#### Niyaz Mohammad Mahmoodi

*h-index*: 114 (Google Scholar Data, November 2025)

**Full Professor** 

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## **≡** Google Scholar

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Environmental Nanotechnology, Water and wastewater treatment

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## Mahmoodi, Niyaz Mohammad

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Prof. Dr. Mahmoodi was ranked in Stanford University study of the world's top 2% of scientists in 2024 (Rank = 6 in Chemical Engineering).

https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/8

## Peer review (1243 reviews for 195 publications/grants)

#### **PROFESSIONAL INTERESTS**

Prof. Dr. Mahmoodi had received BSc and MSc in Chemistry and PhD in Textile Engineering (Environmental Engineering). He published 247 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 54 MSc students.
- \*\* **Publications:** Authored 247 articles in peer-reviewed journals (2005-2026).
- \*\*\* Citations: Over 26,300 total citations with an average of 106 citations per published article.
- \*\*\*\* h-index: 114 (Google Scholar Data, November 2025).

## \* Editor-in-Chief: Sustainable Chemical Engineering

https://ojs.wiserpub.com/index.php/SCE/about/editorialTeam

### \*\* Editorial Board: Collagen and Leather

https://jlse.springeropen.com/about/editorial-board



# Mahmoodi, Niyaz Mohammad Institute for Color Science and Technology

Rank: 1687

- Main Field: Engineering
- Sub Field: Chemical Engineering
- Rank in the SubField: 6.0
- H-index: 25, Hm-index: 14

Top 2% Listed Year(s): 2025, 2024, 2023, 2022, 2021, 2020

"Single Year" Data



The data is verified and sourced from ELSEVIER and Stanford University's Top 2% Scientists list.



www.TopSciNet.com



# Mahmoodi, Niyaz Mohammad Institute for Color Science and Technology ==

Rank: 5363

- Main Field: Engineering
- -@ Sub Field: Chemical Engineering
- Rank in the SubField: 18.0
- H-index: 104, Hm-index: 46

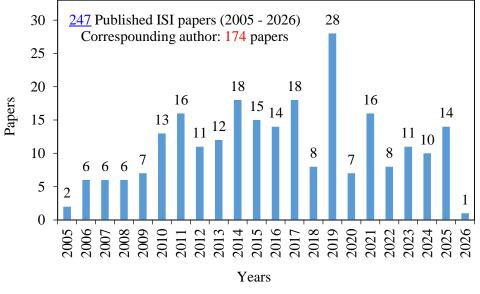
Top 2% Listed Year(s): 2025, 2024, 2023, 2022, 2021, 2020

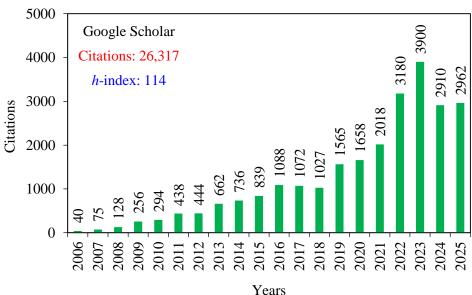
"Career Long" Data



The data is verified and sourced from ELSEVIER and Stanford University's Top 2% Scientists list.







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

Applied Catalysis B: Environmental. 268 (2020) 118443. (Impact factor: 19.5)

Mahmoodi NM\*, Bagherzadeh SB, Synthesis of binary and ternary MOF/carbon based composites (MOF/Carbon nitride/Graphene oxide) for the visible-light assisted destruction of Tetracycline and textile dye.

Nano Materials Science. 7 (2025) 359-376. (Impact factor: 17.9)

Rabeie B, Mahmoodi NM\*, Heterogeneous MIL-88A on MIL-88B hybrid: A promising eco-friendly hybrid from green synthesis to dual application (Adsorption and Photocatalysis) in tetracycline and dyes removal,

Journal of Colloid and Interface Science. 654 (2024) 495–522. (Impact factor: 9.7)

