilayer graphene. Physical Review B, 2020, 101, .	1.1	10
189	Theory of bilinear magneto-electric resistance from topological-insulator surface states. , 2018, , .		10
190	Heterostructure unipolar spin transistors. Journal of Applied Physics, 2005, 97, 104508.	1.1	9
191	Spin drag in ultracold Fermi mixtures with repulsive interactions. New Journal of Physics, 2011, 13, 045010.	1.2	9
192	Spin current swapping and Hanle spin Hall effect in a two-dimensional electron gas. Physical Review B, 2015, 92, .	1.1	9
193	Time-Dependent Current Density Functional Theory. Lecture Notes in Physics, 2012, , 457-469.	0.3	9
194	Dirac Fermion Cloning, Moiré Flat Bands, and Magic Lattice Constants in Epitaxial Monolayer Graphene. Advanced Materials, 2022, 34, e2200625.	11.1	9
195	Density-Functional Theory in Strong Magnetic Fields. Physical Review Letters, 1989, 62, 115-115.	2.9	8
196	Effect of electrical bias on spin transport across a magnetic domain wall. Journal of Applied Physics, 2004, 96, 7424-7427.	1.1	8
197	Temperature dependence of persistent spin currents in a spin-orbit-coupled electron gas: A density-matrix approach. Physical Review B, 2008, 77, .	1.1	8
198	Antiadiabatic limit of the exchange-correlation kernels of an inhomogeneous electron gas. Physical Review B, 2010, 81, .	1.1	8

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199	Spin-current generation from Coulomb-Rashba interaction in semiconductor bilayers. <i>Physical Review B</i> , 2011, 84, .	1.1	8
200	Interacting Drift-Diffusion Theory for Photoexcited Electron-Hole Gratings in Semiconductor Quantum Wells. <i>Physical Review Letters</i> , 2013, 110, 096601.	2.9	8
201	Strain engineering of the intrinsic spin Hall conductivity in a SrTiO <sub>3</sub> quantum well. <i>Physical Review Materials</i> , 2019, 3, .	0.9	8
202	Pseudogauge field driven acoustoelectric current in two-dimensional hexagonal Dirac materials. <i>Physical Review B</i> , 2022, 105, .	1.1	8
203	Ground-state energy of a strongly coupled electron liquid. <i>Journal of Physics F: Metal Physics</i> , 1982, 12, L41-L43.	1.6	7
204	Acoustic plasmons in a two-component superconducting Coulomb liquid. <i>Physical Review B</i> , 1985, 31, 245-250.	1.1	7
205	Electronic diamagnetism in a three-dimensional lattice. <i>Physical Review B</i> , 1991, 43, 5764-5768.	1.1	7
206	Spin Mass of an Electron Liquid. <i>Physical Review Letters</i> , 2004, 93, 106601.	2.9	7
207	SaïetÂal.Reply:. <i>Physical Review Letters</i> , 2007, 98, .	2.9	7
208	The quantum mechanics of electric conduction in crystals. <i>American Journal of Physics</i> , 2010, 78, 954-960.	0.3	7
209	Short-Time Spin Dynamics in Strongly Correlated Few-Fermion Systems. <i>Physical Review Letters</i> , 2012, 108, 245302.	2.9	7
210	Unified Boltzmann transport theory for the drag resistivity close to an interlayer-interaction-driven second-order phase transition. <i>Physical Review B</i> , 2013, 88, .	1.1	7
211	Theory of the nonlinear Rashba-Edelstein effect: The clean electron gas limit. <i>Physical Review B</i> , 2016, 93, .	1.1	7
212	A shortcut to gradient-corrected magnon dispersion: exchange-only case. <i>European Physical Journal B</i> , 2018, 91, 1.	0.6	7
213	Chiral surface and edge plasmons in ferromagnetic conductors. <i>Physical Review B</i> , 2018, 97, .	1.1	7
214	Theory of the pinning gap in the phonon spectrum of a disordered Wigner crystal. <i>Physical Review B</i> , 1993, 48, 2831-2834.	1.1	6
