

LIST OF PUBLICATIONS IN INTERNATIONAL JOURNALS

2020

1. A. Samui, **S. K. Sahu**. Integration of α -amylase into covalent organic framework for highly efficient biocatalyst. **Microporous and Mesoporous Materials**, 291, 109700.
2. C. Sarkar, K. Anuvrat, S. Garai, **S. K. Sahu**, J. Chakraborty. One pot method to synthesize three-dimensional porous hydroxyapatite nanocomposite for bone tissue engineering. **Journal of Porous Materials**, 27 (1), 225-235.
3. A. Samui, N. Kesharwani, C. Haldar, **S. K. Sahu**. Fabrication of nanoscale covalent porous organic polymer: An efficacious catalyst for Knoevenagel condensation. **Microporous and Mesoporous Materials**, 299, 110112.
4. S. C. Pandey, A. Kumar, **S. K. Sahu**. Single Step Green Synthesis of Carbon Dots from *Murraya koenigii* leaves; A Unique Turn-off Fluorescent contrivance for Selective Sensing of Cd (II) ion. **Journal of Photochemistry and Photobiology A: Chemistry**, 112620.
5. R. Kumari, **S. K. Sahu**. Effect of Solvent-Derived Highly Luminescent Multicolor Carbon Dots for White-Light-Emitting Diodes and Water Detection. **Langmuir**, 36 (19), 5287-5295.
6. A. Samui, **S. K. Sahu**. Characterizations of MOFs for biomedical application. **Metal-Organic Frameworks for Biomedical Applications**. 277-295.

2019

7. A. Samui, A. Ray Chowdhuri, **S. K. Sahu**. Lipase Immobilized Metal-Organic Frameworks as Remarkably Biocatalyst for Ester Hydrolysis: A One Step Approach for Lipase Immobilization. **ChemistrySelect**, 2019, 4, 3745-3751.
8. D. Laha, K. Pal, A. Ray Chowdhuri, P. K. Parida, **S. K. Sahu**, K. Jana, P. Karmakar. Fabrication of curcumin-loaded folic acid-tagged metal organic framework for triple negative breast cancer therapy in *in vitro* and *in vivo* systems. **New J. Chem.**, 2019, 43, 217-229.
9. C. Sarkar, **S. K. Sahu**, A. Sinha, J. Chakraborty, S. Garai. Facile synthesis of carbon fiber reinforced polymer-hydroxyapatite ternary composite: A mechanically strong bioactive bone graft. **Materials Science & Engineering C**, 97, 2019, 388-396.

10. A. Samui, K. Pal, P. Karmakar, **S. K. Sahu**. In situ synthesized lactobionic acid conjugated NMOFs, a smart material for imaging and targeted drug delivery in hepatocellular carcinoma. **Materials Science & Engineering C**, 98, 2019, 772-781.
11. R. Kumari, K. Pal, P. Karmakar, **S. K. Sahu**. pH-Responsive Mn-Doped Carbon Dots for White-Light-Emitting Diodes, Fingerprinting, and Bioimaging. **ACS Applied Nano Materials**, 2 (9), 5900-5909.
12. A. Kumar, A. Kumari, S. Asu, D. Laha, **S. K. Sahu**. Synthesis of CDs from β -Cyclodextrin for Smart Utilization in Visual Detection of Cholesterol and Cellular Imaging. **ChemistrySelect** 4 (48), 14222-14227.
13. C. Sarkar, A. R. Chowdhuri, S. Garai, J. Chakraborty, **S. K. Sahu**. Three-dimensional cellulose-hydroxyapatite nanocomposite enriched with dexamethasone loaded metal-organic framework: a local drug delivery system for bone tissue engineering. **Cellulose** 26 (12), 7253-7269.
14. P. Mukherjee, A. Kumar, K. Bhamidipati, N. Puvvada, **S. K. Sahu**. Facile Strategy to Synthesize Magnetic Upconversion Nanoscale Metal–Organic Framework Composites for Theranostics Application. **ACS Applied Bio Materials** 3 (2), 869-880.

2018

15. R. Kumari, **S. K. Sahu***. Synthesis of Longer-Wavelength-Emissive Carbon Quantum Dots for WLEDs and Investigation of Their Photoluminescence Properties. **ChemistrySelect**, 2018, 3, 12998– 13005.
16. A. Samui, **S. K. Sahu***, One-pot synthesis of microporous nanoscale metal organic frameworks conjugated with laccase as a promising biocatalyst, **New J. Chem.**, 2018, 42, 4192.
17. A. Kumar, A. Ray Chowdhuri, A. Kumari, **S. K. Sahu***, IRMOF-3: A fluorescent nanoscale metal organic frameworks for selective sensing of glucose and Fe (III) ions without any modification, **Materials Science & Engineering C**, 2018, 92 913–921.
18. C. Sarkar, A. Ray Chowdhuri, A. Kumar, D. Laha, S. Garai, J. Chakraborty, **S. K. Sahu***, One pot synthesis of carbon dots decorated carboxymethyl cellulose hydroxyapatite nanocomposite for drug delivery, tissue engineering and Fe³⁺ ion sensing, **Carbohydrate Polymers**, 2018, 181 710–718.
19. M. Kumar, A. Kumar, Md. S. H. Faizi, S. Kumar, M. K. Singh, **S. K. Sahu**, S. Kishor, R. P. John, A selective ‘turn-on’ fluorescent chemosensor for detection of Al³⁺ in aqueous medium: Experimental and theoretical studies, **Sensors and Actuators B**, 2018, 260 888–899.

