

Luis Brey

List of Publications by Year in descending order

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153
papers

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154
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154
times ranked

5946
citing authors

#	ARTICLE	IF	CITATIONS
1	Electronic states of graphene nanoribbons studied with the Dirac equation. Physical Review B, 2006, 73, .	3.2	1,247
2	Optical and magneto-optical absorption in parabolic quantum wells. Physical Review B, 1989, 40, 10647-10649.	3.2	404
3	Vacancy-induced magnetism in graphene and graphene ribbons. Physical Review B, 2008, 77, .	3.2	390
4	Edge states and the quantized Hall effect in graphene. Physical Review B, 2006, 73, .	3.2	257
5	Diluted Graphene Antiferromagnet. Physical Review Letters, 2007, 99, 116802.	7.8	242
6	Emerging Zero Modes for Graphene in a Periodic Potential. Physical Review Letters, 2009, 103, 046809.	7.8	224
7	Charged spin-texture excitations and the Hartree-Fock approximation in the quantum Hall effect. Physical Review B, 1994, 50, 11018-11021.	3.2	210
8	Skyrme Crystal in a Two-Dimensional Electron Gas. Physical Review Letters, 1995, 75, 2562-2565.	7.8	190
9	Infrared optical absorption in imperfect parabolic quantum wells. Physical Review B, 1990, 42, 1240-1247.	3.2	184
10	Calculated optical properties of semiconductors. Physical Review B, 1988, 37, 1167-1179.	3.2	129
11	Collective Excitations, NMR, and Phase Transitions in Skyrme Crystals. Physical Review Letters, 1997, 78, 4825-4828.	7.8	127
12	Elementary electronic excitations in graphene nanoribbons. Physical Review B, 2007, 75, .	3.2	126
13	Surface electronic structure and magnetic properties of doped manganites. Physical Review B, 1999, 60, 6698-6704.	3.2	124
14	Spectroscopic measurement of large exchange enhancement of a spin-polarized 2D electron gas. Physical Review Letters, 1992, 68, 3623-3626.	7.8	120
15	Excitations from filled Landau levels in graphene. Physical Review B, 2007, 75, .	3.2	118
16	Carbon Nanoelectronics: Unzipping Tubes into Graphene Ribbons. Physical Review Letters, 2009, 103, 086801.	7.8	113
17	Energy spectrum and charge-density-wave instability of a double quantum well in a magnetic field. Physical Review Letters, 1990, 65, 903-906.	7.8	110
18	Skyrmions without Sigma Models in Quantum Hall Ferromagnets. Physical Review Letters, 1996, 76, 2153-2156.	7.8	104

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19	Electronic transport through bilayer graphene flakes. <i>Physical Review B</i> , 2010, 81, .	3.2	97
20	Electronic structure of gated graphene and graphene ribbons. <i>Physical Review B</i> , 2007, 75, .	3.2	93
21	Ferromagnetism Mediated by Few Electrons in a Semimagnetic Quantum Dot. <i>Physical Review Letters</i> , 2004, 93, 117201.	7.8	91
22	Optical conductivity, Drude weight and plasmons in twisted graphene bilayers. <i>New Journal of Physics</i> , 2013, 15, 113050.	2.9	88
23	Broken-symmetry ground states for the two-dimensional electron gas in a double-quantum-well system. <i>Physical Review B</i> , 1992, 46, 10239-10250.	3.2	87
24	Hartree-Fock theory of Skyrmions in quantum Hall ferromagnets. <i>Physical Review B</i> , 1997, 55, 10671-10680.	3.2	84
25	Luttinger Liquid at the Edge of Undoped Graphene in a Strong Magnetic Field. <i>Physical Review Letters</i> , 2006, 97, 116805.	7.8	83
26	New optical transitions in Si-Ge strained superlattices. <i>Physical Review Letters</i> , 1987, 59, 1022-1025.	7.8	75
27	Band topology and the quantum spin Hall effect in bilayer graphene. <i>Solid State Communications</i> , 2011, 151, 1075-1083.	1.9	75
28	Electronic and magnetic structure of graphene nanoribbons. <i>Semiconductor Science and Technology</i> , 2010, 25, 033003.	2.0	68
29	Edge states of composite fermions. <i>Physical Review B</i> , 1994, 50, 11861-11871.	3.2	64
30	Lattice-Spin Mechanism in Colossal Magnetoresistive Manganites. <i>Physical Review Letters</i> , 2002, 88, 136401.	7.8	64
31	Electronic properties of twisted trilayer graphene. <i>Physical Review B</i> , 2013, 87, .	3.2	64
32	Transport in superlattices on single-layer graphene. <i>Physical Review B</i> , 2011, 83, .	3.2	63
33	Tunnel magnetoresistance in GaMnAs: Going beyond JulliÃre formula. <i>Applied Physics Letters</i> , 2004, 85, 1996-1998.	3.3	59
34	Zero Landau Level in Folded Graphene Nanoribbons. <i>Physical Review Letters</i> , 2010, 105, 106802.	7.8	59
35	Magnetolectric coupling at the interface of BiFe₃O₇/La_{0.7}Ca_{0.3}FeO₄ <small>xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>/La<math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi /><mml:mrow><mml:mn>0</mml:mn><mml:mo>, </mml:mo><mml:mn>7</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math></small>	3.2	59
36	Effect of a high transverse magnetic field on the tunneling through barriers between semiconductors and superlattices. <i>Physical Review B</i> , 1988, 38, 9649-9656.	3.2	58

