Mario S C Mazzoni

List of Publications by Year
in descending order

58 papers	3,112 citations	304368 22 h-index	149479 56 g-index
58 all docs	58 docs citations	58 times ranked	3859 citing authors

#	Article	IF	Citations
1	Crossed Nanotube Junctions. Science, 2000, 288, 494-497.	6.0	1,135
2	Tuning the electronic properties of boron nitride nanotubes with transverse electric fields: A giant dc Stark effect. Physical Review B, 2004, 69, .	1.1	256
3	Group-theory analysis of electrons and phonons in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>-layer graphene systems. Physical Review B, 2009, 79, .	1.1	154
4	Raman evidence for pressure-induced formation of diamondene. Nature Communications, 2017, 8, 96.	5.8	132
5	Electronic structure and energetics ofBxCyNzlayered structures. Physical Review B, 2006, 73, .	1.1	130
6	Roomâ€Temperature Compressionâ€Induced Diamondization of Fewâ€Layer Graphene. Advanced Materials, 2011, 23, 3014-3017.	11.1	124
7	Stability, geometry, and electronic structure of the boron nitride B36N36 fullerene. Applied Physics Letters, 1999, 75, 61-63.	1.5	119
8	Structural Deformation and Intertube Conductance of Crossed Carbon Nanotube Junctions. Physical Review Letters, 2001, 86, 688-691.	2.9	98
9	Bandgap closure of a flattened semiconductor carbon nanotube: A first-principles study. Applied Physics Letters, 2000, 76, 1561-1563.	1.5	94
10	Energetics of the oxidation and opening of a carbon nanotube. Physical Review B, 1999, 60, R2208-R2211.	1.1	69
11	Stability of antiphase line defects in nanometer-sized boron nitride cones. Physical Review B, 2004, 70, .	1.1	64
12	Deformation Induced Semiconductor-Metal Transition in Single Wall Carbon Nanotubes Probed by Electric Force Microscopy. Physical Review Letters, 2008, 100, 256804.	2.9	62
13	Modulating the Electronic Properties along Carbon Nanotubes via Tubeâ^'Substrate Interaction. Nano Letters, 2010, 10, 5043-5048.	4.5	49
14	Electron states in boron nitride nanocones. Applied Physics Letters, 2003, 82, 2323-2325.	1.5	45
15	Two-Dimensional Molecular Crystals of Phosphonic Acids on Graphene. ACS Nano, 2011, 5, 394-398.	7.3	43
16	Asymmetric Effect of Oxygen Adsorption on Electron and Hole Mobilities in Bilayer Graphene: Long- and Short-Range Scattering Mechanisms. ACS Nano, 2013, 7, 6597-6604.	7.3	34
17	Atomic restructuring and localized electron states in a bent carbon nanotube: A first-principles study. Physical Review B, 2000, 61, 7312-7315.	1.1	33
18	Temperature-Induced Coexistence of a Conducting Bilayer and the Bulk-Terminated Surface of the Topological Insulator Bi₂Te₃. Nano Letters, 2013, 13, 4517-4521.	4.5	33

#	Article	IF	Citations
19	Boron nitride fullereneB36N36doped with transition metal atoms: First-principles calculations. Physical Review B, 2007, 75, .	1.1	32
20	Hard, transparent, sp3-containing 2D phase formed from few-layer graphene under compression. Carbon, 2021, 173, 744-757.	5.4	31
21	A theoretical study of the stability trends of boron nitride fullerenes. Chemical Physics Letters, 2006, 421, 246-250.	1.2	29
22	Edge States and Magnetism in Carbon Nanotubes with Line Defects. Physical Review Letters, 2008, 100, 146801.	2.9	27
23	Compression-Induced Modification of Boron Nitride Layers: A Conductive Two-Dimensional BN Compound. ACS Nano, 2018, 12, 5866-5872.	7.3	23
24	Quantum conductance of carbon nanotube peapods. Applied Physics Letters, 2003, 83, 5217-5219.	1.5	22
25	Graphene/h-BN heterostructures under pressure: From van der Waals to covalent. Carbon, 2019, 155, 108-113.	5.4	20
26	First-principles investigation of electrochemical properties of gold nanoparticles. Nanotechnology, 2010, 21, 065705.	1.3	18
27	Thermal Stability and Ordering Study of Long- and Short-Alkyl Chain Phosphonic Acid Multilayers. Langmuir, 2012, 28, 15124-15133.	1.6	18
28	Knots in a graphene nanoribbon. Physical Review B, 2012, 85, .	1.1	18
29	Grapheneâ€“boron nitride superlattices: the role of point defects at the BN layer. Nanotechnology, 2014, 25, 165705.	1.3	17
30	Anomalous response of supported few-layer hexagonal boron nitride to DC electric fields: a confined water effect?. Nanotechnology, 2012, 23, 175703.	1.3	16
31	Electron States in a Lattice of Au Nanoparticles: The Role of Strain and Functionalization. Physical Review Letters, 2006, 96, 116802.	2.9	15
32	Bistability, softening, and quenching of magnetic moments in Ni-filled carbon nanotubes. Physical Review B, 2010, 81, .	1.1	14
33	Electronic Band Tuning and Multivalley Raman Scattering in Monolayer Transition Metal Dichalcogenides at High Pressures. ACS Nano, 2022, 16, 8064-8075.	7.3	13
34	First-principles investigation of Au-covered carbon fullerenes. Physical Review B, 2005, 72, .	1.1	12
35	Origin of the complex Raman tensor elements in single-layer triclinic ReSe2. 2D Materials, 2021, 8, 025002.	2.0	12
36	Thionine Self-Assembled Structures on Graphene: Formation, Organization, and Doping. Langmuir, 2018, 34, 6903-6911.	1.6	11

