**Ứng dụng công nghệ sinh học trong thực tiễn**

(Cập nhật đến ngày 11/11/2022)

Công nghệ sinh học có ứng dụng trong bốn lĩnh vực công nghiệp chính, bao gồm chăm sóc sức khỏe (y tế), sản xuất cây trồng và nông nghiệp, sử dụng phi thực phẩm (công nghiệp) của cây trồng và các sản phẩm khác (ví dụ như nhựa phân hủy sinh học, dầu thực vật, nhiên liệu sinh học) và sử dụng môi trường.



Để hiểu rõ hơn Cục Thông tin KH&CN quốc gia xin giới thiệu một số bài nghiên cứu đã được xuất bản chính thức và các bài viết được chấp nhận đăng trên những cơ sở dữ liệu học thuật chính thống.

**1. Sciencedirect**

1. A review on decentralized wastewater treatment systems in India  
Chemosphere 4 April 2022 Volume 300 (Cover date: August 2022) Article 134462  
V. Geetha Varma, Swetti Jha, V. Ranjith  
<https://www.sciencedirect.com/science/article/pii/S0045653522009559/pdfft?md5=ba3d586455f9a24c9de39c6b7da3a215&pid=1-s2.0-S0045653522009559-main.pdf>

2. The effect of activated sludge treatment and catalytic ozonation on high concentration of ammonia nitrogen removal from landfill leachate  
Bioresource Technology 22 July 2022Volume 361 (Cover date: October 2022)Article 127668  
Yuchen YuanJiadong LiuSaleh Al-Farraj

<https://www.sciencedirect.com/science/article/pii/S096085242200997X/pdfft?md5=36d46440578dff9966439bf69993bcc3&pid=1-s2.0-S096085242200997X-main.pdf>

3. Efficient advanced treatment of coking wastewater using O3/H2O2/Fe-shavings process  
Journal of Environmental Chemical Engineering 2 February 2022 Volume 10, Issue 2 (Cover date: April 2022) Article 107307  
Run Yuan, Yu Xia, Xuwen He

<https://www.sciencedirect.com/science/article/pii/S2213343722001804/pdfft?md5=99ae5107bfdce3117df27b01373b848e&pid=1-s2.0-S2213343722001804-main.pdf>

4. Predicting and assessing the toxicity and ecological risk of seven widely used neonicotinoid insecticides and their aerobic transformation products to aquatic organisms  
Science of The Total Environment 28 July 2022 Volume 847 (Cover date: 15 November 2022) Article 157670  
Chao Shen, Xinglu Pan, Yongquan Zheng

<https://www.sciencedirect.com/science/article/pii/S0048969722047684/pdfft?md5=c5bd052ff9f70fb1776753a41073ce53&pid=1-s2.0-S0048969722047684-main.pdf>

5. Zero valent iron greatly improves sludge destruction and nitrogen removal in aerobic sludge digestion  
Chemical Engineering Journal 4 January 2022 Volume 433, Part 1 (Cover date: 1 April 2022) Article 134459  
Chen Wang, Wei Wei, Bing-Jie Ni

<https://www.sciencedirect.com/science/article/pii/S1385894721060290/pdfft?md5=34c539eeeb72885a2aaa21bfccd902cd&pid=1-s2.0-S1385894721060290-main.pdf>

6. The performance and mechanism of biochar-enhanced constructed wetland for wastewater treatment  
Journal of Water Process Engineering 27 December 2021 Volume 45 (Cover date: February 2022) Article 102522  
Lin-Lan Zhuang, Mengting Li, Jian Zhang

<https://www.sciencedirect.com/science/article/pii/S2214714421006097/pdfft?md5=5aa17b09bd55fa16df5b529ec396bae8&pid=1-s2.0-S2214714421006097-main.pdf>

7. Effect of magnetic field intensity on aerobic granulation and partial nitrification-denitrification performance  
Process Safety and Environmental Protection 28 February 2022 Volume 160 (Cover date: April 2022) Pages 859-867  
Yuanjun Liu, Liang Guo, Zonglian She

<https://www.sciencedirect.com/science/article/pii/S0957582022001902/pdfft?md5=8f7b41a3dc9930ee80806dc390354db4&pid=1-s2.0-S0957582022001902-main.pdf>

