

**Gholamreza Moussavi, Ph.D****Professor**

Department of Environmental Health Engineering

Tarbiat Modares University, Tehran, Iran

Head of "Advanced Water Treatment" Research Group

E-mail: moussavi@modares.ac.ir

Tel: +98 21 8288 3827

Fax: +98 21 8288 4580

Website: <http://www.modares.ac.ir/~moussavi>

- **Published articles:** 197 (**Scopus:** 27-February-2026)
- **h-index:** 57
- **Citations:** 10,380 total citations

PERSONAL INFORMATIONName and surname: **Gholamreza Moussavi**

Date of birth: 22 May 1975

Marital: Married

EDUCATIONAL BACKGROUND

Degree	Major	Department	Year
Researcher	Chemical Engineering	Chemical & Biochemical Engineering, University of British Columbia, Canada	2005
Ph.D	Environmental Health Engineering	Environmental Health Engineering, Tehran University of Medical Science	2001-2005
M.Sc	Environmental Health Engineering	Environmental Health Engineering, Tehran University of Medical Science	1999-2001
B.Sc	Environmental Health	Environmental Health Engineering, Beheshti University of Medical Science	1996-1999

INTERNATIONAL COLLABORATION

- Universidad Politécnica de Madrid, **Spain**
- Group of Advanced Oxidation Processes, EPFL, **Switzerland**.
- Lappeenranta University of Technology, **Finland**.
- Universidad de Córdoba, **Spain**.
- University of Valencia, **Spain**.
- University of British Columbia, **Canada**.

SCIENTIFIC AND ACADEMIC ACCOUNTS

- Researcher ID: O-8699-2017
- Scopus: <https://www.scopus.com/authid/detail.uri?authorId=21934761400>
- ORCID: <http://orcid.org/0000-0003-4708-4507>
- Publons: <https://publons.com/researcher/1267055>
- Mendeley: <https://www.mendeley.com/profiles/gholamreza-moussavi/>

TEACHING EXPERIENCES

I have taught many courses to Ph.D. and M.Sc. students in the Environmental Engineering program.

2006-present **Professor**, Dept. of Environmental Health Engineering, Tarbiat Modares University

- Advanced water treatment systems: Principles and Design (PhD students)
- Advanced wastewater treatment systems: Principles and Design (Ph.D students)
- Wastewater sludge treatment (Ph.D students)
- Wastewater sludge processing (Ph.D students)
- Advanced air pollution control systems (Ph.D students)
- Hazardous waste management (Ph.D students)
- Water treatment plant design (M.Sc. students)
- Wastewater treatment plant design (M.Sc. students)
- Industrial wastewater treatment, (M.Sc. students)
- Air pollution control (M.Sc., students)

2002-2005 **Lecturer**, Department of Environmental Health Engineering, Azad University

- Wastewater Treatment (B.Sc. class of 52 students)
- Water Treatment, (B.Sc. class of 48 students)

2004 **Instructor**, Workshop on the impact of the untreated wastewater discharge, Tehran

2003-2004 **Lecturer**, Department of Environmental Health Engineering, Tehran University of Medical University

- Wastewater Treatment, (B.Sc. class of 32 students)

RESEARCH EXPERIENCES

- 2005-present Department of Environmental Health Engineering, Tarbiat Modares University, Tehran, Iran
- Advanced oxidation processes for air, water, and wastewater treatment
 - Advanced biological processes for soil, air, water, and wastewater treatment
 - Nanotechnology for the degradation of environmental contaminants
 - Catalytic ozonation for removal of micropollutants from liquid and gas streams
 - Biofiltration and biotrickling filtration of VOCs and odorants
 - Ozonation of excess activated sludge
 - Saline wastewater Treatment
- 2005 Department of Chemical and Biological Engineering, University of British Columbia, Vancouver, Canada
- Innovated and Investigated a novel photobioreactor (UV-Biofiltration) for the Biodegradation of recalcitrant air pollutants
- 2001-2005 Department of Environmental Health Engineering, Tehran University of Medical Sciences
- Designed and investigated a novel bioreactor (UA/AFB) for complete treatment of municipal wastewater treatment
 - Investigated performance of UA/AFB reactor for industrial wastewater treatment
 - Evaluated performance of an Ultraviolet Germicidal Irradiation reactor for indoor air disinfection
 - Developed and set up the H₂S sampling and measurement method from waste air streams
 - Designed and evaluated a novel bioscrubber for H₂S removal from waste in the air stream
 - Investigated use of H₂O₂ as an oxidant for H₂S removal from waste air emission in a chemical scrubber
 - Conducted a comparative study on collection and treatment alternatives for part 22 of Tehran city
 - Studied the performance of UV photoreactor for disinfecting effluent air from a bioscrubber treating H₂S gas stream
 - Performed field work on optimization of an activated sludge process
 - Studied the effect of lime on sewage sludge stabilization

- Provided scientific consulting to various companies on water and wastewater treatment plant design
- Provided scientific consulting to M.Sc. students in environmental engineering on their thesis
- Conducted lab work on combined advanced oxidation and biological processes for pollution control
- Organized field visits to various wastewater treatment plants for B.Sc. students in environmental engineering

1999-2001 Department of Environmental Health Engineering, Tehran University of Medical Sciences

- Investigated the effects of the Lyophilization process on kinetic coefficients of the activated sludge process
- Evaluated the effects of the Lyophilization process on the characteristics and microbial quality of the activated sludge process
- Extracted and studied the chitosan as a coagulant in water treatment

1998 Performed field sampling from waste streams

PATENTS

- Innovated the UV-Photobiofiltration for treatment of waste air containing recalcitrant pollutants (*patent No. 33334, Iran*)
- Up-flow Anaerobic/Aerobic Fixed Bed (UA/AFB) combined reactor for municipal and industrial wastewater treatment (*patent No. 33333, Iran*)

ANALYTICAL SKILLS

- Gas chromatograph/Mass spectrophotometry (GC-MS)
- Spectrophotometer
- TOC and BDOC analyzer
- High-performance liquid chromatography (HPLC)
- Fourier transform infrared (FT-IR) spectrometer
- Air, water, and wastewater microbial examination
- Air, water, and wastewater sampling and physicochemical analysis

COMPUTER SKILLS

- Microsoft Windows and office,

- Extensive experience with Excel and Origin (graphing, programming, and statistical data analysis)
- SPSS (statistical data analysis)

SPORT SKILLS

- Kyokushin Karate, Dan III.
- Official Referee, IKF.

PROFESSIONAL TRAINING COURSES / WORKSHOPS

- Teaching Methods Training Workshop, 2004
- Research Methods Training Workshop, 2003
- Laboratory Safety Course, 2002
- Technology Tour, Water and wastewater treatment plants, Petrochemical industry, Composting Plant, and 5 research centers, Iran, 2002
- Analytical instruments training course, 2001

HONOURS AND AWARDS

2021	<i>26th Razi International Award, Distinguished Researcher</i>
2021	<i>2% of highly cited researchers.</i>
2020	<i>IRAN Scientific Leader (35/100), ISEF.</i>
2018-2023	<i>1% of highly cited researchers.</i>
2012-2020	<i>University Outstanding Researcher</i>
2019	<i>Distinguished Researcher in Research</i> , among all researchers in IRAN held by the Iran Ministry of Sciences and Technology.
2015	<i>Distinguished Researcher in Research</i> , among all researchers in IRAN held by the Iran Association of Environmental Health (IAEH) and received the award and an appreciation letter from the Head of IAEH.
2014	<i>Distinguished Researcher in Environmental Biotechnology</i> , among all researchers in IRAN held by the Iran Association of Biotechnology

