

Biodata

Name	Dr. Digambar Y. Nadargi	
Designation	Scientist D	
Educational qualification	M.Sc. from Shivaji University, Kolhapur. Ph.D. from Shivaji University, Kolhapur.	
Research area	Nanomaterials, Porous composites and hybrids, Silica/Non-Silica aerogels, Thin films and coatings, Gas sensors.	
Recognised Awards/Honors/Fellow	<ul style="list-style-type: none">➤ Best 10 Business idea, EIT Raw Materials: Business Idea competition in Raw materials 2016➤ Award for Business idea, 2nd Prize, EIT Raw Materials: Business Idea competition in Raw materials 2016➤ Young Associate, Maharashtra Academy of Sciences, Nov. 2021	
Projects	1. Cost-Effective Recycling of CDW in High Added Value Energy Efficient Prefabricated Concrete Components for Massive Retrofitting of our Built Environment (VEEP) Outlay: 1,08, 250.00 EURO, European Union 2. Smart, lightweight, cost-effective and energy efficient windows based on novel material combinations European Union 3. Dense oxide films onto porous oxide and hybrid layers by cost effective non-vacuum deposition methods. ETH Board, Switzerland 4. Light-weight, energy-saving materials for the construction industry Danish ministry of Science 5. Aerogel based composite/hybrid nanomaterials for cost-effective building super-insulation systems European Union	

<p>Publications/Patents (Past 5 years)</p>	<p>Publications:</p> <ol style="list-style-type: none"> 1. Pd loaded bismuth ferrite: A versatile perovskite for dual applications as acetone gas sensor and photocatalytic dye degradation of malachite green P Ghadage, P Kodam, D Nadargi, S Patil, M Tamboli, N Bhandari, I Mulla, Ceramics International 49 (4), 5738-5747 2 2023 2. Gas sensors and factors influencing sensing mechanism with a special focus on MOS sensors DY Nadargi, A Umar, JD Nadargi, SA Lokare, S Akbar, IS Mulla, Journal of Materials Science, 1-24 2 2023 3. Spinel Magnesium Ferrite ($MgFe_2O_4$): A Glycine-Assisted Colloidal Combustion and Its Potentiality in Gas-Sensing Application D Nadargi, A Umar, J Nadargi, J Patil, I Mulla, S Akbar, S Suryavanshi, Chemosensors 10 (9), 361 3 2022 4. Enhanced pseudocapacitive properties of divalent (Mn, Fe, Zn) substituted $NiCo_2O_4$ nanorods DY Nadargi, KP Shinde, MS Tamboli, PM Kodam, AV Ghadage, Inorganic Chemistry Communications 143, 109725 4 2022 5. Sponge microflowers of $NiCo_2O_4$: a versatile material for high performance supercapacitor A Ghadage, P Kodam, D Nadargi, KP Shinde, I Mulla, JS Park, Journal of Porous Materials 29 (4), 1239-1252 4 2022 6. Ru, Pd doped WO_3 nanomaterials: A synergistic effect of noble metals to enhance the acetone response properties PM Kodam, PA Ghadage, DY Nadargi, KP Shinde, IS Mulla, JS Park, Ceramics International 48 (12), 17923-17933 9 2022 7. Investigation of Structural, Morphological and Elastic Properties of Ni-Zn Ferrite Grown with an Oxalate Precursor ND Chaudhari, DY Nadargi, SM Kabbur, RC Kambale, A Das, Journal of Electronic Materials 51 (6), 2732-2740 2 2022 8. Electrospun flexible 1D-MnO_2 nanofibres: a versatile material for energy storage application AS Salunkhe, YH Navale, ST Navale, DY Nadargi, VB Patil Journal of Materials Science: Materials in Electronics 32 (13), 18028-18042 2 2021 9. RGO/WO_3 hierarchical architectures for improved H₂S sensing and highly efficient solar-driving photo-degradation of RhB dye SS Mehta, DY Nadargi, MS Tamboli, T Alshahrani, VR Minnam Reddy, Scientific Reports 11 (1), 5023 24 2021 10. Ni/SnO₂ xerogels via epoxide chemistry: potential candidate for H₂S gas sensing application NL Myadam, DY Nadargi, JD Nadargi, VR Kudyal, FI Shaikh, IS Mulla, Journal of Porous Materials 28, 239-248 5 2021 11. Microstructure and magnetic interactions of Co²⁺ substituted NiCuZn ferrites SM Kabbur, DY Nadargi, RC Kambale, UR Ghodake, SS Suryavanshi, Journal of Magnetism and Magnetic Materials 517, 167376 13 2021
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12. Structural and magnetic behavior of CTAB assisted BiFeO₃ by self-combustion route
PA Ghadage, LK Bagal, DY Nadargi, RC Kambale, SS Suryavanshi Materials Today: Proceedings 43, 2725-2729 2021
13. Design, development and validation of a portable gas sensor module: A facile approach for monitoring greenhouse gases
SA Mane, DY Nadargi, JD Nadargi, OM Aldossary, M S. Tamboli, Coatings 10 (12), 1148 7 2020
14. Co²⁺ Substituted Spinel MgCuZn Ferrimagnetic Oxide: A Highly Versatile Electromagnetic Material via a Facile Molten Salt Route
LM Thorat, DY Nadargi, MS Tamboli, AM Al-Enizi, RC Kambale, Nanomaterials 10 (12), 2333 3 2020
15. Cu/SnO₂ xerogels: a novel epoxide derived nanomaterial as formaldehyde gas sensor
NL Myadam, DY Nadargi, JD Nadargi, MG Chaskar, Journal of Sol-Gel Science and Technology 96, 56-66 3 2020
16. A facile approach of developing Al/SnO₂ xerogels via epoxide assisted gelation: A highly versatile route for formaldehyde gas sensors
NL Myadam, DY Nadargi, JDG Nadargi, FI Shaikh, SS Suryavanshi, Inorganic Chemistry Communications 116, 107901 20 2020
17. Microwave-Epoxye-Assisted Hydrothermal Synthesis of the CuO/ZnO Heterojunction: a Highly Versatile Route to Develop H₂S Gas Sensors
DY Nadargi, MS Tamboli, SS Patil, RB Dateer, IS Mulla, H Choi, ACS omega 5 (15), 8587-8595 25 2020
18. Bismuth molybdate (α -Bi₂Mo₃O₁₂) nanoplates via facile hydrothermal and its gas sensing study
AK Kulkarni, MS Tamboli, DY Nadargi, YA Sethi, SS Suryavanshi, Journal of Solid State Chemistry 281, 121043 22 2020
19. Development of Ag/ZnO nanorods and nanoplates at low hydrothermal temperature and time for acetone sensing application: an insight into spillover mechanism
DY Nadargi, MS Tamboli, SS Patil, IS Mulla, SS Suryavanshi, SN Applied Sciences 1, 1-10 10 2019
20. Cerium doped MgFe₂O₄ nanocomposites: highly sensitive and fast response-recoverable acetone gas sensor
JY Patil, DY Nadargi, IS Mulla, SS Suryavanshi, Heliyon 5 (6), e01489 36 2019
21. Magnetic interactions and electrical properties of Tb³⁺ substituted NiCuZn ferrites
SM Kabbur, SD Waghmare, DY Nadargi, SD Sartale, RC Kambale, Journal of Magnetism and Magnetic Materials 473, 99-108 30 2019
22. A greener approach towards the development of graphene–Ag loaded ZnO nanocomposites for acetone sensing applications
DY Nadargi, RB Dateer, MS Tamboli, IS Mulla, SS Suryavanshi, RSC advances 9 (58), 33602-33606 16 2019