8. Direct microbial electron uptake as a mechanism for stainless steel corrosion in aerobic environments  
Water Research 5 May 2022 Volume 219 (Cover date: 1 July 2022) Article 118553  
Enze Zhou, Feng Li, Derek R. Lovley

<https://www.sciencedirect.com/science/article/pii/S0043135422005061/pdfft?md5=1d27bbc984f07e9a48426309b8aac814&pid=1-s2.0-S0043135422005061-main.pdf>

9. Aerobic oxidation of hydrocarbons using N-hydroxyphthalimide (NHPI) catalysts for cetane enhancement  
Fuel 19 May 2022 Volume 324, Part B (Cover date: 15 September 2022) Article 124563  
Maryam M. Al-Taher, Christos Kalamaras, Fatimah S. Alomar

<https://www.sciencedirect.com/science/article/pii/S0016236122014120/pdfft?md5=a750f97e6cf1f23177921c19105f985b&pid=1-s2.0-S0016236122014120-main.pdf>

10. Aerobic granular sludge cultivated from Fe-loaded activated carbon as carrier working low-strength wastewater conditions by bioreactor  
Chemosphere 4 July 2022 Volume 306 (Cover date: November 2022) Article 135532  
Dexin Lin, Xinzhi Li, Xuesong Yi

<https://www.sciencedirect.com/science/article/pii/S0045653522020252/pdfft?md5=9cada0fa87c04f7ab5bbbdb251318122&pid=1-s2.0-S0045653522020252-main.pdf>

11. Effect of modified microbial flocculant on membrane fouling alleviation in a hybrid aerobic granular sludge membrane system for wastewater reuse  
Separation and Purification Technology 10 March 2022Volume 290 (Cover date: 1 June 2022)Article 120819  
Bing ZhangXin MaoWenxin Shi

<https://www.sciencedirect.com/science/article/pii/S1383586622003768/pdfft?md5=86efcb9796ade2f50e051a7a04fbbfbe&pid=1-s2.0-S1383586622003768-main.pdf>

12. Facile fabrication of size-controlled Pd nanoclusters supported on Al2O3 as excellent catalyst for solvent-free aerobic oxidation of benzyl alcohol  
Applied Surface Science 1 February 2022 Volume 585 (Cover date: 30 May 2022) Article 152668  
Yanhua Xiao, Liang Liang, Zhiping Du

<https://www.sciencedirect.com/science/article/pii/S0169433222002501/pdfft?md5=c078ecb84e58e26de5864ba00c44a8e1&pid=1-s2.0-S0169433222002501-main.pdf>

13. Systematic development of extraction methods for quantitative microplastics analysis in soils using metal-doped plastics  
Environmental Pollution 12 August 2022 Volume 311 (Cover date: 15 October 2022) Article 119933  
Alissa H. Tophinke, Akshay Joshi, Denise M. Mitrano

<https://www.sciencedirect.com/science/article/pii/S0269749122011472/pdfft?md5=7146549c17455eb3df12e96000b14f10&pid=1-s2.0-S0269749122011472-main.pdf>

14. The role of nitrification inhibitors on the removal of antibiotics in livestock wastewater by aerobic biodegradation  
Science of The Total Environment 14 September 2021 Volume 806, Part 1 (Cover date: 1 February 2022) Article 150309  
Linyan Yang, Lin Zhu, Guomin Cao

<https://www.sciencedirect.com/science/article/pii/S0048969721053869/pdfft?md5=9ef6d69b1b2c5377cdb0466fa81fbd9e&pid=1-s2.0-S0048969721053869-main.pdf>

15. Floating treatment wetland integrated with sediment microbial fuel cell for low-strength surface water treatment  
Journal of Cleaner Production 7 September 2022 Volume 374 (Cover date: 10 November 2022) Article 134002  
Shuting Shen, Xiang Li, Xiwu Lu

<https://www.sciencedirect.com/science/article/pii/S0959652622035740/pdfft?md5=f61b76c3b3cdcbecfdfbb36aab61f6f1&pid=1-s2.0-S0959652622035740-main.pdf>

16. Elemental mercury (Hg0) removal from coal syngas using magnetic tea-biochar: Experimental and theoretical insights  
Journal of Environmental Sciences 2 February 2022 Volume 122 (Cover date: December 2022) Pages 150-161  
Adnan Raza Altaf, Yusuf G. Adewuyi, Fazeel Abid

