Dibakar Bhattacharyya

List of Publications by Year
in descending order

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64 papers	2,817 citations	201674 27 h-index	175258 52 g-index
64 all docs	64 docs citations	64 times ranked	3731 citing authors

#	Article	IF	Citations
1	Large-area graphene-based nanofiltration membranes by shear alignment of discotic nematic liquid crystals of graphene oxide. Nature Communications, 2016, 7, 10891.	12.8	557
2	Reactive nanostructured membranes for water purification. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8577-8582.	7.1	160
3	Fe/Pd Nanoparticle Immobilization in Microfiltration Membrane Pores:Â Synthesis, Characterization, and Application in the Dechlorination of Polychlorinated Biphenyls. Industrial & Engineering Chemistry Research, 2007, 46, 2348-2359.	3.7	137
4	Graphene Oxide Quantum Dots Covalently Functionalized PVDF Membrane with Significantly-Enhanced Bactericidal and Antibiofouling Performances. Scientific Reports, 2016, 6, 20142.	3.3	136
5	Polycysteine and Other Polyamino Acid Functionalized Microfiltration Membranes for Heavy Metal Capture. Environmental Science & Technology, 2001, 35, 3252-3258.	10.0	120
6	Synthesis of Nanoscale Bimetallic Particles in Polyelectrolyte Membrane Matrix for Reductive Transformation of Halogenated Organic Compounds. Journal of Nanoparticle Research, 2005, 7, 449-467.	1.9	115
7	Catalytic biofunctional membranes containing site-specifically immobilized enzyme arrays: a review. Journal of Membrane Science, 2001, 181, 29-37.	8.2	114
8	Membrane-based bimetallic nanoparticles for environmental remediation: Synthesis and reactive properties. Environmental Progress, 2005, 24, 358-366.	0.7	103
9	Degradation of Trichloroethylene by Iron-Based Bimetallic Nanoparticles. Journal of Physical Chemistry C, 2009, 113, 9454-9464.	3.1	78
10	Engineered iron/iron oxide functionalized membranes for selenium and other toxic metal removal from power plant scrubber water. Journal of Membrane Science, 2015, 488, 79-91.	8.2	69
11	Layer-by-Layer-Assembled Laccase Enzyme on Stimuli-Responsive Membranes for Chloro-Organics Degradation. ACS Applied Materials & Interfaces, 2017, 9, 14858-14867.	8.0	62
12	Solvent Transport Behavior of Shear Aligned Graphene Oxide Membranes and Implications in Organic Solvent Nanofiltration. ACS Applied Materials & Interfaces, 2018, 10, 2067-2074.	8.0	62
13	Modeling of Fe/Pd Nanoparticle-Based Functionalized Membrane Reactor for PCB Dechlorination at Room Temperature. Journal of Physical Chemistry C, 2008, 112, 9133-9144.	3.1	59
14	Synthesis of graphene oxide membranes and their behavior in water and isopropanol. Carbon, 2017, 116, 145-153.	10.3	53
15	Iron oxide nanoparticle synthesis in aqueous and membrane systems for oxidative degradation of trichloroethylene from water. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	47
16	Polymerization and Functionalization of Membrane Pores for Water Related Applications. Industrial & Engineering Chemistry Research, 2015, 54, 4174-4182.	3.7	47
17	Pore functionalized PVDF membranes with in-situ synthesized metal nanoparticles: Material characterization, and toxic organic degradation. Journal of Membrane Science, 2017, 530, 147-157.	8.2	47
18	Thermo-responsive adsorption-desorption of perfluoroorganics from water using PNIPAm hydrogels and pore functionalized membranes. Journal of Membrane Science, 2020, 599, 117821.	8.2	45

