

# Jayanta Bhattacharya

## List of Publications by Year in descending order

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Version: 2024-02-01

72  
papers

3,274  
citations

236612

25  
h-index

149479

56  
g-index

74  
all docs

74  
docs citations

74  
times ranked

3540  
citing authors

#	ARTICLE	IF	CITATIONS
1	Challenges, opportunities, and innovations for effective solid waste management during and post COVID-19 pandemic. Resources, Conservation and Recycling, 2020, 162, 105052.	5.3	459
2	Challenges and strategies for effective plastic waste management during and post COVID-19 pandemic. Science of the Total Environment, 2021, 750, 141514.	3.9	412
3	Efficient removal of Chromium(VI) from aqueous solution using chitosan grafted graphene oxide (CS-GO) nanocomposite. International Journal of Biological Macromolecules, 2019, 121, 285-292.	3.6	283
4	Circular economy approach in solid waste management system to achieve UN-SDGs: Solutions for post-COVID recovery. Science of the Total Environment, 2021, 800, 149605.	3.9	159
5	Influence of temperature and duration of pyrolysis on the property heterogeneity of rice straw biochar and optimization of pyrolysis conditions for its application in soils. Journal of Cleaner Production, 2019, 215, 1123-1139.	4.6	157
6	Adsorption of Pb(II) from aqueous solution using a magnetic chitosan/graphene oxide composite and its toxicity studies. International Journal of Biological Macromolecules, 2018, 115, 1142-1150.	3.6	155
7	Occurrence and role of algae and fungi in acid mine drainage environment with special reference to metals and sulfate immobilization. Water Research, 2009, 43, 883-894.	5.3	145
8	Removal of Cu(II), Zn(II) and Pb(II) from water using microwave-assisted synthesized maghemite nanotubes. Chemical Engineering Journal, 2012, 211-212, 493-500.	6.6	137
9	A GO-CS@MOF [Zn(BDC)(DMF)] material for the adsorption of chromium(VI) ions from aqueous solution. Composites Part B: Engineering, 2018, 152, 116-125.	5.9	118
10	Preparation of graphene oxide/chitosan/ferrite nanocomposite for Chromium(VI) removal from aqueous solution. International Journal of Biological Macromolecules, 2018, 119, 540-547.	3.6	101
11	Ultrasound-assisted synthesis of metal organic framework for the photocatalytic reduction of 4-nitrophenol under direct sunlight. Ultrasonics Sonochemistry, 2018, 49, 215-221.	3.8	77
12	A binary and ternary adsorption study of wastewater Cd(II), Ni(II) and Co(II) by $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> nanotubes. Separation and Purification Technology, 2013, 115, 172-179.	3.9	75
13	Potassium-iron rice straw biochar composite for sorption of nitrate, phosphate, and ammonium ions in soil for timely and controlled release. Science of the Total Environment, 2020, 712, 136337.	3.9	75
14	MICROWAVE-ASSISTED SYNTHESIS AND CHARACTERIZATION OF $\text{CaO}$ NANOPARTICLES. International Journal of Nanoscience, 2011, 10, 413-418.	0.4	64
15	Ultrasonic-assisted synthesis of graphene oxide @ fungal hyphae: An efficient and reclaimable adsorbent for chromium(VI) removal from aqueous solution. Ultrasonics Sonochemistry, 2018, 48, 412-417.	3.8	61
16	Wide exposure of persistent organic pollutants (PoPs) in natural waters and sediments of the densely populated Western Bengal basin, India. Science of the Total Environment, 2020, 717, 137187.	3.9	57
17	Reliability Analysis of a conveyor system using hybrid data. Quality and Reliability Engineering International, 2007, 23, 867-882.	1.4	45
18	Development and Validation of a Spectrophotometric Method to Measure Sulfate Concentrations in Mine Water without Interference. Mine Water and the Environment, 2011, 30, 169-174.	0.9	39

