

## CURRICULUM VITAE

### PERSONAL DATA

<b>Name</b>	Mokhtar Hjiri
<b>Nationality</b>	Tunisian
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### EDUCATION

<b>Year</b>	<b>Academic Degree</b>	<b>Institution</b>
2016	Doctorate	University of Monastir, Tunisia
2010	Master	University of Monastir, Tunisia
2008	Bachelor	University of Gabes, Tunisia

### WORK EXPERIENCE

<b>Period</b>	<b>Position</b>	<b>Address</b>
August 2022 until now	Associate Professor	Imam Mohammed Ibn Saud Islamic University, Riyadh, Saudi Arabia
August 2020-June 2022	Associate Professor	King Abdulaziz University, Jeddah, Saudi Arabia
October 2016-June 2020	Assistant Professor	King Abdulaziz University, Jeddah, Saudi Arabia
September 2010-June 2014	Lecturer	University of Gabes, Tunisia

## RESEARCH INTERESTS

Nanomaterials synthesis, Gas sensors, antibacterial activities, Photocatalysis

## PUBLICATIONS

1. M.S. Aida, N. Alonizan, B. Zarrad, **M. Hjiri**, Influence of plant extract on the homogeneous and heterogeneous green chemistry synthesis of nanostructured ZnO, 17 (2023) 2179819.
2. S. Jaballah, **M. Hjiri**, N. Zahmouli, Hasan B. Albargi, R. Dhahri, H. Dahman, L. El Mir, and G. Neri, Room temperature UV-Vis activated NO<sub>2</sub> gas sensor-based Mg-doped zinc oxide nanopowders, J Mater Sci: Mater Electron, 34 (2023) 137.
3. Alejandro Bembibre, Majdi Benamara, **Mokhtar Hjiri**, Elvira Gómez, Hatem R. Alamri, Ramzi Dhahri, Albert Serra, Visible-light driven sonophotocatalytic removal of tetracycline using Ca-doped ZnO nanoparticles, Chemical Engineering Journal 427 (2022) 132006.
4. Ibtessam Alotaibi, Marzook S. Alshammari, Saja Algessair, N. Madkhali, N. AbdelAll, **M. Hjiri**, Sharif AbuAlrub, L. El Mir, O.M. Lemine, Synthesis, characterization, and heating efficiency of Gd-doped maghemite ( $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>) nanoparticles for hyperthermia application, Physica B: Condensed Matter 625 (2022) 413510.
5. M.S. Aida, N.H. Alonizan, M. Hussein, **M. Hjiri**, O. Abdelaziz, R. Attaf, B. Zarrad, Facile synthesis and antibacterial activity of bioplastic membrane containing In doped ZnO/cellulose acetate nanocomposite, Journal of Inorganic and Organometallic Polymers and Materials, 2021.
6. O. M. Lemine, Nawal Madkhali, Marzook Alshammari, Saja Algessair, Abbasher Gismelseed, Lassad El Mir, **Mokhtar Hjiri**, Ali A. Yousif, Kheireddine El-Boubbou, Maghemite ( $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>) and  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> Nanoparticles for Magnetic Hyperthermia Applications: Synthesis, Characterization and Heating Efficiency, Materials 14 (2021) 5691.
7. A. K. Alghamdi, **M. Hjiri**, A. M. Abdel-Daiem, M. Sh. Abdel-wahab, H. Besbess, M. S. Aida, ZnO Nanorods growth via green chemistry using wormwood (Artemisia), Applied Physics A 127 (2021) 489.
8. Enas N. Danial, **M. Hjiri**, M. Sh. Abdel-Wahab, N.H. Alonizan, L. El Mir, M.S. Aida, Antibacterial activity of In-doped ZnO nanoparticles, Inorganic Chemistry Communications 122 (2020) 108281.
9. **M. Hjiri**, N. Zahmouli, K. Khouzami, L. El Mir, M. S. Aida, K. Moulæe, O. M. Lemine, S. G. Leonardi, G. Neri, A comparison of NO<sub>2</sub> sensing characteristics of  $\alpha$ - and  $\gamma$ -iron oxide-based solid-state gas sensors, Applied Physics A 126 (2020) 788.