- 2013 **Razi International Award, *Distinguished Researcher in Research & Technology***, among all researchers in IRAN held by the Ministry of Health and received the award and an appreciation letter from the President of Iran.
- 2005 **Razi International Award *Distinguished Researcher in Research & Technology***, among all researchers in IRAN held by the Ministry of Health and received the award and an appreciation letter from the President of Iran
- 2003 ***The Honored First-Class Ph.D. Candidate*** among all Ph.D. students in IRAN based on Excellence in education and research received the award and an appreciation letter from the President of Iran
- 2002 ***Outstand Graduate Student*** award in education, Tehran University of Medical Sciences
- 2001 ***First Rank in Ph.D. Entrance Exam*** among all applicants throughout the country
- 1999 ***First Rank in M.Sc. Entrance Exam*** among all applicants throughout the country

MEMBERSHIPS

- ***Editorial Board Member***, Research Journal of Applied Sciences, Asian Network for Scientific Information
- Member of Iranian Association of Environmental Health (IAEH), IRAN
Member of Environmental Engineering Scientists, IRAN

REVIEWER FOR PEER-REVIEWED JOURNALS

1. *Applied Catalysis B: Environmental*
2. *Bioresource Technology*
3. *Water Research*
4. *Environmental Science and Technology*
5. *Environmental Progress & Sustainable Energy*
6. *Environmental Science: Nano*
7. *Chemosphere*
8. *Journal of Hazardous Materials*
9. *Chemical Engineering Journal*
10. *Biochemical Engineering Science*
11. *Desalination*
12. *Environmental Engineering and Management Journal*
13. *Process Biochemistry*
14. *Environmental Technology*
15. *Clean air, soil and water*
16. *Iranian Journal of Environmental Health Science & Engineering*
17. *Iranian Journal of Biotechnology*

18. *Iranian Journal of Chemistry and Chemical Engineering*
19. *Iranian Journal of Chemical Engineering*
20. *African Journal of Environmental Science and Technology*
21. *Journal of Environmental Chemistry and Ecotoxicology*
22. *International Journal of Industrial Chemistry*
23. *International Journal of Environmental Science and Technology*
24. *Journal of Environmental Management*
25. *Mesoporous and Microporous Materials*
26. *Journal of the Iranian Chemical Society*
27. *Desalination and Water Treatment*
28. *Ecotoxicology and Environmental Safety*
29. *Environmental Engineering and Management Journal*
30. *Arabian Journal of Chemistry*
31. *Journal of Environmental Chemical Engineering*
32. *Journal of Toxicology and Environmental Health Sciences*
33. *Bioprocess and Biosystems Engineering*
34. *World Applied Sciences Journal*
35. *Applied Surface Science*
36. *Asia-Pacific Journal of Chemical Engineering*
37. *Materials Research Bulletin*
38. *Environmental Science and Pollution Research*
39. *Water, Air, & Soil Pollution*
40. *Separation Science and Technology*
41. *Environmental Processes*
42. *Advances in Physical Chemistry*
43. *RSC Advances*
44. *International Journal of Global Environmental Issue*
45. *Journal of Chemical Technology & Biotechnology*
46. *Water Science and Technology*
47. *Science Asia*
48. *Ozone: Science & Engineering*
49. *Archives of Environmental Protection*
50. *Research on Chemical Intermediates*
51. *Waste and Biomass Valorization*
52. *Environmental Science: Processes & Impacts*
53. *Water Science and Engineering*
54. *Chemical Engineering Communications*
55. *Water Resource and Industry*
56. *The Korean Journal of Chemical Engineering*
57. *International Journal of Chemical Reactor Engineering*
58. *Songklanarin Journal of Science and Technology*
59. *Environmental Health Engineering and Management Journal*
60. *Journal of Advanced Research*
61. *Chinese Journal of Chemical Engineering*
62. *Critical Reviews in Biotechnology*
63. *Journal of Fluorine Chemistry*
64. *Environmental Processes*
65. *Resource-Efficient Technologies*
66. *Chemical Engineering & Technology*
67. *Journal of Materials and Design*
68. *Caspian Journal of Environmental Sciences*
69. *Biochimie*

- 70. *Journal of Material Cycles and Waste Management*
- 71. *The Canadian Journal of Chemical Engineering*
- 72. *Journal of Chemistry*
- 73. *3Biotech*
- 74. *AIMS Environmental Science*

SPORT ACTIVITIES

- Black Belt-Dan 3 in Karate
- Referee, Iranian Sport Organization
- Member of the International Karate Organization (IKO)

PERSONAL INTERESTS

- Karate, Volleyball, Horse Riding,
- Traveling and Touristy

THESIS SUPERVISED

- **PostDoc Researchers**
 - **completed: 8**
 - **active: 2**
- **Ph.D Dissertations**
 - **defended: 25**
 - **active: 5**
- **MSc. Theses:**
 - **defended: 26**
 - **active: 4**

Active PhD Students:

Somayeh Akhbari, co-supervision with Universidad Politécnica de Madrid, Spain (Dr. Stefanos Giannakis)

Samira Mohammadi, co-supervision with Universidad Politécnica de Madrid, Spain (Dr. Stefanos Giannakis)

PUBLICATIONS AND PRESENTATIONS

BOOKS (Persian):

- 1) Moussavi G., Wastewater Examination for Using in Agriculture, Kermanshah University Publisher, 2002.
- 2) Moussavi G., Wastewater Treatment, Khaniran publisher, 2003
- 3) Moussavi G., Air Pollution and its Control, Khaniran publisher, 2003.
- 4) Moussavi G., Water Engineering, Khaniran publisher, 2003.
- 5) Moussavi G., Wastewater Engineering, Khaniran publisher, 2003.
- 6) Moussavi G., Environmental Microbiology, Khaniran publisher, 2003.
- 7) Moussavi G., Environmental Chemistry, Khaniran publisher, 2003.
- 8) Moussavi G., Fluid Mechanic and Hydraulic, Khaniran publisher, 2003.
- 9) Moussavi G., Fundamentals of Environmental Health, Shahrab publisher, 2005.
- 10) Moussavi G., Water Works Engineering, Hafiz publisher, (2007).
- 11) Moussavi G., Wastewater Sludge Processing, Hafiz publisher, 2009.
- 12) Moussavi G., Wastewater Collection Systems, Hafiz publisher, 2009.
- 13) Moussavi G., Wastewater Treatment in Wetlands, Shahrab publisher, 2009.

Peer-Reviewed Papers (2007 – 2024):

2024

1. S. Ostovar, G. Moussavi, ..., S. Giannakis, Uncovering the mesoporous secrets of Ti/ γ -Al₂O₃ 3-D gels: Fine-tuning morphology engineering for enhancing catalytic ozonation efficacy of environmental contaminants, *Separation and Purification Technology*, 335, 5 May 2024, 126118.
2. G. Moussavi, Bakhtiarynasab, Sakineh Shekoohiyan, S. Mohammadi, S. Giannakis, M. Li, High potential of the vacuum UV-activated peracetic acid (VUV/PAA) process in eliminating recalcitrant contaminants and waterborne pathogens: Assessing the efficacy of annular and helical reactor configurations, *Journal of Water Process Engineering*, 335, 60, April 2024, 105143.
3. S. Ostovar, G. Moussavi, ..., S. Giannakis, Rapid degradation of Omeprazole and highly effective inactivation of *E. coli* in the UVA-light photocatalytic process with Cu-doped in spinel-structured γ -Al₂O₃ as a stable catalyst, *Chemical Engineering Journal*, 479, 1 January 2024, 147536.

2023

4. H. Amanollahi, G. Moussavi, ..., S. Giannakis, From waste to wealth: Using MgO nanoparticles to transform ammonium into a valuable resource, *Journal of Water Process Engineering*, 26 September 2023.
5. H. Mohebbi, G. Moussavi, S. Giannakis, Development of a magnetic Ce-Zr bimetallic MOF as an efficient catalytic ozonation mediator: Preparation, characterization, and catalytic activity, *Separation and Purification Technology*, 22 March 2023, Volume 315, 123670.
6. S. Ostovar, G. Moussavi, S. Mohammadi, ..S. Giannakis, Developing a novel Ti-doped Al₂O₃ xerogel with high photocatalytic chemical and microbial removal performance: Characterization and mechanistic insights, *Chemical Engineering Journal*, 21 March 2023, Volume 464, 142545.

