

# Hashem Rafii-Tabar

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

873  
citations

567281

15  
h-index

501196

28  
g-index

61  
all docs

61  
docs citations

61  
times ranked

1064  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonlocal continuum-based modeling of mechanical characteristics of nanoscopic structures. <i>Physics Reports</i> , 2016, 638, 1-97.	25.6	140
2	Multiscale modeling of graphene- and nanotube-based reinforced polymer nanocomposites. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011, 375, 4034-4040.	2.1	104
3	An in-depth view of human serum albumin corona on gold nanoparticles. <i>Molecular BioSystems</i> , 2015, 11, 454-462.	2.9	48
4	Molecular dynamics study of the interfacial mechanical properties of the graphene-collagen biological nanocomposite. <i>Computational Materials Science</i> , 2013, 69, 29-39.	3.0	42
5	Physicochemical properties, antifungal activity and cytotoxicity of selenium sulfide nanoparticles green synthesized by <i>Saccharomyces cerevisiae</i> . <i>Biochemical and Biophysical Research Communications</i> , 2019, 516, 1078-1084.	2.1	41
6	In-plane thermal conductivity of graphene nanomesh: A molecular dynamics study. <i>Computational Materials Science</i> , 2016, 111, 247-251.	3.0	38
7	Amperometric lactate nanobiosensor based on reduced graphene oxide, carbon nanotube and gold nanoparticle nanocomposite. <i>Mikrochimica Acta</i> , 2019, 186, 680.	5.0	38
8	Detection and Discrimination of Bacterial Colonies with Mueller Matrix Imaging. <i>Scientific Reports</i> , 2018, 8, 10815.	3.3	31
9	Multi-scale computational modelling of the mechanical behaviour of the chitosan biological polymer embedded with graphene and carbon nanotube. <i>Computational Materials Science</i> , 2012, 53, 347-353.	3.0	30
10	Gold nanoparticle shape effects on human serum albumin corona interface: a molecular dynamic study. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	1.9	24
11	An investigation into non-covalent functionalization of a single-walled carbon nanotube and a graphene sheet with protein G: A combined experimental and molecular dynamics study. <i>Scientific Reports</i> , 2019, 9, 1273.	3.3	22
12	Computational Continuum Mechanics of Nanoscopic Structures. <i>Springer Tracts in Mechanical Engineering</i> , 2019, , .	0.3	21
13	Influence of hydrogen functionalization on mechanical properties of graphene and CNT reinforced in chitosan biological polymer: Multi-scale computational modelling. <i>Computational Materials Science</i> , 2015, 101, 189-193.	3.0	20
14	Mueller matrix imaging of prostate bulk tissues; Polarization parameters as a discriminating benchmark. <i>Photodiagnosis and Photodynamic Therapy</i> , 2019, 26, 90-96.	2.6	20
15	Electrochemical Determination of Dexamethasone by Graphene Modified Electrode: Experimental and Theoretical Investigations. <i>Scientific Reports</i> , 2019, 9, 11775.	3.3	18
16	Nonlocal continuum-based modeling of breathing mode of nanowires including surface stress and surface inertia effects. <i>Physica B: Condensed Matter</i> , 2014, 440, 43-47.	2.7	14
17	A molecular dynamics investigation of buckling behaviour of hydrogenated graphene. <i>Molecular Simulation</i> , 2015, 41, 1212-1218.	2.0	14
18	Comparison of continuum-based and atomistic-based modeling of axial buckling of carbon nanotubes subject to hydrostatic pressure. <i>Computational Materials Science</i> , 2013, 79, 619-626.	3.0	13

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19	Molecular dynamics simulation of the adhesive behavior of collagen on smooth and randomly rough TiO <sub>2</sub> and Al <sub>2</sub> O <sub>3</sub> surfaces. <i>Computational Materials Science</i> , 2013, 71, 172-178.	3.0	13
20	Effects of electromagnetic field exposure on conduction and concentration of voltage gated calcium channels: A Brownian dynamics study. <i>Brain Research</i> , 2016, 1646, 560-569.	2.2	13
21	Photocount statistics of ultra-weak photon emission from germinating mung bean. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2016, 162, 50-55.	3.8	13
22	Computation of the thermal resistance in graphene sheets with a rectangular hole. <i>Computational Materials Science</i> , 2017, 126, 29-34.	3.0	10
23	Computational modeling to determine key regulators of hypoxia effects on the lactate production in the glycolysis pathway. <i>Scientific Reports</i> , 2020, 10, 9163.	3.3	10
24	Modeling the effect of external electric field and current on the stochastic dynamics of ATPase nano-biomolecular motors. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2008, 387, 5466-5476.	2.6	9
25	Molecular dynamics study of a new mechanism for ripple formation on graphene nanoribbons at very low temperatures based on H <sub>2</sub> physisorption. <i>Solid State Communications</i> , 2013, 159, 84-87.	1.9	8
26	Phototherapy alters the oncogenic metabolic activity of breast cancer cells. <i>Photodiagnosis and Photodynamic Therapy</i> , 2020, 30, 101695.	2.6	8
27	Deconstruction of the human connexin 26 hemichannel due to an applied electric field; A molecular dynamics simulation study. <i>Journal of Molecular Graphics and Modelling</i> , 2017, 73, 108-114.	2.4	7
28	Modeling ion permeation through a bacterial voltage-gated calcium channel Ca <sub>v</sub> Ab using molecular dynamics simulations. <i>Molecular BioSystems</i> , 2017, 13, 208-214.	2.9	7
29	Molecular dynamics simulation of the thermosensitivity of the human connexin 26 hemichannel. <i>Chemical Physics</i> , 2018, 500, 7-14.	1.9	7
30	Population Kinetics and Mechanistic Aspects of <i>Saccharomyces cerevisiae</i> Growth in Relation to Selenium Sulfide Nanoparticle Synthesis. <i>Frontiers in Microbiology</i> , 2020, 11, 1019.	3.5	7
31	Enhancement of the biological autoluminescence by mito-liposomal gold nanoparticle nanocarriers. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2020, 204, 111812.	3.8	7
32	Atomistic modelling of crack propagation in a randomly rough nano-scale metallic surface. <i>Journal of Molecular Graphics and Modelling</i> , 2008, 27, 356-363.	2.4	6
33	A computational modeling of Raman radial breathing-like mode frequencies of fullerene encapsulated inside single-walled carbon nanotubes. <i>Journal of Molecular Modeling</i> , 2017, 23, 48.	1.8	6
34	Structural and Functional Effect of an Oscillating Electric Field on the Dopamine-D <sub>3</sub> Receptor: A Molecular Dynamics Simulation Study. <i>PLoS ONE</i> , 2016, 11, e0166412.	2.5	6
35	Observation of fluid layering and reverse motion in double-walled carbon nanotubes. <i>Current Applied Physics</i> , 2009, 9, 1411-1422.	2.4	5
36	Investigation into mechanism of orotidine 5'-monophosphate decarboxylase enzyme by MM-PBSA/MM-GBSA and molecular docking. <i>Molecular Simulation</i> , 2014, 40, 469-476.	2.0	5