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19	β-Cyclodextrin conjugated graphene oxide: A regenerative adsorbent for cadmium and methylene blue. <i>Journal of Molecular Liquids</i> , 2019, 282, 606-616.	2.3	36
20	Treatment of acidic coal mine drainage: design and operational challenges of successive alkalinity producing systems. <i>Mine Water and the Environment</i> , 2008, 27, 12-19.	0.9	34
21	Performance of a SAPS-Based Chemo-Bioreactor Treating Acid Mine Drainage Using Low-DOC Spent Mushroom Compost, and Limestone as Substrate. <i>Mine Water and the Environment</i> , 2010, 29, 217-224.	0.9	33
22	Optimization of the operation of packed bed bioreactor to improve the sulfate and metal removal from acid mine drainage. <i>Journal of Environmental Management</i> , 2017, 200, 135-144.	3.8	33
23	(3-Aminopropyl)triethoxysilane and iron rice straw biochar composites for the sorption of Cr (VI) and Zn (II) using the extract of heavy metals contaminated soil. <i>Science of the Total Environment</i> , 2021, 771, 144764.	3.9	32
24	Sweetmeat waste fractions as suitable organic carbon source for biological sulfate reduction. <i>International Biodeterioration and Biodegradation</i> , 2013, 82, 215-223.	1.9	30
25	Evaluation of heavy metal leaching under simulated disposal conditions and formulation of strategies for handling solar panel waste. <i>Science of the Total Environment</i> , 2021, 780, 146645.	3.9	28
26	Microbial Growth and Action: Implications for Passive Bioremediation of Acid Mine Drainage. <i>Mine Water and the Environment</i> , 2006, 25, 233-240.	0.9	23
27	Eukaryotes in acidic mine drainage environments: potential applications in bioremediation. <i>Reviews in Environmental Science and Biotechnology</i> , 2009, 8, 257-274.	3.9	23
28	A green approach for single-pot synthesis of graphene oxide and its composite with Mn <sub>3</sub> O <sub>4</sub> . <i>Applied Surface Science</i> , 2018, 437, 41-50.	3.1	23
29	Selective and multicycle removal of Cr(VI) by graphene oxide-EDTA composite: Insight into the removal mechanism and ionic interference in binary and ternary associations. <i>Environmental Technology and Innovation</i> , 2020, 19, 100851.	3.0	22
30	Improvement of the degradation of sulfate rich wastewater using sweetmeat waste (SMW) as nutrient supplement. <i>Journal of Hazardous Materials</i> , 2015, 300, 796-807.	6.5	21
31	Emissions and Environmental Burdens Associated With Plastic Solid Waste Management. , 2019, , 313-342.		21
32	Groundwater vulnerability to pesticide pollution assessment in the alluvial aquifer of Western Bengal basin, India using overlay and index method. <i>Chemie Der Erde</i> , 2020, 80, 125601.	0.8	20
33	Inhibitory and synergistic effects on thermal behaviour and char characteristics during the co-pyrolysis of biomass and single-use plastics. <i>Energy</i> , 2021, 235, 121369.	4.5	20
34	Understanding the performance of sulfate reducing bacteria based packed bed reactor by growth kinetics study and microbial profiling. <i>Journal of Environmental Management</i> , 2016, 177, 101-110.	3.8	18
35	Impact of sanitation and socio-economy on groundwater fecal pollution and human health towards achieving sustainable development goals across India from ground-observations and satellite-derived nightlight. <i>Scientific Reports</i> , 2019, 9, 15193.	1.6	17
36	Influence of process parameters on thermal characteristics of char from co-pyrolysis of eucalyptus biomass and polystyrene: Its prospects as a solid fuel. <i>Energy</i> , 2021, 232, 121050.	4.5	17

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37	Understanding of the biochemical events in a chemo-bioreactor during continuous acid mine drainage treatment. <i>Environmental Earth Sciences</i> , 2012, 66, 607-614.	1.3	15
38	Assessment of the role of silver nanoparticles in reducing poultry mortality, risk and economic benefits. <i>Applied Nanoscience (Switzerland)</i> , 2019, 9, 1293-1307.	1.6	15
39	Optimized production of single-use plastic-Eucalyptus wood char composite for application in soil. <i>Journal of Cleaner Production</i> , 2021, 278, 123968.	4.6	15
40	Single-use LDPE - Eucalyptus biomass char composite produced from co-pyrolysis has the properties to improve the soil quality. <i>Chemical Engineering Research and Design</i> , 2021, 149, 185-198.	2.7	12
41	Bimetallic Fe/Al-MOF for the adsorptive removal of multiple dyes: optimization and modeling of batch and hybrid adsorbent-river sand column study and its application in textile industry wastewater. <i>Environmental Science and Pollution Research</i> , 2022, 29, 56249-56264.	2.7	12
42	ARD generation and corrosion potential of exposed roadside rockmass at Boeun and Mujoo, South Korea. <i>Environmental Geology</i> , 2007, 52, 1033-1043.	1.2	11
43	Improvement of biological sulfate reduction by supplementation of nitrogen rich extract prepared from organic marine wastes. <i>International Biodeterioration and Biodegradation</i> , 2015, 104, 264-273.	1.9	10
44	Groundwater faecal pollution observation in parts of Indo-Gangesâ€“Brahmaputra river basin from in-situ measurements and satellite-based observations. <i>Journal of Earth System Science</i> , 2019, 128, 1.	0.6	10
45	Use of Marine Waste Extract as a Nitrogen Source for Biological Sulfate Reduction: Development of a Suitable Alternative. <i>Mine Water and the Environment</i> , 2014, 33, 362-371.	0.9	9
46	Char from the co-pyrolysis of Eucalyptus wood and low-density polyethylene for use as high-quality fuel: Influence of process parameters. <i>Science of the Total Environment</i> , 2021, 794, 148723.	3.9	9
47	MICROWAVE-ASSISTED SYNTHESIS AND CHARACTERIZATION OF $\text{CaS}$ NANOPARTICLES. <i>International Journal of Nanoscience</i> , 2012, 11, 1250027.	0.4	8
48	Suitability of different growth substrates as source of nitrogen for sulfate reducing bacteria. <i>Biodegradation</i> , 2015, 26, 415-430.	1.5	8
49	Facile Synthesis of Graphene Oxide for Multicycle Adsorption of Aqueous $\text{Pb}^{2+}$ in the Presence of Divalent Cations and Polyatomic Anions. <i>Journal of Chemical &amp; Engineering Data</i> , 2018, 63, 3465-3474.	1.0	8
50	Role of aquifer media in determining the fate of polycyclic aromatic hydrocarbons in the natural water and sediments along the lower Ganges river basin. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2020, 55, 354-373.	0.9	8
51	Growth, serum biochemical, and histopathological responses of broilers administered with silver nanoparticles as a drinking water disinfectant. <i>3 Biotech</i> , 2020, 10, 94.	1.1	8
52	Novel GO/Feâ€“Mn hybrid for the adsorptive removal of Pb(II) ions from aqueous solution and the spent adsorbent disposability in cement mix: compressive properties and leachability study for circular economy benefits. <i>Environmental Science and Pollution Research</i> , 2022, 29, 63898-63916.	2.7	8
53	Effect of the Co-Application of Eucalyptus Wood Biochar and Chemical Fertilizer for the Remediation of Multimetal (Cr, Zn, Ni, and Co) Contaminated Soil. <i>Sustainability</i> , 2022, 14, 7266.	1.6	8
54	Neural Network and Random Forest-Based Analyses of the Performance of Community Drinking Water Arsenic Treatment Plants. <i>Water (Switzerland)</i> , 2021, 13, 3507.	1.2	7

