

## Resr. ASMAE BOUZIANI

### Personal Information

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### International Researcher IDs

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### Education Information

Post Doctorate, Middle East Technical University, Faculty of Engineering, Department of Chemical Engineering, Turkey  
2019 - Continues

Post Doctorate, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials  
Engineering, Turkey 2018 - 2019

Doctorate, Université Mohammed V - Agdal, Faculty of Science, Chemistry, Morocco 2012 - 2016

### Research Areas

Material science and engineering, Analytical Chemistry, Infrared Spectroscopy, Chromatographic Analysis, Mass Spectroscopy, Magnetic Resonance Spectroscopy, Molecular Mass Spectroscopy, Surface Analysis, Physical Chemistry, Conductive Polymers, nanocomposites, Surface Chemistry, Inorganic Chemistry, Catalysis, Solid-State Chemistry

### Academic Titles / Tasks

Researcher, Middle East Technical University, Faculty of Engineering, Department of Chemical Engineering, 2019 -  
Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Ba<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> Photocatalyst for Efficient Photocatalytic Application**  
Naciri Y., Ahdour A., Benhsina E., Hamza M. A., BOUZIANI A., Hsini A., Bakiz B., Navío J. A., Ghazzal M. N.  
Global Challenges, vol.8, no.1, 2024 (SCI-Expanded)
- II. **Antibiotic photocatalysis and antimicrobial activity of low-cost multifunctional Fe<sub>3</sub>O<sub>4</sub>@HAp nanocomposites**  
Labrag J., Abbadi M., Hnini M., Bekkali C. E., BOUZIANI A., Robert D., Aurag J., Laghzizil A., Nunzi J.  
Journal of Environmental Health Science and Engineering, vol.21, no.2, pp.429-440, 2023 (SCI-Expanded)
- III. **Use of conductive polymer-supported oxide-based photocatalysts for efficient VOCs & SVOCs removal in gas/liquid phase**  
Ajmal Z., Naciri Y., Ahmad M., Hsini A., Bouziani A., Laabd M., Raza W., Murtaza A., Kumar A., Ullah S., et al.  
Journal of Environmental Chemical Engineering, vol.11, no.1, 2023 (SCI-Expanded)
- IV. **Ternary Poly(aniline)@Bi<sub>2</sub>O<sub>3</sub>-BiOCl Nanocomposites as Innovative Highly Active Photocatalysts for**

### **the Removal of the Dye under Solar Light Irradiation**

BOUZIANI A., Yahya M., Bianchi C. L., Falletta E., ÇELİK G.

Nanomaterials, vol.13, no.4, 2023 (SCI-Expanded)