7. M.M. Ghorbaninejad Fard Shirazi H. Mohebal, **G. Moussavi**, M. Karimi, S. Giannakis, Development of a magnetic Ce-Zr bimetallic MOF as an efficient catalytic ozonation mediator: Preparation, characterization, and catalytic activity, ***Separation and Purification Technology***, 2023.
8. S. Shekoohiyan, **G. Moussavi**, M. Heidari, Microplastics and mesoplastics as emerging contaminants in Tehran landfill soils: The distribution and induced-ecological risk, ***Environmental Pollution***, Volume 324, 1 May 2023, 121368.
9. F. Fanaei, **G. Moussavi**, S. Shekoohiyan, Enhanced bioremediation of oil-contaminated soil in a slurry bioreactor by H₂O₂-stimulation of oil-degrading/biosurfactant-generating bacteria: performance optimization and bacterial metagenomics, ***Biodegradation***, 2023, 34(1), pp. 83–101, Volume 51, 2023, 103371.
10. M. Ansari, **G. Moussavi**, M.H. Ehrampoosh, S. Giannakis, A systematic review of non-thermal plasma (NTP) technologies for synthetic organic pollutants (SOPs) removal from water: Recent advances in energy yield aspects as their key limiting factor, ***Journal of Water Process Engineering***, Volume 51, 2023, 103371.

2022

11. M. Kohantorabi, **G. Moussavi**, P. Oulego, S. Giannakis, Deriving an α -Fe₂O₃/g-C₃N₄ nanocomposite from a naturally hematite-rich soil, for dual photocatalytic and photo-Fenton degradation of Acetaminophen under visible light, ***Separation and Purification Technology***, Volume 299, 15 October 2022, 121723.
12. S. Akbari, **G. Moussavi**, J. Decker, M.L. Marin, F. Bosca, S. Giannakis, Superior visible light-mediated catalytic activity of a novel N-doped, Fe₃O₄-incorporating MgO nanosheet in presence of PMS: Imidacloprid degradation and implications on simultaneous bacterial inactivation, ***Applied Catalysis B: Environmental***, Volume 317, 15 November 2022, 121732.
13. S. Mohammadi, **G. Moussavi**, K. Kiyanmehr, S. Shekoohiyan, M. Heidari, Kazem Naddafi, S. Giannakis, Degradation of the antiviral remdesivir by a novel, continuous-flow, helical-baffle incorporating VUV/UVC photoreactor: Performance assessment and enhancement by inorganic peroxides, ***Separation and Purification Technology***, Volume 298, 1 October 2022, 121665.

14. N. López-Vinent, A. Cruz-Alcalde, G. Moussavi, I.C. Gonzalez, A.H. Lehmann, J. Giménez, S. Giannakis, Improving ferrate disinfection and decontamination performance at neutral pH by activating peroxymonosulfate under solar light, **Chemical Engineering Journal**, Volume 450, Part 1, 15 December 2022, 137904.
15. K. Kiyanmehr, G. Moussavi, S. Mohammadi, K. Naddafi, S. Giannakis, The efficacy of the VUV/O₃ process run in a continuous-flow fluidized bed reactor for simultaneous elimination of favipiravir and bacteria in aqueous matrices, **Chemosphere**, Volume 304, 2022, 135307.
16. N. Abdollahi, G. Moussavi, S. Giannakis, A review of heavy metals' removal from aqueous matrices by Metal-Organic Frameworks (MOFs): State-of-the art and recent advances, **Journal of Environmental Chemical Engineering**, Volume 10, Issue 3, June 2022, 107394.
17. H. Mohebbi, G. Moussavi, M. Karimi, S. Giannakis, Catalytic ozonation of Acetaminophen with a magnetic, Cerium-based Metal-Organic framework as a novel, easily-separable nanocomposite, **Chemical Engineering Journal**, Volume 434, 15 April 2022, 134614.
18. S. Mohammadi, G. Moussavi, M. Rezaei, Enhanced peroxidase-mediated biodegradation of polyethylene using the bacterial consortia under H₂O₂-biostimulation, **Polymer**, Volume 240, 1 February 2022, 124508.
19. A. Mahmoudnia, N. Mehrdadi, M. Baghdadi, G. Moussavi, Change in global PFAS cycling as a response of permafrost degradation to climate change, **Journal of Hazardous Materials Advances**, Volume 5, February 2022, 100039.
20. S. Mohammadi, G. Moussavi, K. Yaghmaeian, S. Giannakis, Development of a percarbonate-enhanced Vacuum UV process for simultaneous fluoroquinolone antibiotics removal and fecal bacteria inactivation under a continuous flow mode of operation, **Chemical Engineering Journal**, Volume 431, March 2022, 134064.
21. M. Kohantorabi, G. Moussavi, P. Oulego, S. Giannakis, Heterogeneous catalytic ozonation and peroxone-mediated removal of Acetaminophen using natural and modified hematite-rich soil as an efficient environmental catalyst, **Applied Catalysis B: Environmental**, Volume 301, 2022, 120786.

22. S. Mohammadi, G. Moussavi, S. Giannakis, Vacuum UV pre-treatment coupled with self-generated peroxide stimulation of biomass: An innovative hybrid system for detoxification and mineralization of toxic compounds, *Chemosphere*, Volume 286, 2022, 131701.
23. Saeed Molaei, Gholamreza Moussavi, Nasser Talebbeydokhti, Sakine Shekoohiyan, Biodegradation of the petroleum hydrocarbons using an anoxic packed-bed biofilm reactor with in-situ biosurfactant-producing bacteria, *Journal of Hazardous Materials*, Volume 421, 2022, 126699.

2021

24. M. Kohantorabi, G. Moussavi, S. Mohammadi, P. Oulego, S. Giannakis, Synthesis of a novel, ternary AgI/CeO₂@g-C₃N₄ nanocomposite with exceptional stability and reusability for visible light-assisted photocatalytic reduction of hexavalent chromium, *Applied Surface Science*, Volume 555, 2021, 149692.
25. M. Kohantorabi, G. Moussavi, P. Oulego, S. Giannakis, Radical-based degradation of sulfamethoxazole via UVA/PMS-assisted photocatalysis, driven by magnetically separable Fe₃O₄@CeO₂@BiOI nanospheres, *Separation and Purification Technology*, Volume 267, 2021, 118665.
26. M. Kohantorabi, G. Moussavi, S. Mohammadi, P. Oulego, S. Giannakis, Photocatalytic activation of peroxymonosulfate (PMS) by novel mesoporous Ag/ZnO@NiFe₂O₄ nanorods, inducing radical-mediated acetaminophen degradation under UVA irradiation, *Chemosphere* Volume 277, 2021, 130271.
27. M. Kohantorabi, S. Giannakis, G. Moussavi, M. Bensimon, M. Gholami, C. Pulgarin, An innovative, highly stable Ag/ZIF-67@GO nanocomposite with exceptional peroxymonosulfate (PMS) activation efficacy, for the destruction of chemical and microbiological contaminants under visible light, *Journal of Hazardous Materials*, Volume 413, 2021, 125308.
28. H. Amanollahi, G. Moussavi, S. Giannakis, Enhanced Vacuum UV-based process (VUV/H₂O₂/PMS) for the effective removal of ammonia from water: Engineering configuration and mechanistic considerations, *Journal of Hazardous Materials*, Volume 402, 2021, 123789.

