Eduardo V Castro

List of Publications by Year in Descending Order

52 papers	2,974 citations	21 h-index	54 g-index
56 ext. papers	3,308 ext. citations	3.6 avg, IF	4.86 L-index

#	Paper	IF	Citations
52	Interplay of interactions, disorder, and topology in the Haldane-Hubbard model. *Physical Review B*, **2021**, 104,	3.3	1
51	Interplay of local order and topology in the extended Haldane-Hubbard model. *Physical Review B*, **2021**, 103,	3.3	5
50	Disorder-Driven Multifractality Transition in Weyl Nodal Loops. *Physical Review Letters*, **2020**, 124, 136405	7.4	4
49	Phononic phase gate with dark-soliton qubit. *Physica Scripta*, **2020**, 95, 055103	2.6	1
48	Multi-orbital physics of edge-magnetism in a Hubbard model of transition-metal dichalcogenide nanoribbons: Comparing Mean Field Theory and Determinant Quantum Monte Carlo. *EPJ Web of Conferences*, **2020**, 233, 03003	0.3	
47	Transmission across a bilayer graphene region. *Physical Review B*, **2019**, 99,	3.3	1
46	Slow sound in matter-wave dark soliton gases. *Physical Review B*, **2019**, 99,	3.3	2
45	Spontaneous generation of phononic entanglement in quantum dark-soliton qubits. *Physical Review A*, **2019**, 99,	2.6	8
44	Temperature-Driven Gapless Topological Insulator. *Physical Review Letters*, **2019**, 122, 126601	7.4	5
43	Robust one dimensionality at twin grain boundaries in MoSe2. *Physical Review B*, **2019**, 99,	3.3	2
42	Static and Dynamic Disorder in Topological Systems: Localized, Critical and Extended States. *Acta Physica Polonica A*, **2019**, 135, 1180-1190	0.6	0
41	Strain manipulation of Majorana fermions in graphene armchair nanoribbons. *Physical Review B*, **2018**, 97,	3.3	4
40	Impact of complex adatom-induced interactions on quantum spin Hall phases. *Physical Review B*, **2018**, 98,	3.3	12
39	Entanglement sudden death and revival in quantum dark-soliton qubits. *Physical Review A*, **2018**, 98,	2.6	15
38	Dirac points merging and wandering in a model Chern insulator. *Europhysics Letters*, **2018**, 124, 67003	1.6	2
37	Symmetry Breaking and Lattice Kirigami. *Physical Review Letters*, **2018**, 121, 221601	7.4	12
36	Valley-polarized magnetic state in hole-doped monolayers of transition-metal dichalcogenides. *Physical Review B*, **2018**, 98,	3.3	10

35	Haldane model under nonuniform strain. *Physical Review B*, **2017**, 96,	3.3	5
34	Collapse of Landau levels in Weyl semimetals. *Physical Review B*, **2017**, 96,	3.3	21
33	Raise and collapse of pseudo Landau levels in graphene. *Physical Review B*, **2017**, 96,	3.3	10
32	Quantum dark solitons as qubits in Bose-Einstein condensates. *Physical Review A*, **2017**, 95,	2.6	24
31	Absence of localization in a class of topological systems. *Physical Review B*, **2016**, 93,	3.3	8
30	Strain-induced topological phase transition at zigzag edges of monolayer transition-metal dichalcogenides. *Physical Review B*, **2016**, 94,	3.3	14
29	Anderson localization and topological transition in Chern insulators. *Physical Review B*, **2015**, 92,	3.3	21
28	Hall conductivity as bulk signature of topological transitions in superconductors. *Europhysics Letters* , **2014**, 105, 37011	1.6	11
27	Chern band insulators in a magnetic field. *Journal of Physics Condensed Matter*, **2014**, 26, 075501	1.8	7
26	Change of an insulatorꞩ topological properties by a Hubbard interaction. *Physical Review B*, **2013**, 87,	3.3	26
25	Interaction-driven phases in the half-filled spinless honeycomb lattice from exact diagonalization. *Physical Review B*, **2013**, 88,	3.3	50
24	Charge instabilities and topological phases in the extended Hubbard model on the honeycomb lattice with enlarged unit cell. *Physical Review B*, **2013**, 87,	3.3	59
23	Scattering by flexural phonons in suspended graphene under back gate induced strain. *Physica E: Low-Dimensional Systems and Nanostructures*, **2012**, 44, 963-966	3	37
22	Vacancy induced zero energy modes in graphene stacks: The case of ABC trilayer. *Solid State Communications*, **2012**, 152, 1483-1488	1.6	7
21	Effect of pressure on the magnetism of bilayer graphene. *Physical Review B*, **2011**, 84,	3.3	14
20	Temperature-dependent resistivity in bilayer graphene due to flexural phonons. *Physical Review B*, **2011**, 83,	3.3	62
19	Topological Fermi liquids from Coulomb interactions in the doped honeycomb lattice. *Physical Review Letters*, **2011**, 107, 106402	7.4	42
18	Quantum quench dynamics and population inversion in bilayer graphene. *Physical Review B*, **2010**, 82,	3.3	6

17	Substitutional disorder and charge localization in manganites. *Journal of Physics Condensed Matter*, **2010**, 22, 075601	1.8	1
16	Limits on charge carrier mobility in suspended graphene due to flexural phonons. *Physical Review Letters*, **2010**, 105, 266601	7.4	297
15	Electronic properties of a biased graphene bilayer. *Journal of Physics Condensed Matter*, **2010**, 22, 175503	1.8	121
14	New type of vacancy-induced localized States in multilayer graphene. *Physical Review Letters*, **2010**, 104, 036802	7.4	44
13	Valley symmetry breaking in bilayer graphene: a test of the minimal model. *Physical Review Letters*, **2009**, 103, 266804	7.4	29
12	Pinning and switching of magnetic moments in bilayer graphene. *New Journal of Physics*, **2009**, 11, 095017	2.9	16
11	Bilayer graphene: gap tunability and edge properties. *Journal of Physics: Conference Series*, **2008**, 129, 012002	0.3	26
10	First-order ferromagnetic phase transition in the low electronic density regime of a biased graphene bilayer. *Journal of Physics Condensed Matter*, **2008**, 20, 335207	1.8	5
9	Low-density ferromagnetism in biased bilayer graphene. *Physical Review Letters*, **2008**, 100, 186803	7.4	110
8	Localized states at zigzag edges of bilayer graphene. *Physical Review Letters*, **2008**, 100, 026802	7.4	121
7	Localized states at zigzag edges of multilayer graphene and graphite steps. *Europhysics Letters*, **2008**, 84, 17001	1.6	25
6	Gaped graphene bilayer: disorder and magnetic field effects. *Physica Status Solidi (B): Basic Research*, **2007**, 244, 2311-2316	1.3	20
5	Biased bilayer graphene: semiconductor with a gap tunable by the electric field effect. *Physical Review Letters*, **2007**, 99, 216802	7.4	1524
4	Algebraic solution of a graphene layer in transverse electric and perpendicular magnetic fields. *Journal of Physics Condensed Matter*, **2007**, 19, 406231	1.8	57
3	Site dilution of quantum spins in the honeycomb lattice. *Physical Review B*, **2006**, 73,	3.3	47
2	Site dilution of quantum spins in the honeycomb and square lattices. *Physica B: Condensed Matter*, **2006**, 378-380, 137-138	2.8	
1	Double exchange model for magnetic hexaborides. *Physical Review Letters*, **2004**, 93, 147202	7.4	22