- V. **Pd as a reduction promoter for TiO<sub>2</sub>: Oxygen and hydrogen transport at 2D and 3D Pd interfaces with TiO<sub>2</sub> monitored by TPR, operando <sup>1</sup>H NMR and CO oxidation studies**  
YARAR M., Bouzani A., ÜNER D.  
Catalysis Communications, vol.174, 2023 (SCI-Expanded)
- VI. **Synthesis and characterisation of PANI- coated Heliotrope Leaves (PANI@HL) with high clean-up capacity for Orange G dye from aqueous media**  
Brini L., H'Maida K., Imgharn A., Hsini A., Naciri Y., Ajmal Z., BOUZIANI A., Boulahya A., Arahou M., Bakiz B., et al.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.103, no.20, pp.8641-8657, 2023 (SCI-Expanded)
- VII. **Iron phosphate for photocatalytic removal of Ibuprofen from aqueous media under sun-like irradiation**  
Mimouni I., Yahya M., BOUZIANI A., Naciri Y., Maarouf F., Alaoui El Belghiti M., El Azzouzi M.  
Journal of Photochemistry and Photobiology A: Chemistry, vol.433, 2022 (SCI-Expanded)
- VIII. **Structural, photophysical and optoelectronic activity of triphenylamine-based push-pull chromophores: a theoretical study**  
Yahya M., Suvitha A., BOUZIANI A.  
OPTICAL AND QUANTUM ELECTRONICS, vol.54, no.12, 2022 (SCI-Expanded)
- IX. **Development of polyaniline coated titania-hematite composite with enhanced photocatalytic activity under sun-like irradiation**  
BOUZIANI A., Yahya M., Naciri Y., Hsini A., Khan M. A., Sillanpää M., ÇELİK G.  
Surfaces and Interfaces, vol.34, 2022 (SCI-Expanded)
- X. **Recent advances of bismuth titanate based photocatalysts engineering for enhanced organic contaminates oxidation in water: A review**  
Naciri Y., Hsini A., Ahdour A., Akhsassi B., Fritah k., Ajmal Z., Djellabi R., BOUZIANI A., Taoufyq A., Bakiz B., et al.  
Chemosphere, vol.300, 2022 (SCI-Expanded)
- XI. **Effectiveness of a novel polyaniline@Fe-ZSM-5 hybrid composite for Orange G dye removal from aqueous media: Experimental study and advanced statistical physics insights**  
Imgharn A., Anchoum L., Hsini A., Naciri Y., Laabd M., Mobarak M., Aarab N., BOUZIANI A., Szunerits S., Boukherroub R., et al.  
Chemosphere, vol.295, 2022 (SCI-Expanded)
- XII. **Z-scheme WO<sub>3</sub>/PANI heterojunctions with enhanced photocatalytic activity under visible light: A depth experimental and DFT studies**  
Naciri Y., Hsini A., BOUZIANI A., Tanji K., El Ibrahimy B., Ghazzal M., Bakiz B., Albourine A., Benhachemi A., Navío J., et al.  
Chemosphere, vol.292, 2022 (SCI-Expanded)
- XIII. **Effect of heat treatment on the photocatalytic activity of alpha-Fe<sub>2</sub>O<sub>3</sub> nanoparticles: towards diclofenac elimination**  
Mimouni I., BOUZIANI A., Naciri Y., Boujnah M., El Belghiti M. A., El Azzouzi M.  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.29, no.5, pp.7984-7996, 2022 (SCI-Expanded)
- XIV. **Photocatalytic oxidation of pollutants in gas-phase via Ag<sub>3</sub>PO<sub>4</sub>-based semiconductor photocatalysts: Recent progress, new trends, and future perspectives**  
Naciri Y., Hsini A., Bouziani A., Djellabi R., Ajmal Z., Laabd M., Navio J. A., Mills A., Bianchi C. L., Li H., et al.  
CRITICAL REVIEWS IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.52, no.13, pp.2339-2382, 2022 (SCI-Expanded)
- XV. **Polyaniline coated tungsten trioxide as an effective adsorbent for the removal of orange G dye from aqueous media**  
Hsini A., Naciri Y., BOUZIANI A., Aarab N., Essekrei A., Imgharn A., Laabd M., Navio J. A., Puga F., Lakhmiri R., et al.  
RSC ADVANCES, vol.11, no.50, pp.31272-31283, 2021 (SCI-Expanded)

