Luis Brey

List of Publications by Year
in descending order

153 papers	8,147 citations	50276 46 h-index	49909 87 g-index
154 all docs	154 docs citations	154 times ranked	5946 citing authors

#	Article	IF	Citations
1	Quantum geometric exciton drift velocity. Physical Review B, 2021, 103, .	3.2	7
2	Quantum Internal Structure of Plasmons. Physical Review Letters, 2021, 127, 196403.	7.8	1
3	Nonlocal Quantum Effects in Plasmons of Graphene Superlattices. Physical Review Letters, 2020, 124, 257401.	7.8	3
4	Spin-polarized currents in corrugated graphene nanoribbons. Carbon, 2020, 168, 1-11.	10.3	9
5	Plasmonic Dirac Cone in Twisted Bilayer Graphene. Physical Review Letters, 2020, 125, 256804.	7.8	21
6	Probing topology and symmetry in topological crystalline insulators with magnetism. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 114, 113623.	2.7	1
7	Charged topological solitons in zigzag graphene nanoribbons. 2D Materials, 2018, 5, 015026.	4.4	7
8	Magnetic Skyrmionic Polarons. Nano Letters, 2017, 17, 7358-7363.	9.1	7
9	Plasmonics in Topological Insulators: Spinâ€“Charge Separation, the Influence of the Inversion Layer, and Phononâ€“Plasmon Coupling. ACS Photonics, 2017, 4, 2978-2988.	6.6	46
10	Twisting dirac fermions: circular dichroism in bilayer graphene. 2D Materials, 2017, 4, 035015.	4.4	41
11	Band structure and topological properties of graphene in a superlattice spin exchange field. Physical Review B, 2016, 94, .	3.2	0
12	Magnetic phases in periodically rippled graphene. Physical Review B, 2016, 94, .	3.2	8
13	Spin-orbit coupling in graphene induced by adatoms with outer-shell<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math>orbitals. Physical Review B, 2015, 92, .	3.2	48
14	Transport in selectively magnetically doped topological insulator wires. Physical Review B, 2015, 92, .	3.2	7
15	Symmetries of quantum transport with Rashba spinâ€“orbit: graphene spintronics. Physical Chemistry Chemical Physics, 2015, 17, 16469-16475.	2.8	47
16	Electronic Conductance of Twisted Bilayer Nanoribbon Flakes. Journal of Physical Chemistry C, 2015, 119, 10076-10084.	3.1	17
17	Electronic states of wires and slabs of topological insulators: Quantum Hall effects and edge transport. Physical Review B, 2014, 89, .	3.2	35
18	Optical properties of magnetically doped ultrathin topological insulator slabs. Physical Review B, 2014, 90, .	3.2	26

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19	Signatures of a Twoâ€Đimensional Ferromagnetic Electron Gas at the La_{0.7}Sr_{0.3}MnO₃/SrTiO₃ Interface Arising From Orbital Reconstruction. Advanced Materials, 2014, 26, 7516-7520.	21.0	23
20	Coherent Tunneling and Negative Differential Conductivity in a Graphene/<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>h</mml:mi></mml:math>-BN/Graphene Heterostructure. Physical Review Applied, 2014, 2, .	3.8	41
21	Electronic properties of twisted bilayer nanoribbons. Physical Review B, 2014, 89, .	3.2	25
22	Dielectric screening and plasmons in AA-stacked bilayer graphene. Physical Review B, 2013, 88, .	3.2	32
23	Electronic properties of twisted trilayer graphene. Physical Review B, 2013, 87, .	3.2	64
24	Optical conductivity, Drude weight and plasmons in twisted graphene bilayers. New Journal of Physics, 2013, 15, 113050.	2.9	88
25	Spin-charge separation of plasmonic excitations in thin topological insulators. Physical Review B, 2013, 88, .	3.2	49
26	Gapped phase inAA-stacked bilayer graphene. Physical Review B, 2013, 87, .	3.2	25
27	Zener tunneling isospin Hall effect in HgTe quantum wells and graphene multilayers. Physical Review B, 2012, 85, .	3.2	5
28	Electronic transport of folded graphene nanoribbons. Solid State Communications, 2012, 152, 1400-1403.	1.9	9
29	Temperature-induced spin density wave in a magnetically doped topological insulator Bi2Se3. Physical Review B, 2012, 86, .	3.2	11
30	Effect of strain on the orbital and magnetic ordering of manganite thin films and their interface with an insulator. Physical Review B, 2011, 83, .	3.2	36
31	Magnetoelectric coupling at the interface of BiFe<mml:math 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<mml: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> Physical Review B, 2011, 84, .	3.2	59
32	Excitonic effects in two-dimensional massless Dirac fermions. Physical Review B, 2011, 83, .	3.2	22
33	Transport in superlattices on single-layer graphene. Physical Review B, 2011, 83, .	3.2	63
34	Band topology and the quantum spin Hall effect in bilayer graphene. Solid State Communications, 2011, 151, 1075-1083.	1.9	75
35	Charge redistribution and interlayer coupling in twisted bilayer graphene under electric fields. Physical Review B, 2011, 84, .	3.2	55
36	Gate-controlled conductance through bilayer graphene ribbons. Physical Review B, 2011, 83, .	3.2	31

