Andre Muniz

List of Publications by Year in Descending Order

47 papers	750 citations	17 h-index	26 g-index
52 ext. papers	924 ext. citations	5 avg, IF	4.86 L-index

#	Paper	IF	Citations
47	Reduction-Driven 3D to 2D Transformation of Cu Nanoparticles.. *Small*, **2022**, e2106583	11	2
46	Molecular dynamics study of the effects of static and oscillating electric fields in ovalbumin. *Innovative Food Science and Emerging Technologies*, **2022**, 75, 102911	6.8	4
45	Reduction-Driven 3D to 2D Transformation of Cu Nanoparticles (Small 7/2022). *Small*, **2022**, 18, 2270032	11	
44	Strain-Tunable Carbon Nanothread-Derived Membranes for Water Desalination. *Journal of Physical Chemistry B*, **2021**, 125, 7311-7319	3.4	4
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	2	0
42	Experimental and DFT analysis of the acid and reduction properties of Fe-Cu/ZSM-5. *Microporous and Mesoporous Materials*, **2021**, 314, 110860	5.3	1
41	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	5.6	2
40	First-principles study of carbon nanothreads derived from five-membered heterocyclic rings: thiophene, furan and pyrrole. *Physical Chemistry Chemical Physics*, **2021**, 23, 2055-2062	3.6	7
39	Unveiling the Origin of the Giant Barocaloric Effect in Natural Rubber. *Macromolecules*, **2020**, 53, 2606-2615	5.5	2
38	Nature of the interactions between Fe and Zr for the methane dehydroaromatization reaction in ZSM-5. *Journal of Molecular Structure*, **2020**, 1220, 128720	3.4	1
37	Molecular-Dynamics Analysis of Nanoindentation of Graphene Nanomeshes: Implications for 2D Mechanical Metamaterials. *ACS Applied Nano Materials*, **2020**, 3, 3613-3624	5.6	3
36	Prediction of ?-P and □P: Two New Strain-Interconvertible Phosphorene Allotropes. *Journal of Physical Chemistry C*, **2020**, 124, 21207-21214	3.8	5
35	Peering into the Formation of Template-Free Hierarchical Flowerlike Nanostructures of SrTiO. *ACS Omega*, **2020**, 5, 33007-33016	3.9	2
34	Electronic and Mechanical Properties of Partially Saturated Carbon and Carbon Nitride Nanothreads. *Journal of Physical Chemistry C*, **2019**, 123, 3886-3891	3.8	18
33	Flexible carbon nanothread-based membranes with strain-dependent gas transport properties. *Journal of Membrane Science*, **2019**, 585, 184-190	9.6	2
32	Structure-properties relations in graphene derivatives and metamaterials obtained by atomic-scale modeling. *Molecular Simulation*, **2019**, 45, 1173-1202	2	5
31	Fluorescence Based Platform to Discriminate Protein Using Carbon Quantum Dots. *ChemistrySelect*, **2019**, 4, 5619-5627	1.8	8