- XVI. **Synthesis and characterization of arginine-doped heliotrope leaves with high clean-up capacity for crystal violet dye from aqueous media**  
Brini L., Hsini A., Naciri Y., BOUZIANI A., Ajmal Z., H'Maida K., Boulahya A., Arahou M., Bakiz B., Albourine A., et al. WATER SCIENCE AND TECHNOLOGY, vol.84, pp.2265-2277, 2021 (SCI-Expanded)
- XVII. **Effects of fluorination and thermal shock on the photocatalytic activity of Bi<sub>2</sub>O<sub>3</sub> nanopowders**  
BOUZIANI A., Park J., ÖZTÜRK A.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.626, 2021 (SCI-Expanded)
- XVIII. **Development of a novel PANI@WO<sub>3</sub> hybrid composite and its application as a promising adsorbent for Cr(VI) ions removal**  
Hsini A., Naciri Y., Laabd M., BOUZIANI A., Navío J., Puga F., Boukherroub R., Lakhmiri R., Albourine A.  
Journal of Environmental Chemical Engineering, vol.9, no.5, 2021 (SCI-Expanded)
- XIX. **Organic/metal-organic photosensitizers for dye-sensitized solar cells (DSSC): Recent developments, new trends, and future perceptions**  
Yahya M., BOUZIANI A., OCAK C., SEFEROĞLU Z., Sillanpää M.  
Dyes and Pigments, vol.192, 2021 (SCI-Expanded)
- XX. **Synthesis of an arginine-functionalized polyaniline@FeOOH composite with high removal performance of hexavalent chromium ions from water: Adsorption behavior, regeneration and process capability studies**  
Hsini A., Benafqir M., Naciri Y., Laabd M., BOUZIANI A., Ez-zahery M., Lakhmiri R., Alem N. E., Albourine A.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.617, 2021 (SCI-Expanded)
- XXI. **Evolution of the physicochemical and photocatalytic properties of BaO embedded in bismuth phosphovanadates glasses**  
Ferraas S., Naciri Y., Hsini A., Barebita H., Bouziani A., Albourine A., Nimour A., Guedira T.  
CHEMICAL PHYSICS LETTERS, vol.763, 2021 (SCI-Expanded)
- XXII. **Synthesis of alpha-Fe<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> heterogeneous composites by the sol-gel process and their photocatalytic activity**  
Bouziani A., PARK J., ÖZTÜRK A.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.400, 2020 (SCI-Expanded)
- XXIII. **Synthesis and enhanced photocatalytic activity of nitrogen-doped triphasic TiO<sub>2</sub> nanoparticles**  
Erdogan N., Bouziani A., PARK J., Micusik M., Kim S. Y., Majkova E., Omastova M., ÖZTÜRK A.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.377, pp.92-100, 2019 (SCI-Expanded)
- XXIV. **Photocatalytic degradation of the herbicide imazapyr: do the initial degradation rates correlate with the adsorption kinetics and isotherms?**  
Atitar M. F., Bouziani A., Dillert R., El Azzouzi M., Bahnemann D. W.  
CATALYSIS SCIENCE & TECHNOLOGY, vol.8, no.4, pp.985-995, 2018 (SCI-Expanded)
- XXV. **Factors Influencing Imazapyr Herbicide Removal from Wastewater Using Photocatalytic Ozonation**  
Bougarrani S., El Azzouzi L., Akel S., Latrach L., Bouziani A., El Azzouzi M.  
ACTA CHIMICA SLOVENICA, vol.65, no.2, pp.470-474, 2018 (SCI-Expanded)
- XXVI. **Mixed alpha-Fe<sub>2</sub>O<sub>3</sub>/Bi<sub>2</sub>WO<sub>6</sub> oxides for photoassisted hetero-Fenton degradation of Methyl Orange and Phenol**  
Jaramillo-Paez C., Navío J. A., Hidalgo M. C., Bouziani A., El Azzouzi M.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.332, pp.521-533, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The influence of humic acids extracted from Chaouia soil on the behavior of transition metal ions and pesticides**  
Bougarrani S., El Azzouzi L., Bouziani A., Akel S., Latrach L., Baicha Z., El Azzouzi M.  
MOROCCAN JOURNAL OF CHEMISTRY, vol.5, no.3, pp.446-452, 2017 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Non-oxidative propane dehydrogenation over anatase TiO<sub>2</sub>-x**  
Khan I. A., Bouziani A., Çelik G.  
6th Anatolian School of Catalysis 2022, İzmir, Turkey, 23 September - 28 December 2022, pp.1
- II. **Effect of chlorination on the catalytic activity of ZrO<sub>2</sub> toward nonoxidative propane dehydrogenation**  
Çelik G., Bouziani A.  
12th International Conference on Environmental Catalysis (ICEC2022), Osaka, Japan, 30 July - 02 August 2022, pp.1
- III. **Non-oxidative dehydrogenation of propane over phosphate-modified ZrO<sub>2</sub>**  
Bouziani A., Çelik G.  
6th Anatolian School of Catalysis 2022, İzmir, Turkey, 23 - 28 September 2022, pp.1
- IV. **Preparation of 2D g-C<sub>3</sub>N<sub>4</sub>/TiO<sub>2</sub> Heterojunction Nanocomposites for Photocatalytic Applications**  
Gündoğmuş P., Bouziani A., ERDOĞAN N., PARK J., ÖZTÜRK A.  
19. Uluslararası Metalurji ve Malzeme Kongresi, İstanbul, Turkey, 25 - 27 October 2018, vol.1, no.1, pp.547-550
- V. **Production of Photocatalytically Active TiO<sub>2</sub> - P<sub>2</sub>O<sub>5</sub> Glasses by the Sol-gel Process**  
öztürk Y. C., Bouziani A., EFE M., PARK J., KALEM V., ÖZTÜRK A.  
19. Uluslararası Metalurji ve Malzeme Kongresi, İstanbul, Turkey, 25 - 27 October 2018, vol.1, pp.412-415

## Activities in Scientific Journals

FRONTIERS IN CHEMISTRY, Special Issue Editor, 2023 - Continues

## Memberships / Tasks in Scientific Organizations

International Younger Chemists Network, Member, 2021 - Continues, United States Of America

Chinese Chemical Society , Member, 2021 - Continues, China

## Scientific Refereeing

APPLIED SURFACE SCIENCE, SCI Journal, May 2023

CATALYSTS, Journal Indexed in SCI-E, August 2022

FRONTIERS IN CHEMISTRY, Journal Indexed in SSCI, February 2022

## Metrics

Publication: 32

Citation (WoS): 317

Citation (Scopus): 76

H-Index (WoS): 15

H-Index (Scopus): 4

## Scholarships

International Researchers, TUBITAK, 2018 - 2019