Sadegh Sadeghzadeh

List of Publications by Year
in descending order

72 papers	1,090 citations	430874 18 h-index	501196 28 g-index
73 all docs	73 docs citations	73 times ranked	765 citing authors

#	Article	IF	Citations
1	Nonlocal strain gradient theory for dynamical modeling of a thermo-piezo-magnetically actuated spinning inhomogeneous nanoshell. Mechanics Based Design of Structures and Machines, 2022, 50, 1932-1953.	4.7	8
2	Tailoring the effects of interface physics on the free vibration of graphene-boron nitride heterostructure. Diamond and Related Materials, 2022, 124, 108939.	3.9	3
3	Numerical and experimental investigation on electric vehicles battery thermal management under New European Driving Cycle. Applied Energy, 2022, 315, 119026.	10.1	18
4	Molecular dynamics simulations of phase change materials for thermal energy storage: a review. RSC Advances, 2022, 12, 14776-14807.	3.6	19
5	Tailoring the hardness of aluminum surface reinforced with graphene and C3N nanosheets. Diamond and Related Materials, 2022, 127, 109139.	3.9	1
6	Reactive molecular dynamics simulation of thermo-physicochemical properties of non-covalent functionalized graphene nanofluids. Materials Today Communications, 2022, 32, 103869.	1.9	1
7	Thermal conductivity and interfacial thermal resistance behavior for the polyanilineâ€“boron carbide heterostructure. Physical Chemistry Chemical Physics, 2021, 23, 13310-13322.	2.8	18
8	Tailoring the life cycle of lithiumâ€ion batteries with a passive cooling system: A comprehensive dynamic model. International Journal of Energy Research, 2021, 45, 7884-7902.	4.5	10
9	On the desalination performance of multi-layer graphene membranes; A molecular dynamics study. Computational Materials Science, 2021, 191, 110335.	3.0	4
10	Hypersonic impact properties of pristine and hybrid single and multi-layer C3N and BC3 nanosheets. Scientific Reports, 2021, 11, 7972.	3.3	11
11	Assessing mechanical properties of single-layer B-doped C3N and N-doped BC3 nanosheets and their hybrid. Computational Materials Science, 2021, 192, 110368.	3.0	8
12	Crack pathway analysis in graphene-like BC3 nanosheets: Towards a deeper understanding. Journal of Molecular Graphics and Modelling, 2021, 107, 107980.	2.4	2
13	Influence of Stone-Wales defects on the mechanical properties of graphene-like polyaniline (PANI) C3N nanosheets. Diamond and Related Materials, 2020, 101, 107555.	3.9	16
14	Numerical investigation on PCM encapsulation shape used in the passive-active battery thermal management. Energy, 2020, 193, 116840.	8.8	152
15	Thermal resistance analysis of hybrid graphene-boron nitride nanosheets: The effect of geometry, temperature, size, strain and structural defects. Computational Materials Science, 2020, 174, 109484.	3.0	19
16	High-performance cement containing nanosized Fe3O4â€“decorated graphene oxide. Construction and Building Materials, 2020, 260, 120454.	7.2	11
17	Mechanical properties of intrinsic and defective hybrid polyaniline (C3N)-BC3 nanosheets in the armchair and zigzag configurations: a molecular dynamics study. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	13
18	Aluminum nanocomposites reinforced with monolayer polyaniline (C₃N): assessing the mechanical and ballistic properties. RSC Advances, 2020, 10, 19134-19148.	3.6	8

