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List of Publications in International Journals

1. Sameena Begum, Sarika Yadav, **Kurugundla Gopi Krishna**, Nagaraju Pothukanuri, "Thin film gas sensors based on NiO and NiO-ZnO-CuO mixed metal oxides for the detection of benzene under ambient conditions" ***Journal of Materials Science: Materials in Electronics***, 2026. **(IF: 2.8) (SCIE)** https://doi.org/10.1007/s10854-026-16694-2

2. Manasa Pantrangi, Eric Ashalley, Wail Ahmed, Mohammed Kamal Hadi, Umer Younis, Nisha Singh, Yue Zhang, **Kurugundla Gopi Krishna**, Fen Ran, Liang Pan, Zhiming Wang, "Exploring the potential of transition metal disulphate grafted carbon matrix composite anode material for high-performance lithium-ion batteries" ***Journal of Energy Storage***, 2025. **(IF: 9.8) (SCIE)** https://doi.org/10.1016/j.est.2025.115878

3. **Kurugundla Gopi Krishna**, Saidireddy Parne, Nagaraju Pothukanuri, "Room Temperature Benzene Gas Sensing with Spinel Copper Ferrite and Copper Cerium Oxide Nanocomposites" ***Microchemical Journal***, 2025. **(IF: 5.1) (SCIE)** https://doi.org/10.1016/j.microc.2025.114278

4. **Kurugundla Gopi Krishna**, Saidireddy Parne, Nagaraju Pothukanuri, "$ZnFe_2O_4$ and $ZnCuFe_2O_4$ Spinel Nanoferrites as Efficient Isopropanol Gas Sensors" ***Inorganic Chemistry Communications***, 2025. **(IF: 5.4) (SCIE)** https://doi.org/10.1016/j.inoche.2025.114051

5. Sarika Yadav, Sameena Begum, Swathi M, **Kurugundla Gopi Krishna**, Jai Kishan Ojha, G R Turpu, Nagaraju Pothukanuri, "Synthesis and characterization of p-CuO/n-ZnO heterostructure composite thin films for the detection of formaldehyde gas" ***Journal of Physics: Condensed Matter***, 2024. **(IF: 2.8) (SCIE)** 10.1088/1361-648X/ad8f23

6. Sarika Yadav, Sameena Begum, M. Swathi Reddy, **Kurugundla Gopi Krishna**, G R Turpu, Vijaya Kumar Yelsani, Nagaraju Pothukanuri, "Facile synthesis and characterization of spray deposited ZnO-CuO nanocomposite thin films for the detection of xylene" ***Journal of Materials Science: Materials in Electronics***, 2024. **(IF: 2.8) (SCIE)** https://doi.org/10.1007/s10854-024-13724-9

7. Bodicherla Naresh, TVM Sreekanth, **Kurugundla Gopi Krishna**, K Sunil Kumar, CN Suma, Kisoo Yoo, Jonghoon Kim, "Enhanced Ammonia Detection Using rGO-Wrapped $Zn_3V_2O_8$ Nanostructures" ***Sensors and Actuators A: Physical***, 2024. **(IF: 4.1) (SCIE)** https://doi.org/10.1016/j.sna.2024.115928

8. Godavarti Umadevi, **Kurugundla Gopi Krishna**, Vishwanath Dattu Mote, "Green Synthesis of $ZnCeO_2$ and $ZnCuCeO_2$ Nanocomposites for Enhanced Gas Sensing" ***Journal of Materials Science: Materials in Electronics***, 2024. **(IF: 2.8) (SCIE)** https://doi.org/10.1007/s10854-024-13285-x

9. **Kurugundla Gopi Krishna**, Saidireddy Parne, Nagaraju Pothukanuri, Damodar Reddy Edla, "Optimized n-Butanol Sensing Performance of $ZnCeO_2$ and $ZnCuCeO_2$ Nanocomposites at Room Temperature" ***ECS Journal of Solid-State Science and Technology***, 2024. **(IF: 1.8) (SCIE)** 10.1149/2162-8777/ad7b72

10. Ruchika Thayil, **Kurugundla Gopi Krishna**, Amaravathi Chinthamreddy, Saidi Reddy Parne, "Exploring the multifunctionality of MoS_2 and $MoSe_2$ nanostructures" ***Microchemical Journal***, 2024. **(IF: 4.9) (SCIE)** https://doi.org/10.1016/j.microc.2024.111175

11. Godavarti Umadevi, **Kurugundla Gopi Krishna**, "Camellia sinensis-mediated green synthesis of ZnO nanoparticles" ***Sensors and Actuators A: Physical***, 2024. **(IF: 4.1) (SCIE)** https://doi.org/10.1016/j.sna.2024.115479

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13. Murali Ankinapalli, Harish G. S, **Kurugundla Gopi Krishna**, Charan Kuchi, Sowjanya Munga, P. Sreedhara Reddy, "Eu and Ni Co-Doped ZnS Nanoparticles for Ammonia Gas Detection" ***ECS Journal of Solid-State Science and Technology***, 2024. **(IF: 1.8) (SCIE)** 10.1149/2162-8777/ad34fb

