Eduardo Costa GirÃ£o

List of Publications by Year
in descending order

49 papers	843 citations	567144 15 h-index	501076 28 g-index
50 all docs	50 docs citations	50 times ranked	1091 citing authors

#	Article	IF	Citations
1	Topographic and Spectroscopic Characterization of Electronic Edge States in CVD Grown Graphene Nanoribbons. Nano Letters, 2012, 12, 1928-1933.	4.5	104
2	Quantum Dots in Graphene Nanoribbons. Nano Letters, 2017, 17, 4277-4283.	4.5	99
3	Enhanced thermoelectric figure of merit in assembled graphene nanoribbons. Physical Review B, 2012, 86, .	1.1	81
4	Emergence of Atypical Properties in Assembled Graphene Nanoribbons. Physical Review Letters, 2011, 107, 135501.	2.9	69
5	Improved All-Carbon Spintronic Device Design. Scientific Reports, 2015, 5, 7634.	1.6	52
6	Electronic Transport Properties of Assembled Carbon Nanoribbons. ACS Nano, 2012, 6, 6483-6491.	7.3	29
7	Functionalization of single-wall carbon nanotubes through chloroform adsorption: theory and experiment. Physical Chemistry Chemical Physics, 2010, 12, 1518.	1.3	27
8	Elastic properties of graphyne-based nanotubes. Computational Materials Science, 2019, 170, 109153.	1.4	25
9	Structural and electronic properties of graphitic nanowiggles. Physical Review B, 2012, 85, .	1.1	24
10	First principles study of 1,2-dichlorobenzene adsorption on metallic carbon nanotubes. International Journal of Quantum Chemistry, 2006, 106, 2558-2563.	1.0	23
11	Naphthylenes: 1D and 2D carbon allotropes based on naphthyl units. Carbon, 2019, 153, 792-803.	5.4	23
12	Nicotine adsorption on single wall carbon nanotubes. Journal of Hazardous Materials, 2010, 184, 678-683.	6.5	19
13	A single molecule rectifier with strong push-pull coupling. Journal of Chemical Physics, 2008, 129, 204701.	1.2	17
14	Patchwork algorithm for the parallel computation of the Greenâ€™s function in open systems. Journal of Computational Electronics, 2013, 12, 123-133.	1.3	17
15	Computational study of elastic, structural stability and dynamics properties of penta-graphene membrane. Chemical Physics, 2021, 542, 111052.	0.9	16
16	Quasiparticle band gaps of graphene nanowiggles and their magnetism on Au(111). Physical Review B, 2013, 88, .	1.1	15
17	Spin-Negative Differential Resistance in Zigzag Graphene Nanoribbons with Side-Attached Porphine Molecule. Journal of Physical Chemistry C, 2018, 122, 15911-15921.	1.5	14
18	Electronic properties of tetragraphene nanoribbons. Physical Review Materials, 2019, 3, .	0.9	14