#### **PUBLICATIONS**

- Mahmoodi NM\*, Bagherzadeh SB, Synthesis of binary and ternary MOF/carbon based composites (MOF/Carbon nitride/Graphene oxide) for the visible-light assisted destruction of Tetracycline and textile dye. Nano Materials Science. 7 (2025) 359-376 (June 2025).
- Mahmoodi NM\*, Soroush S, Bagherzadeh SB, Mahmoodi B, Hayati B, Sorkheh M, *Ternary MIL-101(Fe)/TiO2/GO composites: synthesis, characterization, and photocatalytic performance.* Inorganic Chemistry Communications. 183 (2026) 359-376 (January 2026).
- Rabeie B, Mahmoodi NM\*, *Green synthesis of biopolymer-driven dual functional carboxymethyl cellulose composite (CMC/MIL100(Fe)/MIL88A(Al)) as a Z-Scheme photocatalyst and an adsorbent for Water Pollutants.* International Journal of Biological Macromolecules. 329 (2025) 147358 (November 2025).
- Rabeie B, Mahmoodi NM\*, Environmentally friendly novel covalent organic framework composites as porous photocatalysts and adsorbents for Tetracycline and dyes (Congo Red and Methylene Blue) removal: Green synthesis, kinetics, regeneration, and removal mechanisms. Applied Materials Today. 46 (2025) 102884 (October 2025).
- Rabeie B, Mahmoodi NM\*, Fish scales-like magnetic covalent organic framework (COF) composite: Synthesis and photocatalytic tetracycline and dye degradation using LED visible light in water. Surfaces and Interfaces. 72 (2025) 107251 (1 September 2025).
- Talebipour S, Panahi PN, Mahmoodi NM, Rasoulifard MH, Rabeie B, *Novel eco-friendly MIL-88B/ZIF-67 hybrid composites for the efficient degradation of Direct Red 23 from wastewater under visible light irradiation.* Journal of Molecular Liquids. 439 (2025) 128873 (1 December 2025).
- Mokhtari-Shourijeh Z, Mahmoodi NM\*, Novel electrospun metal-organic framework nanofibers (Nickel-Coated ZIF-67/Chitosan/Polyvinyl Alcohol) as efficient adsorbents: Isotherm, kinetic and thermodynamic. Surfaces and Interfaces. 72 (2025) 107142 (1 September 2025).
- Meghdadian M, Mahmoodi NM\*, Dual-functional materials (catalysts and adsorbents) as innovative and sustainable pathways toward combined healthcare (antibacterial, antifungal, antiviral, antioxidant, and anticancer properties) and water pollution remediation. Journal of Environmental Chemical Engineering, 13 (2025) 117718 (October 2025).
- Mahmoodi NM\*, Ghadirly MM, Hayati B, Mahmoodi B, Rabeie B, Synthesis of ZIF-8 composite (g- $C_3N_4@ZIF-8/Ag_3PO_4$ ) as a catalyst for the malachite green and tetracycline degradation. Inorganic Chemistry Communications. 17 (2025) 114345 (July 2025).
- Rabeie B, Mahmoodi NM\*, Hayati B, Dargahi A, Moghaddam HR, Magnetic COF/MOF hybrid: An efficient Z-scheme photocatalyst for the visible light-assisted degradation of tetracycline and malachite green.

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- Mazarji M, Mahmoodi NM\*, Bidhendi GN, Li A, Li M, James A, Mahmoodi B, Pan J, Synthesis, Characterization, and Enhanced Photocatalytic Dye Degradation: Optimizing Graphene-Based ZnO-CdSe Nanocomposites via Response Surface Methodology. Journal of Alloys and Compounds. 1010 (2025) 177999 (5 January 2025).
- Shahmansoori M, Yaghmaei S, Mahmoodi NM\*, *Green synthesis of chitosan-ZIF67 composite beads for efficient removal of Malachite Green and Tetracycline*. Chemical Engineering Science. 304 (**2025**) 121017 (1 February 2025).
- Oshani F, Kargari A, Norouzbeigi R, Mahmoodi NM, *Performance optimization and fouling study of geopolymer-zeolite composite membranes for sustainable textile wastewater treatment.* Scientific Reports. 15 (2025) 35463 (10 October 2025).

- Mokhtari-Shourijeh Z, Ardjmand M, Mahmoodi NM\*, Gholipour-Kanani A, Nosratinia F, *Seedassisted two-step ZIF-67 growth on CS/PVA nanofibers for high-efficiency cadmium and tetracycline adsorption.*Journal of Molecular Structure. 1321 (2025) 139835 (February 2025).
- Moradi A, Kalaee M, Moradi O, Mahmoodi NM, Zaarei D, Novel binary and ternary biocomposites (ZIF-67), graphene oxide (GO) nanosheet, and Guar gum (GG) biopolymer): synthesis and adsorption of malachite green cationic dye. ChemistrySelect. 10 (2025) e202404673 (February 2025).
- Rabeie B, Mahmoodi NM\*, Hayati B, Dargahi A, Moghaddam HR, *Chitosan adorned with ZIF-67 on ZIF-8 biocomposite: A potential LED visible light-assisted photocatalyst for wastewater decontamination.*International Journal of Biological Macromolecules. 282 (2024) 137405 (December 2024).
- Rabeie B, Mahmoodi NM\*, Green and environmentally friendly architecture of starch-based ternary magnetic biocomposite (Starch/MIL100/CoFe<sub>2</sub>O<sub>4</sub>): Synthesis and photocatalytic degradation of tetracycline and dye. International Journal of Biological Macromolecules. 274 (2024) 133318 (August 2024).
- Rabeie B, Mahmoodi NM\*, Heterogeneous MIL-88A on MIL-88B hybrid: A promising eco-friendly hybrid from green synthesis to dual application (Adsorption and Photocatalysis) in tetracycline and dyes removal, Journal of Colloid and Interface Science. 654 (2024) 495–522 (January 2024).
- Naeini AH, Moradi SAH, Mahmoodi NM\*, Binary metal-organic framework composites as environmentally friendly photocatalysts: Green synthesis and visible light-assisted pollutant degradation. Journal of Photochemistry and Photobiology A: Chemistry. 457 (2024) 115916 (1 December 2024).
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