<https://www.sciencedirect.com/science/article/pii/S1001074221004071/pdfft?md5=20cf0b037c97e298a46c9dd642a8a5e7&pid=1-s2.0-S1001074221004071-main.pdf>

17. Recycling of agricultural (orange and olive) bio-wastes into ecofriendly fertilizers for improving soil and garlic quality  
Resources, Conservation & Recycling Advances 4 May 2022 Volume 15 (Cover date: November 2022) Article 200083  
Panuccio MR, Marra F, Muscolo A  
<https://www.sciencedirect.com/science/article/pii/S2667378922000219/pdfft?md5=6dcbd28f3904f0be6e7f8043e56aa6d3&pid=1-s2.0-S2667378922000219-main.pdf>

18. Two dimensional MXenes as emerging paradigm for adsorptive removal of toxic metallic pollutants from wastewater  
Chemosphere 23 September 2021 Volume 287, Part 3 (Cover date: January 2022) Article 132319  
Tahir Rasheed, Fahmeeda Kausar, Fwzah H. Alshammari  
<https://www.sciencedirect.com/science/article/pii/S0045653521027910/pdfft?md5=d23d93897f9d8529a80bcb58b0b7d9cf&pid=1-s2.0-S0045653521027910-main.pdf>

19. Congo red recovery from water using green extraction solvents  
Water Resources and Industry 30 December 2021 Volume 27 (Cover date: June 2022) Article 100170  
Lorena Villar Blanco, Olalla González Sas, Begoña González de Prado  
<https://www.sciencedirect.com/science/article/pii/S2212371721000330/pdfft?md5=4510441e991a8d6700fec1533338a886&pid=1-s2.0-S2212371721000330-main.pdf>

20. Thermal energy recovery and valorisation of Delonix regia stem for biochar production  
Environmental Challenges 6 October 2022 Volume 9 (Cover date: December 2022) Article 100630  
Adewale George Adeniyi, Comfort A. Adeyanju, Abubakar Adegbola Raji  
<https://www.sciencedirect.com/science/article/pii/S266701002200186X/pdfft?md5=6c6b25b5f11e36c5594769172d6998ff&pid=1-s2.0-S266701002200186X-main.pdf>

21. Quantitative image analysis as a robust tool to assess effluent quality from an aerobic granular sludge system treating industrial wastewater  
Chemosphere 3 November 2021 Volume 291, Part 2 (Cover date: March 2022) Article 132773  
Joana G. Costa, Ana M. S. Paulo, Daniela P. Mesquita

<https://www.sciencedirect.com/science/article/pii/S0045653521032458/pdfft?md5=344020d14ab60f25342a35f53afb16a1&pid=1-s2.0-S0045653521032458-main.pdf>

22. Removal of pollutants from wastewater using coffee waste as adsorbent: A review  
Journal of Water Process Engineering 30 September 2022 Volume 49 (Cover date: October 2022) Article 103178  
Le-Le Kang, Ya-Nan Zeng, Zhen Fang  
<https://www.sciencedirect.com/science/article/pii/S2214714422006225/pdfft?md5=460c070500ff385362f23bdea249185a&pid=1-s2.0-S2214714422006225-main.pdf>

23. Microbial community and nitrogen transformation pathway in bioretention system for stormwater treatment in response to formulated soil medium  
Process Safety and Environmental Protection 29 March 2022 Volume 161 (Cover date: May 2022) Pages 594-602  
Gongduan Fan, Junkai Zhang, Jing Luo

<https://www.sciencedirect.com/science/article/pii/S0957582022002932/pdfft?md5=f1f4231f4bab6078b55f7cd5306a25cc&pid=1-s2.0-S0957582022002932-main.pdf>

24. Sulfur(IV) assisted oxidative removal of organic pollutants from source water  
Environmental Pollution 2 December 2021 Volume 294 (Cover date: 1 February 2022) Article 118625  
Alexandra Truzsi, János ElekIstván Fábián  
<https://www.sciencedirect.com/science/article/pii/S0269749121022077/pdfft?md5=c8dd4be303de505739525ecf6e77b126&pid=1-s2.0-S0269749121022077-main.pdf>