14. Ruchika Thayil, **Kurugundla Gopi Krishna**, Sudhir Cherukulappurath, Velavan Kathirvelu, Saidi Reddy Parne, "MoS_2 nanocomposites for enhanced toluene sensing" ***Surfaces and Interfaces***, 2024. **(IF: 5.7) (SCIE)** https://doi.org/10.1016/j.surfin.2024.104134

15. E. Praveen Kumar, N. Chanakya, Ayesha Siddiqua, **Kurugundla Gopi Krishna**, et al., "MWO_4 nanostructures for toluene detection" ***Sensors and Actuators A: Physical***, 2024. **(IF: 4.1) (SCIE)** https://doi.org/10.1016/j.sna.2024.115094

16. S. L. Bhise, L. H. Kathwate, G. Umadevi, **Kurugundla Gopi Krishna**, et al. "Zn-doped CuO nanostructure thin films for benzene sensing" ***Journal of Materials Science: Materials in Electronics***, 2024. **(IF: 2.8) (SCIE)** https://doi.org/10.1007/s10854-023-11780-1

17. **Kurugundla Gopi Krishna**, Saidireddy Parne, Nagaraju Pothukanuri, "Optimizing Gas Sensing Properties of Fe-Loaded Indium Zinc Oxide Nanocomposite" ***ECS Journal of Solid-State Science and Technology***, 2023. **(IF: 1.8) (SCIE)** 10.1149/2162-8777/ad1207

18. **Kurugundla Gopi Krishna**, Saidireddy Parne, Nagaraju Pothukanuri, "ZnO/CdO island-like porous nanocomposite as an ultra-sensitive BTX sensor" ***Surfaces and Interfaces***, 2023. **(IF: 5.7) (SCIE)** https://doi.org/10.1016/j.surfin.2023.103631

19. **Kurugundla Gopi Krishna**, Saidireddy Parne, Nagaraju Pothukanuri, "Heterojunction n-ZnO/p-CuO nanosheets for n-butanol detection" ***Journal of Material Science***, 2023. **(IF: 3.5) (SCIE)** https://doi.org/10.1007/s10853-023-08997-0

20. **Kurugundla Gopi Krishna**, Saidireddy Parne, Nagaraju Pothukanuri, "Low-cost ternary metal oxide nanocomposites for formaldehyde sensing" ***Physica Scripta***, 2023. **(IF: 2.6) (SCIE)** 10.1088/1402-4896/acfa37

21. D. Rajasekhar, Bodicherla Naresh, V. Madhavi, **Kurugundla Gopi Krishna**, et al. "Hierarchical $NiCo_2O_4$/NiO mixed nanofibers" ***Inorganic Chemistry Communications***, 2023. **(IF: 4.4) (SCIE)** https://doi.org/10.1016/j.inoche.2023.111405

22. **Kurugundla Gopi Krishna**, Saidireddy Parne, Nagaraju Pothukanuri, "Facile ZnO/TiO_2 nanocomposite synthesis for acetone sensing" ***Materials Science & Engineering B***, 2023. **(IF: 3.9) (SCIE)** https://doi.org/10.1016/j.mseb.2023.116734

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24. **Kurugundla Gopi Krishna**, Umadevi Godavarthi, Saidireddy Parne, Nagaraju Pothukanuri, "ZnO-based gas sensors: A critical review" ***Journal of Materials Chemistry C***, 2023. **(IF: 8.067) (SCIE)** https://doi.org/10.1039/D2TC04690C

25. Mohan Reddy Pallavolu, **Kurugundla Gopi Krishna**, et al. "Cu-doped Co_3O_4@carbon nanocomposite supercapacitors" ***Journal of Industrial and Engineering Chemistry***, 2022. **(IF: 6.76) (SCIE)** https://doi.org/10.1016/j.jiec.2022.09.033

26. **Kurugundla Gopi Krishna**, Saidireddy Parne, and Nagaraju Pothukanuri. "Nanostructured Metal Oxide Semiconductor-Based Gas Sensors: A Review." ***Sensors and Actuators A: Physical***, 2022. **(IF: 4.291) (SCIE)** https://doi.org/10.1016/j.sna.2022.113578

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30. **Kurugundla Gopi Krishna**, L. Krishna Bharat, and Jae Su Yu. "Energy Transfer and Luminescence Properties of Sr_3SiO_5: $Ce^{3+,}$ Dy^{3+}" ***Ceramics International***, 2017. **(IF: 5.532) (SCIE)** https://doi.org/10.1016/j.ceramint.2016.11.065

International Conferences

1. **Kurugundla Gopi Krishna**, Saidi Reddy Parne, P. Nagaraju, "Green synthesis of ZnO/NiO nanocomposites using *Camellia sinensis* to generate an efficient gas sensing platform for ammonia detection," *International Conference on Emerging Multifunctional Materials and Devices for Sustainable Technologies (IEMDST-2024),* **National Institute of Technology Warangal**, 4–5 July 2024.

2. **Kurugundla Gopi Krishna**, L. Krishna Bharat, and Jae Su Yu, "Fabrication and luminescent properties of Sr_3SiO_5 phosphors for near-UV based WLEDs," *Korean Physical Society Conference,* 19–21 October 2016, Kimdaejung Convention Centre, Gwangju, South Korea.