

• **List of papers in SCI journals :**

1. “Reduced graphene oxide (rGO) decorated Cr (III) dopant induced hexagonal WO₃ nanocomposite sensor for enhanced ppm-level acetone detection at room temperature: A trendsetter towards non-invasive diabetes diagnosis, Sovandeb Sen, **Susmita Kundu***, Microchemical Journal, 212 (2025) 113385. **(I.F.-4.9)**.
2. Bio-waste derived reduced graphene oxide (rGO) decorated Cr (III) doped α -Fe₂O₃ nanocomposite for selective ppm-level acetone sensing at room temperature: Potential approach towards non-invasive diagnosis of diabetic biomarker, Sovandeb Sen, **Susmita Kundu***, Advanced Composites and Hybrid Materials. 8 (2025) 150. **(I.F. - 23.2)**.
3. Enhanced Performance Based on the Synergistic Effect of Three-Phase Nanocomposite-rGO-ZnO Nanowires Embedded in the PVDF Matrix as a power Source for Low-Powered Portable Electronic Devices, Pounomi Bera, Sovandeb Sen, **Susmita Kundu**, Shrabanee Sen*, ACS Applied Energy Materials, 24(2024)11834. **(I.F.-5.5)**.
4. Robust Dual-Color Electrochromism of Vanadium Oxide Nanorods Embedded on Reduced Graphene Oxide: Unraveling the Mechanism, Saheli Bhattacharjee, Sovandeb Sen, **Susmita Kundu***, Journal of the Electrochemical Society, 171 (2024) 093504. **(I.F.-3.2)**.
5. Sovandeb Sen, Sourav Maity, **Susmita Kundu***, “Reduced graphene oxide (rGO) decorated NiO-SnO₂ nanocomposite based sensor towards room temperature diabetic biomarker detection”, Journal of Alloys and Compounds, 966 (2023) 171553. **(I.F.-6.3)**
6. Saheli Bhattacharjee, Sovandeb Sen, Soumya Samanta, **Susmita Kundu***, “Study the role of rGO in enhancing the electrochromic performance of WO₃ film”, Electrochimica Acta, 427 (2022) 140820. **(I.F.-7.3)**
7. Saheli Bhattacharjee, Sovandeb Sen, **Susmita Kundu***, “Development of La-impregnated TiO₂ based ethanol sensors for next generation automobile application”, Journal of Materials Science: Materials in Electronics, 33(2022)15296-15312. **(I.F.-2.5)**
8. Sovandeb Sen, Sourav Maity and **Susmita Kundu***, “Fabrication of Fe doped reduced graphene oxide (rGO) decorated WO₃ based low temperature ppm level acetone sensor: Unveiling sensing mechanism by impedance spectroscopy”, Sensors and Actuators B, 361 (2022) 131706 **(I.F.-9.2)**
9. Sovandeb Sen, **Susmita Kundu***, “Reduced graphene oxide (rGO) decorated ZnO-SnO₂: A ternary nanocomposite towards improved low concentration VOC sensing performance”, Journal of Alloys and Compounds, 881 (2021) 160406 **(I.F.-6.4)**

10. Sovandeb Sen, Amit Nilabh, and **Susmita Kundu***, **Room temperature acetone sensing performance of Pt/Sb₂O₃ impregnated Fe₂O₃ thin film: Noninvasive diabetes detection**, Microchemical Journal, 165 (2021) 106111, **(I.F.-3.5)**

11. **Susmita Kundu**, Amit Kumar, Sovandeb Sen, Amit Nilabh, Biosynthesis of SnO₂ and comparison of its CO sensing performance with conventional process, Journal of Alloys and Compounds, 818 (2020) Article: 152841 **(I.F.- 6.4)**

12. Amit Nilabh, Sovandeb Sen, Mousumi Narjinary, **Susmita Kundu**, “A novel ppm level ethanol sensor based on La loaded ITO impregnated with Pd and Sb additives”, Microchemical Journal, 158 (2020) 105146 **(I.F.-3.5)**

13. Dewan S. Rahman , Sudip Kumar Pal , Shibshankar Singha , **Susmita Kundu** , Soumen Basu and Sujit Kumar Ghosh, Spectral characteristics upon harvesting plasmonic hot electrons at the Ag/ZnO hetero microstructures, Materials advances, 1 (2020) 2897-2907 **(I.F.-5.2)**

14. **Susmita Kundu**, Amit Kumar, “Low concentration ammonia sensing performance of Pd incorporated indium tin oxide”, Journal of Alloys and Compounds, 780 (2019) 245-255. **(I.F.-4.6)**

15. **Susmita Kundu**, R. Sudarshan, Mousumi Narjinary, “Pd impregnated gallia : tin oxide nanocomposite - an excellent high temperature carbon monoxide sensor”, Sensor and Actuator B, 254 (2018) 437-447. **(I.F.-9.3)**

16. Susanta Bera, **Susmita Kundu**, Hasmat Khan, Sunirmal Jana, “Polyaniline coated graphene hybridized SnO₂ nanocomposite: Low temperature solution synthesis, structural property and room temperature ammonia gas sensing”, Journal of Alloys and Compounds 744 (2018) 260-270. **(I.F.-4.6)**

17. Hasimur Rahaman, **Susmita Kundu**, Sujit Kumar Ghosh, “Size-selective silver-induced evolution of Mn₃O₄-Ag nanocomposites for effective ethanol sensing”, Chemistry Select, 2 (2017) 6991–6999. **(I.F.-1.8).**

