Pedro Alves da Silva Autreto

List of Publications by Year
in descending order

50 papers	1,551 citations	430874 18 h-index	302126 39 g-index
51 all docs	51 docs citations	51 times ranked	2180 citing authors

#	Article	IF	Citations
1	Me-graphane: tailoring the structural and electronic properties of Me-grapheneviahydrogenation. Physical Chemistry Chemical Physics, 2021, 23, 9483-9491.	2.8	9
2	Structure, Properties and Applications of Twoâ€Dimensional Hexagonal Boron Nitride. Advanced Materials, 2021, 33, e2101589.	21.0	239
3	Assessing the oxygen reduction reaction by a 2-electron mechanism on ceria surfaces. Physical Chemistry Chemical Physics, 2021, 23, 18580-18587.	2.8	7
4	Hydrogenation Dynamics Process of Single-Wall Carbon Nanotube Twisted. Chemical Physics Letters, 2020, 739, 136960.	2.6	4
5	On the Mechanical Properties and Thermal Stability of a Recently Synthesized Monolayer Amorphous Carbon. Journal of Physical Chemistry C, 2020, 124, 14855-14860.	3.1	25
6	Bioinspired Aluminum Composite Reinforced with Soft Polymers with Enhanced Strength and Plasticity. Advanced Engineering Materials, 2020, 22, 1901116.	3.5	2
7	Carbon Nanotube Peapods Under High-Strain Rate Conditions: A Molecular Dynamics Investigation. MRS Advances, 2020, 5, 1723-1730.	0.9	3
8	Tuning hydrogen adsorption and electronic properties from graphene to fluorographone. Physical Review Materials, 2020, 4, .	2.4	5
9	High-velocity impact of a hybrid CBN nanotubes. Oxford Open Materials Science, 2020, 1, .	1.8	1
10	Mixing the immiscible through high-velocity mechanical impacts: an experimental and theoretical study. Journal Physics D: Applied Physics, 2019, 52, 445304.	2.8	0
11	Atomically locked interfaces of metal (Aluminum) and polymer (Polypropylene) using mechanical friction. Polymer, 2019, 169, 148-153.	3.8	20
12	On the mechanical properties of protomene: A theoretical investigation. Computational Materials Science, 2019, 161, 190-198.	3.0	11
13	Mechanical Properties of Protomene: A Molecular Dynamics Investigation. MRS Advances, 2019, 4, 191-196.	0.9	2
14	Silver Hardening via Hypersonic Impacts. MRS Advances, 2018, 3, 493-498.	0.9	1
15	Efficient prediction of suitable functional monomers for molecular imprintingvialocal density of states calculations. Physical Chemistry Chemical Physics, 2018, 20, 13153-13158.	2.8	9
16	Virtually imprinted polymers (VIPs): understanding molecularly templated materialsviamolecular dynamics simulations. Physical Chemistry Chemical Physics, 2018, 20, 13145-13152.	2.8	19
17	Water/Alcohol Separation in Graphene Oxide Membranes: Insights from Molecular Dynamics and Monte Carlo Simulations. MRS Advances, 2018, 3, 109-114.	0.9	5
18	Improving Graphene-metal Contacts: Thermal Induced Polishing. MRS Advances, 2018, 3, 73-78.	0.9	4