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19	A new approach to dispersing and stabilizing graphene in aqueous nanofluids of enhanced efficiency of energy-systems. Scientific Reports, 2020, 10, 7707.	3.3	2
20	Interfacial Thermal Resistance Mechanism for the Polyaniline (C₃N)â€“Graphene Heterostructure. Journal of Physical Chemistry C, 2020, 124, 14316-14326.	3.1	28
21	Nanoparticle mass detection by single-layer triangular graphene sheets, the extraordinary geometry for detection of nanoparticles. Journal of Nanoparticle Research, 2020, 22, 1.	1.9	4
22	Investigation of tetracosane thermal transport in presence of graphene and carbon nanotube fillersâ€“â€“A molecular dynamics study. Journal of Energy Storage, 2020, 29, 101321.	8.1	25
23	A comparative study on the mechanical, physical and morphological properties of cement-micro/nanoFe3O4 composite. Scientific Reports, 2020, 10, 2859.	3.3	27
24	A semiâ€analytical solution for timeâ€varying latent heat thermal energy storage problems. International Journal of Energy Research, 2020, 44, 2726-2739.	4.5	8
25	Investigating the effects of adding hybrid nanoparticles, graphene and boron nitride nanosheets, to octadecane on its thermal properties. RSC Advances, 2020, 10, 14785-14793.	3.6	21
26	Effect of nitrogen or boron impurities on the mechanical and vibrational properties of graphene nanosheets: a molecular dynamics approach. Micro and Nano Letters, 2020, 15, 977-983.	1.3	1
27	Constructing a three-dimensional graphene structure via bonding layers by ion beam irradiation. Scientific Reports, 2019, 9, 8127.	3.3	18
28	Enhancement of nanogripper performance by using soft material coating. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2082-2089.	2.1	0
29	Wrinkling C3N nano-grids in uniaxial tensile testing; a molecular dynamics study. Diamond and Related Materials, 2019, 92, 130-137.	3.9	9
30	A size dependent dynamic model for piezoelectric nanogenerators: effects of geometry, structural and environmental parameters. Materials Research Express, 2018, 5, 035508.	1.6	4
31	Mechanical properties of defective hybrid graphene-boron nitride nanosheets: A molecular dynamics study. Computational Materials Science, 2018, 149, 170-181.	3.0	69
32	Vibrational modes and frequencies of borophene in comparison with graphene nanosheets. Superlattices and Microstructures, 2018, 117, 271-282.	3.1	17
33	Borophene sheets with in-plane chain-like boundaries; a reactive molecular dynamics study. Computational Materials Science, 2018, 143, 1-14.	3.0	18
34	Effects of vacancies and divacancies on the failure of C3N nanosheets. Diamond and Related Materials, 2018, 89, 257-265.	3.9	33
35	Effect of Nb on the structural, optical and photocatalytic properties of Al-doped ZnO thin films fabricated by the sol-gel method. Ceramics International, 2018, 44, 20170-20177.	4.8	31
36	Studying the effects of longitudinal and transverse defects on the failure of hybrid graphene-boron nitride sheets: A molecular dynamics simulation. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 104, 71-81.	2.7	27

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37	Vibration analysis of defected and pristine triangular single-layer graphene nanosheets. Current Applied Physics, 2018, 18, 1327-1337.	2.4	13
38	The mechanical design of hybrid graphene/boron nitride nanotransistors: Geometry and interface effects. Solid State Communications, 2018, 270, 82-86.	1.9	30
39	Role of mechanical and thermal nonlinearities in imaging by Atomic Force Microscope. International Journal of Mechanical Sciences, 2017, 122, 255-266.	6.7	7
40	A hybrid solution for analyzing nonlinear dynamics of electrostatically-actuated microcantilevers. Applied Mathematical Modelling, 2017, 48, 593-606.	4.2	7
41	Conceptual design of a 5â€‰MW OTEC power plant in the Oman Sea. Journal of Marine Engineering and Technology, 2017, 16, 94-102.	4.1	10
42	Modal identification of single layer graphene nano sheets from ambient responses using frequency domain decomposition. European Journal of Mechanics, A/Solids, 2017, 65, 70-78.	3.7	22
43	The creation of racks and nanopores creation in various allotropes of boron due to the mechanical loads. Superlattices and Microstructures, 2017, 111, 1145-1161.	3.1	15
44	Application of Higher Order Hamiltonian Approach to the Nonlinear Vibration of Micro Electro Mechanical Systems. Latin American Journal of Solids and Structures, 2016, 13, 478-497.	1.0	28
45	On the oblique collision of gaseous molecules with graphene nanosheets. Molecular Simulation, 2016, 42, 1233-1241.	2.0	11
46	A study of thermal conductivity in graphene diodes and transistors with intrinsic defects and subjected to metal impurities. Superlattices and Microstructures, 2016, 100, 97-111.	3.1	14
47	Computational design of graphene sheets for withstanding the impact of ultrafast projectiles. Journal of Molecular Graphics and Modelling, 2016, 70, 196-211.	2.4	14
48	Effects of damping and stiffness of AFM cantilever on the imaging of fine surfaces. Microscopy Research and Technique, 2016, 79, 982-992.	2.2	1
49	Effects of physical boundary conditions on the transverse vibration of single-layer graphene sheets. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	12
50	The mechanical design of graphene nanodiodes and nanotransistors: geometry, temperature and strain effects. RSC Advances, 2016, 6, 86324-86333.	3.6	23
51	Resistance and rupture analysis of single- and few-layer graphene nanosheets impacted by various projectiles. Superlattices and Microstructures, 2016, 97, 617-629.	3.1	18
52	Equivalent mechanical boundary conditions for single layer graphene sheets. Micro and Nano Letters, 2016, 11, 248-252.	1.3	14
53	Nanoparticle mass detection by single and multilayer graphene sheets: Theory and simulations. Applied Mathematical Modelling, 2016, 40, 7862-7879.	4.2	26
54	Benchmarking the penetration-resistance efficiency of multilayer graphene sheets due to spacing the graphene layers. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	15