18. Arijit De, **Susmita Kundu**, “Dielectric properties of gel calcined Cd-Zn oxide nanocomposites”, Journal of Ceramic Science & Technology, 8 (2017) 463-470. **(I.F. -1.2).**

19. Arijit De, Graceson Antony, **Susmita Kundu**, “Enhanced ethanol sensing performance of gel calcined Cd–Sn oxide nanocomposites”, Journal of Materials Science: Materials in Electronics, 28 (2017) 1555–1561. **(I.F. -2.5).**

20. Atanu Naskar, Mousumi Narjinary, **Susmita Kundu**, “Unconventional synthesis of γ Fe₂O₃: Excellent low-concentration ethanol sensing performance”, Journal of Electronic Materials, 46 (2017) 478-487. **(I.F. -2.1).**

21. Arijit De and **Susmita Kundu**, “Synthesis and study of gel calcined Cd-Sn oxide nanocomposites”, Journal of Materials Engineering and Performances, 25 (2016) 2746-2751. **(I.F. -1.2).**
22. **Susmita Kundu**, Iyappan Subramanian, Mousumi Narjinary, Raju Manna, “Enhanced performance of γ -Fe₂O₃:WO₃ nanocomposite towards selective acetone vapor detection”, Ceramics International, 42 (2016) 7309-7314. **(I.F. -5.5).**
23. **Susmita Kundu**, Pr. Kalees Warran, Md. Mursalin, Mousumi Narjinary, “Synergistic effect of Pd and Sb incorporation on ethanol vapour detection of La doped tin oxide sensor”, Journal of Materials Science: Materials in Electronics, 26 (2015) 9865–9872. **(I.F. -2.5).**
24. Arnab Kanti Giri, Arka Saha, Aniruddha Mondal, Subhash Chandra Ghosh, **Susmita Kundu**, Asit Baran Panda, “Rectangular ZnO porous nano-plate assembly with excellent acetone sensing performance and catalytic activity”, RSC Advances, 5 (2015) 102134-102142. **(I.F. -4.06).**
25. **Susmita Kundu**, Abhik Choudhury, Sk. Md. Mursalin, Mousumi Narjinary, Raju Manna, “Synthesis, characterization and low concentration ethanol sensing performance of sol-gel derived La(III) doped tin oxide”, Journal of Materials Science: Materials in Electronics 26 (2015) 6252–6260. **(I.F. -2.5).**
26. **Susmita Kundu**, Nilanjana Das, Dipten Bhattacharya and Prasanta Kumar Biswas, “Synthesis of sol-gel based nanostructured Cr(III) doped indium tin oxide films on glass and their optical and magnetic characterizations”, Optical Materials, 35 (2013) 1029-1034. **(I.F. -2.7).**
27. S. Mondal, S. Mahata, **S. Kundu** and B. Mondal, “Processing of natural resourced hydroxyl apatite ceramics from fish scale”, Advances in Applied Ceramics, 109 (2010) 234-239. **(I.F. -2.1).**
28. Prasanta Kumar Biswas, **Susmita Kundu**, Sunirmal Jana, Nilanjana Das and Dipten Bhattacharya, “Photoluminescence of magnetic ion doped nanostructured indium tin oxide films”, Advances in Optical Materials, 11(2009) AWA4 (3pages). **(I.F. -2.3).**
29. **Susmita Kundu**, Dipten Bhattacharya, Jiten Ghosh, Pintu Das, Prasanta Kumar Biswas, “Ferromagnetism in transparent Mn(II)-doped indium tin oxide films prepared by sol-gel coating”, Chemical Physics Letters, 469 (2009) 313-317. **(I.F. -2.3)**
30. B Mondal, **S Kundu**, A K Lohar and B C Pai, “Net-Shape manufacturing of intricate components of A356/SiC_p composite through RP-integrated investment casting”, J. of Mater. Sci. & Engg. Vol-A, 498 (2008) 59-64. **(I.F. 2.5)**
31. **Susmita Kundu**, Prasanta Kumar Biswas, “Synthesis of nanostructured sol-gel ITO films at different temperatures and study of their absorption and photoluminescence properties”, Optical Materials, 31 (2008) 429-433. **(I.F. 2.1)**

32. **S. Kundu** et al., "Effect of Mn doping on the structural, morphological, optical and magnetic properties of indium tin oxide films", Journal of Materials Science: Materials in Electronics, 18 (2007) 1197-1201. **(I.F. 2.5)**
33. B. Mondal, **S. Kundu**, "Novel synthesis of Advanced Composites of α -Al₂O₃ Reinforced with Ce-TZP through Co-precipitation Process", Advances in applied Ceramics, 206 (2006) 222-227. **(I.F. 2.1)**
34. **Susmita Kundu**, Prasanta Kumar Biswas, "Synthesis and photoluminescence property of nanostructured sol-gel Mn(II) doped indium tin oxide films on glass", Chemical Physics Letters, 432(2006) 508-512. **(I.F. 2.1)**
35. **Susmita Kundu**, Prasanta Kumar Biswas, "Synthesis and photoluminescence property of nanostructured sol-gel indium tin oxide films on glass", Chemical Physics Letters, 414 (2005) 107-110. **(I.F. 2.1)**
36. **Susmita Kundu**, Sunirmal Jana, Prasanta Kumar Biswas, "Quantum confinement effect of in-situ generated Cu₂O in nanostructured zirconia matrix", Materials Science, 23(2005) 7-14. **(I.F. 1.1)**