Himanshu Mishra

List of Publications by Year
in descending order

46	1,496	279487 23	315357 38
papers	citations	h-index	g-index

52	52	52	1668
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On the formation of hydrogen peroxide in water microdroplets. Chemical Science, 2022, 13, 2574-2583.	3.7	44
2	Zwitterions Layer at but Do Not Screen Electrified Interfaces. Journal of Physical Chemistry B, 2022, 126, 1852-1860.	1.2	5
3	Nature-Inspired Superhydrophobic Sand Mulches Increase Agricultural Productivity and Water-Use Efficiency in Arid Regions. ACS Agricultural Science and Technology, 2022, 2, 276-288.	1.0	12
4	Why did only one genus of insects, Halobates, take to the high seas?. PLoS Biology, 2022, 20, e3001570.	2.6	4
5	Direct imaging of polymer filaments pulled from rebounding drops. Soft Matter, 2022, 18, 5097-5105.	1.2	2
6	A firstâ€principles approach for treating wastewaters. International Journal of Quantum Chemistry, 2021, 121, e26501.	1.0	3
7	How particleâ€“particle and liquidâ€“particle interactions govern the fate of evaporating liquid marbles. Soft Matter, 2021, 17, 7628-7644.	1.2	19
8	Cover Image, Volume 121, Issue 5. International Journal of Quantum Chemistry, 2021, 121, e26288.	1.0	0
9	Nature-inspired wax-coated jute bags for reducingÂpost-harvest storage losses. Scientific Reports, 2021, 11, 15354.	1.6	7
10	The Airâ€“Water Interface of Water Microdroplets Formed by Ultrasonication or Condensation Does Not Produce H₂O₂. Journal of Physical Chemistry Letters, 2021, 12, 11422-11429.	2.1	25
11	10.1063/5.0064040.3. , 2021, , .		0
12	10.1063/5.0064040.7. , 2021, , .		0
13	Suppression of Leidenfrost effect on superhydrophobic surfaces. Physics of Fluids, 2021, 33, .	1.6	14
14	10.1063/5.0064040.4. , 2021, , .		0
15	Electrification at waterâ€“hydrophobe interfaces. Nature Communications, 2020, 11, 5285.	5.8	75
16	Counterintuitive Wetting Transitions in Doubly Reentrant Cavities as a Function of Surface Makeâ€Up, Hydrostatic Pressure, and Cavity Aspect Ratio. Advanced Materials Interfaces, 2020, 7, 2001268.	1.9	11
17	Biomimetic Coating-free Superomniphobicity. Scientific Reports, 2020, 10, 7934.	1.6	33
18	Proof-of-Concept for Gas-Entrapping Membranes Derived from Water-Loving SiO₂/Si/SiO₂ Wafers for Green Desalination. Journal of Visualized Experiments, 2020, , .	0.2	9

