

# Saroj Sundar Baral

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3660418/publications.pdf>

Version: 2024-02-01

44  
papers

1,624  
citations

361413

20  
h-index

289244

40  
g-index

45  
all docs

45  
docs citations

45  
times ranked

1854  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Hexavalent chromium removal from aqueous solution by adsorption on treated sawdust. <i>Biochemical Engineering Journal</i> , 2006, 31, 216-222.   | 3.6  | 311       |
| 2  | Removal of Cr(VI) by thermally activated weed <i>Salvinia cucullata</i> in a fixed-bed column. <i>Journal of Hazardous Materials</i> , 2009, 161, 1427-1435.  | 12.4 | 234       |
| 3  | Biogas generation potential by anaerobic digestion for sustainable energy development in India. <i>Renewable and Sustainable Energy Reviews</i> , 2010, 14, 2086-2094.  | 16.4 | 226       |
| 4  | Defect engineering in photocatalysis: formation, chemistry, optoelectronics, and interface studies. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18560-18604.   | 10.3 | 116       |
| 5  | Chromium(VI) removal by calcined bauxite. <i>Biochemical Engineering Journal</i> , 2007, 34, 69-75.   | 3.6  | 86        |
| 6  | A preliminary study on the adsorptive removal of Cr(VI) using seaweed, <i>Hydrilla verticillata</i> . <i>Journal of Hazardous Materials</i> , 2009, 171, 358-369.   | 12.4 | 82        |
| 7  | A bio-hydrometallurgical approach towards leaching of lanthanum from the spent fluid catalytic cracking catalyst using <i>Aspergillus niger</i> . <i>Hydrometallurgy</i> , 2019, 184, 175-182.  | 4.3  | 39        |
| 8  | Steering the Charge Kinetics in Dual-Functional Photocatalysis by Surface Dipole Moments and Band Edge Modulation: A Defect Study in TiO <sub>2</sub> -ZnS-rGO Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 11679-11692. | 8.0  | 34        |
| 9  | Removal of Cr(VI) from aqueous solution using waste weed, <i>Salvinia cucullata</i> . <i>Chemistry and Ecology</i> , 2007, 23, 105-117.   | 1.6  | 29        |
| 10 | Defect-induced enhanced dissociative adsorption, optoelectronic properties and interfacial contact in Ce doped TiO <sub>2</sub> : Solar photocatalytic degradation of Rhodamine B. <i>Ceramics International</i> , 2019, 45, 22253-22263.         | 4.8  | 29        |
| 11 | A comparative study of the extraction of metals from the spent fluid catalytic cracking catalyst using chemical leaching and bioleaching by <i>Aspergillus niger</i> . <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103335.    | 6.7  | 28        |
| 12 | Process intensification of thumbar methyl ester (Biodiesel) production using hydrodynamic cavitation. <i>Chemical Engineering Research and Design</i> , 2021, 171, 277-292.   | 5.6  | 26        |
| 13 | Adsorption of Cr (VI) by treated weed <i>Salvinia cucullata</i> : kinetics and mechanism. <i>Adsorption</i> , 2008, 14, 111-121.  | 3.0  | 25        |
| 14 | Aerosol physical characteristics at Bhubaneswar, East coast of India. <i>Atmospheric Research</i> , 2009, 93, 897-901.  | 4.1  | 25        |
| 15 | Attribute based specification, comparison and selection of feed stock for anaerobic digestion using MADM approach. <i>Journal of Hazardous Materials</i> , 2011, 186, 2009-2016.  | 12.4 | 25        |
| 16 | Biofuel production potential from wastewater in India by integrating anaerobic membrane reactor with algal photobioreactor. <i>Biomass and Bioenergy</i> , 2020, 133, 105445.   | 5.7  | 25        |
| 17 | Bioleaching of rare earth elements from spent fluid catalytic cracking catalyst using <i>Acidithiobacillus ferrooxidans</i> . <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104848.   | 6.7  | 24        |
| 18 | The potential of sustainable algal biofuel production using CO <sub>2</sub> from thermal power plant in India. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 49, 1061-1074.   | 16.4 | 23        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Cleaner production of catalytic thumba methyl ester (Biodiesel) from thumba seed oil (Citrullus Tj ETQq1 1 0.784314 rgBT /Overlock 123021.  | 6.4  | 22        |
| 20 | Leaching of nickel and vanadium from the spent fluid catalytic cracking catalyst by reconnoitering the potential of Aspergillus niger associating with chemical leaching. Journal of Environmental Chemical Engineering, 2019, 7, 103025.                   | 6.7  | 21        |
| 21 | Hydrodynamic cavitation for process intensification of biodiesel synthesis- a review. Current Research in Green and Sustainable Chemistry, 2021, 4, 100144.   | 5.6  | 21        |
