

Dr.N.Gopalakrishnan
Professor, Department of Physics
National Institute of Technology (NIT)
Tiruchirapalli

Publications

1. E Vinoth and N Gopalakrishnan, Fabrication of interdigitated electrode (IDE) based ZnO sensors for room temperature ammonia detection, Journal of Alloys and Compounds 824 (2020) 153900
2. E Hemalatha and N Gopalakrishnan, Synthesis of ZrO₂ nanostructure for gas sensing application, Bulletin of Materials Science 43 (2020) 12
3. Pramila Ponnaiyan and Gopalakrishnan Nammalvar, Enhanced performance of PSF/PVP polymer membrane by silver incorporation, Polymer Bulletin 77 (2020) 197-212
4. P. Pramila and N.Gopalakrishnan, Enhancement of the PSF/PVP membrane performance by Ag-ZnO incorporation, Materials Research Express 6 (2019)115006
5. Sivanantham Nallusamy and Gopalakrishnan Nammalvar, Enhancing the saturation magnetisation in Ni doped ZnO thin films by TOPO
6. Functionalization, Journal of Magnetism and Magnetic Materials 485 (2019) 297-303
7. E Hemalatha and N Gopalakrishnan, Gas sensing performances of pure and Cu-doped ZrO₂ nano structures, Applied Physics A 125 (2019) 493
8. Pramila Ponnaiyan and Gopalakrishnan Nammalvar, Effect of additives on graphene oxide incorporated polysulfone (PSF) membrane, Polymer Bulletin 76 (2019) 4003-4015
9. P. Pramila and N. Gopalakrishnan, Fabrication and characterization of pristine and GO incorporated pristine membranes for water purification, AIP Conference Proceedings 2115 (2019) 030273.
10. Bhuvaneshwari, Sakthivel, and N.Gopalakrishnan, Selective ammonia sensor based on copper oxide/reduced graphene oxide
11. Nanocomposite, Journal of Alloys and Compounds 788 (2019) 422-428.
12. S Bhuvaneshwari, N Gopalakrishnan, Effect of Fe doping on the NH₃ sensing properties of CuO nanostructures, Journal of Materials Science: Materials in Electronics 30 (2019) 6920-6928.

13. R. Pilliadugula, N.Gopalakrishnan, Gas sensing performance of GaOOH and β -Ga₂O₃ synthesized by hydrothermal method: a comparison, Materials Research Express 6 (2018) 025027
14. M Kirubanithy, N.Gopalakrishnan and K Balamurugan, Magnetic vortex state in a layered muscovite sheet silicate single crystal, Materials Research Express 5 (2018) 096103
15. E.Vinoth and N.Gopalakrishnan, Ammonia sensing Characteristics of Yttrium doped ZnO thin films by RF Magnetron sputtering, Mater. Res. Express 5 (2018) 066413
16. L.Manjakkal, B.Sakthivel, N.Gopalakrishnan, R. Dahiya, Printed flexible electrochemical pH sensors based on CuO nanorods, Sensors and Actuators B: Chemical 263,(2018) 50-58
17. E.Vinoth, S.Gowrishankar and N.Gopalakrishnan, Gas sensing performance of RF magnetron sputtered Mg doped ZnO thin films, Applied Physics A 124 (2018) 433.
18. P.Pramila and N.Gopalakrishnan, Enhancement of antibacterial activity in the nanofillers incorporated PSF/PVP membranes, Materials Research Express 5 (4), (2018) 045306
19. P.Pramila and N Gopalakrishnan, Effects of ZnO incorporation on PSF-PEG mixed matrix membrane, AIP Conference Proceedings 1942 (2018) 080005
20. E Vinoth and N Gopalakrishnan, Effect of temperature on NH₃ sensing by ZnO: Mg thin film grown by radio frequency magnetron sputtering technique, AIP Conference Proceedings 1942 (2018) 080058
21. S.Bhuvaneshwari and N Gopalakrishnan, CuO mesostructures as ammonia sensors, American Institute of Physics Conference Series 1942 (2018) 50114
22. Sivanantham Nallusamy and N.Gopalakrishnan, Enhancement of ferromagnetism in Thiol functionalized Mn doped ZnO thin films, Materials Research Express 5 (2018) 026418
23. P Ponnaiyan, N.Gopalakrishnan, Effect of additive on Graphene oxide incorporated polysulfone (PSF) membrane, Polymer Bulletin (2018)1-13.
24. Bhuvaneshwari Sakthivel , Libu Manjakkal , N.Gopalakrishnan, High Performance CuO Nanorectangles based Room Temperature Flexible NH₃ Sensor, IEEE Sensors Journal 17 (20), (2017) 6529-6536
25. S.Bhuvaneshwari, S.Papachan and N.Gopalakrishnan, Free standing CuO-MnO₂ nanocomposite for room temperature ammonia sensing, AIP Conference Proceedings 1832 (2017) 050126

26. E.Vinoth, S.Gowrishankar, and N.Gopalakrishnan, RF magnetron sputtered Cd doped ZnO thin films for gas-sensing applications, *Materials and Manufacturing Processes* 32 (2017) 377-382
27. Sivanantham Nallusamy and N.Gopalakrishnan, Fabrication of Thiol Functionalized Ni doped ZnO Thin Films for RoomTemperature Ferromagnetism, *IEEE Magnetics Letters* 8, (2017) 2109304
28. Bhuvaneshwari, S., and N. Gopalakrishnan, Hydrothermally synthesized Copper Oxide (CuO) superstructures for ammonia sensing, *Journal of Colloid and Interface Science* 480 (2016) 76–84.
29. Bhuvaneshwari, S., and N. Gopalakrishnan, Room temperature ammonia and VOC sensing properties of CuO nanorods, *AIP Conf. Proc.* 1731, 050112 (2016).
30. Bhuvaneshwari, S., and N. Gopalakrishnan, Facile synthesis of low dimensional CuO nanostructures and their gas sensing applications, *Crystal Research and Technology* 51 (2016) 145–153
31. Bhuvaneshwari, S., and N. Gopalakrishnan, Enhanced ammonia sensing characteristics of Cr doped CuO nanoboats, *Journal of Alloys and Compounds* 654 (2016) 202-208