#	Article	IF	Citations
19	Superhydrophobicity and size reduction enabled Halobates (Insecta: Heteroptera, Gerridae) to colonize the open ocean. Scientific Reports, 2020, 10, 7785.	1.6	22
20	Mitigating cavitation erosion using biomimetic gas-entrapping microtextured surfaces (GEMS). Science Advances, 2020, 6, eaax6192.	4.7	60
21	A molecular to macro level assessment of direct contact membrane distillation for separating organics from water. Journal of Membrane Science, 2020, 608, 118140.	4.1	23
22	Rendering SiO₂/Si Surfaces Omniphobic by Carving Gas-Entrapping Microtextures Comprising Reentrant and Doubly Reentrant Cavities or Pillars. Journal of Visualized Experiments, 2020, , .	0.2	12
23	Assessing omniphobicity by immersion. Journal of Colloid and Interface Science, 2019, 534, 156-162.	5.0	38
24	Evaluating the potential of superhydrophobic nanoporous alumina membranes for direct contact membrane distillation. Journal of Colloid and Interface Science, 2019, 533, 723-732.	5.0	50
25	Nuclear Quantum Effects in Hydrophobic Nanoconfinement. Journal of Physical Chemistry Letters, 2019, 10, 5530-5535.	2.1	26
26	Reply to the â€˜Comment on â€œThe chemical reactions in electrosprays of water do not always correspond to those at the pristine airâ€“water interfaceâ€â€™ by A. J. Colussi and S. Enami, Chem. Sci., 2019, 10, DOI: 10.1039/c9sc00991d. Chemical Science, 2019, 10, 8256-8261.	3.7	10
27	The chemical reactions in electrosprays of water do not always correspond to those at the pristine airâ€“water interface. Chemical Science, 2019, 10, 2566-2577.	3.7	43
28	Bio-inspired gas-entrapping membranes (GEMs) derived from common water-wet materials for green desalination. Journal of Membrane Science, 2019, 588, 117185.	4.1	27
29	Wetting of water on graphene nanopowders of different thicknesses. Applied Physics Letters, 2018, 112, .	1.5	20
30	Bulk and Surface Aqueous Speciation of Calcite: Implications for Low-Salinity Waterflooding of Carbonate Reservoirs. SPE Journal, 2018, 23, 84-101.	1.7	33
31	Biomimetic coating-free surfaces for long-term entrapment of air under wetting liquids. Nature Communications, 2018, 9, 3606.	5.8	85
32	Simple-to-Apply Wetting Model to Predict Thermodynamically Stable and Metastable Contact Angles on Textured/Rough/Patterned Surfaces. Journal of Physical Chemistry C, 2017, 121, 5642-5656.	1.5	64
33	Doubly Reentrant Cavities Prevent Catastrophic Wetting Transitions on Intrinsically Wetting Surfaces. ACS Applied Materials & Interfaces, 2017, 9, 21532-21538.	4.0	64
34	Bulk and Surface Aqueous Speciation of Calcite: Implications for Low-Salinity Waterflooding of Carbonate Reservoirs. , 2016, , .		10
35	Time-Dependent Wetting Behavior of PDMS Surfaces with Bioinspired, Hierarchical Structures. ACS Applied Materials & Interfaces, 2016, 8, 8168-8174.	4.0	67
36	Quantum chemical insights into the dissociation of nitric acid on the surface of aqueous electrolytes. International Journal of Quantum Chemistry, 2013, 113, 413-417.	1.0	14

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37	Tropospheric aerosol as a reactive intermediate. Faraday Discussions, 2013, 165, 407.	1.6	29
38	Anions dramatically enhance proton transfer through aqueous interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10228-10232.	3.3	55
39	BrÃ¸nsted basicity of the airâ€“water interface. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18679-18683.	3.3	159
40	Protonation and Oligomerization of Gaseous Isoprene on Mildly Acidic Surfaces: Implications for Atmospheric Chemistry. Journal of Physical Chemistry A, 2012, 116, 6027-6032.	1.1	96
41	Branched Polymeric Media: Boron-Chelating Resins from Hyperbranched Polyethylenimine. Environmental Science & Technology, 2012, 46, 8998-9004.	4.6	35
42	Hofmeister effects in micromolar electrolyte solutions. Journal of Chemical Physics, 2012, 136, 154707.	1.2	44
43	The hydrogel template method for fabrication of homogeneous nano/microparticles. Journal of Controlled Release, 2010, 141, 314-319.	4.8	128
44	Thermomechanical and Thermal Contact Characteristics of Bismuth Telluride Films Electrodeposited on Carbon Nanotube Arrays. Advanced Materials, 2009, 21, 4280-4283.	11.1	14
45	Examining the best-fit paradigm for FEM at element level. Sadhana - Academy Proceedings in Engineering Sciences, 2004, 29, 573-588.	0.8	0
46	Effects of superhydrophobic sand mulching on evapotranspiration and phenotypic responses in tomato (Solanum lycopersicum) plants under normal and reduced irrigation. Plant-Environment Interactions, 0, , .	0.7	1