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37	Nanophysics in graphene: neutrino physics in quantum rings and superlattices. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 5483-5497.	3.4	8
38	Allâ€Manganite Tunnel Junctions with Interfaceâ€Induced Barrier Magnetism. Advanced Materials, 2010, 22, 5029-5034.	21.0	34
39	Zero Landau Level in Folded Graphene Nanoribbons. Physical Review Letters, 2010, 105, 106802.	7.8	59
40	Dirac spectrum in piecewise constant one-dimensional (1D) potentials. New Journal of Physics, 2010, 12, 123020.	2.9	39
41	Effective Magnetic Fields in Graphene Superlattices. Physical Review Letters, 2010, 105, 156801.	7.8	30
42	Electronic and magnetic structure of graphene nanoribbons. Semiconductor Science and Technology, 2010, 25, 033003.	2.0	68
43	Electronic transport through bilayer graphene flakes. Physical Review B, 2010, 81, .	3.2	97
44	Linear response and the Thomas-Fermi approximation in undoped graphene. Physical Review B, 2009, 80, .	3.2	41
45	Emerging Zero Modes for Graphene in a Periodic Potential. Physical Review Letters, 2009, 103, 046809.	7.8	224
46	Carbon Nanoelectronics: Unzipping Tubes into Graphene Ribbons. Physical Review Letters, 2009, 103, 086801.	7.8	113
47	Effective time-reversal symmetry breaking and energy spectra of graphene armchair rings. Physical Review B, 2009, 80, .	3.2	27
48	Monte Carlo simulations of magnetic order in Fe-doped manganites. Physica B: Condensed Matter, 2008, 403, 394-397.	2.7	7
49	Conductance through graphene bends and polygons. Physical Review B, 2008, 78, .	3.2	21
50	Vacancy-induced magnetism in graphene and graphene ribbons. Physical Review B, 2008, 77, .	3.2	390
51	Performance limits of graphene-ribbon field-effect transistors. Physical Review B, 2008, 77, .	3.2	57
52	Magnetoresistance of an all-manganite spin valve: A thin antiferromagnetic insulator sandwiched between two ferromagnetic metallic electrodes. Physical Review B, 2008, 77, .	3.2	34
53	Phase diagram for quantum Hall states in graphene. Physical Review B, 2008, 78, .	3.2	8
54	Electron gas at the interface between two antiferromagnetic insulating manganites. Physical Review B, 2008, 78, .	3.2	12