25. Development of advanced method based on nanoporous membranes for separation of pharmaceutical compounds from aqueous streams: Computational simulation and analysis  
Environmental Technology & Innovation6 September 2022Volume 28 (Cover date: November 2022)Article 102906

Sameer Alshehri, Ahmed Alobaida, Mohammed A. S. Abourehab  
<https://www.sciencedirect.com/science/article/pii/S2352186422003297/pdfft?md5=de8c65701ab7753adbaf2fc72a38f7fd&pid=1-s2.0-S2352186422003297-main.pdf>

26. Ammonia-nitrogen removal from water with gC3N4-rGO-TiO2 Z-scheme system via photocatalytic nitrification-denitrification process  
Environmental Research 29 November 2021 Volume 205 (Cover date: 1 April 2022) Article 112434  
Houfen Li, Yajie Cao, Xiuping Yue  
<https://www.sciencedirect.com/science/article/pii/S0013935121017357/pdfft?md5=7831b88b09800f4f546975f927372b75&pid=1-s2.0-S0013935121017357-main.pdf>

27. Kinetics of antimony biogeochemical processes under pre-definite anaerobic and aerobic conditions in a paddy soil  
Journal of Environmental Sciences 3 July 2021 Volume 113 (Cover date: March 2022) Pages 269-280  
Bingqing Xia, Yang Yang, Tongxu Liu

<https://www.sciencedirect.com/science/article/pii/S1001074221002369/pdfft?md5=1113ad351c4bef8a4f6bf9c545ec3b08&pid=1-s2.0-S1001074221002369-main.pdf>

28. Interrogating nitritation at a molecular level: Understanding the potential influence of Nitrobacter spp.  
Water Research 8 September 2022 Volume 224 (Cover date: 1 October 2022) Article 119074  
Lindsey Smoot, Jason Mellin,Erik R. Coats

<https://www.sciencedirect.com/science/article/pii/S004313542201020X/pdfft?md5=60157274511717f64e2d65e797fbf9b3&pid=1-s2.0-S004313542201020X-main.pdf>

29. Fe- and SiFe-pillared clays from a mineralogical waste as adsorbents of ciprofloxacin from water  
Applied Clay Science 26 February 2022 Volume 220 (Cover date: April 2022) Article 106458  
Angela Andrea Maggio, Maria Eugenia Roca Jalil, Miria Teresita Baschini  
<https://www.sciencedirect.com/science/article/pii/S0169131722000539/pdfft?md5=fd78f8b4aca73fe843fa8b9ef5150968&pid=1-s2.0-S0169131722000539-main.pdf>

30. Advances in the application of immobilized enzyme for the remediation of hazardous pollutant: A review  
Chemosphere 23 March 2022 Volume 299 (Cover date: July 2022) Article 134390  
P. R. Yaashikaa, M. Keerthana Devi, P. Senthil Kumar  
<https://www.sciencedirect.com/science/article/pii/S0045653522008839/pdfft?md5=87d2c451763e149ae5b5e652386d75c4&pid=1-s2.0-S0045653522008839-main.pdf>

31. Study on personalized microbial formulation during high-temperature aerobic fermentation of different types of food wastes  
Science of The Total Environment 29 December 2021 Volume 814 (Cover date: 25 March 2022) Article 152561  
Dandan Liu, Xinxin Ma, Yiying Jin

<https://www.sciencedirect.com/science/article/pii/S0048969721076397/pdfft?md5=c4f4e577caf9d932b63afe192a0ffa34&pid=1-s2.0-S0048969721076397-main.pdf>

32. Catalytic aerobic oxidation of P(I)/P(III) into P(V) over PdNi10 as a low-cost alternative catalyst rivaling Pd  
Chemical Engineering Journal 11 May 2022 Volume 446, Part 2 (Cover date: 15 October 2022) Article 136892  
Huan Su, Chao Shan, Bingcai Pan

<https://www.sciencedirect.com/science/article/pii/S1385894722023865/pdfft?md5=a74f2636fad586591d5fbe9e1414413d&pid=1-s2.0-S1385894722023865-main.pdf>

33. Tailored design of MXene-like 2D MOF derived carbon/Fe3O4 Fenton-like catalysts towards effective removal of contaminants via size-exclusion effect  
Separation and Purification Technology 9 July 2022 Volume 299 (Cover date: 15 October 2022) Article 121694  
Jingqi Ruan, Ming Zhang, Weichuan Qiao  
<https://www.sciencedirect.com/science/article/pii/S1383586622012503/pdfft?md5=e681dbf890302ba973a703efd81e2dec&pid=1-s2.0-S1383586622012503-main.pdf>

