Andre Muniz

List of Publications by Year
in descending order

51	1,065	393982	433756
papers	citations	19 h-index	31 g-index

52	52	52	1125
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ab initiostudies of thermodynamic and electronic properties of phosphorene nanoribbons. Physical Review B, 2014, 90, .	1.1	126
2	Opening and tuning of band gap by the formation of diamond superlattices in twisted bilayer graphene. Physical Review B, 2012, 86, .	1.1	68
3	Mechanical behavior of interlayer-bonded nanostructures obtained from bilayer graphene. Carbon, 2015, 81, 663-677.	5.4	64
4	First-principles calculation of the mechanical properties of diamond nanothreads. Carbon, 2017, 113, 260-265.	5.4	53
5	An open and extensible sigmaâ€profile database for COSMOâ€based models. AICHE Journal, 2018, 64, 3443-3455.	1.8	53
6	Functionalized diamond nanothreads from benzene derivatives. Physical Chemistry Chemical Physics, 2017, 19, 7132-7137.	1.3	52
7	Elastic properties of graphene nanomeshes. Applied Physics Letters, 2014, 104, .	1.5	42
8	Superlattices of Fluorinated Interlayer-Bonded Domains in Twisted Bilayer Graphene. Journal of Physical Chemistry C, 2013, 117, 7315-7325.	1.5	41
9	Tunable mechanical properties of diamond superlattices generated by interlayer bonding in twisted bilayer graphene. Applied Physics Letters, 2013, 103, .	1.5	38
10	Elucidation of deactivation phenomena in cobalt catalyst for Fischer-Tropsch synthesis using SSITKA. Journal of Catalysis, 2016, 344, 669-679.	3.1	37
11	Formation of fullerene superlattices by interlayer bonding in twisted bilayer graphene. Journal of Applied Physics, 2012, 111, .	1.1	35
12	Experimental and computational analysis of carbon molecular sieve membrane formation upon polyetherimide pyrolysis. Carbon, 2017, 119, 21-29.	5.4	33
13	Formation and Mechanical Behavior of Nanocomposite Superstructures from Interlayer Bonding in Twisted Bilayer Graphene. ACS Applied Materials & Interfaces, 2018, 10, 28898-28908.	4.0	33
14	Mechanical behavior and fracture of graphene nanomeshes. Journal of Applied Physics, 2015, 117, .	1.1	28
15	Carbon nanothreads from polycyclic aromatic hydrocarbon molecules. Carbon, 2018, 140, 644-652.	5.4	28
16	Effects of hydrogen chemisorption on the structure and deformation of single-walled carbon nanotubes. Applied Physics Letters, 2009, 94, .	1.5	25
17	Electronic and Mechanical Properties of Partially Saturated Carbon and Carbon Nitride Nanothreads. Journal of Physical Chemistry C, 2019, 123, 3886-3891.	1.5	25
18	On the hydrogen storage capacity of carbon nanotube bundles. Applied Physics Letters, 2009, 95, 163111.	1.5	21