#	Article	IF	Citations
37	Porous nanotubes and fullerenes based on covalent organic frameworks. Chemical Physics Letters, 2007, 449, 171-174.	1.2	10
38	Formation of Bi_{<i>x</i>}Se_{<i>y</i>} Phases Upon Annealing of the Topological Insulator Bi₂Se₃: Stabilization of In-Depth Bismuth Bilayers. Journal of Physical Chemistry Letters, 2018, 9, 954-960.	2.1	10
39	Oxygen intercalated graphene on SiC(0001): Multiphase SiOx layer formation and its influence on graphene electronic properties. Carbon, 2020, 167, 746-759.	5.4	9
40	Two-dimensional semiconductors: The case of silver thiolates. Applied Physics Letters, 2016, 109, .	1.5	8
41	Bi₂:Bi₂Te₃ stacking influence on the surface electronic response of the topological insulator Bi₄Te₃. Electronic Structure, 2020, 2, 015002.	1.0	8
42	Nanometrological porphyrins. Nanotechnology, 2012, 23, 275504.	1.3	7
43	All-perylene-derivative for white light emitting diodes. Physical Chemistry Chemical Physics, 2020, 22, 20744-20750.	1.3	5
44	Effects of dimensionality and excitation energy on the Raman tensors of triclinic ReSe₂. Journal of Raman Spectroscopy, 2021, 52, 2068-2080.	1.2	5
45	Chemical Stabilization and Improved Thermal Resilience of Molecular Arrangements: Possible Formation of a Surface Network of Bonds by Multiple Pulse Atomic Layer Deposition. Journal of Physical Chemistry B, 2014, 118, 9792-9799.	1.2	4
46	Edge States and Half-Metallicity in TiO₂ Nanoribbons. Journal of Physical Chemistry C, 2011, 115, 18047-18050.	1.5	3
47	Metastable phase formation and structural evolution of epitaxial graphene grown on SiC(100) under a temperature gradient. Nanotechnology, 2012, 23, 175603.	1.3	3
48	Toxins by first-principles: Electronic structure mapping structural changes. Computational and Theoretical Chemistry, 2008, 853, 58-61.	1.5	2
49	Spontaneous Formation of O₈ Clusters and Chains within Nanostructures. Journal of Physical Chemistry C, 2014, 118, 24741-24745.	1.5	2
50	Charge transfer between carbon nanotubes on surfaces. Nanoscale, 2015, 7, 16175-16181.	2.8	2
51	Room temperature observation of the correlation between atomic and electronic structure of graphene on Cu(110). RSC Advances, 2016, 6, 98001-98009.	1.7	2
52	Quantitative measurement of manganese incorporation into (In,Mn)As islands by resonant x-ray scattering. Physical Review B, 2017, 96, .	1.1	2
53	Interplay between structural deformations and flat band phenomenology in twisted bilayer antimonene. RSC Advances, 2021, 11, 27855-27859.	1.7	2
54	Electromechanical Modulations in Transition Metal Dichalcogenide Nanosheets: Implications for Environmental Sensors. ACS Applied Nano Materials, 2021, 4, 11305-11311.	2.4	2

#	ARTICLE	IF	CITATIONS
55	Use of the DX center as a probe to study the profile of Si impurities in planarâ€doped GaAs. Journal of Applied Physics, 1995, 77, 3283-3287.	1.1	1
56	Oxidation-driven formation of precisely ordered antimonene nanoribbons. Journal of Physics Condensed Matter, 2020, 32, 165302.	0.7	1
57	Covalently Linked Porphyrins as One-Dimensional Conductors. Journal of Physical Chemistry Letters, 2021, 12, 10788-10792.	2.1	1
58	The Special Case of the Spectral Emission of a Tb³⁺ Mono Metal Complex. ChemPhysChem, 2022, 23, .	1.0	1