#	Article	IF	Citations
19	Tuning the electronic and quantum transport properties of nitrogenated holey graphene nanoribbons. Journal of Materials Chemistry C, 2017, 5, 11856-11866.	2.7	13
20	One- and two-dimensional carbon nanostructures based on unfolded buckyballs: An ab initio investigation of their electronic properties. Physical Review B, 2017, 95, .	1.1	13
21	Electronic and structural properties of tetragraphenes. Carbon, 2020, 167, 403-413.	5.4	11
22	Electronic and magnetic structures of coronene-based graphitic nanoribbons. Physical Chemistry Chemical Physics, 2014, 16, 3603.	1.3	10
23	Mechanical Properties of Pentagraphene-based Nanotubes: A Molecular Dynamics Study. MRS Advances, 2018, 3, 97-102.	0.5	10
24	Structural and electronic properties of nanotubes constructed from fragmented fullerenes. Carbon, 2019, 147, 616-627.	5.4	10
25	Tripentaphenes: two-dimensional acepentalene-based nanocarbon allotropes. Physical Chemistry Chemical Physics, 2020, 22, 23195-23206.	1.3	10
26	Quantifying energetics of topological frustration in carbon nanostructures. Physical Review B, 2014, 89, .	1.1	9
27	Emergent magnetism in irradiated graphene nanostructures. Carbon, 2014, 78, 196-203.	5.4	9
28	High efficiency spin-valve and spin-filter in a doped rhombic graphene quantum dot device. Journal of Magnetism and Magnetic Materials, 2018, 451, 532-539.	1.0	8
29	Electronic and Transport Properties of Graphene Nanoribbons Based on Super-Heptazethrene Molecular Blocks. Journal of Physical Chemistry C, 2021, 125, 11235-11248.	1.5	7
30	Electronic properties of 2D and 1D carbon allotropes based on a triphenylene structural unit. Physical Chemistry Chemical Physics, 2021, 23, 25114-25125.	1.3	7
31	Electronic transport properties of carbon nanotoroids. Nanotechnology, 2011, 22, 075701.	1.3	6
32	Mechanical Properties of Phagraphene Membranes: A Fully Atomistic Molecular Dynamics Investigation. MRS Advances, 2018, 3, 67-72.	0.5	6
33	Electronic properties of N-rich graphene nano-chevrons. Physical Chemistry Chemical Physics, 2021, 23, 13204-13215.	1.3	6
34	Mechanical properties of single-walled penta-graphene-based nanotubes: A DFT and Classical molecular dynamics study. Chemical Physics, 2021, 547, 111187.	0.9	6
35	Electronic transmission selectivity in multiterminal graphitic nanorings. Applied Physics Letters, 2011, 98, 112111.	1.5	5
36	Electronic properties of three-terminal graphitic nanowiggles. Physical Review B, 2014, 90, .	1.1	4

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37	Naphthylene- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math> : 1D and 2D carbon allotropes based on the fusion of phenyl- and naphthyl-like groups. Physical Review Materials, 2020, 4, .	0.9	4
38	Electronic and transport properties of graphene nanoribbon barbellâ€shaped heterojunctions. Physica Status Solidi (B): Basic Research, 2013, 250, 2417-2423.	0.7	3
39	Electronic transport in three-terminal triangular carbon nanopatches. Nanotechnology, 2014, 25, 045706.	1.3	3
40	Electronic, transport, and magnetic properties of punctured carbon nanotubes. Physical Review B, 2016, 94, .	1.1	3
41	Modeling the Kondo effect of a magnetic atom adsorbed on graphene. 2D Materials, 2019, 6, 035038.	2.0	3
42	Structural and electronic properties of nonconventional Î± -graphyne nanocarbons. Physical Review Materials, 2022, 6, .	0.9	2
43	Electronic and magnetic properties of tripentaphene nanoribbons. Physical Review Materials, 2022, 6, .	0.9	2
44	Heterospin Junctions in Zigzag-Edged Graphene Nanoribbons. Applied Sciences (Switzerland), 2014, 4, 351-365.	1.3	1
45	Structural and electronic properties of double-walled Î±-graphyne nanotubes. Computational Materials Science, 2021, 200, 110768.	1.4	1
46	Electronic properties of boron-rich graphene nanowiggles. Computational Materials Science, 2022, 201, 110907.	1.4	1
47	Modeling and Simulation of Electron Transport at the Nanoscale: Illustrations in Low-Dimensional Carbon Nanostructures. Advances in Atom and Single Molecule Machines, 2013, , 123-133.	0.0	0
48	Electronic properties of carbon sheets and nanoribbons based on acepentalene-like building blocks. Computational Materials Science, 2022, 211, 111520.	1.4	0
49	Phenyl- and naphthyl-type heteroatom substitution blocks in naphthylene-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e883" altimg="si39.svg"><mml:mi>Î³</mml:mi></mml:math>: A DFT study. Computational Materials Science, 2022, 213, 111578.	1.4	0