20. A. Kumari, A. Kumar, **S. K. Sahu**, S. Kumar. Synthesis of green fluorescent carbon quantum dots using wastepolyolefins residue for Cu²⁺-ion sensing and live cell imaging. **Sensors and Actuators B: Chemical**, 2018, 254, 197–205.
21. S. Chandra, K. Majee, T. K. Mahto, S. K. Padhi, **S. K. Sahu***. Fabrication of a Hierarchical TiO₂ microsphere/Carbon dots photocatalyst for oxygen evolution and dye degradation under Visible Light. **Journal of Nanoscience and Nanotechnology**, 2018, 18(2):1057-1065.

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24. A. Ray Chowdhuri, D. Laha, S. Chandra, P. Karmakar, **S. K. Sahu***. Synthesis of multifunctional upconversion NMOFs for targeted antitumor drug delivery and imaging in triple negative breast cancer cells. **Chemical Engineering Journal**, 2017, 319, 200–211.
25. S. Chandra, A. Ray Chowdhuri, T. K. Mahto, D. Laha, **S. K. Sahu***. Sulphur and nitrogen doped carbon dots: A facile synthetic strategy for multicolour bioimaging, tiopronin sensing, and Hg²⁺ ion detection. **Nano-Structures & Nano-Objects**, 2017, 12, 10-18.
26. M. Kumar, A. Kumar, M. K. Singh, **S. K. Sahu**, R. P. John, A novel benzidine based Schiff base “turn-on” fluorescent chemosensor for selective recognition of Zn²⁺. **Sensors and Actuators B: Chemical**, 241, 2017, 1218.
27. A. Kumar, A Ray Chowdhuri, D. Laha, T. K. Mahto, P. Karmakar, **S. K. Sahu***. Green synthesis of carbon dots from *Ocimum sanctum* for effective fluorescent sensing of Pb²⁺ ions and live cell imaging. **Sensors and Actuators B: Chemical**, 242, 2017, 679–686
28. S. Chandra, A. Ray Chowdhuri, T. K. Mahto, **S. K. Sahu***. Nanostructured Fe₃O₄@Fe₂O₃/carbon dots heterojunction for efficient photocatalyst under visible light. **Journal of Nanoscience and Nanotechnology**, 17, 2017, 1116.

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29. A. Ray Chowdhuri, D. Laha, S. Pal, P. Karmakar, **S. K. Sahu***, One-pot synthesis of folic acid encapsulated upconversion nanoscale metal organic frameworks for targeting, imaging and pH responsive drug release. **Dalton Trans.**, 2016, 45, 18120.

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33. T. K. Mahto, R. Jain, S. Chandra, D. Roy, V. Mahto, **S. K. Sahu***, Single step synthesis of sulfonic group bearing graphene oxide: A promising carbo-nano material for biodiesel production. **Journal of Environmental Chemical Engineering**, 2016, 4, 2933.
34. A. Ray Chowdhuri, T. Singh, S. K. Ghosh, **S. K. Sahu***, Carbon Dots Embedded Magnetic Nanoparticles @Chitosan @Metal Organic Framework as a Nanoprobe for pH Sensitive Targeted Anticancer Drug Delivery. **ACS Appl. Mater. Interfaces** 2016, 8, 16573.
35. A. Ray Chowdhuri, D. Bhattacharya, **S. K. Sahu***, Magnetic nanoscale metal organic frameworks for potential targeted anticancer drug delivery, imaging and MRI contrast agent. **Dalton Trans.**, 2016, 45, 2963.
36. T. K. Mahto, A. Ray Chowdhuri, B. Sahoo, **S. K. Sahu***, Polyaniline functionalized magnetic mesoporous nanocomposite: A smart material for the immobilization of lipase. **Polymer Composites** 2016, 37, 1152.
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38. D. Bhattacharya, B. Behera, **S. K. Sahu**, R. Ananthakrishnan, T. K. Maiti and P. Pramanik, Design of Dual Stimuli Responsive Polymer Modified Magnetic Nanoparticles for Targeted Anti-Cancer Drug Delivery and Enhanced MR Imaging, **New J. Chem.**, 2016, 40, 545.

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41. A. Ray Chowdhuri, S. Tripathy, S. Chandra, S. Roy, **S. K. Sahu***. A ZnO decorated chitosan–graphene oxide nanocomposite shows significantly enhanced antimicrobial activity with ROS generation. **RSC Advances** 2015, 5, 49420.
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55. **S. K. Sahu**, S. Maiti, A. Pramanik , S. K. Ghosh, P. Pramanik. Controlling the Thickness of Polymeric Shell on Magnetic Nanoparticles Loaded with Doxorubicin for Targeted Delivery and MRI Contrast Agent. **Carbohydrate polymers** 2011, 87, 2593.

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