215	Bosonization theory for tunneling spectra in smooth edges of quantum Hall systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 1997, 1, 101-104.	1.3	6
216	Continuum elasticity theory of edge waves in a two-dimensional electron liquid with finite-range interactions. <i>Physical Review B</i> , 1999, 60, 2084-2092.	1.1	6

#	ARTICLE	IF	CITATIONS
217	Coulomb drag, magnetoresistance, and spin-current injection in magnetic multilayers. <i>Solid State Communications</i> , 2003, 127, 829-834.	0.9	6
218	Derivative discontinuity with localized Hartree-Fock potential. <i>Journal of Chemical Physics</i> , 2015, 143, 064111.	1.2	6
219	Low-dissipation edge currents without edge states. <i>Physical Review B</i> , 2019, 99, .	1.1	6
220	Field and Current Control of the Electrical Conductivity of an Artificial 2D Honeycomb Lattice. <i>Advanced Materials</i> , 2019, 31, e1808298.	11.1	6
221	Current Density Functional Theory and Orbital Magnetism. <i>NATO ASI Series Series B: Physics</i> , 1995, , 485-511.	0.2	6
222	Current-Density Functional Theory of Linear Response to Time-Dependent Electromagnetic Fields. , 1998, , 199-216.		6
223	The quasiparticle lifetime in a doped graphene sheet. , 2016, , 107-124.		6
224	Many-body theory of electronic excitations in random substitutional alloys. <i>European Physical Journal B</i> , 1987, 69, 193-207.	0.6	5
225	Effect of exchange and correlation on the Fermi momenta of an electron liquid in a magnetic field. <i>Physical Review Letters</i> , 1992, 69, 949-952.	2.9	5
226	Dynamic dielectric response function of liquid water. <i>Physical Review E</i> , 1994, 50, 4618-4624.	0.8	5
227	Classical continuum theory of the dipole-forbidden collective excitations in quantum strips. <i>Physical Review B</i> , 1996, 53, 13016-13023.	1.1	5
228	Effect of disorder on the nondissipative drag between two mesoscopic metal rings. <i>Physical Review B</i> , 1999, 60, 8804-8810.	1.1	5
229	Intrinsic Decay of Spin Currents: The Spin Coulomb Drag Effect. <i>Journal of Superconductivity and Novel Magnetism</i> , 2003, 16, 253-256.	0.5	5
230	Quasi-particle tunneling between fractional quantum Hall edges. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004, 22, 185-188.	1.3	5
231	Comment on "Modifying the variational principle in the action-integral-functional derivation of time-dependent density-functional theory". <i>Physical Review A</i> , 2011, 83, .	1.0	5
232	Ab initio theory of spin entanglement in atoms and molecules. <i>Physical Review B</i> , 2015, 91, .	1.1	5
233	Ab initio electronic structure of quasi-two-dimensional materials: A "Gaussian" plane wave approach. <i>Journal of Chemical Physics</i> , 2016, 144, 204122.	1.2	5
234	Nonlocal Drag of Magnons in a Ferromagnetic Bilayer. <i>Physical Review Letters</i> , 2016, 116, 237202.	2.9	5

#	ARTICLE	IF	CITATIONS
235	Graphene electrodynamics in the presence of the extrinsic spin Hall effect. Physical Review B, 2016, 93, .	1.1	5
236	Antiferromagnetism and chiral $d$ -wave superconductivity from an effective model for twisted bilayer graphene. Physical Review B, 2020, 101, .	1.1	5
237	Many-body theory of electronic excitations in random substitutional alloys. European Physical Journal B, 1987, 69, 209-225.	0.6	4
238	Spin-density-wave domain in $\text{Cu}_1-x\text{Mn}_x$ : diagnostics for the spin susceptibility of an electron gas. Solid State Communications, 1991, 77, 829-832.	0.9	4
239	Spin-resolved correlation kinetic energy of the spin-polarized electron gas. Physical Review B, 2004, 70, .	1.1	4