| 22 | Parametric studies of methyl esters synthesis from Thumba seed oil using heterogeneous catalyst under conventional stirring and ultrasonic cavitation. Materials Science for Energy Technologies, 2018, 1, 106-116.   | 1.8  | 20        |
| 23 | Fundamentals and application of single-atom photocatalyst in sustainable energy and environmental applications. Renewable and Sustainable Energy Reviews, 2022, 167, 112693.  | 16.4 | 17        |
| 24 | Synergistic effect of dual electron-cocatalyst modified photocatalyst and methodical strategy for better charge separation. Applied Surface Science, 2019, 489, 930-942.  | 6.1  | 15        |
| 25 | Selection of suitable adsorbent for the removal of Cr(VI) by using objective based multiple attribute decision making method. Preparative Biochemistry and Biotechnology, 2021, 51, 69-75.  | 1.9  | 14        |
| 26 | Optimization of leaching parameters for the extraction of rare earth metal using decision making method. Hydrometallurgy, 2014, 143, 60-67.   | 4.3  | 11        |
| 27 | Biosorption of Cr(VI) from wastewater using <i>Sorghastrum Nutans L.</i> Chemistry and Ecology, 2018, 34, 762-785.  | 1.6  | 11        |
| 28 | Effect of Defects on Optical, Electronic, and Interface Properties of NiO/SnO <sub>2</sub> Heterostructures: Dual-Functional Solar Photocatalytic H <sub>2</sub> Production and RhB Degradation. ACS Applied Materials & Interfaces, 2021, 13, 60002-60017. | 8.0  | 11        |
| 29 | Comparative studies of chemical composition of particulate matter between sea and remote location of eastern part of India. Atmospheric Research, 2011, 99, 337-343.  | 4.1  | 9         |
| 30 | Leaching of metals from spent fluid catalytic cracking catalyst using Acidithiobacillus ferrooxidans and comparing its leaching efficiency with organic and inorganic acids. Journal of Environmental Chemical Engineering, 2021, 9, 105522.                | 6.7  | 9         |
| 31 | Thermodynamic and Mineralogical Aspects of Injecting LPG, Coke Oven Gas, and Oxygen into Goethitic Iron Ore Sintering Process. Journal of Sustainable Metallurgy, 2021, 7, 136-150.   | 2.3  | 9         |
| 32 | Unravelling the rate controlling step in degradation of phenol on a higher potential photocatalyst. Journal of Environmental Chemical Engineering, 2020, 8, 103938.   | 6.7  | 8         |
| 33 | Trend in chemical composition of precipitation during 2005–2009 at a rural station of Bhubaneswar, eastern India. Theoretical and Applied Climatology, 2012, 110, 55-63.  | 2.8  | 7         |
| 34 | Hydrogen production from water splitting of real-time industry effluent using novel photocatalyst. Advanced Powder Technology, 2022, 33, 103488.  | 4.1  | 5         |
| 35 | Dissolution kinetics of cerium from red mud. Separation Science and Technology, 2017, 52, 883-891.  | 2.5  | 4         |
| 36 | A comparative study of bioelectrochemical systems with established anaerobic/aerobic processes. Biomass Conversion and Biorefinery, 0, , 1.   | 4.6  | 4         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Process Technology for the Removal of Cr(VI) from Wastewater Using Pig Iron Sludge. <i>Chemical Engineering and Technology</i> , 2022, 45, 543-551.  | 1.5 | 4         |
| 38 | Characterization and In Situ Abatement of SO <sub>x</sub> , NO <sub>x</sub> , and PCDD/Fs in Iron Ore Sinter Machine Wind Legs. <i>Journal of Sustainable Metallurgy</i> , 2022, 8, 742-753. | 2.3 | 4         |
| 39 | Modeling and simulation for the adsorptive removal of Cr(VI) from aqueous solution. <i>Desalination and Water Treatment</i> , 2014, 52, 5652-5662.   | 1.0 | 3         |
| 40 | Rate-Limiting Mechanism in Iron Ore Sintering Process with Waste Gas Recycling. <i>Transactions of the Indian Institute of Metals</i> , 2021, 74, 713-723.                                   | 1.5 | 3         |
| 41 | Use of Manganic Ferrihydrite to treat As(V) contaminated water. <i>Chemistry and Ecology</i> , 2008, 24, 23-33.  | 1.6 | 2         |
| 42 | Pretreatment of organic composite waste mixtures for enhanced biomethanation. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2018, 40, 1380-1387.          | 2.3 | 2         |
| 43 | Highlighting the importance of optimal defect density through band structure and photocatalytic studies. <i>Applied Surface Science</i> , 2021, 536, 147843.                                 | 6.1 | 1         |
| 44 | A review on photocatalytic hydrogen production potential from paper and pulp industry wastewater. <i>Biomass Conversion and Biorefinery</i> , 2024, 14, 3135-3159.                           | 4.6 | 0         |