

## Publications (63 nos.):

Citations: 3180; h-index:29; i-10 index:50 (as per 27/07/2023)

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## Research papers published:

- 1. Emerging technological solutions for the management of paper mill wastewater: Treatment, nutrient recovery and fourth industrial revolution (IR 4.0).**  
Kumar R, Maurya A & [Raj, A.](#)  
Journal of Water Process Engineering 2023, 53:103715 ([Impact factor:7.0](#))
- 2. Biofilm-based technology for industrial wastewater treatment: current technology, applications and future perspectives.**  
Maurya A, Kumar R & [Raj A.](#)  
World Journal of Microbiology and Biotechnology 2023, 39(5):112. ([Impact factor:4.1](#))
- 3. Characterization of tannery effluents by analyzing the recalcitrant organic pollutants and phytotoxicity assay.**  
Kumar S, Yadav A, Maurya A, Pratap SG, Singh PK & [Raj, A.](#)  
Journal of Applied Biology and Biotechnology 2022, 10(2): 91-99
- 4. Isolation of functional ligninolytic *Bacillus aryabhatai* from paper mill sludge and its lignin degradation potential.**  
Singh A, Kumar R, Maurya A, Chowdhary P & [Raj A](#)  
Biotechnology Reports 2022, 35: e00755.
- 5. Effective bioremediation of pulp and paper mill wastewater using *Bacillus cereus* as a possible kraft lignin-degrading bacterium.**  
Kumar R, Singh A, Maurya A, Yadav P, Yadav A, Chowdhary P & [Raj A](#)  
Bioresource Technology 2022, 352: 127076. ([Impact factor:11.4](#))
- 6. Biofilm formation and extracellular polymeric substance (EPS) production by *Bacillus haynesii* and influence of hexavalent chromium.**  
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Bioresource Technology 2022, 352: 127109. ([Impact factor:11.4](#))
- 7. Sustainable microalgal biomass production in food industry wastewater for low-cost biorefinery products: a review.**  
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- 8. In silico analytical toolset for predictive degradation and toxicity of hazardous pollutants in water sources.**  
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- 9. Synergistic role of bacterial consortium (RKS-AMP) for treatment of recalcitrant coloring pollutants of textile industry wastewater.**  
Kishor R, [Raj A](#), Bharagava RN  
Journal of Water Process Engineering 2022, 47: 102700. ([Impact factor:7.7](#))
- 10. Detection and identification of hazardous organic pollutants from distillery wastewater by GC-MS analysis and its phytotoxicity and genotoxicity evaluation by using *Allium cepa* and *Cicer arietinum* L.**  
Chowdhary P, Singh A, Chandra R, Kumar PS, [Raj A](#) & Bharagava RN  
Chemosphere 2022, 297: 134123. ([Impact factor:8.8](#))
- 11. Characterization of biofilm formation and reduction of hexavalent chromium by bacteria isolated from tannery sludge.**  
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- Chemosphere 2022, 286:131795. ([Impact factor:8.8](#))
12. **Preparation, characterization and agri applications of biochar produced by pyrolysis of sewage sludge at different temperatures.**  
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Science of The Total Environment 2021, 795:148722. ([Impact factor:9.8](#))
  13. **Kinetic and thermodynamic investigations of sewage sludge biochar in removal of Remazol Brilliant Blue R dye from aqueous solution and evaluation of residual dyes cytotoxicity.**  
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Environmental Technology and Innovation 2021, 23:101556. ([Impact factor:7.1](#))
  14. **A rapid and sensitive colorimetric method for the detection of cyanide ions in aqueous samples.**  
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  15. **Investigation on biofilm formation activity of *Enterococcus faecium* under various physiological conditions and possible application in bioremediation of tannery effluent.**  
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  16. **Decolourisation of textile dye by laccase: process evaluation and assessment of its degradation bioproducts.**  
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  17. **Trends in predictive biodegradation for sustainable mitigation of environmental pollutants: Recent progress and future outlook.**  
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  18. **Lignin peroxidase in focus for catalytic elimination of contaminants-A critical review on recent progress and perspectives.**  
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  19. **Bioremediation of lignin derivatives and phenolics in wastewater with lignin modifying enzymes: Status, opportunities and challenges.**  
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  22. **Emerging and eco-friendly approaches for waste management: a book review.**  
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- 23. Bacterial degradation of distillery wastewater pollutants and their metabolites characterization and its toxicity evaluation by using *Caenorhabditis elegans* as terrestrial test models.**  
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- 25. Phytotoxicity, cytotoxicity and genotoxicity evaluation of organic and inorganic pollutants rich tannery wastewater from a Common Effluent Treatment Plant (CETP) in Unnao district, India using *Vigna radiata* and *Allium cepa*.**  
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- 26. Production and purification of xylanase from alkaliphilic *Bacillus licheniformis* and its pretreatment of eucalyptus kraft pulp.**  
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- 27. Stress response of *Triticum aestivum* L. and *Brassica juncea* L. against heavy metals growing at distillery and tannery wastewater contaminated site.**  
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- 31. Purification, characterization and thermostability improvement of xylanase from *Bacillus amyloliquefaciens* and its application in pre-bleaching of kraft pulp.**  
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- 32. Genotoxicity assessment of pulp and paper mill effluent before and after bacterial degradation using *Allium cepa* test.**  
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- 37. Immobilization and Biochemical Properties of Purified Xylanase from *Bacillus amyloliquefaciens* SK-3 and Its Application in Kraft Pulp Biobleaching.**  
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- 40. Assessing hazardous risks of indoor airborne polycyclic aromatic hydrocarbons in the kitchen and its association with lung functions and urinary PAH metabolites in kitchen workers.** Singh A, Nair KC, Kamal R, Bihari V, Gupta MK, Mudiam MKR, Satyanarayana GNV, Raj A, Haq I, Shukla NK, Khan AH & Srivastava AK  
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- 45. Impact of tannery effluent in simulated condition on some physico-chemical characteristics of river water and its seasonal variation.**  
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54. **Antibiotic resistance, plasmid and RAPD profiles of multidrug-resistant coliform bacteria isolated from sewage samples of Ghaziabad City, India.**  
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