Niyaz Mohammad Mahmoodi

Professor

Faculty: Dyes and Pigments Faculty

Department: Department of Environmental Research

چندان که خواهی درنگر در من که نشناسی مرا

زیرا از آن کم دیده‌ای من صدصفت گردیده‌ام

در دیده من اندرآ وز چشم من بنگر مرا

زیرا برون از دیده‌ها منزلگهی بگزیده‌ام

رومی (مولوی)

“Study me as much as you like, you will never know me.

For I differ a hundred ways from what you see me to be.

Put yourself behind my eyes, and see me as I see myself.

Because I have chosen to dwell in a place you can’t see”.

Jalal al-Din Rumi

* Prof. Dr. Mahmoodi was ranked in Stanford University study of the world's top 2% of scientists in 2023 (Rank = 6 in Chemical Engineering).
https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/8

** **h-index: 115** (Citation: 26,509 - Google Scholar Data, December 2025)
https://scholar.google.com/citations?user=6yscPJwAAAAJ&hl=en&safe=strict

** **h-index: 110** (Scopus Data, 2025)
https://www.scopus.com/authid/detail.uri?authorId=9733238800

*** Prof. Dr. Mahmoodi is the Editor-in-Chief of "Sustainable Chemical Engineering".
https://ojs.wiserpub.com/index.php/SCE/about/editorialTeam

**** Prof. Dr. Mahmoodi is on the Editorial Board of "Collagen and Leather".
https://jlse.springeropen.com/about/editorial-board

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

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 26,500 total citations with an average of 107 citations per published article.

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.

https://www.sciencedirect.com/search?authors=niyaz+mohammad+mahmoodi

Some published papers:

Clean Laccase immobilized nanobiocatalysts (graphene oxide - zeolite nanocomposites): From production to detailed biocatalytic degradation of organic pollutant

https://doi.org/10.1016/j.apcatb.2019.118443

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

https://doi.org/10.1016/j.nanoms.2024.04.015

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

https://doi.org/10.1016/j.ijbiomac.2025.147358

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

https://doi.org/10.1016/j.apmt.2025.102884

Fish scales-like magnetic covalent organic framework (COF) composite: Synthesis and photocatalytic tetracycline and dye degradation using LED visible light in water

https://doi.org/10.1016/j.surfin.2025.107251

Novel electrospun metal-organic framework nanofibers (Nickel-coated ZIF-67/Chitosan/Polyvinyl Alcohol) as efficient adsorbents: Isotherm, kinetic and thermodynamic

https://doi.org/10.1016/j.surfin.2025.107142

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

https://doi.org/10.1016/j.jece.2025.117718

Chitosan adorned with ZIF-67 on ZIF-8 biocomposite: A potential LED visible light-assisted photocatalyst for wastewater decontamination

https://doi.org/10.1016/j.ijbiomac.2024.137405

Green and environmentally friendly architecture of starch-based ternary magnetic biocomposite (Starch/MIL100/$CoFe_2O_4$): Synthesis and photocatalytic degradation of tetracycline and dye

https://doi.org/10.1016/j.ijbiomac.2024.133318

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

https://doi.org/10.1016/j.jcis.2023.10.060

Hierarchical ternary titanium dioxide decorated with graphene quantum dot/ZIF-8 nanocomposite for the photocatalytic degradation of doxycycline and dye using visible light

https://doi.org/10.1016/j.jwpe.2023.103976

Metal-organic frameworks (MIL-101) decorated biochar as a highly efficient bio-based composite for immobilization of polycyclic aromatic hydrocarbons and copper in real contaminated soil

https://doi.org/10.1016/j.jece.2022.108821

Effect of preparation parameters on properties of metakaolin-based geopolymer activated by silica fume- sodium hydroxide alkaline blend

https://doi.org/10.1016/j.jobe.2022.104984

Morphological diversity effect of graphene quantum dot/MIL88A(Fe) composites on dye and pharmaceuticals (tetracycline and doxycycline) removal

https://doi.org/10.1016/j.jece.2022.108321

Synthesis of visible light activated metal-organic framework coated on titania nanocomposite (MIL-53(Al)@TiO_2) and dye photodegradation

https://doi.org/10.1016/j.jssc.2021.122747

Graphene quantum dot incorporation in the zeolitic imidazolate framework with sodalite (SOD) topology: Synthesis and improving the adsorption ability in liquid phase

https://doi.org/10.1016/j.jece.2021.106303

Green synthesis of reduced graphene oxide-$CoFe_2O_4$ nanocomposite as a highly efficient visible-light-driven catalyst in photocatalysis and photo Fenton-like reaction

https://doi.org/10.1016/j.mseb.2021.115223

Adsorption of azo dyes by a novel bio-nanocomposite based on whey protein nanofibrils and nano-clay: Equilibrium isotherm and kinetic modeling

https://doi.org/10.1016/j.jcis.2021.05.174

Synthesis of porous aminated PAN/PVDF composite nanofibers by electrospinning: Characterization and Direct Red 23 removal