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55	Impact dynamics of metallic nano particles in collision with graphene nano sheets. Scientia Iranica, 2016, 23, 3153-3162.	0.4	0
56	Effects of macro-scale uncertainties on the imaging and automatic manipulation of nanoparticles. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	5
57	Semi-analytic actuating and sensing in regular and irregular MEMs, single and assembled micro cantilevers. Applied Mathematical Modelling, 2013, 37, 4717-4732.	4.2	10
58	Precise manipulation of metallic nanoparticles: Multiscale analysis. Computational Materials Science, 2013, 67, 11-20.	3.0	15
59	Nano cluster manipulation success considering flexibility of system: Coarse grained molecular dynamics simulations. Scientia Iranica, 2012, 19, 1288-1298.	0.4	5
60	Coarse-grained molecular dynamics simulation of automatic nanomanipulation process: The effect of tip damage on the positioning errors. Computational Materials Science, 2012, 60, 201-211.	3.0	12
61	A new multiscale methodology for modeling of single and multi-body solid structures. Computational Materials Science, 2012, 63, 1-11.	3.0	38
62	Coupled dynamics of piezo-tube and microcantilever in scanning probe devices and sensitive samples imaging. Micro and Nano Letters, 2012, 7, 986-990.	1.3	3
63	Dynamic modeling for nanomanipulation of polystyrene nanorod by atomic force microscope. Scientia Iranica, 2011, 18, 808-815.	0.4	14
64	Semi-analytical motion analysis of nano-steering devices, segmented piezotube scanners. International Journal of Mechanical Sciences, 2011, 53, 536-548.	6.7	14
65	A multi-scale Dynamic approach for nano-robotic applications. , 2011, , .		0
66	A semi-analytic modeling of nonlinearities for nano-robotic applications, macro and micro sized systems. , 2011, , .		1
67	A shape-feedback approach for more precise automatic nano manipulation process. , 2011, , .		1
68	Aspect ratio and dimension effects on nanorod manipulation by atomic force microscope. Micro and Nano Letters, 2010, 5, 324.	1.3	20
69	A new modeling and compensation approach for creep and hysteretic loops in nanosteering by SPMâ€™s piezotubes. International Journal of Advanced Manufacturing Technology, 2009, 44, 1133-1143.	3.0	7
70	Manipulation of Nanorods on Elastic Substrate, Modeling and Analysis. , 0, , .		1
71	Twoâ€region semiâ€analytical solution for latent heat thermal energy storage systems. International Journal of Energy Research, 0, , .	4.5	0
72	Free Vibration Analysis of a Spinning Smart Piezoelectrically Actuated Heterogeneous Nanoscale Shell with Nonlocal Strain Gradient Theory. Journal of Nano Research, 0, 64, 1-19.	0.8	0