Publication

JOURNALS

1. **S. Kumar**, A. Chakraborty, J. R. Gomez Quispe, R. Mitra, S. Barala, P. A. D. S. Autreto, C. S. Tiwary, K. Biswas, and M. Kumar, AlMnPdPtAu Quasicrystal Modulated Carbon Nanotubes for H_2 Sensors: Experimental and DFT Computational Analysis, ***ACS Applied Materials and Interface,*** *17 (14), 21670–21681* (2025). https://doi.org/10.1021/acsami.5c00924

2. **S. Kumar**, M. Hojamberdiev, A. Chakraborty, R. Mitra, R. Chaurasiya, M. Kwoka, C. S. Tiwary, K. Biswas, and M. Kumar, Quasicrystal Nanosheet/α-Fe_2O_3 Heterostructure-Based Low Power NO_2 Sensors: Experimental and DFT Studies, ***ACS Applied Materials and Interfaces***, 16(13), 16687–16698, (2024). https://doi.org/10.1021/acsami.4c00201

3. **S. Kumar**, R. Mitra, S. Barala, A. Kumar, M. Kwoka, K. Biswas, and M. Kumar, Resistance-driven low power H_2S sensors based on MWCNT@CuO heterojunction, ***Journal of Applied Physics,*** 136(7), *074501* (2024). https://doi.org/10.1063/5.0218549

4. **S. Kumar**, M. A. Khan, S. S. Mishra, R. Chaurasiya, N. Sharma, M. Gang, C. S. Tiwary, K. Biswas, and M. Kumar, 1T and 2H mixed phase WS_2 nanoflakes decorated with quasicrystal nanosheets for NO_2 sensors, ***Journal of Materials Chemistry C,*** 11, 15119-15129 (2023). https://doi.org/10.1039/d3tc02524a

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7. **S. Kumar** and M. Kumar, Utilizations of High Entropy Alloy Nanoparticles for Gas Sensors, ***Transactions of the Indian National Academy of Engineering,*** 9(3), 679–687 (2024). https://doi.org/10.1007/s41403-023-00447-2

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