Maksudbek Yusupov

List of Publications by Year
in descending order

47 papers	1,463 citations	279701 23 h-index	330025 37 g-index
48 all docs	48 docs citations	48 times ranked	1492 citing authors

#	Article	IF	Citations
1	Plasma-Induced Destruction of Bacterial Cell Wall Components: A Reactive Molecular Dynamics Simulation. Journal of Physical Chemistry C, 2013, 117, 5993-5998.	1.5	136
2	Synergistic effect of electric field and lipid oxidation on the permeability of cell membranes. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 839-847.	1.1	116
3	Reactive molecular dynamics simulations of oxygen species in a liquid water layer of interest for plasma medicine. Journal Physics D: Applied Physics, 2014, 47, 025205.	1.3	97
4	Effect of head group and lipid tail oxidation in the cell membrane revealed through integrated simulations and experiments. Scientific Reports, 2017, 7, 5761.	1.6	88
5	Atomic-scale simulations of reactive oxygen plasma species interacting with bacterial cell walls. New Journal of Physics, 2012, 14, 093043.	1.2	77
6	A comparative study for the inactivation of multidrug resistance bacteria using dielectric barrier discharge and nano-second pulsed plasma. Scientific Reports, 2015, 5, 13849.	1.6	73
7	Mechanism and comparison of needle-type non-thermal direct and indirect atmospheric pressure plasma jets on the degradation of dyes. Scientific Reports, 2016, 6, 34419.	1.6	71
8	Low-Temperature Plasma for Biology, Hygiene, and Medicine: Perspective and Roadmap. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 127-157.	2.7	64
9	Reactive Molecular Dynamics Simulations for a Better Insight in Plasma Medicine. Plasma Processes and Polymers, 2014, 11, 1156-1168.	1.6	48
10	Inactivation of the Endotoxic Biomolecule Lipid A by Oxygen Plasma Species: A Reactive Molecular Dynamics Study. Plasma Processes and Polymers, 2015, 12, 162-171.	1.6	43
11	Atomic scale simulation of H₂O₂permeation through aquaporin: toward the understanding of plasma cancer treatment. Journal Physics D: Applied Physics, 2018, 51, 125401.	1.3	42
12	Oxidative damage to hyaluronanâ€“CD44 interactions as an underlying mechanism of action of oxidative stress-inducing cancer therapy. Redox Biology, 2021, 43, 101968.	3.9	41
13	Computer simulations of plasmaâ€“biomolecule and plasmaâ€“tissue interactions for a better insight in plasma medicine. Journal Physics D: Applied Physics, 2014, 47, 293001.	1.3	39
14	Detection of CO2 using CNT-based sensors: Role of Fe catalyst on sensitivity and selectivity. Materials Chemistry and Physics, 2017, 186, 353-364.	2.0	33
15	Oxidation destabilizes toxic amyloid beta peptide aggregation. Scientific Reports, 2019, 9, 5476.	1.6	33
16	Atomic scale understanding of the permeation of plasma species across native and oxidized membranes. Journal Physics D: Applied Physics, 2018, 51, 365203.	1.3	32
17	Transport of Reactive Oxygen and Nitrogen Species across Aquaporin: A Molecular Level Picture. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-11.	1.9	32
18	The effect of reactive oxygen and nitrogen species on the structure of cytoglobin: A potential tumor suppressor. Redox Biology, 2018, 19, 1-10.	3.9	31