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37	Performance limits of graphene-ribbon field-effect transistors. Physical Review B, 2008, 77, .	3.2	57
38	Charge redistribution and interlayer coupling in twisted bilayer graphene under electric fields. Physical Review B, 2011, 84, .	3.2	55
39	Deformation potentials at the valence-band maximum in semiconductors. Physical Review B, 1987, 36, 2638-2644.	3.2	53
40	Monte Carlo simulations for the magnetic phase diagram of the double-exchange Hamiltonian. Physical Review B, 1998, 58, 3286-3292.	3.2	53
41	Magnetic properties of GaMnAs from an effective Heisenberg Hamiltonian. Physical Review B, 2003, 68, .	3.2	51
42	Electronic phase separation in manganite-insulator interfaces. Physical Review B, 2007, 75, .	3.2	51
43	Magnetoresistance of graphene-based spin valves. Physical Review B, 2007, 76, .	3.2	49
44	Spin-charge separation of plasmonic excitations in thin topological insulators. Physical Review B, 2013, 88, .	3.2	49
45	Spin-orbit coupling in graphene induced by adatoms with outer-shell p orbitals. Physical Review B, 2015, 92, .	3.2	48
46	Symmetries of quantum transport with Rashba spin-orbit: graphene spintronics. Physical Chemistry Chemical Physics, 2015, 17, 16469-16475.	2.8	47
47	Exchange-induced charge inhomogeneities in rippled neutral graphene. Physical Review B, 2008, 77, .	3.2	46
48	Plasmonics in Topological Insulators: Spin-Orbit Charge Separation, the Influence of the Inversion Layer, and Phonon-Plasmon Coupling. ACS Photonics, 2017, 4, 2978-2988.	6.6	46
49	Electromodulation of the Bilayered $\frac{1}{2} = 2$ Quantum Hall Phase Diagram. Physical Review Letters, 1999, 83, 168-171.	7.8	45
50	Continuous Charge Modulated Diagonal Phase in Manganites. Physical Review Letters, 2004, 92, 127202.	7.8	43
51	Phase Diagram of Diluted Magnetic Semiconductor Quantum Wells. Physical Review Letters, 2000, 85, 2384-2387.	7.8	41
52	Linear response and the Thomas-Fermi approximation in undoped graphene. Physical Review B, 2009, 80, .	3.2	41
53	Coherent Tunneling and Negative Differential Conductivity in a Graphene/h-BN/Graphene Heterostructure. Physical Review Applied, 2014, 2, .	3.8	41
54	Twisting dirac fermions: circular dichroism in bilayer graphene. 2D Materials, 2017, 4, 035015.	4.4	41

