List of Publications:

1. Surface Modifications of Binder Free ZnO Nanorod Thin Films through Cds Quantum Dots for Dye Sensitized Solar Cells K. V. More, S. M. Patil *et al* **Journal of Shivaji University: Science and Technology** Volume-49, Issue-1 Pages 36-49 **(2023).**

2. Chemical and gas sensing property tuning of cadmium sulfide thin films SA Vanalakar, VL Patil, **SM Patil**, SP Deshmukh, PS Patil, JH Kim **Materials Science and Engineering: B** 282, 115787 **(2022)**. https://doi.org/10.1016/j.mseb.2022.115787

3. Preparation of 2,4,5-triarylimidazole derivatives using green *Syzygium Cumini* seed catalyst **SM Patil**, M Asif, SM Bagwan **RASĀYAN Journal of Chemistry** 15 (3), 1861-1866 **(2022)**. http://rasayanjournal.co.in/admin/php/upload/3675_pdf.pdf

4. Recent progress in Nanostructured Metal Oxides based NO_2 gas sensing in India S Vanalakar, VL Patil, **SM Patil**, SB Dhavale, TD Dongale, PS Patil **Journal of Materials NanoScience** 9 (1), 13-25 **(2022)**. https://pubs.thesciencein.org/journal/index.php/jmns/article/view/294

5. Ultrasonochemically Modified Ag@TiO_2 Nanocomposites as Potent Antibacterial Agent in the Paint Formulation for Surface Disinfection SP Deshmukh, VB Koli, AG Dhodamani, **SM Patil**, VS Ghodake **ChemistrySelect** 6 (1), 113-122 **(2021)**. https://doi.org/10.1002/slct.202002903

6. Sulfated TiO_2/SnO_2 nanocomposite as a green heterogeneous catalyst for direct amide formation reaction **SM Patil**, SA Vanalakar, SA Sankpal, SP Deshmukh, SD Delekar **Results in Chemistry** 3, 100102 **(2021)**. https://doi.org/10.1016/j.rechem.2021.100102

7. Synergistics of Cr (III) doping in TiO_2/MWCNTs nanocomposites: Their enhanced physicochemical properties in relation to photovoltaic studies AG Dhodamani, KV More, **SM Patil**, AR Shelke, SK Shinde, DY Kim **Solar Energy** 201, 398-408 **(2020)**. https://doi.org/10.1016/j.solener.2020.03.001

8. Interfacially interactive ternary silver-supported polyaniline/multiwalled carbon nanotube nanocomposites for catalytic and antibacterial activity SP Deshmukh, AG Dhodamani, **SM Patil**, SB Mullani, KV More ***ACS* Omega** 5 (1), 219-227 **(2019)**. https://doi.org/10.1021/acsomega.9b02526

9. Silver nanoparticles as an effective disinfectant: A review SP Deshmukh, **SM Patil**, SB Mullani, SD Delekar **Materials Science and Engineering: C** 97, 954-965 **(2019)**. https://doi.org/10.1016/j.msec.2018.12.102

10. Sulfated TiO_2/WO_3 nanocomposite: An efficient photocatalyst for degradation of Congo red and methyl red dyes under visible light irradiation **S.M. Patil**, S.P. Deshmukh, K.V. More, V.B. Shevale, S.B. Mullani, SD Delekar **Materials Chemistry and Physics** 225, 247-255 **(2019)**. https://doi.org/10.1016/j.matchemphys.2018.12.041

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12. NH_3 gas sensing performance of ternary $TiO_2/SnO_2/WO_3$ hybrid nanostructures prepared by ultrasonic-assisted sol–gel method **SM Patil**, SA Vanalakar, AG Dhodamani, SP Deshmukh, VL Patil, PS Patil, SD Delekar **Journal of Materials Science: Materials in Electronics** 29 (14), 11830-11839 **(2018)**. https://doi.org/10.1007/s10854-018-9283-x

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