29. M. Kohantorabi, G. Moussavi, S. Giannakis, A review of the innovations in metal- and carbon-based catalysts explored for heterogeneous peroxymonosulfate (PMS) activation, with focus on radical vs. non-radical degradation pathways of organic contaminants, ***Chemical Engineering Journal***, Volume 411, 2021, 127957.
30. S. Akbari, G. Moussavi, S. Giannakis, Efficient photocatalytic degradation of ciprofloxacin under UVA-LED, using S,N-doped MgO nanoparticles: Synthesis, parametrization and mechanistic interpretation, ***Journal of Molecular Liquids***, Volume 324, 2021, 114831.
31. Z. Amiri, G. Moussavi, S. Mohammadi, S. Giannakis, Development of a VUV-UVC/peroxymonosulfate, continuous-flow Advanced Oxidation Process for surface water disinfection and Natural Organic Matter elimination: Application and mechanistic aspects. ***Journal of Hazardous Materials***, Volume 402, 2021, 123789.
32. S. Mohammadi, G. Moussavi, S. Giannakis, S. Shekoohiyan, M. Luisa Marín, F. Boscá, A continuous-flow catalytic process with natural hematite-alginate beads for effective water decontamination and disinfection: Peroxymonosulfate activation leading to dominant sulfate radical and minor non-radical pathways, ***Chemical Engineering Journal***, Volume 411, 2021, 127738.
33. E. Aseman-Bashiz, A. Rezaee, G. Moussavi, Ciprofloxacin removal from aqueous solutions using modified electrochemical Fenton processes with iron green catalysts, ***Journal of Molecular Liquids***, Volume 324, 2021, 114694.

2020

34. F. Fanaei, G. Moussavi, S. Shekoohiyan, Enhanced treatment of the oil-contaminated soil using biosurfactant-assisted washing operation combined with H₂O₂-stimulated biotreatment of the effluent, ***Journal of Environmental Management***, 2 July 2020, Volume 271, 110941.
35. S. Karimian, G. Moussavi, F. Fanaei, S. Mohammadi, S. Shekoohiyan, S. Giannakis, Shedding light on the catalytic synergies between Fe(II) and PMS in vacuum UV (VUV/Fe/PMS) photoreactors for accelerated elimination of pharmaceuticals: The case of metformin, ***Chemical Engineering Journal***, Volume 40015 November 2020Article 125896.

36. M. Moradi, , G. Moussavi, K. Yaghmaeian, A. Yazdanbakhsh, M. Sillanpää, Synthesis of novel Ag-doped S-MgO nanosphere as an efficient UVA/LED-activated photocatalyst for non-radical oxidation of diclofenac: Catalyst preparation and characterization and photocatalytic mechanistic evaluation, ***Applied Catalysis B: Environmental***, Volume 260, January 2020, Article 118128.
37. M. Rezaei, G. Moussavi, K. Naddafi, M.S. Johnson, Enhanced biodegradation of styrene vapors in the biotrickling filter inoculated with biosurfactant-generating bacteria under H₂O₂ stimulation, ***Science of The Total Environment***, Volume 704, 20 February 2020, Article 135325.
38. S. Shekoohiyan, A. Rahmania, M. Chamack, G. Moussavi, S. Giannakis, A novel CuO/Fe₂O₃/ZnO composite for visible-light assisted photocatalytic oxidation of Bisphenol A: Kinetics, degradation pathways, and toxicity elimination, ***Separation and Purification Technology***, Volume 242, 1 July 2020, Article 116821.
39. H.M. Nejad, G. Moussavi, Advanced biodegradation process of atrazine in the peroxidase-mediated sequencing batch reactor (SBR) and moving-bed SBR (MSBR): mineralization and detoxification, *Journal of Environmental Health Science and Engineering*, 2020, 18(2), pp. 433–439.
40. R., Rostami, G., Moussavi, A.J., Jafari, S. Darbari, A modeling concept on removal of VOCs in wire-tube non-thermal plasma, considering electrical and structural factors, 2020, ***Environmental Monitoring and Assessment***.
41. A.H. Cheshme Khavar, G. Moussavi, K. Yaghmaeian, et al., A new Ru(II) polypyridyl complex as an efficient photosensitizer for enhancing the visible-lightdriven photocatalytic activity of a TiO₂/reduced graphene oxide nanocomposite for the degradation of atrazine: DFT and mechanism insights, ***RSC Advances***, 2020, 10, 22500.

2019

42. H. Amanollahi, G. Moussavi, S. Giannakis, VUV/Fe(II)/H₂O₂ as a novel integrated process for advanced oxidation of methyl tert-butyl ether (MTBE) in water at neutral pH: Process intensification and mechanistic aspects, ***Water Research***, Volume 166, 1 December 2019, Article 115061.

43. A.H. Cheshme Khavar, G. Moussavi, A.R. Mahjoub, R. Luque, M. Sattari, Enhanced visible light photocatalytic degradation of acetaminophen with Ag₂S-ZnO@rGO core-shell microsphere as a novel catalyst: Catalyst preparation and characterization and mechanistic catalytic experiments, ***Separation and Purification Technology***, Volume 229, 15 December 2019, Article 115803.
44. F. Fanaei, G. Moussavi, V. Srivastava, M. Sillanpää, The enhanced catalytic potential of sulfur-doped MgO (S-MgO) nanoparticles in activation of peroxysulfates for advanced oxidation of acetaminophen, ***Chemical Engineering Journal***, Volume 371, 1 September 2019, Pages 404-413.
45. F. Abbaszadeh Haddad, G. Moussavi, M. Moradi, Advanced oxidation of formaldehyde in aqueous solution using the chemical-less UVC/VUV process: Kinetics and mechanism evaluation, ***Journal of Water Process Engineering***, Volume 27, February 2019, Pages 120-125.
46. S. Shekoohiyan, S. Rtimi, G. Moussavi, S. Giannakis, C. Pulgarin, Enhancing solar disinfection of water in PET bottles by optimized in-situ formation of iron oxide films. From heterogeneous to homogeneous action modes with H₂O₂ vs. O₂ – Part 2: Direct use of (natural) iron oxides, ***Chemical Engineering Journal***, Volume 360, 15 March 2019, Pages 1051-1062.
47. S. Shekoohiyan, S. Rtimi, G. Moussavi, S. Giannakis, C. Pulgarin, Enhancing solar disinfection of water in PET bottles by optimized in-situ formation of iron oxide films. From heterogeneous to homogeneous action modes with H₂O₂ vs. O₂ – Part 1: Iron salts as oxide precursors, ***Chemical Engineering Journal***, Volume 358, 15 February 2019, Pages 211-224.
48. G. Moussavi, E. Fathi, M. Moradi, Advanced disinfecting and post-treating the biologically treated hospital wastewater in the UVC/H₂O₂ and VUV/H₂O₂ processes: performance comparison and detoxification, ***Process Safety and Environmental Protection***, 126C (2019) pp. 259-268.
49. M. Moradi, G. Moussavi, Enhanced treatment of tannery wastewater using the electrocoagulation process combined with UVC/VUV photoreactor: Parametric and mechanistic evaluation, ***Chemical Engineering Journal***, Volume 358, 15 February 2019, Pages 1038-1046.

50. G. Moussavi, F. Abbaszadeh Haddad, Bacterial peroxidase-mediated enhanced biodegradation and mineralization of bisphenol A in a batch bioreactor, **Chemosphere**, Volume 222, 15 May 2019, Pages 549-555.
51. A. Sheikhmohammadi, A. Yazdanbakhsh, G. Moussavi, A. Eslami, M. Almasian, Degradation and COD removal of trichlorophenol from wastewater using sulfite anion radicals in a photochemical process combined with a biological reactor: Mechanisms, degradation pathway, optimization and energy consumption, **Process Safety and Environmental Protection**, Volume 123, March 2019, Pages 263-271.
52. R. Rostami, G. Moussavi, S. Darbari, A.J. Jafari, Enhanced removal of benzene in non-Thermal plasma with ozonation, flow recycling, and flow recirculation, **Plasma Science and Technology**, 21(9),095501.
53. N. Shafeei, G. Asadollahfardi, G. Moussavi, M.M.A. Akbar Boojar, Degradation of ibuprofen in the photocatalytic process with doped TiO₂ as catalyst and UVA-LED as existing source, **Desalination and Water Treatment**, 142, pp. 341-352.
54. E. Aghayani, G. Moussavi, K. Naddafi, Improved peroxidase-mediated biodegradation of toluene vapors in the moving-bed activated sludge diffusion (MASD) process using biosurfactant-generating biomass stimulated with H₂O₂, **Journal of Hazardous Materials**, Volume 361, 5 January 2019, Pages 259-266.