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55	Charged pseudospin textures in double-layer quantum Hall systems: Bimerons and meron crystals. <i>Physical Review B</i> , 1996, 54, 16888-16902.	3.2	39
56	Impurity-semiconductor band hybridization effects on the critical temperature of diluted magnetic semiconductors. <i>Physical Review B</i> , 2002, 66, .	3.2	39
57	Dirac spectrum in piecewise constant one-dimensional (1D) potentials. <i>New Journal of Physics</i> , 2010, 12, 123020.	2.9	39
58	Mean-field theory for double perovskites: Coupling between itinerant electron spins and localized spins. <i>Physical Review B</i> , 2006, 74, .	3.2	36
59	Effect of strain on the orbital and magnetic ordering of manganite thin films and their interface with an insulator. <i>Physical Review B</i> , 2011, 83, .	3.2	36
60	Electronic states of wires and slabs of topological insulators: Quantum Hall effects and edge transport. <i>Physical Review B</i> , 2014, 89, .	3.2	35
61	Magnetoresistance of an all-manganite spin valve: A thin antiferromagnetic insulator sandwiched between two ferromagnetic metallic electrodes. <i>Physical Review B</i> , 2008, 77, .	3.2	34
62	All-Manganite Tunnel Junctions with Interface-Induced Barrier Magnetism. <i>Advanced Materials</i> , 2010, 22, 5029-5034.	21.0	34
63	Folding effects in GaAs-AlAs superlattices. <i>Physical Review B</i> , 1987, 35, 9112-9119.	3.2	33
64	Phase separation of edge states in the integer quantum Hall regime. <i>Physical Review B</i> , 1993, 47, 13884-13886.	3.2	32
65	Dielectric screening and plasmons in AA-stacked bilayer graphene. <i>Physical Review B</i> , 2013, 88, .	3.2	32
66	Full-potential linear-muffin-tin-orbital calculation of phonon frequencies in semiconductors. <i>Physical Review B</i> , 1988, 38, 1392-1396.	3.2	31
67	Gate-controlled conductance through bilayer graphene ribbons. <i>Physical Review B</i> , 2011, 83, .	3.2	31
68	Effective Magnetic Fields in Graphene Superlattices. <i>Physical Review Letters</i> , 2010, 105, 156801.	7.8	30
69	Conductance as a function of temperature in the double-exchange model. <i>Physical Review B</i> , 1999, 59, 4170-4175.	3.2	29
70	Temperature dependence of the dielectric constant and resistivity of diluted magnetic semiconductors. <i>Physical Review B</i> , 2003, 68, .	3.2	29
71	Stripes in quantum Hall double-layer systems. <i>Physical Review B</i> , 2000, 62, 10268-10277.	3.2	28
72	Spins, charges, and currents at domain walls in a quantum Hall Ising ferromagnet. <i>Physical Review B</i> , 2002, 66, .	3.2	28

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73	Effective time-reversal symmetry breaking and energy spectra of graphene armchair rings. Physical Review B, 2009, 80, .	3.2	27
74	Optical properties of magnetically doped ultrathin topological insulator slabs. Physical Review B, 2014, 90, .	3.2	26
75	Coherent and sequential tunneling in double barriers with transverse magnetic fields. Physical Review B, 1989, 40, 8548-8551.	3.2	25
76	Collective modes of soliton-lattice states in double-quantum-well systems. Physical Review B, 1995, 51, 13475-13490.	3.2	25
77	Solitonic Phase in Manganites. Physical Review Letters, 2005, 95, 117205.	7.8	25
78	Gapped phase in AA-stacked bilayer graphene. Physical Review B, 2013, 87, .	3.2	25
79	Electronic properties of twisted bilayer nanoribbons. Physical Review B, 2014, 89, .	3.2	25
80	Scaling of the Hamiltonian and momentum in semiconductors. Physical Review B, 1984, 29, 6840-6845.	3.2	24
81	Phase diagram of half doped manganites. Physical Review B, 2005, 71, .	3.2	24
82	Disorder-induced first order transition and Curie temperature lowering in ferromagnetic manganites. Physical Review B, 2006, 73, .	3.2	24
83	Collective modes in quantum-dot arrays in magnetic fields. Physical Review B, 1990, 42, 11708-11713.	3.2	23
84	Hall resistance of a two-dimensional electron gas in the presence of magnetic-flux tubes. Physical Review B, 1993, 47, 15961-15964.	3.2	23
85	Signatures of a Two-Dimensional Ferromagnetic Electron Gas at the $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3/\text{SrTiO}_3$ Interface Arising From Orbital Reconstruction. Advanced Materials, 2014, 26, 7516-7520.	21.0	23
86	Spin-density-wave instability in wide parabolic quantum wells. Physical Review B, 1989, 40, 11634-11638.	3.2	22
87	Electronic and optical properties of a superlattice in a parabolic potential. Physical Review B, 1990, 42, 2886-2892.	3.2	22
88	Phase diagram and incommensurate phases in undoped manganites. Physical Review B, 2006, 73, .	3.2	22
89	Excitonic effects in two-dimensional massless Dirac fermions. Physical Review B, 2011, 83, .	3.2	22
90	Canted ground state in artificial molecules at high magnetic fields. Physical Review B, 2000, 62, R10633-R10636.	3.2	21

