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Environmental Nanotechnology, Water and wastewater treatment

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Prof. Dr. Mahmoodi was ranked in Stanford University study of the world's top 2% of scientists in 2023 (Rank = 38 in Chemical Engineering).

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PROFESSIONAL INTERESTS

Prof. Dr. Mahmoodi had received BSc and MSc in Chemistry and PhD in Textile Engineering (Environmental Engineering). He published 227 peer-reviewed papers (ISI Thomson Reuters). His research focuses on environmental nanotechnology for water and wastewater treatment including the removal of pollutants using different nanomaterials (nanosheets, nanotubes, nanofibers, nanocomposites and nanoparticles). The main processes are adsorption, advanced oxidation, enzymatic, and membrane.

ACADEMIC POSITIONS

Department of Environmental Research, Institute for Color Science and Technology, Tehran, Iran

* Full Professor: June 2019 - Present

** Associate Professor: May 2015 - June 2019

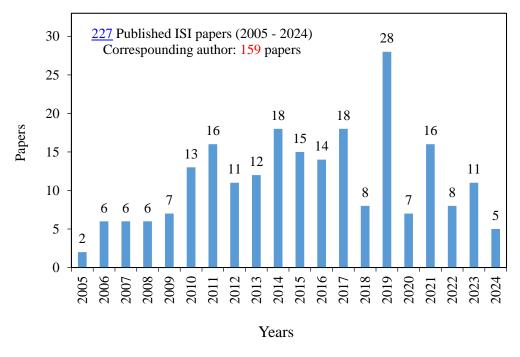
*** Assistant Professor: January 2011 - May 2015

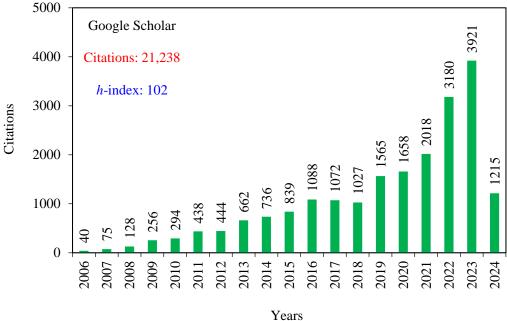
EDUCATION

- * PhD: Textile (Environmental) Engineering, Amirkabir University of Technology, Tehran, Iran, 2008 2010.
- ** MSc: Applied Chemistry, Amirkabir University of Technology, Tehran, Iran, 2000 2003.
- *** **BSc**: Chemistry, University of Mazandaran, Babolsar, Iran, 1996 2000.

MENTORING, PUBLICATIONS, AND CITATIONS

- * **Mentoring:** Research mentor to 20 PhD students, and 50 MSc students.
- ** **Publications:** Authored 227 articles in peer-reviewed journals (2005-2024).
- *** Citations: Over 21,200 total citations with an average of 93 citations per published article.
- **** h-index: 102 (Google Scholar Data, April 2024).





Mahmoodi NM*, Saffar-Dastgerdi MH, Clean Laccase immobilized nanobiocatalysts (graphene oxide-zeolite nanocomposites): From production to detailed biocatalytic degradation of organic pollutant.

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PUBLICATIONS

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- Shahmansoori M, Yaghmaei, S, Mahmoodi NM*, Zeolitic imidazolate framework biocomposite as a visible light-assisted photocatalyst: Synthesis (in-situ and blending), regeneration, and decolorization of Malachite Green. Journal of Industrial and Engineering Chemistry. 128 (2023) 472-486 (December 2023).
- Rabeie B, Mahmoodi NM*, Hierarchical ternary titanium dioxide decorated with graphene quantum dot/ZIF-8 nanocomposite for the photocatalytic degradation of doxycycline and dye using visible light, Journal of Water Process Engineering. 54 (2023) 103976 (August 2023).
- Mahmoodi NM*, Bakhtiari M, Oveisi M, Mahmoodi B, Hayati B, *Green synthesis of eco-friendly magnetic metal-organic framework nanocomposites (AlFum -graphene oxide) and pollutants (dye and pharmaceuticals) removal capacity from water,* Materials Chemistry and Physics. 302 (2023) 127720 (1 July 2023).
- Yekkezare H, Tajik H, Mahmoodi NM, *Green synthesis of metronidazole-based stabilized silica-coated Fe*₃O₄ as a novel modified magnetic catalyst for the green solvent-free halogenation of aromatic compounds. Materials Science & Engineering B. 294 (**2023**) 116507 (August 2023).
- Mousavi SR, Asghari M, Mahmoodi NM*, Salahshoori I, *Water decolorization and antifouling melioration of a novel PEBA1657/PES TFC membrane using chitosan-decorated graphene oxide fillers.* Journal of Environmental Chemical Engineering. 11 (2023) 109955 (June 2023).
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 inorganic nanofiber (Fe₂O₃) nanocomposite: Green synthesis and photocatalytic degradation using LED
 irradiation. Journal of Molecular Liquids. 291 (2019) 111333. (1 October 2019)

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