# JosÃ© Eduardo Padilha

List of Publications by Year
in descending order



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|---|---|---|---|
| 32 papers | 1,388 citations | 471509 17 h-index | 454955 30 g-index |
| 32 all docs | 32 docs citations | 32 times ranked | 2174 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | van der Waals Heterostructure of Phosphorene and Graphene: Tuning the Schottky Barrier and Doping by Electrostatic Gating. Physical Review Letters, 2015, 114, 066803. | 7.8 | 445 |
| 2 | Nature and evolution of the band-edge states 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></mml:math> From monolayer to bulk. Physical Review B, 2014, 90, . | 3.2 | 138 |
| 3 | Metal Chalcogenides Janus Monolayers for Efficient Hydrogen Generation by Photocatalytic Water Splitting. ACS Applied Nano Materials, 2019, 2, 890-897. | 5.0 | 93 |
| 4 | Directional dependence of the electronic and transport properties of 2D borophene and borophane. Physical Chemistry Chemical Physics, 2016, 18, 25491-25496. | 2.8 | 92 |
| 5 | Free-Standing Bilayer Silicene: The Effect of Stacking Order on the Structural, Electronic, and Transport Properties. Journal of Physical Chemistry C, 2015, 119, 3818-3825. | 3.1 | 73 |
| 6 | Two-dimensional van der Waals p-n junction of InSe/phosphorene. Physical Review B, 2017, 95, . | 3.2 | 68 |
| 7 | Quantum spin Hall effect on germanene nanorod embedded in completely hydrogenated germanene. Physical Review B, 2014, 89, . | 3.2 | 57 |
| 8 | Electronic and transport properties of structural defects in monolayer germanene: An ab initio investigation. Solid State Communications, 2016, 225, 38-43. | 1.9 | 50 |
| 9 | Layer-dependent band alignment of few layers of blue phosphorus and their van der Waals heterostructures with graphene. Physical Review B, 2018, 97, . | 3.2 | 45 |
| 10 | Energetics and stability of vacancies in carbon nanotubes. Solid State Communications, 2011, 151, 482-486. | 1.9 | 42 |
| 11 | Bilayer graphene dual-gate nanodevice: Anab initiosimulation. Physical Review B, 2011, 84, . | 3.2 | 36 |
| 12 | Transport properties of single vacancies in nanotubes. Physical Review B, 2008, 77, . | 3.2 | 35 |
| 13 | Quantum spin Hall effect in a disordered hexagonal Si<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>Ge<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>alloy. Physical Review B, 2013, 88, . | 3.2 | 24 |
| 14 | Bilayer graphene on h-BN substrate: investigating the breakdown voltage and tuning the bandgap by electric field. Journal of Physics Condensed Matter, 2012, 24, 075301. | 1.8 | 22 |
| 15 | Directional Control of the Electronic and Transport Properties of Graphynes. Journal of Physical Chemistry C, 2014, 118, 18793-18798. | 3.1 | 18 |
| 16 | Fully and partially iodinated germanane as a platform for the observation of the quantum spin Hall effect. Physical Review B, 2016, 93, . | 3.2 | 18 |
| 17 | IxV curves of boron and nitrogen doping zigzag graphene nanoribbons. International Journal of Quantum Chemistry, 2011, 111, 1379-1386. | 2.0 | 17 |
| 18 | A new class of large band gap quantum spin hall insulators: 2D fluorinated group-IV binary compounds. Scientific Reports, 2016, 6, 26123. | 3.3 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Microscopic Description of the Ferroism in Lead-Free AlFeO3. Scientific Reports, 2018, 8, 6420. | 3.3 | 17 |
| 20 | Electronic and optical properties of hydrogenated group-IV multilayer materials. Physical Chemistry Chemical Physics, 2018, 20, 8112-8118. | 2.8 | 12 |
| 21 | Graphene nanoribbon intercalated with hexagonal boron nitride: Electronic transport properties from ab initio calculations. Solid State Communications, 2013, 173, 24-29. | 1.9 | 10 |
| 22 | Topological phase transitions of (BixSb1â^'x)2Se3 alloys by density functional theory. Journal of Physics Condensed Matter, 2015, 27, 255501. | 1.8 | 10 |
| 23 | Stacking-dependent transport properties in few-layers graphene. Solid State Communications, 2017, 250, 70-74. | 1.9 | 10 |
| 24 | Tunable magnetism and spin-polarized electronic transport in graphene mediated by molecular functionalization of extended defects. Physical Review B, 2018, 97, . | 3.2 | 9 |
| 25 | Structural evolution and the role of native defects in subnanometer MoS nanowires. Physical Review B, 2019, 100, . | 3.2 | 7 |
| 26 | Green synthesis of templated carbon porous materials from simple raw materials. Materials Advances, 2021, 2, 403-412. | 5.4 | 7 |
| 27 | Interatomic potential for atomistic simulation of self-catalyzed GaAs nanowires growth. Computational Materials Science, 2020, 183, 109805. | 3.0 | 5 |
| 28 | Substrate-supported large-band-gap quantum spin Hall insulator based on III-V bismuth layers. Physical Review B, 2016, 94, . | 3.2 | 4 |
| 29 | Structural Transition in Oxidized Ca2N Electrenes: CaO/CaN 2D Heterostructures. Journal of Physical Chemistry C, 2020, 124, 14706-14712. | 3.1 | 4 |
| 30 | Electron density distribution and electronic structure as tools to study the origin of ferroic states in ferroelectric and magnetic materials. Ferroelectrics, 2016, 500, 26-36. | 0.6 | 2 |
| 31 | Oxidation of two-dimensional electrides: Structural transition and the formation of half-metallic channels protected by oxide layers. Physical Review B, 2022, 105, . | 3.2 | 1 |
| 32 | Nanodots of transition metal dichalcogenides embedded in MoS2 and MoSe2: first-principles calculations. Physical Chemistry Chemical Physics, 2017, 19, 26240-26247. | 2.8 | 0 |