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55	Exchange-induced charge inhomogeneities in rippled neutral graphene. Physical Review B, 2008, 77, .	3.2	46
56	Electronic phase separation in manganite-insulator interfaces. Physical Review B, 2007, 75, .	3.2	51
57	Magnetoresistance of graphene-based spin valves. Physical Review B, 2007, 76, .	3.2	49
58	Electronic structure of gated graphene and graphene ribbons. Physical Review B, 2007, 75, .	3.2	93
59	Excitations from filled Landau levels in graphene. Physical Review B, 2007, 75, .	3.2	118
60	Elementary electronic excitations in graphene nanoribbons. Physical Review B, 2007, 75, .	3.2	126
61	Diluted Graphene Antiferromagnet. Physical Review Letters, 2007, 99, 116802.	7.8	242
62	Edges and interactions for graphene in quantum Hall states. Solid State Communications, 2007, 143, 86-91.	1.9	2
63	Edge physics of graphene in the quantum Hall regime. European Physical Journal: Special Topics, 2007, 148, 143-150.	2.6	1
64	Disorder-induced first order transition and Curie temperature lowering in ferromagnetic manganites. Physical Review B, 2006, 73, .	3.2	24
65	Phase diagram and incommensurate phases in undoped manganites. Physical Review B, 2006, 73, .	3.2	22
66	Mean-field theory for double perovskites: Coupling between itinerant electron spins and localized spins. Physical Review B, 2006, 74, .	3.2	36
67	Edge states and the quantized Hall effect in graphene. Physical Review B, 2006, 73, .	3.2	257
68	Anisotropic magnetoresistance in single electron transport. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4231-4234.	0.8	3
69	Electronic states of graphene nanoribbons studied with the Dirac equation. Physical Review B, 2006, 73, .	3.2	1,247
70	Luttinger Liquid at the Edge of Undoped Graphene in a Strong Magnetic Field. Physical Review Letters, 2006, 97, 116805.	7.8	83
71	Solitonic Phase in Manganites. Physical Review Letters, 2005, 95, 117205.	7.8	25
72	Phase diagram of half doped manganites. Physical Review B, 2005, 71, .	3.2	24

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73	Ferromagnetism Mediated by Few Electrons in a Semimagnetic Quantum Dot. Physical Review Letters, 2004, 93, 117201.	7.8	91
74	Continuous Charge Modulated Diagonal Phase in Manganites. Physical Review Letters, 2004, 92, 127202.	7.8	43
75	Spin depolarization in the transport of holes acrossGaxMn1â^'xAsâ^•GayAl1â^'yAsâ^•pâ^'GaAs. Physical Review B, 2004, 70, .	3.2	9
76	Dielectric function of diluted magnetic semiconductors in the infrared regime. Physical Review B, 2004, 70, .	3.2	6
77	Temperature dependence of the conductance in diluted magnetic semiconductors. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1585-E1586.	2.3	3
78	Tunnel magnetoresistance in GaMnAs: Going beyond JulliÃ¨re formula. Applied Physics Letters, 2004, 85, 1996-1998.	3.3	59
79	Electromodulation of the magnetoresistance in diluted magnetic semiconductors based heterostructures. Solid State Communications, 2003, 125, 31-35.	1.9	5
80	Magnetic properties of GaMnAs from an effective Heisenberg Hamiltonian. Physical Review B, 2003, 68, .	3.2	51
81	Temperature dependence of the dielectric constant and resistivity of diluted magnetic semiconductors. Physical Review B, 2003, 68, .	3.2	29
82	Impurity-semiconductor band hybridization effects on the critical temperature of diluted magnetic semiconductors. Physical Review B, 2002, 66, .	3.2	39
83	Spins, charges, and currents at domain walls in a quantum Hall Ising ferromagnet. Physical Review B, 2002, 66, .	3.2	28
84	Lattice-Spin Mechanism in Colossal Magnetoresistive Manganites. Physical Review Letters, 2002, 88, 136401.	7.8	64
85	Phase separation in diluted magnetic semiconductor quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 388-390.	2.7	0
86	Canted phase in artificial molecules. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 904-907.	2.7	0
87	Skyrmion strings contribution to the anomalous Hall effect in double-exchange systems. Physical Review B, 2001, 63, .	3.2	20
88	Canted phase in double quantum dots. Physical Review B, 2001, 64, .	3.2	10
89	Low-temperature resistivity in double-exchange systems. Physical Review B, 2001, 64, .	3.2	14
90	Stability and dynamics of free magnetic polarons. Physical Review B, 2000, 62, 3368-3371.	3.2	14