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37	Simulation of the effect of an external GHz electric field on the potential energy profile of Ca <sup>2+</sup> ions in the selectivity filter of the Ca <sub>v</sub> Ab channel. <i>Proteins: Structure, Function and Bioinformatics</i> , 2018, 86, 414-422.	2.6	5
38	Synergistic effect of phototherapy and chemotherapy on bladder cancer cells. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2019, 193, 148-154.	3.8	5
39	A proposed implantable voltammetric carbon fiber-based microsensor for corticosteroid monitoring by cochlear implants. <i>Mikrochimica Acta</i> , 2021, 188, 357.	5.0	5
40	Interaction of low frequency external electric fields and pancreatic $\hat{I}^2$ -cell: a mathematical modeling approach to identify the influence of excitation parameters. <i>International Journal of Radiation Biology</i> , 2018, 94, 1038-1048.	1.8	4
41	The role of the transient receptor potential melastatin5 (TRPM5) channels in the pancreatic $\hat{I}^2$ -cell electrical activity: A computational modeling study. <i>Computational Biology and Chemistry</i> , 2018, 76, 101-108.	2.3	4
42	New insights on nonlocal spherical shell model and its application to free vibration of spherical fullerene molecules. <i>International Journal of Mechanical Sciences</i> , 2019, 161-162, 105046.	6.7	4
43	Contribution of the dipole-dipole interaction to targeting efficiency of magnetite nanoparticles inside the blood vessel: A computational modeling analysis with different magnet geometries. <i>Physics of Fluids</i> , 2022, 34, .	4.0	4
44	Neurophysiological Effect of External Electromagnetic Field: A Computational Modeling. <i>Nano</i> , 2016, 11, 1650111.	1.0	3
45	Investigation of the role of ion channels in human pancreatic $\hat{I}^2$ -cell hubs: A mathematical modeling study. <i>Computers in Biology and Medicine</i> , 2018, 97, 50-62.	7.0	3
46	Study of orotidine 5 $\hat{I}^2$ -monophosphate decarboxylase in complex with the top three OMP, BMP, and PMP ligands by molecular dynamics simulation. <i>Journal of Biomolecular Structure and Dynamics</i> , 2015, 33, 404-417.	3.5	2
47	Computational modeling of the effect of temperature variations on human pancreatic $\hat{I}^2$ -cell activity. <i>Journal of Thermal Biology</i> , 2018, 75, 69-80.	2.5	2
48	Protein G selects two binding sites for carbon nanotube with dissimilar behavior; a molecular dynamics study. <i>Journal of Molecular Graphics and Modelling</i> , 2019, 87, 257-267.	2.4	2
49	The impact of power line electric field on neural activity: A theoretical investigation. , 2014, , .		1
50	Electrophysiological effects of low frequency electrical radiation on the neural compartment: a theoretical investigation. <i>Biomedical Physics and Engineering Express</i> , 2018, 4, 025040.	1.2	1
51	Axon swelling is electrophysiologically disruptive: A theoretically confirmed hypothesis. , 2016, , .		0
52	Computational Modelling of the Vibrational Characteristics of Zero-Dimensional Nanoscopic Structures. <i>Springer Tracts in Mechanical Engineering</i> , 2019, , 143-159.	0.3	0
53	Modelling the Mechanical Characteristics of Carbon Nanotubes: A Nonlocal Differential Approach. <i>Springer Tracts in Mechanical Engineering</i> , 2019, , 187-217.	0.3	0
54	Fundamental Tenets of Nanomechanics. <i>Springer Tracts in Mechanical Engineering</i> , 2019, , 11-39.	0.3	0

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55	Application of Nonlocal Elasticity Theory to Modelling of Two-Dimensional Structures. Springer Tracts in Mechanical Engineering, 2019, , 219-239.	0.3	0
56	Recent Developments and Future Challenges in the Application of Nonlocal Elasticity Theory. Springer Tracts in Mechanical Engineering, 2019, , 261-275.	0.3	0
57	Elastic Properties of Carbon-Based Nanoscopic Structures. Springer Tracts in Mechanical Engineering, 2019, , 115-139.	0.3	0
58	The investigation into the effect of the length of RGD peptides and temperature on the interaction with the $\alpha_5\beta_3$ integrin: a molecular dynamic study. Journal of Biomolecular Structure and Dynamics, 2021, , 1-12.	3.5	0