#	Article	IF	Citations
19	Development of bench and full-scale temperature and pH responsive functionalized PVDF membranes with tunable properties. Journal of Membrane Science, 2014, 457, 39-49.	8.2	42
20	Modulation of persistent organic pollutant toxicity through nutritional intervention: Emerging opportunities in biomedicine and environmental remediation. Science of the Total Environment, 2014, 491-492, 11-16.	8.0	37
21	Orientation Specific Immobilization of Organophosphorus Hydrolase on Magnetic Particles through Gene Fusion. Biomacromolecules, 2001, 2, 700-705.	5.4	34
22	Functionalization of Flat Sheet and Hollow Fiber Microfiltration Membranes for Water Applications. ACS Sustainable Chemistry and Engineering, 2016, 4, 907-918.	6.7	34
23	Enhanced permselective separation of per-fluorooctanoic acid in graphene oxide membranes by a simple PEI modification. Journal of Materials Chemistry A, 2020, 8, 24800-24811.	10.3	34
24	Role of membrane pore polymerization conditions for pH responsive behavior, catalytic metal nanoparticle synthesis, and PCB degradation. Journal of Membrane Science, 2018, 555, 348-361.	8.2	33
25	Reactive Functionalized Membranes for Polychlorinated Biphenyl Degradation. Industrial & Engineering Chemistry Research, 2013, 52, 10430-10440.	3.7	32
26	Iron-Based Redox Polymerization of Acrylic Acid for Direct Synthesis of Hydrogel/Membranes and Metal Nanoparticles for Water Treatment. Industrial & Engineering Chemistry Research, 2014, 53, 1130-1142.	3.7	32
27	Kinetic Studies of Site-Specifically and Randomly Immobilized Alkaline Phosphatase on Functionalized Membranes. Journal of Chemical Technology and Biotechnology, 1997, 68, 294-302.	3.2	31
28	Pd/Fe nanoparticle integrated PMAA-PVDF membranes for chloro-organic remediation from synthetic and site groundwater. Journal of Membrane Science, 2020, 594, 117454.	8.2	29
29	Naphthenic acids removal from high TDS produced water by persulfate mediated iron oxide functionalized catalytic membrane, and by nanofiltration. Chemical Engineering Journal, 2017, 327, 573-583.	12.7	27
30	Positively charged nanofiltration membrane synthesis, transport models, and lanthanides separation. Journal of Membrane Science, 2021, 620, 118973.	8.2	27
31	Immobilized palladium-catalyzed electro-Fenton's degradation of chlorobenzene in groundwater. Chemosphere, 2019, 216, 556-563.	8.2	26
32	High Total Dissolved Solids Water Treatment by Charged Nanofiltration Membranes Relating to Power Plant Applications. Industrial & Engineering Chemistry Research, 2016, 55, 4089-4097.	3.7	23
33	Activity Studies of Immobilized Subtilisin on Functionalized Pure Cellulose-Based Membranes. Biotechnology Progress, 2001, 17, 866-871.	2.6	22
34	Composite Membranes Derived from Cellulose and Lignin Sulfonate for Selective Separations and Antifouling Aspects. Nanomaterials, 2019, 9, 867.	4.1	22
35	Development of PVDF Membrane Nanocomposites via Various Functionalization Approaches for Environmental Applications. Polymers, 2016, 8, 32.	4.5	21
36	HDPE liquefaction: Random chain scission model. Journal of Applied Polymer Science, 1998, 70, 1239-1251.	2.6	20