30	Chain- and chainmail-like nanostructures from carbon nanotube rings. *Computational Materials Science*, **2019**, 161, 76-82	3.2	3
29	Nanoporous carbon superstructures based on covalent bonding of porous fullerenes. *Carbon*, **2018**, 130, 424-432	10.4	7
28	An open and extensible sigma-profile database for COSMO-based models. *AICHE Journal*, **2018**, 64, 3443-3455	3.6	28
27	Diamond nanothread-based 2D and 3D materials: Diamond nanomeshes and nanofoams. *Carbon*, **2018**, 139, 789-800	10.4	13
26	Thermal annealing of graphite oxide under high pressure: An experimental and computational study. *Carbon*, **2018**, 139, 1035-1047	10.4	5
25	Formation and Mechanical Behavior of Nanocomposite Superstructures from Interlayer Bonding in Twisted Bilayer Graphene. *ACS Applied Materials & Interfaces*, **2018**, 10, 28898-28908	9.5	20
24	Carbon nanothreads from polycyclic aromatic hydrocarbon molecules. *Carbon*, **2018**, 140, 644-652	10.4	18
23	Functionalized diamond nanothreads from benzene derivatives. *Physical Chemistry Chemical Physics* , **2017**, 19, 7132-7137	3.6	42
22	Experimental and computational analysis of carbon molecular sieve membrane formation upon polyetherimide pyrolysis. *Carbon*, **2017**, 119, 21-29	10.4	24
21	First-principles calculation of the mechanical properties of diamond nanothreads. *Carbon*, **2017**, 113, 260-265	10.4	40
20	Tuning the band structure of graphene nanoribbons through defect-interaction-driven edge patterning. *Physical Review B*, **2017**, 96,	3.3	4
19	Elucidation of deactivation phenomena in cobalt catalyst for Fischer-Tropsch synthesis using SSITKA. *Journal of Catalysis*, **2016**, 344, 669-679	7.3	23
18	EVALUATION OF BIOMASS AND COAL CO-GASIFICATION OF BRAZILIAN FEEDSTOCK USING A CHEMICAL EQUILIBRIUM MODEL. *Brazilian Journal of Chemical Engineering*, **2016**, 33, 401-414	1.7	8
17	Mechanical properties of hydrogenated electron-irradiated graphene. *Journal of Applied Physics*, **2016**, 120, 124301	2.5	11
16	Carbon-Based Nanostructures Derived from Bilayer Graphene with Zero Thermal Expansion Behavior. *Journal of Physical Chemistry C*, **2015**, 119, 17458-17465	3.8	13
15	Mechanical behavior of interlayer-bonded nanostructures obtained from bilayer graphene. *Carbon*, **2015**, 81, 663-677	10.4	45
14	Mechanical behavior and fracture of graphene nanomeshes. *Journal of Applied Physics*, **2015**, 117, 024302	2.5	23
13	Elastic properties of graphene nanomeshes. *Applied Physics Letters*, **2014**, 104, 141911	3.4	33

12	Ab initio studies of thermodynamic and electronic properties of phosphorene nanoribbons. *Physical Review B*, **2014**, 90,	3.3	112
11	Superlattices of Fluorinated Interlayer-Bonded Domains in Twisted Bilayer Graphene. *Journal of Physical Chemistry C*, **2013**, 117, 7315-7325	3.8	34
10	Tunable mechanical properties of diamond superlattices generated by interlayer bonding in twisted bilayer graphene. *Applied Physics Letters*, **2013**, 103, 013113	3.4	30
9	Opening and tuning of band gap by the formation of diamond superlattices in twisted bilayer graphene. *Physical Review B*, **2012**, 86,	3.3	46
8	Formation of fullerene superlattices by interlayer bonding in twisted bilayer graphene. *Journal of Applied Physics*, **2012**, 111, 043513	2.5	28
7	Hydrogenation effects on the structure and morphology of graphene and single-walled carbon nanotubes. *Journal of Applied Physics*, **2010**, 108, 113532	2.5	11
6	On the hydrogen storage capacity of carbon nanotube bundles. *Applied Physics Letters*, **2009**, 95, 163111	3.4	17
5	Analysis of diamond nanocrystal formation from multiwalled carbon nanotubes. *Physical Review B*, **2009**, 80,	3.3	17
4	Effects of hydrogen chemisorption on the structure and deformation of single-walled carbon nanotubes. *Applied Physics Letters*, **2009**, 94, 103108	3.4	20
3	High-order finite volume method for solving viscoelastic fluid lows. *Brazilian Journal of Chemical Engineering*, **2008**, 25, 153-166	1.7	5
2	An□lise te□rico-experimental da dispers□o de poluentes l□quidos em solos. *Engenharia Sanitaria E Ambiental*, **2007**, 12, 410-416	0.4	2
1	Uma nova metodologia para a simula□□o de escoamentos de fluidos viscoel□sticos. *Polimeros*, **2005**, 15, 53-58	1.6	1