2018

55. P. Baratpour, G. Moussavi, The accelerated biodegradation and mineralization of acetaminophen in the H₂O₂-stimulated upflow fixed-bed bioreactor (UFBR), **Chemosphere**, Volume 210, November 2018, Pages 1115-1123.
56. G. Moussavi, M. Pourakbar, E. Aghayani, M. Mahdavianpour, Investigating the aerated VUV/PS process simultaneously generating hydroxyl and sulfate radicals for the oxidation of cyanide in aqueous solution and industrial wastewater, **Chemical Engineering Journal**, Volume 350, 15 October 2018, Pages 673-680.
57. A.H. Cheshmehkhavar, G. Moussavi, A. Mahjoub, M. Satari, P. Abdolmaleki, Synthesis and visible-light photocatalytic activity of In,S-TiO₂@rGO nanocomposite for

- degradation and detoxification of pesticide atrazine in water, **Chemical Engineering Journal**, Volume 345, 1 August 2018, Pages 300-311.
58. M. Mahdavianpour, G. Moussavi, M. Farrokhi, Biodegradation and COD removal of p-Cresol in a denitrification baffled reactor: Performance evaluation and microbial community, **Process Biochemistry**, Volume 69, June 2018, Pages 153-160.
59. A.H. Cheshmehkhavar, G. Moussavi, A. Mahjoub, The preparation of TiO₂@rGO nanocomposite efficiently activated with UVA/LED and H₂O₂ for high rate oxidation of acetaminophen: Catalyst characterization and acetaminophen degradation and mineralization, **Applied Surface Science**, Volume 440, 15 May 2018, Pages 963-973.
60. M. Pourakbar, G. Moussavi, K. Yaghmaeian, Enhanced biodegradation of phenol in a novel cyclic activated sludge integrated with a rotating bed bioreactor in anoxic and peroxidase-mediated conditions, **RSC Advances**, Volume 8 (12), Pages 6293-6305.
61. Eskandari, M., Goudarzi, N., G. Moussavi, Application of low-voltage UVC light and synthetic ZnO nanoparticles to photocatalytic degradation of ciprofloxacin in aqueous sample solutions, **Water and Environment Journal**, 32(2018), pp. 58-66.
62. R. Khosravi, G. Moussavi, M.T. Ghaneian, M.H. Ehrampoush, G. Sharifzadeh, Chromium adsorption from aqueous solution using novel green nanocomposite: Adsorbent characterization, isotherm, kinetic and thermodynamic investigation, **Journal of Molecular Liquids**, Volume 258, 15 April 2018, Pages 163-174.
63. G. Moussavi, A. Mashayekh, K. Yaghmaeian, A., Mohseni-bandpei, The catalytic destruction of antibiotic tetracycline by sulfur-doped manganese oxide (S-MgO) nanoparticles, **Journal of Environmental Management**, Volume 210, 15 March 2018, Pages 131-138.
64. G. Moussavi, M. Rezaie, M. Pourakbar, Comparing VUV and VUV/Fe²⁺ processes for decomposition of cloxacillin antibiotic: Degradation rate and pathways, mineralization and by-product analysis, **Chemical Engineering Journal**, Volume 332, 15 January 2018, Pages 140-149.
65. M. Moradi, G. Moussavi, Investigation of chemical-less UVC/VUV process for advanced oxidation of sulfamethoxazole in aqueous solutions: Evaluation of operational variables and degradation mechanism, **Separation and Purification Technology**, Volume 190, 8 January 2018, Pages 90-99.

66. G. Moussavi, M. Pourakbar, S. Shekoohian, M. Satari, The photochemical decomposition and detoxification of bisphenol A in the VUV/H₂O₂ process: Degradation, mineralization, and cytotoxicity assessment, **Chemical Engineering Journal**, Volume 331, 1 January 2018, Pages 755-764.
67. A. Yazdanbakhsh, A. Eslami, G. Moussavi, M. Rafiee, A. Sheikhmohammadi, Photo-assisted degradation of 2, 4, 6-trichlorophenol by an advanced reduction process based on sulfite anion radical: Degradation, dechlorination and mineralization, **Chemosphere**, Volume 191, January 2018, Pages 156-165.

2017

68. G. Moussavi, M. Rezaei, Exploring the advanced oxidation/reduction processes in the VUV photoreactor for dechlorination and mineralization of trichloroacetic acid: Parametric experiments, degradation pathway and bioassessment, **Chemical Engineering Journal**, Volume 328, 15 November 2017, Pages 331-342.
69. M. Moradi, G. Moussavi, Oxidation of acetaminophen in the contaminated water using UVC/S₂O₈²⁻ process in a cylindrical photoreactor: Efficiency and kinetics of degradation and mineralization, **Separation and Purification Technology**, In press, accepted manuscript, Available online 4 August 2017.
70. A. Allahabadi, G. Moussavi, Preparation, characterization and atrazine adsorption potential of mesoporous carbonate-induced activated biochar (CAB) from Calligonum Comosum biomass: Parametric experiments and kinetics, equilibrium and thermodynamic modeling, **Journal of Molecular Liquids**, Volume 242, September 2017, Pages 40-52.
71. R. Rostami, G. Moussavi, A. Jonaidi, S. Darbari, Decomposition of benzene using wire-tube AC/DC discharge reactors, **Journal of Electrostatics**, Volume 87, June 2017, Pages 158-166.
72. G. Moussavi, S. Shekoohian, K. Naddafi, The accelerated enzymatic biodegradation and COD removal of petroleum hydrocarbons in the SCR using active bacterial biomass capable of in-situ generating peroxidase and biosurfactants, **Chemical Engineering Journal**, Volume 308, 15 January 2017, Pages 1081-1089.

73. G. Moussavi, H. Momennejad, S. Shekoohyian, P. Baratpour, Oxidation of acetaminophen in the contaminated water using UVC/S₂O₈²⁻ process in a cylindrical photoreactor: Efficiency and kinetics of degradation and mineralization, **Separation and Purification Technology**, Volume 181, 2017, Pages 132-138.
74. A. Mashayekh, G. Moussavi, K. Yaghmaeian, Preparation, characterization and catalytic activity of a novel mesoporous nanocrystalline MgO nanoparticle for ozonation of acetaminophen as emerging water contaminants, **Chemical Engineering Journal**, Volume 310, Part 1, 15 February 2017, Pages 157-169, Available online 22 October 2016.
75. K. Yaghmaeian, G. Moussavi, A. Mashayekh, A. Mohseni-Bandpei, M. Satari, Oxidation of acetaminophen in the ozonation process catalyzed with modified MgO nanoparticles: effect of operational variables and cytotoxicity assessment, **Process Safety and Environmental Protection**, Volume 109, July 2017, Pages 520-528.
76. H. Hossaini, G. Moussavi, M. Farrokhi, Oxidation of diazinon in *cns*-ZnO/LED photocatalytic process: catalyst preparation, photocatalytic examination, and toxicity bioassay of oxidation by-products, **Separation and Purification Technology**, Volume 174, 1 March 2017, Pages 320-330.
77. A. Alahabadi, A. Hosseini-Bandegharaei, G. Moussavi, B. Amin, A. Rastegar, H. Karimi-Sani, M. Fattahi, M. Miri, Comparing adsorption properties of NH₄Cl-modified activated carbon towards chlortetracycline antibiotic with those of commercial activated carbon, **Journal of Molecular Liquids**, Volume 232, April 2017, Pages 367-381.

