Vitor Manuel Pereira

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4053475/publications.pdf

Version: 2024-02-01

56	6,345	136950 32	144013 57
papers	citations	h-index	g-index

60	60	60	6639
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tight-binding approach to uniaxial strain in graphene. Physical Review B, 2009, 80, .	3.2	1,094
2	Electron-Electron Interactions in Graphene: Current Status and Perspectives. Reviews of Modern Physics, 2012, 84, 1067-1125.	45.6	999
3	Strain Engineering of Grapheneâ€™s Electronic Structure. Physical Review Letters, 2009, 103, 046801.	7.8	933
4	Disorder Induced Localized States in Graphene. Physical Review Letters, 2006, 96, 036801.	7.8	543
5	Modeling disorder in graphene. Physical Review B, 2008, 77, .	3.2	357
6	Coulomb Impurity Problem in Graphene. Physical Review Letters, 2007, 99, 166802.	7.8	261
7	Strained graphene: tight-binding and density functional calculations. New Journal of Physics, 2009, 11, 115002.	2.9	197
8	Geometry, Mechanics, and Electronics of Singular Structures and Wrinkles in Graphene. Physical Review Letters, 2010, 105, 156603.	7.8	177
9	Faraday effect in graphene enclosed in an optical cavity and the equation of motion method for the study of magneto-optical transport in solids. Physical Review B, 2011, 84, .	3.2	125
10	Optical properties of strained graphene. Europhysics Letters, 2010, 92, 67001.	2.0	112
11	Supercritical Coulomb impurities in gapped graphene. Physical Review B, 2008, 78, .	3.2	96
12	Tuning Optical Conductivity of Largeâ€Scale CVD Graphene by Strain Engineering. Advanced Materials, 2014, 26, 1081-1086.	21.0	86
13	Polarization charge distribution in gapped graphene: Perturbation theory and exact diagonalization analysis. Physical Review B, 2008, 78, .	3.2	77
14	Coexistence of large conventional and planar spin Hall effect with long spin diffusion length in a low-symmetry semimetal at room temperature. Nature Materials, 2020, 19, 292-298.	27.5	77
15	Adatoms in graphene. Solid State Communications, 2009, 149, 1094-1100.	1.9	65
16	Lattice-corrected strain-induced vector potentials in graphene. Physical Review B, 2012, 85, .	3.2	64
17	Characterization of the second- and third-harmonic optical susceptibilities of atomically thin tungsten diselenide. Scientific Reports, 2018, 8, 10035.	3.3	57
18	Stable charge density wave phase in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi><mml:mo>â€“</mml:m monolayer. Physical Review B, 2017, 95, .	3.2	56

#	Article	IF	Citations
19	Pseudomagnetic fields in graphene nanobubbles of constrained geometry: A molecular dynamics study. Physical Review B, 2014, 90, .	3.2	52
20	Resonant Tunneling in Graphene Pseudomagnetic Quantum Dots. Nano Letters, 2013, 13, 2692-2697.	9.1	49
21	Reproduction of the Charge Density Wave Phase Diagram in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi><mml:mtext>â^'</mml:mtext><mml:msub><mml:mrow><m Exposes its Excitonic Character. Physical Review Letters, 2018, 121, 226602.	7.8	49
22	Excitonic structure of the optical conductivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mm monolayers. Physical Review B, 2018, 97, .	3.2	43
23	Tunable optical absorption and interactions in graphene via oxygen plasma. Physical Review B, 2014, 89, .	3.2	42
24	Piezoelectricity in planar boron nitride via a geometric phase. Physical Review B, 2016, 94, .	3.2	42
25	Magnetism in strained graphene dots. Physical Review B, 2009, 80, .	3.2	41
26	Purely rotational symmetry-protected topological crystalline insulator Î± -Bi₄Br₄. 2D Materials, 2019, 6, 031004.	4.4	41
27	Spinâ€Orbit Torque Magnetization Switching in MoTe₂/Permalloy Heterostructures. Advanced Materials, 2020, 32, e2002799.	21.0	40
28	Nonlinear magnetotransport shaped by Fermi surface topology and convexity. Nature Communications, 2019, 10, 1290.	12.8	38
29	Canted Persistent Spin Texture and Quantum Spin Hall Effect in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WTe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Physical Review Letters, 2020, 125, 256603.	7.8	38
30	Conductance signatures of electron confinement induced by strained nanobubbles in graphene. Nanoscale, 2015, 7, 15300-15309.	5.6	35
31	Nonlinear photocurrents in two-dimensional systems based on graphene and boron nitride. Physical Review B, 2016, 94, .	3.2	34
32	Quantized Transport, Strain-Induced Perfectly Conducting Modes, and Valley Filtering on Shape-Optimized Graphene Corbino Devices. Nano Letters, 2017, 17, 5304-5313.	9.1	32
33	Topological crystalline insulator states in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ca</mml:mi><mml:mn>2</mml:mn></mml:msub></mr family. Physical Review B, 2018, 98, .	3.2	28
34	Conductance across strain junctions in graphene nanoribbons. Physical Review B, 2013, 88, .	3.2	26
35	Graphene kirigami as a platform for stretchable and tunable quantum dot arrays. Physical Review B, 2016, 93, .	3.2	25
36	Frustrated supercritical collapse in tunable charge arrays on graphene. Nature Communications, 2019, 10, 477.	12.8	23

