Diego Rabelo da Costa

List of Publications by Year
in descending order

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		566801	395343
47	1,172	15	33
papers	citations	h-index	g-index

47	47	47	1189
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bandgap engineering of two-dimensional semiconductor materials. Npj 2D Materials and Applications, 2020, 4, .	3.9	528
2	Geometry and edge effects on the energy levels of graphene quantum rings: A comparison between tight-binding and simplified Dirac models. Physical Review B, 2014, 89, .	1.1	58
3	Valley filtering using electrostatic potentials in bilayer graphene. Physical Review B, 2015, 92, .	1.1	44
4	Multilayered black phosphorus: From a tight-binding to a continuum description. Physical Review B, 2017, 96, .	1.1	39
5	Analytical study of the energy levels in bilayer graphene quantum dots. Carbon, 2014, 78, 392-400.	5.4	36
6	Stark shift of excitons and trions in two-dimensional materials. Physical Review B, 2018, 98, .	1.1	31
7	All-strain based valley filter in graphene nanoribbons using snake states. Physical Review B, 2016, 94, .	1.1	30
8	Energy levels of hybrid monolayer-bilayer graphene quantum dots. Physical Review B, 2016, 93, .	1.1	30
9	Wave-packet scattering on graphene edges in the presence of a pseudomagnetic field. Physical Review B, 2012, 86, .	1.1	28
10	Energy levels of bilayer graphene quantum dots. Physical Review B, 2015, 92, .	1.1	24
11	Unusual quantum confined Stark effect and Aharonov-Bohm oscillations in semiconductor quantum rings with anisotropic effective masses. Physical Review B, 2017, 95, .	1.1	24
12	Magnetic field dependence of energy levels in biased bilayer graphene quantum dots. Physical Review B, 2016, 93, .	1.1	22
13	Visualization and Manipulation of Bilayer Graphene Quantum Dots with Broken Rotational Symmetry and Nontrivial Topology. Nano Letters, 2020, 20, 8682-8688.	4.5	20
14	Boundary conditions for phosphorene nanoribbons in the continuum approach. Physical Review B, 2016, 94, .	1.1	18
15	Wave-packet dynamics in multilayer phosphorene. Physical Review B, 2019, 99, .	1.1	17
16	Substrate effects on the exciton fine structure of black phosphorus quantum dots. Physical Review B, 2017, 96, .	1.1	15
17	Valley filtering in graphene due to substrate-induced mass potential. Journal of Physics Condensed Matter, 2017, 29, 215502.	0.7	14
18	Magnetic properties of bilayer graphene quantum dots in the presence of uniaxial strain. Physical Review B, 2017, 96, .	1.1	14

#	Article	IF	Citations
19	Electronic properties of bilayer graphene catenoid bridge. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126458.	0.9	13
20	Structural analysis, molecular docking and molecular dynamics of an edematogenic lectin from Centrolobium microchaete seeds. International Journal of Biological Macromolecules, 2018, 117, 124-133.	3.6	12
21	Electron collimation at van der Waals domain walls in bilayer graphene. Physical Review B, 2019, 100, .	1.1	12
22	Hexagonal-shaped monolayer-bilayer quantum disks in graphene: A tight-binding approach. Physical Review B, 2016, 94, .	1.1	10
23	Dirac fermions in graphene using the position-dependent translation operator formalism. Physical Review B, 2020, 102, .	1.1	10
24	Energy shift and conduction-to-valence band transition mediated by a time-dependent potential barrier in graphene. Physical Review B, 2015, 92, .	1.1	9
25	Energy levels of ABC-stacked trilayer graphene quantum dots with infinite-mass boundary conditions. Physical Review B, 2016, 94, .	1.1	9
26	Band-gap formation and morphing in Î±â^'T3 superlattices. Physical Review B, 2021, 104, .	1.1	9
27	Curvature effects on the electronic and transport properties of semiconductor films. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 99, 304-309.	1.3	8
28	Tunneling properties in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î±</mml:mi><mml:mtext>â^'</mml:mtext><mml:msub><mml:mi>T</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> lattices: Effects of symmetry-breaking terms. Physical Review B, 2022, 105, .	1.1	8
29	Charging energy spectrum of black phosphorus quantum dots. Journal Physics D: Applied Physics, 2017, 50, 305103.	1.3	7
30	Electronic confinement in graphene quantum rings due to substrate-induced mass radial kink. Journal of Physics Condensed Matter, 2016, 28, 505501.	0.7	6
31	Electronic and transport properties of anisotropic semiconductor quantum wires. Physical Review B, 2020, 102, .	1.1	6
32	Signatures of subband excitons in few-layer black phosphorus. Physical Review B, 2021, 103, .	1.1	6
33	Gate potential-controlled current switching in graphene Y-junctions. Journal of Physics Condensed Matter, 2021, 33, 375501.	0.7	6
34	Effect of zitterbewegung on the propagation of wave packets in ABC-stacked multilayer graphene: an analytical and computational approach. Journal of Physics Condensed Matter, 2021, 33, 095503.	0.7	6
35	Electronic properties of superlattices on quantum rings. Journal of Physics Condensed Matter, 2017, 29, 165501.	0.7	5
36	Magnetic field induced vortices in graphene quantum dots. Journal of Physics Condensed Matter, 2020, 32, 155501.	0.7	5

#	Article	IF	Citations
37	Zitterbewegung of MoirÃ© Excitons in Twisted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Heterobilayers. Physical Review Letters, 2021, 127, 106801.	2.9	5
38	Three-boson stability for boosted interactions towards the zero-range limit. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 823, 136773.	1.5	5
39	Current modulation in graphene pâ€“n junctions with external fields. Journal of Physics Condensed Matter, 2020, 32, 425501.	0.7	4
40	Two-dimensional electron gas in a non-Euclidean space. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 129, 114639.	1.3	4
41	Gap opening in graphene nanoribbons by application of simple shear strain and in-plane electric field. Journal of Physics Condensed Matter, 2021, 33, 065503.	0.7	4
42	Tight-binding Model in First and Second Quantization for Band Structure Calculations. Brazilian Journal of Physics, 2022, 52, 1.	0.7	3
43	Conditions for the occurrence of Coulomb blockade in phosphorene quantum dots at room temperature. Physical Review B, 2018, 98, .	1.1	2
44	Channel surface plasmons in a continuous and flat graphene sheet. Physical Review B, 2018, 97, .	1.1	2
45	Magnetic brightening, large valley Zeeman splitting, and dynamics of long-lived A and B dark excitonic states in monolayer WS2. Physical Review B, 2019, 100, .	1.1	2
46	Modulation of persistent current in graphene quantum rings. Journal of Physics Condensed Matter, 2022, 34, 125503.	0.7	2
47	Terahertz photo-generated current in a two-dimensional quantum dot system. Journal of Applied Physics, 2020, 128, 185702.	1.1	0