34. Biological nitrate removal from a drinking water supply with an aerobic granular sludge technology: An environmental and economic assessment  
Journal of Cleaner Production 8 July 2022 Volume 367 (Cover date: 20 September 2022) Article 133059  
Fernando Alguacil-Duarte, Francisco González-Gómez. Mercedes Romero-Gámez

<https://www.sciencedirect.com/science/article/pii/S095965262202649X/pdfft?md5=5c357ff6703b632dda4de26238ad0cf8&pid=1-s2.0-S095965262202649X-main.pdf>

35. The botanical biofiltration of volatile organic compounds and particulate matter derived from cigarette smoke  
Chemosphere 9 February 2022 Volume 295 (Cover date: May 2022) Article 133942  
Angela L. Morgan, Fraser R. Torpy, Thomas Pettit  
<https://www.sciencedirect.com/science/article/pii/S0045653522004350/pdfft?md5=afbfad829b5b0176c12933fcdac03a37&pid=1-s2.0-S0045653522004350-main.pdf>

36. Self-templated fabrication of CoMoO4-Co3O4 hollow nanocages for efficient aerobic oxidative desulfurization  
Applied Surface Science 18 December 2021 Volume 579 (Cover date: 30 March 2022) Article 152251  
Junzhen Guo, Liang Chu, Ge Wang

<https://www.sciencedirect.com/science/article/pii/S0169433221032797/pdfft?md5=8a26b748fb2bb012792ce7916e1df006&pid=1-s2.0-S0169433221032797-main.pdf>

37. Storage and reactivation of aerobic granular sludge: A review  
Fuel 12 September 2022 Volume 330 (Cover date: 15 December 2022) Article 125536  
Karn Tanavarotai, Hesam Kamyab, Shahabaldin Rezania

<https://www.sciencedirect.com/science/article/pii/S0016236122023699/pdfft?md5=029ae4b483b36b545e800e12673a169b&pid=1-s2.0-S0016236122023699-main.pdf>

38. Degradation of organic chemicals in aqueous system through ferrate-based processes: A review  
Journal of Environmental Chemical Engineering 4 October 2022 Volume 10, Issue 6 (Cover date: December 2022) Article 108706  
Tianci He, Beihai Zhou, Rongfang Yuan  
<https://www.sciencedirect.com/science/article/pii/S2213343722015792/pdfft?md5=f7b54da0ef5455306cc4850c34fde49a&pid=1-s2.0-S2213343722015792-main.pdf>

39. Simulation and experimental verification of nitrite-oxidizing bacteria inhibition by alternating aerobic/anoxic strategy  
Bioresource Technology 6 June 2022 Volume 358 (Cover date: August 2022) Article 127441  
Xiaodan Gu, Wenhui Huang, Miao Zhang

<https://www.sciencedirect.com/science/article/pii/S0960852422007702/pdfft?md5=755abb6371981d00b310dccfe8a03e33&pid=1-s2.0-S0960852422007702-main.pdf>

40. Unveiling the distinctive role of titanium dioxide nanoparticles in aerobic sludge digestion  
Science of The Total Environment 23 November 2021 Volume 813 (Cover date: 20 March 2022) Article 151872  
Chen Wang, Wei Wei, Bing-Jie Ni  
<https://www.sciencedirect.com/science/article/pii/S0048969721069485/pdfft?md5=0981d7c1fda4f967e456705b388ef96e&pid=1-s2.0-S0048969721069485-main.pdf>

43. Wastewater treatment plants as reservoirs and sources for antibiotic resistance genes: A review on occurrence, transmission and removal  
Journal of Water Process Engineering 20 January 2022 Volume 46 (Cover date: April 2022) Article 102539  
Yu-Xi Gao, Xing Li, Zhong-Xing Zhang  
<https://www.sciencedirect.com/science/article/pii/S2214714421006267/pdfft?md5=1be87f94268aaba065a3ab149e0458df&pid=1-s2.0-S2214714421006267-main.pdf>