https://doi.org/10.1016/j.jece.2020.103876

Environmentally friendly novel covalently immobilized enzyme bionanocomposite: From synthesis to the destruction of pollutant

https://doi.org/10.1016/j.compositesb.2019.107666

Graphene based ZnO nanoparticles to depolymerize lignin-rich residues via UV/iodide process

https://doi.org/10.1016/j.envint.2018.12.062

Cadmium selenide quantum dot-zinc oxide composite: Synthesis, characterization, dye removal ability with UV irradiation, and antibacterial activity as a safe and high-performance photocatalyst

https://doi.org/10.1016/j.jphotobiol.2018.08.023

One-pot synthesis of a reduced graphene oxide–ZnO nanorod composite and dye decolorization modeling

https://doi.org/10.1016/j.jtice.2017.07.038

Synthesis of nanoparticle and modelling of its photocatalytic dye degradation ability from colored wastewater

https://doi.org/10.1016/j.jece.2017.07.010

Preparation of aminated nanoporous nanofiber by solvent casting/porogen leaching technique and dye adsorption modeling

https://doi.org/10.1016/j.jtice.2016.05.042

Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Institute for Color Science and Technology	Full Professor	Tenured	Full Time	

Papers in Journals

1. Niyaz Mohammad Mahmoodi, Mohammad Hosein Saffar ,& Dastgerdi,Clean Laccase immobilized nanobiocatalysts (graphene oxide - zeolite nanocomposites): From production to detailed biocatalytic degradation of organic pollutant,Applied Catalysis B: Environmental,2020.
2. Niyaz Mohammad Mahmoodi, Mina Oveisi, Ali Taghizadeh, Mohsen Taghizadeh,Novel magnetic amine functionalized carbon nanotube/metal-organic framework nanocomposites: From green ultrasound-assisted synthesis to detailed selective pollutant removal modelling from binary systems,Journal of Hazardous Materials,2019 04 15.
3. Niyaz Mohammad Mahmoodi, Ali Taghizadeh, Mohsen Taghizadeh, Jafar Abdi,In situ deposition of Ag/AgCl on the surface of magnetic metal-organic framework nanocomposite and its application for the visible-light photocatalytic degradation of Rhodamine dye,Journal of Hazardous Materials,2019 09 15.
4. Niyaz Mohammad Mahmoodi, Mohammad Hosein Saffar ,& Dastgerdi, Bagher Hayati,Environmentally friendly novel covalently immobilized enzyme bionanocomposite: From synthesis to the destruction of pollutant,Composites Part B: Engineering,2020 03 01.
5. Niyaz Mohammad Mahmoodi, Mina Oveisi, Elham Asadi,Synthesis of NENU metal-organic framework-graphene oxide nanocomposites and their pollutant removal ability from water using ultrasound,Journal of Cleaner Production,2019 02 20.
6. Mina Oveisi, Niyaz Mohammad Mahmoodi, Mokhtar Alinia Asli,Facile and green synthesis of metal-organic framework/inorganic nanofiber using electrospinning for recyclable visible-light photocatalysis,Journal of Cleaner Production,2019 06 10.
7. Niyaz Mohammad Mahmoodi, Mina Oveisi, Ali Taghizadeh, Mohsen Taghizadeh,Synthesis of pearl necklace-like ZIF-8@chitosan/PVA nanofiber with synergistic effect for recycling aqueous dye removal,Carbohydrate Polymers,2020 01 01.
8. Niyaz Mohammad Mahmoodi, Jafar Abdi,Metal-organic framework as a platform of the enzyme to prepare novel environmentally friendly nanobiocatalyst for degrading pollutant in water,Journal of Industrial and Engineering Chemistry,2019 12 25.
9. Niyaz Mohammad Mahmoodi, Samaneh Keshavarzi, Mina Oveisi, Sajad Rahimi, Bagher Hayati,Metal-organic framework (ZIF-8)/inorganic nanofiber (Fe2O3) nanocomposite: Green synthesis and photocatalytic degradation using LED irradiation,Journal of Molecular Liquids,2019 09 01.
10. Mina Oveisi, Niyaz Mohammad Mahmoodi, Mokhtar Alinia Asli,Halogen lamp activated nanocomposites as nanoporous photocatalysts: Synthesis, characterization, and pollutant degradation mechanism,Journal of Molecular Liquids,2019 05 01.
11. Niyaz Mohammad Mahmoodi, Mina Oveisi, Atefeh Panahdar, Bagher Hayati, Khadijeh Nasiri,Synthesis of porous metal-organic framework composite adsorbents and pollutant removal from multicomponent systems,Materials Chemistry and Physics,2020 03 01.
12. Niyaz Mohammad Mahmoodi , Mohammad Hosein Saffar , Dastgerdi,Clean Laccase immobilized nanobiocatalysts (graphene oxide - zeolite nanocomposites): From production to detailed biocatalytic degradation of organic pollutant,Applied Catalysis B: Environmental,Vol. 268,2020 07 05.