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19	On hardening silver nanocubes by high-velocity impacts: a fully atomistic molecular dynamics investigation. Journal of Materials Science, 2018, 53, 7486-7492.	3.7	5
20	Structural transformations of carbon and boron nitride nanoscrolls at high impact collisions. Physical Chemistry Chemical Physics, 2018, 20, 4911-4916.	2.8	15
21	Insights on the mechanism of water-alcohol separation in multilayer graphene oxide membranes: Entropic versus enthalpic factors. Carbon, 2018, 127, 280-286.	10.3	44
22	On the mechanical properties of novamene: A fully atomistic molecular dynamics and DFT investigation. Carbon, 2018, 139, 782-788.	10.3	18
23	Bacteria as Bio-Template for 3D Carbon Nanotube Architectures. Scientific Reports, 2017, 7, 9855.	3.3	21
24	Hydrogenation Dynamics of Biphenylene Carbon (Graphenylene) Membranes. MRS Advances, 2017, 2, 1571-1576.	0.9	5
25	Carbon Nanoscrolls at High Impacts: A Molecular Dynamics Investigation. MRS Advances, 2016, 1, 1423-1428.	0.9	5
26	A generic approach for mechano-chemical reactions between carbonnanotubes of different functionalities. Carbon, 2016, 104, 196-202.	10.3	15
27	The structural and dynamical aspects of boron nitride nanotubes under high velocity impacts. Physical Chemistry Chemical Physics, 2016, 18, 14776-14781.	2.8	15
28	One Side-Graphene Hydrogenation (Graphone): Substrate Effects. MRS Advances, 2016, 1, 1429-1434.	0.9	8
29	Ballistic Fracturing of Carbon Nanotubes. ACS Applied Materials & Interfaces, 2016, 8, 24819-24825.	8.0	16
30	3D Porous Graphene by Lowâ€Temperature Plasma Welding for Bone Implants. Advanced Materials, 2016, 28, 8959-8967.	21.0	52
31	Graphene healing mechanisms: A theoretical investigation. Carbon, 2016, 99, 302-309.	10.3	29
32	The Influence of Morphology on the Charge Transport in Two-Phase Disordered Organic Systems. Materials Research Society Symposia Proceedings, 2015, 1737, 13.	0.1	0
33	Burning Graphene Layer-by-Layer. Scientific Reports, 2015, 5, 11546.	3.3	26
34	Ambient solid-state mechano-chemical reactions between functionalized carbon nanotubes. Nature Communications, 2015, 6, 7291.	12.8	35
35	Enhanced Mechanical Stability of Gold Nanotips through Carbon Nanocone Encapsulation. Scientific Reports, 2015, 5, 10408.	3.3	21
36	Species fractionation in atomic chains from mechanically stretched alloys. Journal of Physics Condensed Matter, 2014, 26, 435304.	1.8	0

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37	Designing nanoscaled hybrids from atomic layered boron nitride with silver nanoparticle deposition. Journal of Materials Chemistry A, 2014, 2, 3148.	10.3	65
38	Mechanical properties and fracture dynamics of silicene membranes. Physical Chemistry Chemical Physics, 2014, 16, 19417-19423.	2.8	56
39	Inorganic Graphenylene: A Porous Two-Dimensional Material With Tunable Band Gap. Journal of Physical Chemistry C, 2014, 118, 23670-23674.	3.1	76
40	Low-density three-dimensional foam using self-reinforced hybrid two-dimensional atomic layers. Nature Communications, 2014, 5, 4541.	12.8	91
41	Site-dependent hydrogenation on graphdiyne. Carbon, 2014, 77, 829-834.	10.3	38
42	Unzipping Carbon Nanotubes at High Impact. Nano Letters, 2014, 14, 4131-4137.	9.1	63
43	Dynamical aspects of the unzipping of multiwalled boron nitride nanotubes. Physical Chemistry Chemical Physics, 2013, 15, 19147.	2.8	6
44	Nonzero Gap Two-Dimensional Carbon Allotrope from Porous Graphene. Journal of Physical Chemistry C, 2012, 116, 12810-12813.	3.1	152
45	On the unzipping of multiwalled carbon nanotubes. Nanotechnology, 2012, 23, 465702.	2.6	39
46	Correlation between quantum conductance and atomic arrangement of atomic-size silver nanowires. Journal of Applied Physics, 2012, 111, 124316.	2.5	12
47	Temperature effects on the atomic arrangement and conductance of atomic-size gold nanowires generated by mechanical stretching. Nanotechnology, 2010, 21, 485702.	2.6	18
48	Carbon nanotube with square cross-section: An ab initio investigation. Journal of Chemical Physics, 2010, 133, 124513.	3.0	17
49	Graphene to graphane: a theoretical study. Nanotechnology, 2009, 20, 465704.	2.6	219
50	Febrifugine derivative antimalarial activity: quantum mechanical predictors. Revista Do Instituto De Medicina Tropical De Sao Paulo, 2008, 50, 21-24.	1.1	3