2016

78. G. Moussavi, S. Shekoohyian, Simultaneous nitrate reduction and acetaminophen oxidation using the continuous-flow chemical-less VUV process as an integrated advanced oxidation and reduction process, **Journal of Hazardous Materials**, Volume 318, 15 November 2016, Pages 329-338.
79. S. Shekoohyian, G. Moussavi, K. Naddafi, The peroxidase-mediated biodegradation of petroleum hydrocarbons in a H₂O₂-induced SBR using in-situ production of peroxidase: biodegradation experiments and bacterial identification, **Journal of Hazardous Materials**, Volume 313, 5 August 2016, Pages 170-178.
80. G. Moussavi, M. Mahdavianpour, The selective direct oxidation of ammonium in the contaminated water to nitrogen gas using the chemical-less VUV photochemical continuous-flow reactor, **Chemical Engineering Journal**, Volume 295, 1 July 2016, Pages 57-63.

81. G. Moussavi, M. Pourakbar, E. Aghayani, M. Mahdavianpour, S. Shekoohyan, Comparing the efficacy of VUV and UVC/S₂O₈²⁻ advanced oxidation processes for degradation and mineralization of cyanide in wastewater, **Chemical Engineering Journal**, Volume 294, 15 June 2016, Pages 273-280.
82. A. Mashayekh, G. Moussavi, Removal of acetaminophen from the contaminated water using adsorption onto carbon activated with NH₄Cl, **Desalination and Water Treatment**, Volume 57, 2016, Pages 12861-12873.
83. G. Moussavi, S. Shekoohyan, S. Mojab, Adsorption capacity of NH₄Cl-induced activated carbon for the removal sodium dodecyl sulfate from water, **Desalination and Water Treatment**, Volume 57, January 2016, Pages 11283-11290.
84. G. Moussavi, S. Shekoohyan, K. Naddafi, Anoxic biodegradation of petroleum hydrocarbons in saline media using denitrifier biogranules, **Ecotoxicology and Environmental Safety**, Volume 129, July 2016, Pages 51-56.
85. F. Rezaei, G. Moussavi, A. Riyahi, Y. Yamini, Toluene removal from waste air stream by the catalytic ozonation process with MgO/GAC composite as catalyst, **Journal of Hazardous Materials**, Volume 306, 5 April 2016, Pages 348-358.
86. G. Moussavi, Z. Hossaini, M. Pourakbar, High-rate adsorption of acetaminophen from the contaminated water onto double-oxidized graphene oxide, **Chemical Engineering Journal**, Volume 287, 1 March 2016, Pages 665-673.
87. M. Pourakbar, G. Moussavi, S. Shekoohyan, Homogenous VUV advanced oxidation process for enhanced degradation and mineralization of antibiotics in contaminated water, **Ecotoxicology and Environmental Safety**, Volume 125, March 2016, Pages 72-77.
88. G. Moussavi, M. Leili, K. Naddafi, Investigation of furfural biodegradation in a continuous inflow cyclic biological reactor, **Water Science and Technology**, Volume 73, January 2016, Pages 292-301.
89. S.J. Jafari, G. Moussavi, H. Hossaini, Degradation and mineralization of diazinon pesticide in UVC and UVC/TiO₂ processes, **Desalination and Water Treatment**, Volume 57, January 2016, Pages 3782-3790.
90. G. Moussavi, M. Aqaneghad, Electrochemically enhancement of the anaerobic baffled reactor performance as an appropriate technology for treatment of municipal wastewater in developing countries, **Sustainable Environment Research**, Volume 26, Issue 5, September 2016, Pages 203-208.

91. **G. Moussavi**, J. Jafari, K. Yaghmaeian, High-rate biological denitrification in the cyclic rotating-bed biological reactor: effect of COD/NO₃⁻, nitrate concentration and salinity and the phylogenetic analysis of denitrifiers, **Bioresource Technology**, Volume 197, December 2015, Pages 482-488.
92. **G. Moussavi**, M. Ghorbanian, The biodegradation of petroleum hydrocarbons in an upflow sludge-blanket/fixed-film hybrid bioreactor under nitrate-reducing conditions: performance evaluation and microbial identification, **Chemical Engineering Journal**, Volume 280, 15 November 2015, Pages 121-131.
93. **G. Moussavi**, F. Jiani, S. Shekoohyian, Advanced reduction of Cr(VI) in real chrome-plating wastewater using a VUV photoreactor: batch and continuous-flow experiments, **Separation and Purification Technology**, Volume 151, 4 September 2015, Pages 218-224.
94. **G. Moussavi**, M. Aqanaghad, Performance evaluation of electro-Fenton process for pretreatment and biodegradability improvement of a pesticide manufacture effluent, **Sustainable Environment Research**, Volume 25, 5 September 2015, Pages 249-254.
95. **G. Moussavi**, J. Jafari, K. Yaghmaeian, Enhanced biological denitrification in the cyclic rotating biological reactor with catechol as carbon source, **Bioresource Technology**, Volume 189, August 2015, Pages 266-272.
96. **G. Moussavi**, K. Yaghmaeian, A. Alahabadi, Investigating the potential of carbon activated with NH₄Cl for catalyzing the degradation and mineralization of antibiotics in ozonation process, **Chemical Engineering Research and Design**, Volume 97, May 2015, Pages 91-99.
97. A.A. Aghapour, **G. Moussavi**, K. Yaghmaeian, Degradation and COD removal of catechol in wastewater using the catalytic ozonation process combined with the cyclic rotating-bed biological reactor, **Journal of Environmental Management**, Volume 157, 1 July 2015, Pages 262-266.
98. **G. Moussavi**, M. Borghee, M. Farzadkia, R. AHmadi Asl, Decolorization and mineralization of reactive red 198 in saline water: performance comparison of photolysis, UV/TiO₂, and UV/ZnO processes, **Environmental Engineering and Management Journal**, Volume 14, May 2015, No. 5, pages 1027-1036.
99. M. Abbasi, M. Dehghani, **G. Moussavi**, A. Azhdarpoor, Degradation of organic matter of municipal sewage sludge using ultrasound treatment in Shiraz wastewater treatment plant, **Health Scope**, 4(1): September 2015, e23507.

2014

100. **G. Moussavi**, H. Hossaini, S.J. Jafari, M. Farokhi, Comparing the efficacy of UVC, UVC/ZnO and VUV processes for oxidation of organophosphate pesticides in water, **Journal**

of Photochemistry and Photobiology A: Chemistry, Volume 290, 15 September 2014, Pages 86-93.

101. G. Moussavi, S. Ghodrati, A. Mohseni-Bandpei, The biodegradation and COD removal of 2-chlorophenol in a granular anoxic baffled reactor, *Journal of Biotechnology*, Volume 184, 20 August 2014, Pages 111-117.
102. G. Moussavi, M. Aghanejad, The performance of electrochemical peroxidation process for COD reduction and biodegradability improvement of the wastewater from a paper recycling plant, *Separation and Purification Technology*, Volume 132, 20 August 2014, Pages 182-186.
103. G. Moussavi, A.A. Aghapour, K. Yaghmaian, The degradation and mineralization of catechol using ozonation catalyzed with MgO/GAC composite in a fluidized bed reactor, *Chemical Engineering Journal*, Volume 249, 1 August 2014, Pages 302-310.
104. H. Hossaini, G. Moussavi, M. Farrokhi, The investigation of the LED-activated FeFNS-TiO₂ nanocatalyst for photocatalytic degradation and mineralization of organophosphate pesticides in water, *Water Research*, Volume 59, 1 August 2014, Pages 130-144.
105. M. Ghorbanian, G. Moussavi, M. Farzadkia, Investigating the performance of an up-flow anoxic fixed-bed bioreactor and a sequencing anoxic batch reactor for the biodegradation of hydrocarbons in petroleum-contaminated saline water, *International Biodeterioration & Biodegradation*, Volume 90, May 2014, Pages 106-114.
106. K. Yaghmaeian, G. Moussavi, A. Alahabadi, Removal of amoxicillin from contaminated water using NH₄Cl-activated carbon: Continuous flow fixed-bed adsorption and catalytic ozonation regeneration, *Chemical Engineering Journal*, Volume 236, 15 January 2014, Pages 538-544.
107. A. Ajdarpour, B. Mortazavi, G. Moussavi, Oily wastewaters treatment using Pseudomonas sp. isolated from the compost fertilizer, *Journal of Environmental Health Science & Engineering*, volume 12, 2014.