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91	Phase Diagram of Diluted Magnetic Semiconductor Quantum Wells. Physical Review Letters, 2000, 85, 2384-2387.	7.8	41
92	Stripes in quantum Hall double-layer systems. Physical Review B, 2000, 62, 10268-10277.	3.2	28
93	Canted ground state in artificial molecules at high magnetic fields. Physical Review B, 2000, 62, R10633-R10636.	3.2	21
94	Wigner crystal state for the edge electrons in the quantum Hall effect at fillingÎ½=2. Physical Review B, 2000, 61, 16787-16795.	3.2	1
95	Effect of the equivalence between topological and electric charge on the magnetization of the Hall ferromagnet. Physical Review B, 2000, 61, 7257-7260.	3.2	4
96	Conductance as a function of temperature in the double-exchange model. Physical Review B, 1999, 59, 4170-4175.	3.2	29
97	Electromodulation of the BilayeredÎ½=2Quantum Hall Phase Diagram. Physical Review Letters, 1999, 83, 168-171.	7.8	45
98	Spin-Isospin Textured Excitations in a Double Layer at Filling FactorÎ½=2. Physical Review Letters, 1999, 83, 2250-2253.	7.8	10
99	Surface electronic structure and magnetic properties of doped manganites. Physical Review B, 1999, 60, 6698-6704.	3.2	124
100	Electronic properties and quantum Hall effect in multi-layer electron systems. Physica B: Condensed Matter, 1998, 256-258, 97-103.	2.7	0
101	Interlayer Magnetic Coupling and the Quantum Hall Effect in Multilayer Electron Systems. Physical Review Letters, 1998, 81, 4692-4695.	7.8	20
102	Monte Carlo simulations for the magnetic phase diagram of the double-exchange Hamiltonian. Physical Review B, 1998, 58, 3286-3292.	3.2	53
103	Collective Excitations, NMR, and Phase Transitions in Skyrme Crystals. Physical Review Letters, 1997, 78, 4825-4828.	7.8	127
104	Hartree-Fock theory of Skyrmions in quantum Hall ferromagnets. Physical Review B, 1997, 55, 10671-10680.	3.2	84
105	Phase diagram of a quantum Hall ferromagnet edge, spin-textured edges, and collective excitations. Physical Review B, 1997, 56, 10383-10391.	3.2	18
106	Skyrmions without Sigma Models in Quantum Hall Ferromagnets. Physical Review Letters, 1996, 76, 2153-2156.	7.8	104
107	The 2D electron gas near ν = 1 as a Skyrme crystal. Surface Science, 1996, 361-362, 274-277.	1.9	1
108	Skyrme and meron crystals in quantum Hall ferromagnets. Physica Scripta, 1996, T66, 154-157.	2.5	17

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109	Internal Excitations and Dissipative Damping of Quantum Hall Skyrmions. Physical Review Letters, 1996, 77, 1572-1575.	7.8	15
110	Charged pseudospin textures in double-layer quantum Hall systems: Bimerons and meron crystals. Physical Review B, 1996, 54, 16888-16902.	3.2	39
111	Charge Density Wave Behavior in the Integer Quantum Hall Effect Edge States. Physical Review Letters, 1996, 77, 1358-1361.	7.8	14
112	Dispersive collective excitation modes in the quantum Hall regime. Solid State Communications, 1995, 93, 897-902.	1.9	14
113	Composite fermions traversing a potential barrier. Physical Review B, 1995, 51, 17259-17262.	3.2	4
114	Skyrme Crystal in a Two-Dimensional Electron Gas. Physical Review Letters, 1995, 75, 2562-2565.	7.8	190
115	Collective modes of soliton-lattice states in double-quantum-well systems. Physical Review B, 1995, 51, 13475-13490.	3.2	25
116	Edge states of composite fermions. Physical Review B, 1994, 50, 11861-11871.	3.2	64
117	Charged spin-texture excitations and the Hartree-Fock approximation in the quantum Hall effect. Physical Review B, 1994, 50, 11018-11021.	3.2	210
118	Self-consistent Hartree description ofNelectrons in a quantum dot with a magnetic field. Physical Review B, 1994, 49, 5718-5721.	3.2	13
119	Resistivity and Hall resistance of a two-dimensional electron gas in the presence of magnetic flux tubes. Surface Science, 1994, 305, 424-427.	1.9	0
120	Phase separation of edge states in the integer quantum Hall regime. Physical Review B, 1993, 47, 13884-13886.	3.2	32
121	Many-body effects on the symmetric-antisymmetric gap in double quantum wells in strong magnetic fields. Physical Review B, 1993, 47, 4585-4591.	3.2	8
122	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
123	Spectroscopic measurement of large exchange enhancement of a spin-polarized 2D electron gas. Physical Review Letters, 1992, 68, 3623-3626.	7.8	120
124	Broken-symmetry ground states for the two-dimensional electron gas in a double-quantum-well system. Physical Review B, 1992, 46, 10239-10250.	3.2	87
125	Energy spectrum of electrons in a parabolic quantum well in a strong magnetic field. Physical Review B, 1991, 44, 3772-3781.	3.2	17
126	Electromodulation of magnetorotons in coupled quasi-two-dimensional electron gases. Physical Review B, 1991, 44, 10676-10679.	3.2	4