44. Extraction and separation of petroleum pollutants from oil-based drilling cuttings using methanol/n-hexane solvent  
Process Safety and Environmental Protection 22 October 2022 Volume 168 (Cover date: December 2022) Pages 760-767  
Yuansi Hu, Xinglong Chen, Qibin Li  
<https://www.sciencedirect.com/science/article/pii/S0957582022009144/pdfft?md5=3602bc3f802653d440b1acdac976b047&pid=1-s2.0-S0957582022009144-main.pdf>

45. Synthesis and modifications of g-C3N4-based materials and their applications in wastewater pollutants removal  
Journal of Environmental Chemical Engineering 17 October 2022 Volume 10, Issue 6 (Cover date: December 2022) Article 108782  
Jiangna Xing, Na Wang, Hongxun Hao  
<https://www.sciencedirect.com/science/article/pii/S2213343722016554/pdfft?md5=8da32bffc01c86dc81de6b548436de77&pid=1-s2.0-S2213343722016554-main.pdf>

46. Polymeric photocatalytic membrane: An emerging solution for environmental remediation  
Chemical Engineering Journal 1 March 2022 Volume 438 (Cover date: 15 June 2022) Article 135575  
Sukanya Kundu, Niranjan Karak  
<https://www.sciencedirect.com/science/article/pii/S1385894722010774/pdfft?md5=d29674de5e604630b507d39df0446fa4&pid=1-s2.0-S1385894722010774-main.pdf>

47. Carbon nanotube based magnetic composites for decontamination of organic chemical pollutants in water: A review  
Applied Surface Science Advances 16 July 2022 Volume 10 (Cover date: August 2022) Article 100270  
Nityananda Agasti, Vinay Gautam, Raghabendra Samantaray  
<https://www.sciencedirect.com/science/article/pii/S2666523922000605/pdfft?md5=1e73a48fa5a458fce727bac9254147b5&pid=1-s2.0-S2666523922000605-main.pdf>

48. Enhanced nitrogen removal from low COD/TIN mainstream wastewater in a continuous plug-flow reactor via partial nitrification, simultaneous anammox and endogenous denitrification (PN-SAED) process  
Bioresource Technology 11 December 2021 Volume 345 (Cover date: February 2022) Article 126539  
Yan Feng, Bo Wang, Qiong Zhang

<https://www.sciencedirect.com/science/article/pii/S0960852421018812/pdfft?md5=adc5aa6d7fd63d84bb5f79bd77acc175&pid=1-s2.0-S0960852421018812-main.pdf>

49. Laboratory-scale study of a biodegradable microplastic polylactic acid stabilizing aerobic granular sludge system  
Environmental Pollution 20 April 2022 Volume 306 (Cover date: 1 August 2022) Article 119329  
Xin Song, Shiquan Sun, Guanlong Yu  
<https://www.sciencedirect.com/science/article/pii/S0269749122005437/pdfft?md5=492db52865035cf0314ddb2ac65629be&pid=1-s2.0-S0269749122005437-main.pdf>

50. Enhanced pollutants removal and high-value cell inclusions accumulation with Fe2+ in heavy oil refinery treatment system using Rhodopseudomonas and Pseudomonas  
Chemosphere 12 January 2022 Volume 294 (Cover date: May 2022) Article 133520  
Yujie Sun, Xiangkun Li, Gaige Liu  
<https://www.sciencedirect.com/science/article/pii/S0045653522000091/pdfft?md5=3562ee243e9801da0816bb97035d3191&pid=1-s2.0-S0045653522000091-main.pdf>

51. Engineering hollow mesoporous silica supported cobalt molybdate catalyst by dissolution-regrowth strategy for efficiently aerobic oxidative desulfurization  
Fuel 21 June 2022 Volume 325 (Cover date: 1 October 2022) Article 124755  
Xin An, Linhua Zhu, Huaming Li

<https://www.sciencedirect.com/science/article/pii/S0016236122016015/pdfft?md5=3dff1226d59318432dbdb34d1ec3da29&pid=1-s2.0-S0016236122016015-main.pdf>

52. A novel approach to estimate and control denitrification performance in activated sludge systems with respirogram technology  
Journal of Environmental Sciences 1 February 2022 Volume 121 (Cover date: November 2022) Pages 112-121  
Zhihua Li, Yali Zhang, Ruina Zhang

