

**Dr. M. Mahalakshmi**

Assistant Professor,

Department of chemistry

SSN College of Engineering

E-Mail: mahalakshmim@ssn.edu.in

Mobile: 044-27469700

**Last five years publication list:**

1. Subha, N., Mahalakshmi, M., Monika, S., & Neppolian, B. (2020). Ni (OH) 2-CuxO-TiO2 nanocomposite for the enhanced H2 production under solar light: The mechanistic pathway. *International Journal of Hydrogen Energy*, 45(13), 7552-7561.
2. Subha, N., Mahalakshmi, M., Myilsamy, M., Neppolian, B., & Murugesan, V. (2019). The influence of n-type and p-type dopants on the interfacial charge transfer and the band structure of Bi2MoO6 to enhance solar H2 production. *Journal of Photochemistry and Photobiology A: Chemistry*, 379, 150-158.
3. Subha, N., Mahalakshmi, M., Myilsamy, M., Neppolian, B., & Murugesan, V. (2018). Direct Z-scheme heterojunction nanocomposite for the enhanced solar H2 production. *Applied Catalysis A: General*, 553, 43-51.
4. Subha, N., Mahalakshmi, M., Myilsamy, M., Reddy, N. L., Shankar, M. V., Neppolian, B., & Murugesan, V. (2018). Effective excitons separation on graphene supported ZrO2TiO2 heterojunction for enhanced H2 production under solar light. *International Journal of Hydrogen Energy*, 43(8), 3905-3919.
5. Myilsamy, M., Mahalakshmi, M., Subha, N., & Murugesan, V. (2018). Mesoporous Ga-TiO2: Role of Oxygen Vacancies for the Photocatalytic Degradation Under Visible Light. *Journal of nanoscience and nanotechnology*, 18(2), 925-935.
6. Subha, N., Mahalakshmi, M., Myilsamy, M., Reddy, N. L., Shankar, M. V., Neppolian, B., & Murugesan, V. (2017). Influence of synthesis conditions on the photocatalytic activity of mesoporous Ni doped SrTiO3/TiO2 heterostructure for H2 production under solar light irradiation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 522, 193-206.
7. Myilsamy, M., Mahalakshmi, M., Subha, N., Rajabhuvaneswari, A., & Murugesan, V. (2016). Visible light responsive mesoporous graphene-Eu 2 O 3/TiO 2 nanocomposites for the efficient photocatalytic degradation of 4-chlorophenol. *RSC Advances*, 6(41), 35024-35035.

8. Myilsamy, M., Mahalakshmi, M., Murugesan, V., & Subha, N. J. A. S. S. (2015). Enhanced photocatalytic activity of nitrogen and indium co-doped mesoporous TiO<sub>2</sub> nanocomposites for the degradation of 2, 4-dinitrophenol under visible light. *Applied Surface Science*, 342, 1-10.
9. Myilsamy, M., Murugesan, V., & Mahalakshmi, M. (2015). The effect of synthesis conditions on mesoporous structure and the photocatalytic activity of TiO<sub>2</sub> nanoparticles. *Journal of nanoscience and nanotechnology*, 15(6), 4664-4675.
10. Myilsamy, M., Murugesan, V., & Mahalakshmi, M. (2015). Indium and cerium co-doped mesoporous TiO<sub>2</sub> nanocomposites with enhanced visible light photocatalytic activity. *Applied Catalysis A: General*, 492, 212-222.