108. M.Leili, G.Moussavi, K.Naddafi, Removal of Furfural From Wastewater Using Integrated Catalytic Ozonation and Biological Approaches, **Avicenna J. Environ. Health Eng.** 2014 December; 1(1):e120.

2013

109. G. Moussavi, R. Rashidi, A. Khavanin, The efficacy of GAC/MgO composite for destructive adsorption of benzene from waste air stream, **Chemical Engineering Journal**, Volume 228, 15 July 2013, Pages 741-747. (IF: 6.216)
110. A.A. Aghapour, G. Moussavi, K. Yaghmaeian, Investigating the performance of a novel cyclic rotating-bed biological reactor compared with a sequencing continuous-inflow reactor for biodegradation of catechol in wastewater, **Bioresource Technology**, Volume 138, June 2013, Pages 369-372. (IF: 5.651)
111. G. Moussavi, A. Alahabadi, K. Yaghmaian, M. Eskandari, Preparation, characterization and adsorption potential of the NH₄Cl-induced activated carbon for the removal of amoxicillin antibiotic from water, **Chemical Engineering Journal**, Volume 217, 1 February 2013, Pages 119-128. (IF: 6.216)
112. G. Moussavi, H. Hosseini, A. Alahabadi, The investigation of Diazinon pesticide removal from contaminated water by adsorption onto NH₄OH-induced activated carbon, **Chemical Engineering Journal**, Volume 214, 1 January 2013, Pages 172-179. (IF: 6.216)
113. A.A. Aghapour, G. Moussavi, K. Yaghmaeian, Biological degradation of catechol in wastewater using the sequencing continuous-inflow reactor (SCR), **Iranian Journal of Environmental Health Science and Engineering**, 11 (2013). (IF: 2.28)
114. B. Barikbin, B. Mortazavi, G. Moussavi, Simultaneous removal of Cr(VI) from water containing sulfate using nanofiltration, **Desalination and Water Treatment**, 2013, Pages 1-7. (IF: 1.171)
115. G. Moussavi, S. Talebi, M. Farokhi, M. Mojtbaee, Removal of ammonium from water by adsorption onto synthetic zeolites NaA and NaX: A comparative parametric, kinetic and equilibrium study, **Desalination and Water Treatment**, 2013, 51 (28-30), pp. 5710-5720. (IF: 1.171)

116. M. Leili, G. Moussavi, K. Nadafi, Degradation and mineralization of furfural in aqueous solutions using heterogeneous catalytic ozonation, ***Desalination and Water Treatment***, 2013, 51 (34-36), pp. 6789-679. (IF: 1.171)
117. A. Ajdarpour, B. Mortazavi, G. Moussavi, Isolation of the lipase producing bacteria from oily wastewater and determination of the variables for optimum lipase production, ***Fresenius Environmental Bulletin***, 2013, 22, pp. 1-6. (IF: 0.38)
- 118.
119. G. Moussavi, R. Khosravi, Degradation of concentrated toluene vapors in a UV/O₃ process combined with biotrickling filtration, ***Environmental Engineering and Management Journal***, In Press, Accepted Manuscript, Available online 2013. (IF: 1.065)

2012

120. G. Moussavi, A. Bagheri, A. Khavanin, The investigation of degradation and mineralization of high concentrations of formaldehyde in an electro-Fenton process combined with the biodegradation, ***Journal of Hazardous Materials***, Volumes 237–238, 30 October 2012, Pages 147-152. (IF: 6.065)
121. G. Moussavi, R. Khosravi, Preparation and characterization of a biochar from pistachio hull biomass and its catalytic potential for ozonation of water recalcitrant contaminants, ***Bioresource Technology***, Volume 119, September 2012, Pages 66-71. (IF: 5.651)
122. G. Moussavi, R. Khosravi, N. Rashidnejad, Development of an efficient catalyst from magnetite ore: Characterization and catalytic potential in the ozonation of water toxic contaminants, ***Applied Catalysis A: General***, Volumes 445–446, 28 November 2012, Pages 42-49. (IF: 4.339)
123. M. Afsharnia, A. Torabian, G. Moussavi, M. Abdoli, Landfill leachate treatment through sono-evaporation, ***Desalination and water Treatment***, Volume 48, Issue 1-3, 2012, Available online 13 September 2012. (IF: 0.93)
124. G. Moussavi, A. Bagheri, Removal of petroleum hydrocarbons from contaminated groundwater by the combined technique of adsorption onto perlite followed by the O₃/H₂O₂ process, ***Environmental Technology***, 33 (16), pp. 1905-1912. (IF: 1.751)
125. G. Moussavi, S. Talebi, Comparing the efficacy of a novel waste-based adsorbent with PAC for the simultaneous removal of chromium (VI) and cyanide from electroplating wastewater, ***Chemical Engineering Research and Design***, Volume 90, Issue 7, July 2012, Pages 960-966. (IF: 2.538)

2011

126. G. Moussavi, R. Khosravi, The removal of cationic dyes from aqueous solutions by adsorption onto pistachio hull waste, **Chemical Engineering Research and Design**, Volume 89, Issue 10, October 2011, Pages 2182-2189. (IF: 2.538)
127. G. Mussavi, F. Majidi, M. Farzadkia, The influence of operational parameters on elimination of cyanide from wastewater using the electrocoagulation process, **Desalination**, Volume 280, Issues 1-3, 3 October 2011, Pages 127-133. (IF: 5.527)
128. G. Moussavi, R. Khosravi, M. Farzadkia, Removal of petroleum hydrocarbons from contaminated groundwater using an electrocoagulation process: Batch and continuous experiments, **Desalination**, Volume 278, Issues 1-3, 1 September 2011, Pages 288-294. (IF: 5.527)
129. G. Moussavi, S. Talebi, M. Farrokhi, R. MojtabaeeSabouti, The investigation of mechanism, kinetic and isotherm of ammonia and humic acid co-adsorption onto natural zeolite, **Chemical Engineering Journal**, Volume 171, Issue 3, 15 July 2011, Pages 1159-1169. (IF: 6.216)
130. G. Moussavi, A. Khavanin, A. Sharifi, Ammonia removal from a waste air stream using a biotrickling filter packed with polyurethane foam through the SND process, **Bioresource Technology**, Volume 102, Issue 3, February 2011, Pages 2517-2522. (IF: 5.651)
131. G. Moussavi, M. Heidarizad, The performance of SBR, SCR, and MSCR for simultaneous biodegradation of high concentrations of formaldehyde and ammonia, **Separation and Purification Technology**, Volume 77, Issue 2, 20 February 2011, Pages 187-195. (IF: 3.359)
132. M. H. Ehrampoosh, G. Moussavi, M. T. Ghaneian, S. Rahimi, M. Ahmadian, Removal of methylene blue dye from textile simulated sample using tubular reactor and TiO₂/UV-C photocatalytic process, **Iranian Journal of Environmental Health Science & Engineering**, 2011; 8(1) : 34-40. (IF: 2.28)
133. B. Barikbin, B. Mortazavi, G. Moussavi, Removal of hexavalent chromium from brackish groundwater by nanofiltration: A case study in Iran, **Journal of Water Supply: Research and Technology- AQUA**, 60 (2) 121-126. (IF: 0.824)