#	Article	IF	Citations
19	Structural modification of the skin barrier by OH radicals: a reactive molecular dynamics study for plasma medicine. Journal Physics D: Applied Physics, 2015, 48, 155202.	1.3	30
20	How membrane lipids influence plasma delivery of reactive oxygen species into cells and subsequent DNA damage: an experimental and computational study. Physical Chemistry Chemical Physics, 2019, 21, 19327-19341.	1.3	28
21	Plasma for cancer treatment: How can RONS penetrate through the cell membrane? Answers from computer modeling. Frontiers of Chemical Science and Engineering, 2019, 13, 253-263.	2.3	27
22	Multi-level molecular modelling for plasma medicine. Journal Physics D: Applied Physics, 2016, 49, 054002.	1.3	26
23	Impact of plasma oxidation on structural features of human epidermal growth factor. Plasma Processes and Polymers, 2018, 15, 1800022.	1.6	26
24	Oxidation of Innate Immune Checkpoint CD47 on Cancer Cells with Non-Thermal Plasma. Cancers, 2021, 13, 579.	1.7	26
25	The penetration of reactive oxygen and nitrogen species across the stratum corneum. Plasma Processes and Polymers, 2020, 17, 2000005.	1.6	20
26	How do plasma-generated OH radicals react with biofilm components? Insights from atomic scale simulations. Biointerphases, 2015, 10, .	0.6	19
27	Phosphatidylserine flipâ€flop induced by oxidation of the plasma membrane: a better insight by atomic scale modeling. Plasma Processes and Polymers, 2017, 14, 1700013.	1.6	18
28	Parametrization and Molecular Dynamics Simulations of Nitrogen Oxyanions and Oxyacids for Applications in Atmospheric and Biomolecular Sciences. Journal of Physical Chemistry B, 2020, 124, 1082-1089.	1.2	16
29	Influence of osmolytes and ionic liquids on the Bacteriorhodopsin structure in the absence and presence of oxidative stress: A combined experimental and computational study. International Journal of Biological Macromolecules, 2020, 148, 657-665.	3.6	13
30	Behavior of electrons in a dual-magnetron sputter deposition system: a Monte Carlo model. New Journal of Physics, 2011, 13, 033018.	1.2	12
31	Enhancement of cellular glucose uptake by reactive species: a promising approach for diabetes therapy. RSC Advances, 2018, 8, 9887-9894.	1.7	12
32	Lipid Oxidation: Role of Membrane Phase-Separated Domains. Journal of Chemical Information and Modeling, 2021, 61, 2857-2868.	2.5	12
33	Transport of cystine across xCâ˜ antiporter. Archives of Biochemistry and Biophysics, 2019, 664, 117-126.	1.4	10
34	How do nitrated lipids affect the properties of phospholipid membranes?. Archives of Biochemistry and Biophysics, 2020, 695, 108548.	1.4	10
35	Effect of Cysteine Oxidation in SARS-CoV-2 Receptor-Binding Domain on Its Interaction with Two Cell Receptors: Insights from Atomistic Simulations. Journal of Chemical Information and Modeling, 2022, 62, 129-141.	2.5	9
36	Modeling of plasma and plasma-surface interactions for medical, environmental and nano applications. Journal of Physics: Conference Series, 2012, 399, 012011.	0.3	8

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37	Effect of oxidative stress on cystine transportation by xCâ€¾ antiporter. Archives of Biochemistry and Biophysics, 2019, 674, 108114.	1.4	7
38	Unraveling the permeation of reactive species across nitrated membranes by computer simulations. Computers in Biology and Medicine, 2021, 136, 104768.	3.9	7
39	Elucidating the asymmetric behavior of the discharge in a dual magnetron sputter deposition system. Applied Physics Letters, 2011, 98, .	1.5	6
40	Molecular dynamics simulations of mechanical stress on oxidized membranes. Biophysical Chemistry, 2019, 254, 106266.	1.5	6
41	Sputter deposition of MgxAlyOzthin films in a dual-magnetron device: a multi-species Monte Carlo model. New Journal of Physics, 2012, 14, 073043.	1.2	4
42	Selective Plasma Oxidation of Ultrasmall Si Nanowires. Journal of Physical Chemistry C, 2016, 120, 472-477.	1.5	4
43	Effect of Mutation and Disulfide Bond Formation on the Catalytic Site of Monomeric Cytoglobin: A Molecular Level Insight. Plasma Medicine, 2021, 11, 41-51.	0.2	4
44	Possible Mechanism of Glucose Uptake Enhanced by Cold Atmospheric Plasma: Atomic Scale Simulations. Plasma, 2018, 1, 119-125.	0.7	3
45	Distribution of lipid aldehydes in phase-separated membranes: A molecular dynamics study. Archives of Biochemistry and Biophysics, 2022, 717, 109136.	1.4	2
46	Plasma and Plasmaâ€"Cell Interaction Simulations. Springer Series on Atomic, Optical, and Plasma Physics, 2020, , 169-208.	0.1	1
47	Growth onset of perylene-based nanocrystals. Uzbekiston Fizika Å¾urnali, 2021, 23, 7-11.	0.0	0