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127	Electronic and optical properties of a superlattice in a parabolic potential. Physical Review B, 1990, 42, 2886-2892.	3.2	22
128	Collective modes in quantum-dot arrays in magnetic fields. Physical Review B, 1990, 42, 11708-11713.	3.2	23
129	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
130	Infrared optical absorption in imperfect parabolic quantum wells. Physical Review B, 1990, 42, 1240-1247.	3.2	184
131	Quantum transmission channels for magnetotunneling in semiconductor microstructures. Surface Science, 1990, 228, 291-295.	1.9	4
132	Possible spin-density wave in wide parabolic quantum wells. Surface Science, 1990, 229, 142-144.	1.9	2
133	Interface states in CdTe-ZnTe strained superlattices. Physical Review B, 1989, 40, 3955-3961.	3.2	14
134	Spin-density-wave instability in wide parabolic quantum wells. Physical Review B, 1989, 40, 11634-11638.	3.2	22
135	Coherent and sequential tunneling in double barriers with transverse magnetic fields. Physical Review B, 1989, 40, 8548-8551.	3.2	25
136	Magnetotunneling in semiconductor superlattices. Superlattices and Microstructures, 1989, 5, 531-533.	3.1	6
137	Optical and magneto-optical absorption in parabolic quantum wells. Physical Review B, 1989, 40, 10647-10649.	3.2	404
138	Band offsets in Siî—¸Si1âˆ'xGex and Geî—¸Si1âˆ'xGex strained heterojunctions. Solid State Communications, 1988, 67, 445-447.	1.9	2
139	Electric field modulation of valence band mixing in semiconductor quantum wells. Superlattices and Microstructures, 1988, 4, 653-656.	3.1	0
140	Effect of a high transverse magnetic field on the tunneling through barriers between semiconductors and superlattices. Physical Review B, 1988, 38, 9649-9656.	3.2	58
141	Calculated optical properties of semiconductors. Physical Review B, 1988, 37, 1167-1179.	3.2	129
142	Band offsets in heterostructures with thin interlayers. Physical Review B, 1988, 38, 8185-8191.	3.2	15
143	Full-potential linear-muffin-tin-orbital calculation of phonon frequencies in semiconductors. Physical Review B, 1988, 38, 1392-1396.	3.2	31
144	Generalized transfer Hamiltonian for the study of resonant tunneling. Physical Review B, 1988, 38, 10507-10511.	3.2	20

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145	Resonant Raman scattering in GaAs-Ga1â^'xAlxAs quantum wells in an electric field. Physical Review B, 1987, 36, 6054-6057.	3.2	9
146	Folding effects in GaAs-AlAs superlattices. Physical Review B, 1987, 35, 9112-9119.	3.2	33
147	Deformation potentials at the valence-band maximum in semiconductors. Physical Review B, 1987, 36, 2638-2644.	3.2	53
148	New optical transitions in Si-Ge strained superlattices. Physical Review Letters, 1987, 59, 1022-1025.	7.8	75
149	Localization in a one-dimensional quasiperiodic Hamiltonian with off-diagonal disorder. Physical Review B, 1987, 35, 5270-5272.	3.2	12
150	ELECTRONIC STRUCTURE OF Si-Ge STRAINED SUPERLATTICES. Journal De Physique Colloque, 1987, 48, C5-557-C5-560.	0.2	2
151	Effect of the electron-electron interaction on the band structure of semiconductors. Solid State Communications, 1985, 55, 1093-1096.	1.9	3
152	Scaling of the Hamiltonian and momentum in semiconductors. Physical Review B, 1984, 29, 6840-6845.	3.2	24
153	Comment on "Static Charge Fluctuations in Amorphous Silicon". Physical Review Letters, 1984, 52, 1840-1840.	7.8	11