240	Integral charge quasiparticles in a fractional quantum Hall liquid. Physical Review B, 2006, 73, .	1.1	4
241	Collective Spin Hall Effect for Electron-Hole Gratings. Physical Review Letters, 2013, 111, 136602.	2.9	4
242	Electrically induced charge-density waves in a two-dimensional electron liquid: Effects of negative electronic compressibility. Physical Review B, 2017, 96, .	1.1	4
243	Phonons of the 2D Wigner Crystal in Strong Magnetic Field from Density Functional Theory. Europhysics Letters, 1992, 20, 457-462.	0.7	3
244	Refractive index of waterlike fluids. Physical Review E, 1993, 48, 3172-3175.	0.8	3
245	Absence of certain exchange driven instabilities of an electron gas at high densities. Physical Review B, 2008, 78, .	1.1	3
246	Communications: On the relation between the scalar and tensor exchange-correlation kernels of the time-dependent density-functional theory. Journal of Chemical Physics, 2010, 133, 021101.	1.2	3
247	Spin Hall and Edelstein Effects in Metallic Films. Acta Physica Polonica A, 2015, 127, 457-459.	0.2	3
248	Hidden anisotropy in the Drude conductivity of charge carriers with Dirac-Schrödinger dynamics. Physical Review B, 2019, 100, .	1.1	3
249	Hall viscosity and nonlocal conductivity of gapped graphene. Physical Review B, 2019, 100, .	1.1	3
250	Two-component electron-hole liquid: A simple model. Physical Review B, 1981, 24, 7174-7180.	1.1	2
251	Ground-state properties, thermodynamics and systematics of electron-hole liquid in Ge and Si under uniaxial stress. Journal of Physics C: Solid State Physics, 1983, 16, 699-709.	1.5	2
252	Self-consistent Green's function theory for interacting electrons in a random potential. European Physical Journal B, 1985, 60, 393-400.	0.6	2

#	ARTICLE	IF	CITATIONS
253	Altshuler-Aronov anomalies in the density of states of substitutional alloys. <i>Physical Review B</i> , 1987, 36, 2924-2927.	1.1	2
254	Current density functional theory in a continuum and lattice lagrangians: Application to spontaneously broken chiral ground states. <i>International Journal of Quantum Chemistry</i> , 1992, 44, 359-370.	1.0	2
255	Bound on the group velocity of an electron in a one-dimensional periodic potential. <i>Physical Review B</i> , 1995, 51, 2616-2617.	1.1	2
256	Spins in cold atoms – what a drag!. <i>Physics Magazine</i> , 2009, 2, .	0.1	2
257	Quantum continuum mechanics in a strong magnetic field. <i>Physical Review B</i> , 2011, 84, .	1.1	2
258	Spin-orbit-interaction induced singularity of the charge density relaxation propagator. <i>Physical Review B</i> , 2013, 88, .	1.1	2
259	Temperature collapse of the electric conductivity in bilayer graphene. <i>Physical Review Research</i> , 2020, 2, .	1.3	2
260	Crossover in the Heisenberg ferromagnet. <i>Journal of Physics Condensed Matter</i> , 1991, 3, 4381-4387.	0.7	1
261	Spin disorder in the two-dimensional Hubbard model: A mean-field theory. <i>Physical Review B</i> , 1991, 43, 6216-6219.	1.1	1
262	Zero-temperature Hall coefficient of a localized-electron insulator: Wigner crystal versus Anderson localization. <i>Physical Review B</i> , 1993, 48, 11504-11507.	1.1	1
263	High field and Coulomb interaction effects on spin injection in degenerate semiconductors. <i>Semiconductor Science and Technology</i> , 2004, 19, S383-S385.	1.0	1
264	Linear response theory. , 2005, , 111-156.		1
265	Linear response of independent electrons. , 2005, , 157-187.		1