#	Article	IF	Citations
19	Diamond nanothread-based 2D and 3D materials: Diamond nanomeshes and nanofoams. Carbon, 2018, 139, 789-800.	5.4	21
20	First-principles study of carbon nanothreads derived from five-membered heterocyclic rings: thiophene, furan and pyrrole. Physical Chemistry Chemical Physics, 2021, 23, 2055-2062.	1.3	19
21	Analysis of diamond nanocrystal formation from multiwalled carbon nanotubes. Physical Review B, 2009, 80, .	1.1	18
22	Carbon-Based Nanostructures Derived from Bilayer Graphene with Zero Thermal Expansion Behavior. Journal of Physical Chemistry C, 2015, 119, 17458-17465.	1.5	18
23	Unveiling the Origin of the Giant Barocaloric Effect in Natural Rubber. Macromolecules, 2020, 53, 2606-2615.	2.2	15
24	EVALUATION OF BIOMASS AND COAL CO-GASIFICATION OF BRAZILIAN FEEDSTOCK USING A CHEMICAL EQUILIBRIUM MODEL. Brazilian Journal of Chemical Engineering, 2016, 33, 401-414.	0.7	13
25	Fluorescence Based Platform to Discriminate Protein Using Carbon Quantum Dots. ChemistrySelect, 2019, 4, 5619-5627.	0.7	13
26	Prediction of Ï•-P and Ïƒ-P: Two New Strain-Interconvertible Phosphorene Allotropes. Journal of Physical Chemistry C, 2020, 124, 21207-21214.	1.5	13
27	Hydrogenation effects on the structure and morphology of graphene and single-walled carbon nanotubes. Journal of Applied Physics, 2010, 108, 113532.	1.1	12
28	Molecular dynamics study of the effects of static and oscillating electric fields in ovalbumin. Innovative Food Science and Emerging Technologies, 2022, 75, 102911.	2.7	12
29	Mechanical properties of hydrogenated electron-irradiated graphene. Journal of Applied Physics, 2016, 120, 124301.	1.1	11
30	Nanoporous carbon superstructures based on covalent bonding of porous fullerenes. Carbon, 2018, 130, 424-432.	5.4	9
31	Strain-Tunable Carbon Nanothread-Derived Membranes for Water Desalination. Journal of Physical Chemistry B, 2021, 125, 7311-7319.	1.2	9
32	Molecular-Dynamics Simulations on Nanoindentation of Graphene-Diamond Composite Superstructures in Interlayer-Bonded Twisted Bilayer Graphene: Implications for Mechanical Metamaterials. ACS Applied Nano Materials, 2021, 4, 8611-8625.	2.4	9
33	On the colossal barocaloric effect in higher n-alkanes. Journal of Materials Chemistry A, 2022, 10, 8344-8355.	5.2	9
34	Thermal annealing of graphite oxide under high pressure: An experimental and computational study. Carbon, 2018, 139, 1035-1047.	5.4	8
35	Tuning the band structure of graphene nanoribbons through defect-interaction-driven edge patterning. Physical Review B, 2017, 96, .	1.1	6
36	Flexible carbon nanothread-based membranes with strain-dependent gas transport properties. Journal of Membrane Science, 2019, 585, 184-190.	4.1	6

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37	Structure-properties relations in graphene derivatives and metamaterials obtained by atomic-scale modeling. Molecular Simulation, 2019, 45, 1173-1202.	0.9	6
38	Molecular-Dynamics Analysis of Nanoindentation of Graphene Nanomeshes: Implications for 2D Mechanical Metamaterials. ACS Applied Nano Materials, 2020, 3, 3613-3624.	2.4	6
39	High-order finite volume method for solving viscoelastic fluid lows. Brazilian Journal of Chemical Engineering, 2008, 25, 153-166.	0.7	5
40	Peering into the Formation of Template-Free Hierarchical Flowerlike Nanostructures of SrTiO₃. ACS Omega, 2020, 5, 33007-33016.	1.6	5
41	Experimental and DFT analysis of the acid and reduction properties of Fe-Cu/ZSM-5. Microporous and Mesoporous Materials, 2021, 314, 110860.	2.2	4
42	Chain- and chainmail-like nanostructures from carbon nanotube rings. Computational Materials Science, 2019, 161, 76-82.	1.4	3
43	The effect of subgrid-scale modeling on LES of turbulent coaxial jets. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1.	0.8	3
44	AnÃ¡lise teÃ³rico-experimental da dispersÃ£o de poluentes lÃquidos em solos. Engenharia Sanitaria E Ambiental, 2007, 12, 410-416.	0.1	3
45	Reductionâ€Driven 3D to 2D Transformation of Cu Nanoparticles. Small, 2022, , 2106583.	5.2	3
46	Nature of the interactions between Fe and Zr for the methane dehydroaromatization reaction in ZSM-5. Journal of Molecular Structure, 2020, 1220, 128720.	1.8	2
47	Uma nova metodologia para a simulaÃ§Ã£o de escoamentos de fluidos viscoelÃ¡sticos. Polimeros, 2005, 15, 53-58.	0.2	1
48	PMLES: A Hybrid Open MP CUDA Source Code for LES of Turbulent Flows. Journal of Applied Fluid Mechanics, 2020, 13, 1067-1079.	0.4	1
49	DETERMINAÃ‡ÃƒO DAS PROPRIEDADES MECÃ‚NICAS DE NANOMALHAS DE GRAFENO POR SIMULAÃ‡ÃƒO MOLECULAR. , 0, , .		0
50	ESTUDO DA FORMAÃ‡ÃƒO DE MEMBRANAS DE CARBONO ATRAVÃ‰S DA PIRÃ“LISE DE POLI(Ã‰TER-IMIDA) COM DINÂMICA MOLECULAR REATIVA. , 0, , .		0
51	Reductionâ€Driven 3D to 2D Transformation of Cu Nanoparticles (Small 7/2022). Small, 2022, 18, .	5.2	0