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55	An Overview of Agricultural Pollutants and Organic Contaminants in Groundwater of India. Springer Hydrogeology, 2018, , 247-255.	0.1	4
56	Nutrients for the Selective Growth of Specific Bacteria. , 2018, , 43-75.		2
57	Dispersion, availability, and antimicrobial activity of silver nanoparticles during application to drinking water of the poultry. Environmental Nanotechnology, Monitoring and Management, 2020, 14, 100368.	1.7	2
58	Sand coated with graphene oxide-PVA matrix for aqueous Pb <sup>2+</sup> adsorption: Insights from optimization and modeling of batch and continuous flow studies. Surfaces and Interfaces, 2022, 32, 102115.	1.5	2
59	Reactivation of carbon exhausted sulfidogenic bioreactor by fractionated sweetmeat waste dosing: The role of neutralizing substance and nitrogen supplement. Environmental Technology and Innovation, 2014, 1-2, 35-45.	3.0	1
60	Microbial Treatment of Industrial Wastewater. , 2018, , 1-42.		1
61	Reverse Auction Administration in Indian Public Sector Coal Mining, its Effect on the Engineering and Unsustainable Outcomes. Journal of the Institution of Engineers (India): Series D, 2021, 102, 103-111.	0.6	1
62	Influence of process parameters for production of biochar: A potential tool for an energy transition. Advances in Chemical Pollution, Environmental Management and Protection, 2021, 7, 295-313.	0.3	1
63	Biochar for sustainable agriculture: Prospects and implications. Advances in Chemical Pollution, Environmental Management and Protection, 2021, 7, 221-262.	0.3	1
64	Efficacy of silver nanoparticles-based foliar spray application to control plant diseases, its effect on productivity, and risk assessment. Arabian Journal of Geosciences, 2022, 15, 1.	0.6	1
65	Computer aided study to estimate dump denudation due to rain water flow. International Journal of Mining, Reclamation and Environment, 1997, 11, 209-211.	0.1	0
66	Cost-effective indicator“a tool for resource prioritization. Safety and Reliability, 2007, 27, 36-52.	1.0	0
67	Reactivation of Reactor and Role of Supplement and Neutralizing Substances. , 2018, , 127-150.		0
68	Effectiveness of Marine Waste Extract as a Suitable External Nutrient Source. , 2018, , 199-229.		0
69	Improvement by Dosing in Schemes of Continuous Treatment. , 2018, , 231-263.		0
70	Reactivating Bacterial Community and Biochemical Events. , 2018, , 77-97.		0
71	Mechanization and Automation. Spectrum Analysis of Drilling Noise for Estimating the Mechanical Properties of Rock.. Shigen-to-Sozai, 1996, 112, 525-529.	0.1	0
72	Geogenic sulfate-rich wastewater: Sources, characteristics, effects and treatment technologies. , 2022, , 249-273.		0