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37	Mercury Removal from Wastewater Using Cysteamine Functionalized Membranes. ACS Omega, 2020, 5, 22255-22267.	3.5	20
38	Thermoresponsive PNIPAmâ€“PMMA-Functionalized PVDF Membranes with Reactive Feâ€“Pd Nanoparticles for PCB Degradation. Industrial & Engineering Chemistry Research, 2020, 59, 16614-16625.	3.7	18
39	Temperature responsive hydrogel with reactive nanoparticles. Journal of Applied Polymer Science, 2013, 128, 1804-1814.	2.6	17
40	Reductive degradation of CCl4 by sulfidized Fe and Pd-Fe nanoparticles: Kinetics, longevity, and morphology aspects. Chemical Engineering Journal, 2020, 394, 125013.	12.7	17
41	Kinetics and Active Fraction Determination of a Protease Enzyme Immobilized on Functionalized Membranes: Mathematical Modeling and Experimental Results. Biotechnology Progress, 1998, 14, 865-873.	2.6	16
42	Effect of silica-core gold-shell nanoparticles on the kinetics of biohydrogen production and pollutant hydrogenation via organic acid photofermentation over enhanced near-infrared illumination. International Journal of Hydrogen Energy, 2021, 46, 7821-7835.	7.1	16
43	Rapid removal of PFOA and PFOS via modified industrial solid waste: Mechanisms and influences of water matrices. Chemical Engineering Journal, 2022, 433, 133271.	12.7	16
44	Multienzyme Immobilized Polymeric Membrane Reactor for the Transformation of a Lignin Model Compound. Polymers, 2018, 10, 463.	4.5	15
45	Sulfur-Functionalization of Porous Silica Particles and Application to Mercury Vapor Sorption. Industrial & Engineering Chemistry Research, 2010, 49, 4687-4693.	3.7	14
46	Gravity-driven electrospun membranes for effective removal of perfluoro-organics from synthetic groundwater. Journal of Membrane Science, 2022, 644, 120180.	8.2	14
47	Rhodopseudomonas palustris-based conversion of organic acids to hydrogen using plasmonic nanoparticles and near-infrared light. RSC Advances, 2019, 9, 41218-41227.	3.6	13
48	Ion and organic transport in Graphene oxide membranes: Model development to difficult water remediation applications. Journal of Membrane Science, 2020, 604, 118024.	8.2	12
49	Layer-by-layer assembled membranes with immobilized porins. RSC Advances, 2017, 7, 56123-56136.	3.6	11
50	Reduced graphene oxideâ€“metal nanoparticle composite membranes for environmental separation and chloro-organic remediation. RSC Advances, 2019, 9, 38547-38557.	3.6	9
51	Selective molecular separation of lignin model compounds by reduced graphene oxide membranes from solvent-water mixture. Separation and Purification Technology, 2020, 230, 115865.	7.9	9
52	Demonstration of Hollow Fiber Membrane-Based Enclosed Space Air Remediation for Capture of an Aerosolized Synthetic SARS-CoV-2 Mimic and Pseudovirus Particles. ACS ES&T Engineering, 2022, 2, 251-262.	7.6	9
53	Dual-Functional Nanofiltration and Adsorptive Membranes for PFAS and Organics Separation from Water. ACS ES&T Water, 2022, 2, 863-872.	4.6	9
54	Synthesis of Catalytic Nanoporous Metallic Thin Films on Polymer Membranes. Industrial & Engineering Chemistry Research, 2018, 57, 4420-4429.	3.7	8

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55	Thiol-Functionalized Membranes for Mercury Capture from Water. Industrial & Engineering Chemistry Research, 2020, 59, 5287-5295.	3.7	7
56	Electrochemical Assay for Highly Charged Polyamino Acids: Application to Polyamino Acid Functionalized Microfiltration Membranes. Electroanalysis, 2000, 12, 1368-1372.	2.9	6
57	Aerosol capture and coronavirus spike protein deactivation by enzyme functionalized antiviral membranes. Communications Materials, 2022, 3, .	6.9	6
58	Chitosan Membranes with Nanoparticles for Remediation of Chlorinated Organics. , 0, , 189-216.		5
59	Nanocomposite and Responsive Membranes for Water Treatment. , 2016, , 389-431.		5
60	Dual-Functional-Tag-Facilitated Protein Labeling and Immobilization. ACS Omega, 2017, 2, 522-528.	3.5	4
61	HDPE liquefaction: Random chain scission model. Journal of Applied Polymer Science, 1998, 70, 1239-1251.	2.6	2
62	Immobilized Enzyme Reactions on Beads and Membranes. , 1996, , 117-129.		2
63	Nanoporous metalâ€“polymer composite membranes for organics separations and catalysis. Journal of Materials Research, 2020, 35, 2629-2642.	2.6	0
64	Selective Isolation and Purification of Genetically Modified Tat Protein by Stacked Affinity Membrane System. FASEB Journal, 2006, 20, LB61.	0.5	0