#	Article	IF	Citations
37	Double Exchange Model for Magnetic Hexaborides. Physical Review Letters, 2004, 93, 147202.	7.8	22
38	Anomalous Quantum Metal in a 2D Crystalline Superconductor with Electronic Phase Nonuniformity. Nano Letters, 2019, 19, 4126-4133.	9.1	22
39	Measuring Valley Polarization in Two-Dimensional Materials with Second-Harmonic Spectroscopy. ACS Photonics, 2020, 7, 925-931.	6.6	22
40	Discommensuration-driven superconductivity in the charge density wave phases of transition-metal dichalcogenides. Physical Review B, 2019, 99, .	3.2	21
41	Designing electronic properties of two-dimensional crystals through optimization of deformations. New Journal of Physics, 2014, 16, 093044.	2.9	20
42	Second harmonic spectroscopy to optically detect valley polarization in 2D materials. 2D Materials, 2017, 4, 021027.	4.4	20
43	Enhanced optical dichroism of graphene nanoribbons. Physical Review B, 2012, 86, .	3.2	18
44	Magneto-Optical Evidence of Double Exchange in a Percolating Lattice. Physical Review Letters, 2006, 96, 016403.	7.8	16
45	Correlated states of a triangular net of coupled quantum wires: Implications for the phase diagram of marginally twisted bilayer graphene. Physical Review B, 2020, 101, .	3.2	12
46	Distortion of the perfect lattice structure in bilayer graphene. Physical Review B, 2009, 79, .	3.2	11
47	Low-symmetry topological materials for large charge-to-spin interconversion: The case of transition metal dichalcogenide monolayers. Physical Review Research, 2021, 3, .	3.6	11
48	Charge Density Waves and the Hidden Nesting of Purple Bronze K0.9Mo6O17. Physical Review Letters, 2017, 118, 257601.	7.8	10
49	Scaling study of the metal-insulator transition in one-dimensional Fermion systems. Physical Review B, 2002, 66, .	3.2	9
50	Effective contact model for geometry-independent conductance calculations in graphene. Physical Review B, 2013, 88, .	3.2	7
51	Boron and nitrogen doping in graphene antidot lattices. Physical Review B, 2016, 93, .	3.2	7
52	Effect of Oxygen Plasma on the Optical Properties of Monolayer Graphene. Advanced Materials Research, 0, 896, 510-513.	0.3	5
53	Antiferromagnetism and chiral <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>d</mml:mi></mml:math> -wave superconductivity from an effective <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>t</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi>J</mml:mi></mml:mrow></mml:math> model for twisted bilayer graphene. Physical Review B, 2020, 101, .	3.2	5
54	Topological excitons. Nature Physics, 2022, 18, 6-7.	16.7	5

#	Article	IF	Citations
55	Expeditious computation of nonlinear optical properties of arbitrary order with native electronic interactions in the time domain. Physical Review B, 2020, 102, .	3.2	4
56	Reply to â€œComment on â€˜Piezoelectricity in planar boron nitride via a geometric phase' â€• Physical Review B, 2018, 98, .	3.2	0