<https://www.sciencedirect.com/science/article/pii/S1001074221003764/pdfft?md5=17bd8321151b723169a73b534c696c3a&pid=1-s2.0-S1001074221003764-main.pdf>

53. One-pot synthesis of graphene hydrogel/M (M: Cu, Co, Ni) nanocomposites as cathodes for electrochemical removal of rifampicin from polluted water  
Environmental Research 5 July 2022 Volume 214, Part 1 (Cover date: November 2022) Article 113789  
Masoud Ebratkhahan, Mahmoud Zarei, Önder Metin  
<https://www.sciencedirect.com/science/article/pii/S0013935122011161/pdfft?md5=12658d553a661d23e1fb56efcd5e7d15&pid=1-s2.0-S0013935122011161-main.pdf>

54. Micro and nano bubbles promoted biofilm formation with strengthen of COD and TN removal synchronously in a blackened and odorous water  
Science of The Total Environment 4 May 2022 Volume 837 (Cover date: 1 September 2022) Article 155578  
Ben Chen, Sining Zhou, Hui Lu

<https://www.sciencedirect.com/science/article/pii/S0048969722026742/pdfft?md5=ab91d5cd130c9a282316af68d91f7a16&pid=1-s2.0-S0048969722026742-main.pdf>

55. Metal organic frameworks as versatile platforms for wastewater remediation  
Materials Today: Proceedings 16 March 2022 Volume 57, Part 2 (Cover date: 2022) Pages 846-850  
Kritika Rajput, Shweta Sareen, Manish Dev Sharma  
<https://www.sciencedirect.com/science/article/pii/S2214785322010896/pdfft?md5=91d4d696fb72c67647a41a5cacf5cd51&pid=1-s2.0-S2214785322010896-main.pdf>

56. Sonocatalytic degradation of ciprofloxacin and organic pollutant by 1T/2H phase MoS2 in Polyvinylidene fluoride nanocomposite membrane  
Chemosphere 22 September 2022 Volume 308, Part 3 (Cover date: December 2022) Article 136571  
Ranjith Kumar Dharman, Gowthami Palanisamy, Tae Hwan Oh  
<https://www.sciencedirect.com/science/article/pii/S0045653522030648/pdfft?md5=2bd50392dd7e5655cca20167f483422d&pid=1-s2.0-S0045653522030648-main.pdf>

57. A quantified nitrogen metabolic network by reaction kinetics and mathematical model in a single-stage microaerobic system treating low COD/TN wastewater  
Water Research 14 September 2022 Volume 225 (Cover date: 15 October 2022) Article 119112  
Zhenju Sun, Jianzheng Li, Jia Meng

<https://www.sciencedirect.com/science/article/pii/S0043135422010582/pdfft?md5=615ef664c443d86552228c386c904890&pid=1-s2.0-S0043135422010582-main.pdf>

58. Application of biochar for the adsorption of organic pollutants from wastewater: Modification strategies, mechanisms and challenges  
Separation and Purification Technology 11 August 2022 Volume 300 (Cover date: 1 November 2022) Article 121925  
Bingbing Qiu, Qianni Shao, Huaqiang Chu  
<https://www.sciencedirect.com/science/article/pii/S1383586622014800/pdfft?md5=775f62dc021be9d855134767bda32b5a&pid=1-s2.0-S1383586622014800-main.pdf>

59. The pollutant elimination performance and bacterial communities of unpowered baffle rural sewage reactor filtered with construction wastes  
Journal of Cleaner Production 17 August 2022 Volume 371 (Cover date: 15 October 2022) Article 133630  
Wenkai Li, Ming Lei, Hongwei Lei  
<https://www.sciencedirect.com/science/article/pii/S0959652622032085/pdfft?md5=9e46a30b196529435367850f91e74553&pid=1-s2.0-S0959652622032085-main.pdf>

60. Investigation of the aerobic biochemical treatment of food waste: A case study in Zhejiang and Jiangsu provinces in China  
Science of The Total Environment 17 September 2021 Volume 806, Part 1 (Cover date: 1 February 2022) Article 150414  
Dandan Liu, Xinxin Ma, Yiying Jin  
<https://www.sciencedirect.com/science/article/pii/S0048969721054917/pdfft?md5=44cdf6e93ec5d435e12ab1405cb0584f&pid=1-s2.0-S0048969721054917-main.pdf>

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