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91	Conductance through graphene bends and polygons. <i>Physical Review B</i> , 2008, 78, .	3.2	21
92	Plasmonic Dirac Cone in Twisted Bilayer Graphene. <i>Physical Review Letters</i> , 2020, 125, 256804.	7.8	21
93	Generalized transfer Hamiltonian for the study of resonant tunneling. <i>Physical Review B</i> , 1988, 38, 10507-10511.	3.2	20
94	Interlayer Magnetic Coupling and the Quantum Hall Effect in Multilayer Electron Systems. <i>Physical Review Letters</i> , 1998, 81, 4692-4695.	7.8	20
95	Skyrmion strings contribution to the anomalous Hall effect in double-exchange systems. <i>Physical Review B</i> , 2001, 63, .	3.2	20
96	Phase diagram of a quantum Hall ferromagnet edge, spin-textured edges, and collective excitations. <i>Physical Review B</i> , 1997, 56, 10383-10391.	3.2	18
97	Energy spectrum of electrons in a parabolic quantum well in a strong magnetic field. <i>Physical Review B</i> , 1991, 44, 3772-3781.	3.2	17
98	Skyrme and meron crystals in quantum Hall ferromagnets. <i>Physica Scripta</i> , 1996, T66, 154-157.	2.5	17
99	Electronic Conductance of Twisted Bilayer Nanoribbon Flakes. <i>Journal of Physical Chemistry C</i> , 2015, 119, 10076-10084.	3.1	17
100	Band offsets in heterostructures with thin interlayers. <i>Physical Review B</i> , 1988, 38, 8185-8191.	3.2	15
101	Internal Excitations and Dissipative Damping of Quantum Hall Skyrmions. <i>Physical Review Letters</i> , 1996, 77, 1572-1575.	7.8	15
102	Interface states in CdTe-ZnTe strained superlattices. <i>Physical Review B</i> , 1989, 40, 3955-3961.	3.2	14
103	Dispersive collective excitation modes in the quantum Hall regime. <i>Solid State Communications</i> , 1995, 93, 897-902.	1.9	14
104	Charge Density Wave Behavior in the Integer Quantum Hall Effect Edge States. <i>Physical Review Letters</i> , 1996, 77, 1358-1361.	7.8	14
105	Stability and dynamics of free magnetic polarons. <i>Physical Review B</i> , 2000, 62, 3368-3371.	3.2	14
106	Low-temperature resistivity in double-exchange systems. <i>Physical Review B</i> , 2001, 64, .	3.2	14
107	Self-consistent Hartree description of Nelectrons in a quantum dot with a magnetic field. <i>Physical Review B</i> , 1994, 49, 5718-5721.	3.2	13
108	Localization in a one-dimensional quasiperiodic Hamiltonian with off-diagonal disorder. <i>Physical Review B</i> , 1987, 35, 5270-5272.	3.2	12

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109	Electron gas at the interface between two antiferromagnetic insulating manganites. <i>Physical Review B</i> , 2008, 78, .	3.2	12
110	Comment on "Static Charge Fluctuations in Amorphous Silicon". <i>Physical Review Letters</i> , 1984, 52, 1840-1840.	7.8	11
111	Temperature-induced spin density wave in a magnetically doped topological insulator Bi ₂ Se ₃ . <i>Physical Review B</i> , 2012, 86, .	3.2	11
112	Spin-Isospin Textured Excitations in a Double Layer at Filling Factor $\nu=2$. <i>Physical Review Letters</i> , 1999, 83, 2250-2253.	7.8	10
113	Canted phase in double quantum dots. <i>Physical Review B</i> , 2001, 64, .	3.2	10
114	Resonant Raman scattering in GaAs-Ga _{1-x} Al _x As quantum wells in an electric field. <i>Physical Review B</i> , 1987, 36, 6054-6057.	3.2	9
115	Spin depolarization in the transport of holes across Ga _x Mn _{1-x} As/GaAl _y As/p-GaAs. <i>Physical Review B</i> , 2004, 70, .	3.2	9
116	Electronic transport of folded graphene nanoribbons. <i>Solid State Communications</i> , 2012, 152, 1400-1403.	1.9	9
117	Spin-polarized currents in corrugated graphene nanoribbons. <i>Carbon</i> , 2020, 168, 1-11.	10.3	9
118	Many-body effects on the symmetric-antisymmetric gap in double quantum wells in strong magnetic fields. <i>Physical Review B</i> , 1993, 47, 4585-4591.	3.2	8
119	Phase diagram for quantum Hall states in graphene. <i>Physical Review B</i> , 2008, 78, .	3.2	8
120	Nanophysics in graphene: neutrino physics in quantum rings and superlattices. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 5483-5497.	3.4	8
121	Magnetic phases in periodically rippled graphene. <i>Physical Review B</i> , 2016, 94, .	3.2	8
122	Monte Carlo simulations of magnetic order in Fe-doped manganites. <i>Physica B: Condensed Matter</i> , 2008, 403, 394-397.	2.7	7
123	Transport in selectively magnetically doped topological insulator wires. <i>Physical Review B</i> , 2015, 92, .	3.2	7
124	Magnetic Skyrmionic Polarons. <i>Nano Letters</i> , 2017, 17, 7358-7363.	9.1	7
125	Quantum geometric exciton drift velocity. <i>Physical Review B</i> , 2021, 103, .	3.2	7
126	Charged topological solitons in zigzag graphene nanoribbons. <i>2D Materials</i> , 2018, 5, 015026.	4.4	7