	<p>23. Ni²⁺ substituted Mg-Cu-Zn ferrites by molten salt route: Evaluation of structural, morphological and electromagnetic properties LM Thorat, JY Patil, DY Nadargi, RC Kambale, SS Suryavanshi, Inorganic Chemistry Communications 99, 20-25 15 2019</p> <p>24. Macroporous WO₃: tunable morphology as a function of glycine concentration and its excellent acetone sensing performance S Mehta, D Nadargi, M Tamboli, V Patil, I Mulla, S Suryavanshi Ceramics International 45 (1), 409-414 23 2019</p> <p>25. Co²⁺ substituted Mg–Cu–Zn ferrite: Evaluation of structural, magnetic, and electromagnetic properties LM Thorat, JY Patil, DY Nadargi, UR Ghodake, RC Kambale, Journal of Advanced Ceramics 7, 207-217 28 2018</p> <p>26. Structural, Optical and Ethanol Sensing Properties of Dy-Doped SnO₂ Nanoparticles FI Shaikh, LP Chikhale, DY Nadargi, IS Mulla, SS Suryavanshi, Journal of Electronic Materials 47, 3817-3828 13 2018</p> <p>27. Ni²⁺substituted Mg–Cu–Zn ferrites: a colloidal approach of tuning structural and electromagnetic properties LM Thorat, JY Patil, DY Nadargi, UR Ghodake, RC Kambale, Journal of Sol-Gel Science and Technology 86, 731-742 12 2018</p> <p>28. Effect of Dy³⁺ substitution on structural and magnetic properties of nanocrystalline Ni-Cu-Zn ferrites SM Kabbur, UR Ghodake, DY Nadargi, RC Kambale, SS Suryavanshi, Journal of Magnetism and Magnetic Materials 451, 665-675 28 2018</p> <p>29. Spinel MgFe₂O₄ thick films: a colloidal approach for developing gas sensors J Patil, D Nadargi, IS Mulla, SS Suryavanshi, Materials Letters 213, 27-30 38 2018</p> <p>30. Ru-loaded mesoporous WO₃ microflowers for dual applications: enhanced H₂S sensing and sunlight-driven photocatalysis SS Mehta, DY Nadargi, MS Tamboli, LS Chaudhary, PS Patil, IS Mulla, Dalton Transactions 47 (47), 16840-16845</p>
	Book
	<ol style="list-style-type: none"> 1. Book Chapter entitled “Tungsten Oxide Nanocomposites as High-Performance Gas Sensors: Factors Influencing the Sensor Performance” by DY Nadargi, IS Mulla, SS Suryavanshi, in the book Functional Nanomaterials: Advances in Gas Sensing Technologies, Published by Springer in 2020
Google Scholar Link	https://scholar.google.com/citations?hl=en&user=JXPvoMIAAAAJ