134. B. Ramavandi, S.B. Mortazavi, G. Moussavi, Experimental investigation of the chemical reduction of nitrate ion in aqueous solution by Mg/Cu bimetallic particles, *Reaction Kinetics, Mechanisms and Catalysis* 102 (2), PP. 313-329. (IF: 1.264)
135. S.B. Mortazavia, B. Ramavandi, G. Moussavi, Chemical reduction kinetics of nitrate in aqueous solution by Mg/Cu bimetallic particles, *Environmental Technology*, Vol. 32, No. 3, February 2011, 251–260. (IF: 1.751)
136. B. Ramavandi, S.B. Mortazavi, G. Moussavi, B. Ranjbar, S. Mamisaheby, Experimental investigation of the chemical reduction of nitrate in water by Mg and Cu/Mg bimetallic particles in the absence of any pH control mechanism, *Fresenius Environmental Bulletin*, Volume 20 – No 9a. 2011. (IF: 0.38)

2010

137. G. Moussavi, A. Khavanin, R. Alizadeh, The integration of ozonation catalyzed with MgOnanocrystals and the biodegradation for the removal of phenol from saline wastewater, *Applied Catalysis B: Environmental*, Volume 97, Issues 1-2, 9 June 2010, Pages 160-167. (IF: 9.446)
138. G. Moussavi, M. Heidarizad, Biodegradation of mixture of phenol and formaldehyde in wastewater using a single-basin MSCR process, *Journal of Biotechnology*, Volume 150, Issue 2, 15 October 2010, Pages 240-245. (IF: 2.47)
139. G. Moussavi, R. Khosravi, Removal of cyanide from wastewater by adsorption onto pistachio hull wastes: Parametric experiments, kinetics and equilibrium analysis, *Journal of Hazardous Materials*, Volume 183, Issues 1-3, 15 November (2010), Pages 724-730. (IF: 6.065)
140. G. Moussavi, B. Barikbin, Biosorption of chromium(VI) from industrial wastewater onto pistachio hull waste biomass, *Chemical Engineering Journal*, Volume 162, Issue 3, 1 September (2010) Pages 893-900. (IF: 6.216)
141. G. Moussavi, B. Barikbin, M. Mahmoudi, The removal of high concentrations of phenol from saline wastewater using aerobic granular SBR, *Chemical Engineering Journal*, Volume 158, Issue 3, 15 April 2010, Pages 498-504. (IF: 6.216)
142. G. Moussavi, F. Kazembeigi, M. Farzadkia, Performance of a pilot scale up-flow septic tank for on-site decentralized treatment of residential wastewater, *Process Safety and Environmental Protection*, Volume 88, Issue 1, January 2010, Pages 47-52. (IF: 2.905)

143. B.Mortazavi, G. Asgari, J. Hashemian, **G. Moussavi**, Degradation of humic acids through heterogeneous catalytic ozonation with bone charcoal, **Reaction Kinetics, Mechanisms and Catalysis**, 100 (2010), pp. 471-485. (IF: 1.265)
144. M. Farzadkia, R. Rezaee Kalantari, **G. Moussavi**, S. Jorfi, M. Gholami, The effect of organic loading on propylene glycol removal using fixed bed activated sludge hydride reactor, **Chemical and Biochemical Engineering Quarterly** 24 (2010), pp. 227-234. (IF: 0.675)
145. S.B. Mortazavi, B. Ramavandi, **G.Moussavi**, Chemical reduction kinetics of nitrate in aqueous solution by Mg/Cu bimetallic particles, **Environmental Technology**, In Press, accepted manuscript, (2010). (IF: 1.751)
146. M.H. Ehrampoush, **G.Moussavi**, M.T. Ghaneian, S. Rahimi, M. Ahmadian, Removal of Methylene blue (MB) dye from textile synthetic wastewater using TiO₂/UV-C photocatalytic process, **Australian Journal of Basic and Applied Sciences** 4 (2010), pp. 4279-4285.

2009

147. **G. Moussavi**, A. Yazdanbakhsh, M. Heidari, The removal of formaldehyde from concentrated synthetic wastewater using O₃/MgO/H₂O₂ process integrated with the biological treatment, **Journal of Hazardous Materials**, 171 (2009) 907-913. (IF: 6.065)
148. **G. Moussavi**, A. Khavanin, R. Alizadeh, The investigation of catalytic ozonation and integrated catalytic ozonation/biological processes for the removal of phenol from saline wastewaters, **Journal of Hazardous Materials**, 171 (2009) 175-181. (IF: 6.065)
149. **G. Moussavi**, M. Mahmoudi, Degradation and biodegradability improvement of the reactive red 198 azo dye using catalytic ozonation with MgO nanocrystals, **Chemical Engineering Journal**, 152 (2009) 1-7. (IF: 6.216)
150. **G. Moussavi**, M. Mahmoudi, Removal of azo and anthraquinone reactive dyes from industrial wastewaters using MgO nanoparticles, **Journal of Hazardous Materials**, 168 (2009) 806-812. (IF: 6.065)
151. **G. Moussavi**, M. Mahmoudi, B. Barikbin, Biological removal of phenol from strong wastewaters using a novel MSBR. **Water Research**, 43 (2009) 1295-1302. (IF: 6.942)

152. G. Moussavi, M.B. Bahadori, M. Farzadkia, A. Yazdanbakhsh, M. Mohseni, Performance evaluation of a thermophilic biofilter for the removal of MTBE from waste air stream: Effects of inlet concentration and EBRT, *Biochemical Engineering Journal*, 45 (2009) 152-156. (IF: 2.463)

2008

153. G. Moussavi, M. Mohseni, The treatment of waste air containing phenol vapors in biotrickling filter, *Chemosphere*, 72 (2008) 1649-1654. (IF: 3.698)
154. A. Rezaee, M.T. Ghaneian, A. Khavanin, S.J. Hashemian, G. Moussavi, G.H. Ghanizadeh, E. Hajizadeh, Photochemical oxidation of Reactive blue 19 dye (RB19) in textile wastewater by UV/K₂S₂O₈ process, *Iranian Journal of Environmental Health Science and Engineering*, 5 (2008) 95-100. (IF: 2.28)
155. G. Moussavi, K. Naddafi, A. Mesdaghinia, M. Mohseni, Effectiveness of hydrogen peroxide in H₂S removal by a packed high specific surface area bed scrubber, *Chemical and Biochemical Engineering Quarterly* 22 (2008) 9-14. (IF: 0.675)
156. Rezaee, H. Godini, S. Dehestani, A. Yazdanbakhsh, G. Moussavi, A. Kazemnejad, Biological denitrification by *Pseudomonas stutzeri* immobilized on microbial cellulose, *World Journal of Microbiology and Biotechnology*, 24 (2008) 2397-2402.
157. A. Rezaee, M.T. Ghaneian, S.J. Hashemian, G. Moussavi, Enhanced decolorization of Reactive Blue 19 dye from synthetic textile wastewater through UV photolysis in alkaline conditions, *Environmental Engineering and Management Journal* 7 (2008) 119-123. (IF: 1.065)
158. S.B. Mortazavi, A. Khavanin, G. Moussavi, A. Azhdarpoor, Removal of sodium dodecyl sulfate in an intermittent cycle extended aeration system, *Pakistan Journal of Biological Sciences* 11 (2008) 290-293.
159. G. Moussavi, H. Asilian, A. Jamal, Effect of Ozonation on Reduction of Volume and Mass of Waste Activated Sludge, *Journal of Applied Sciences Research*, 4 (2008): 122-127.

2007

.....