266	Exchange and correlation effects on drag in low density electron bilayers: Coulomb and virtual-optical-phonon-mediated electron-electron interaction. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 34, 421-424.	1.3	1
267	Exchange and correlation effect on spin Coulomb drag in a quasi-two-dimensional electron system. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1590-1592.	1.3	1
268	Voltage-controlled spin-wave-based logic gate. , 2011, , .		1
269	Spin-orbit interaction from low-symmetry localized defects in semiconductors. <i>Europhysics Letters</i> , 2012, 98, 17013.	0.7	1
270	Geometric Derivation of the Stress Tensor of the Homogeneous Electron Gas. <i>Computation</i> , 2017, 5, 28.	1.0	1



#	ARTICLE	IF	CITATIONS
271	First-principles perspective on magnetic second sound. <i>Physical Review B</i> , 2020, 101, .	1.1	1
272	Theory of unidirectional magnetoresistance in magnetic heterostructures. , 2017, , .		1
273	Possibility of superconductivity in the electron-hole liquid. , 1985, , 219-220.		0
274	Possibility of superconductivity in the electron-hole liquid. <i>Physica B: Physics of Condensed Matter &amp; C: Atomic, Molecular and Plasma Physics, Optics</i> , 1985, 135, 457.	0.9	0
275	On the possibility of superconductivity in electron-hole liquids. <i>Solid State Communications</i> , 1985, 53, 415-418.	0.9	0
276	Properties of doped holes in the antiferromagnetic state of the two-dimensional Hubbard model. <i>Physica C: Superconductivity and Its Applications</i> , 1989, 162-164, 1503-1504.	0.6	0
277	Dynamical properties of the 2D wigner crystal in a strong magnetic field. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1993, 15, 547-555.	0.4	0
278	Self-energy and persistent current in ensembles of mesoscopic metal rings. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1994, 192, 117-121.	0.9	0
279	Spin Coulomb drag and spin diffusion in doped semiconductors. <i>Physica B: Condensed Matter</i> , 2002, 314, 239-243.	1.3	0
280	Effect of the Coulomb interaction on spin injection in semiconductor structures. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, 1928-1929.	1.0	0
281	Temperature-dependent theory of tunneling in the fractional quantum Hall effect. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 34, 199-202.	1.3	0
282	Coulomb-Induced Rashba Spin-Orbit Coupling in Semiconductor Quantum Wells. <i>Physical Review Letters</i> , 2010, 104, 226601.	2.9	0
283	Reply to "Comment on "The quantum mechanics of electric conduction in crystals," by Massimiliano Sassi de Bianchi [Am. J. Phys. 79 (5), 549-551 (2010)]. <i>American Journal of Physics</i> , 2011, 79, 550-551.	0.3	0
284	Doppler speed gun for spins. <i>Nature Physics</i> , 2012, 8, 115-116.	6.5	0
285	Inverse Edelstein Effect: an Heuristic Derivation. <i>Acta Physica Polonica A</i> , 2015, 127, 454-456.	0.2	0
286	Spintronics: Field and Current Control of the Electrical Conductivity of an Artificial 2D Honeycomb Lattice ( <i>Adv. Mater.</i> 16/2019). <i>Advanced Materials</i> , 2019, 31, 1970117.	11.1	0
287	Collective excitations and quantum incompressibility in electron-hole bilayers. <i>Physical Review B</i> , 2021, 104, .	1.1	0
288	TIME-DEPENDENT DENSITY FUNCTIONAL THEORY BEYOND THE ADIABATIC APPROXIMATION. , 2000, , .		0

#	ARTICLE	IF	CITATIONS
289	Spin-Polarized Electron Transport in GaAs: Role of Holes. , 2009, , .		0
290	Density Functional Theory of Quantum Dots in A Magnetic Field. , 2002, , 313-318.		0