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127	Magnetotunneling in semiconductor superlattices. <i>Superlattices and Microstructures</i> , 1989, 5, 531-533.	3.1	6
128	Dielectric function of diluted magnetic semiconductors in the infrared regime. <i>Physical Review B</i> , 2004, 70, .	3.2	6
129	Electromodulation of the magnetoresistance in diluted magnetic semiconductors based heterostructures. <i>Solid State Communications</i> , 2003, 125, 31-35.	1.9	5
130	Zener tunneling isospin Hall effect in HgTe quantum wells and graphene multilayers. <i>Physical Review B</i> , 2012, 85, .	3.2	5
131	Quantum transmission channels for magnetotunneling in semiconductor microstructures. <i>Surface Science</i> , 1990, 228, 291-295.	1.9	4
132	Electromodulation of magnetorotons in coupled quasi-two-dimensional electron gases. <i>Physical Review B</i> , 1991, 44, 10676-10679.	3.2	4
133	Composite fermions traversing a potential barrier. <i>Physical Review B</i> , 1995, 51, 17259-17262.	3.2	4
134	Effect of the equivalence between topological and electric charge on the magnetization of the Hall ferromagnet. <i>Physical Review B</i> , 2000, 61, 7257-7260.	3.2	4
135	Effect of the electron-electron interaction on the band structure of semiconductors. <i>Solid State Communications</i> , 1985, 55, 1093-1096.	1.9	3
136	Temperature dependence of the conductance in diluted magnetic semiconductors. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E1585-E1586.	2.3	3
137	Anisotropic magnetoresistance in single electron transport. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 4231-4234.	0.8	3
138	Nonlocal Quantum Effects in Plasmons of Graphene Superlattices. <i>Physical Review Letters</i> , 2020, 124, 257401.	7.8	3
139	Band offsets in $\text{Si}^{1-x}\text{Ge}_x$ and $\text{Ge}^{1-x}\text{Si}_x$ strained heterojunctions. <i>Solid State Communications</i> , 1988, 67, 445-447.	1.9	2
140	Possible spin-density wave in wide parabolic quantum wells. <i>Surface Science</i> , 1990, 229, 142-144.	1.9	2
141	Edges and interactions for graphene in quantum Hall states. <i>Solid State Communications</i> , 2007, 143, 86-91.	1.9	2
142	ELECTRONIC STRUCTURE OF Si-Ge STRAINED SUPERLATTICES. <i>Journal De Physique Colloque</i> , 1987, 48, C5-557-C5-560.	0.2	2
143	The 2D electron gas near $\nu = 1$ as a Skyrme crystal. <i>Surface Science</i> , 1996, 361-362, 274-277.	1.9	1
144	Wigner crystal state for the edge electrons in the quantum Hall effect at filling $\nu = 2$. <i>Physical Review B</i> , 2000, 61, 16787-16795.	3.2	1

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145	Edge physics of graphene in the quantum Hall regime. <i>European Physical Journal: Special Topics</i> , 2007, 148, 143-150.	2.6	1
146	Probing topology and symmetry in topological crystalline insulators with magnetism. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2019, 114, 113623.	2.7	1
147	Quantum Internal Structure of Plasmons. <i>Physical Review Letters</i> , 2021, 127, 196403.	7.8	1
148	Electric field modulation of valence band mixing in semiconductor quantum wells. <i>Superlattices and Microstructures</i> , 1988, 4, 653-656.	3.1	0
149	Resistivity and Hall resistance of a two-dimensional electron gas in the presence of magnetic flux tubes. <i>Surface Science</i> , 1994, 305, 424-427.	1.9	0
150	Electronic properties and quantum Hall effect in multi-layer electron systems. <i>Physica B: Condensed Matter</i> , 1998, 256-258, 97-103.	2.7	0
151	Phase separation in diluted magnetic semiconductor quantum wells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 12, 388-390.	2.7	0
152	Canted phase in artificial molecules. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 12, 904-907.	2.7	0
153	Band structure and topological properties of graphene in a superlattice spin exchange field. <i>Physical Review B</i> , 2016, 94, .	3.2	0