10. O.M. Lemine, N. Madkhali, **M. Hjiri**, N. Abdel All, M.S. Aida, Comparative heating efficiency of hematite ( $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>) and nickel ferrite nanoparticles for magnetic hyperthermia application, *Ceramics international*, 46 (2020) 28821-28827.
11. M.S. Aida, **M. Hjiri**, Temperature-dependent photoluminescence of Li-doped ZnO, *Journal of Materials Science: Materials in Electronics* 31 (2020)10521–10530.
12. M.M. Althubayti, **M. Hjiri**, N.H. Alonizan, O.M. Lemine, M. S. Aida, Influence of divalent metals (Zn, Cu and Co) on the synthesis and magnetic properties of spinel ferrite nanopowders, *Journal of Materials Science: Materials in Electronics* 31 (2020) 8194–8205
13. N. Zahmouli, **M. Hjiri**, S.G. Leonardi, L. El Mir, G. Neri, D. Iannazzo, C. Espro, M.S. Aida, High performance Gd-doped  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> based acetone sensor, *Materials Science in Semiconductor Processing* 116 (2020) 105154.
14. **M. Hjiri**, F. Bahanan, M.S. Aida, L. El Mir, G. Neri, High Performance CO Gas Sensor Based on ZnO Nanoparticles, *Journal of Inorganic and Organometallic Polymers and Materials*, 30 (2020) 4063–4071.
15. **M. Hjiri**, M.S. Aida, Co<sub>3</sub>O<sub>4</sub>/ $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> nanocomposites (NCs): synthesis and characterization, *Journal of Materials Science: Materials in Electronics*, 31 (2020) 5591–5598.
16. O. M. Lemine, Amal Alanazi, Emmellie Laura Albert, **M. Hjiri**, Mohamed Ould M'hamed, S. Abu Alrub, A. Alkaoud, Che Azuranim Che Abdullah,  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>/Gd<sub>2</sub>O<sub>3</sub>-chitosan magnetic nanocomposite for hyperthermia application: structural, magnetic, heating efficiency and cytotoxicity studies, *Applied Physics A* 126 (2020) 471.
17. **M. Hjiri**, Highly sensitive NO<sub>2</sub> gas sensor based on hematite nanoparticles synthesized by sol-gel technique, *Journal of Materials Science: Materials in Electronics*, 31 (2020) 5025–5031.
18. **M. Hjiri**, M.S. Aida, G. Neri, NO<sub>2</sub> Selective Sensor Based on  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> Nanoparticles Synthesized via Hydrothermal Technique, *Sensors*, 19 (2019) 167.
19. Ada Fort, Enza Panzardi, Valerio Vignoli, **Mokhtar Hjiri**, Mohamed Salah Aida, Marco Mugnaini, Tommaso Addabbo, Co<sub>3</sub>O<sub>4</sub>/Al-ZnO Nano-composites: Gas Sensing Properties, *Sensors*, 19 (2019) 760.
20. **M. Hjiri**, S Alshammari, H Besbes, O M Lemine, A H Hammad, M S Aida, The effect of Ni/Fe ratio on the physical properties of NiFe<sub>2</sub>O<sub>4</sub> nanocomposites, *Mater. Res. Express* 6 (2019) 086107
21. M. Mishal, N. H. Alonizan, **M. Hjiri**, M. S. Aida, Preparation of iron oxide nanoparticles doped with divalent metal: Application for heavy metal removal from waste water, *AIP Conference Proceedings* 2123, 030009 (2019)
22. **M. Hjiri**, N. H. Alonizan, M. M. Althubayti, S. Alshammari, H. Besbes, M. S. Aida, Preparation and photoluminescence of NiFe<sub>2</sub>O<sub>4</sub> nanoparticles, 30 (2019) 15379–15387

23. T. Addabbo, A. Fort, M. Mugnaini, E. Panzardi, A. Pozzebon, **M. Hjiri**, M. S. Aida, A Low-Cost Resistive Gas Sensor Network Based on Zn-Al Doped and Co<sub>3</sub>O<sub>4</sub> Nanopowder Composite, *AISEM 2019: Sensors and Microsystems* pp 163-168
24. **M. Hjiri**, M.S. Aida, O.M. Lemine, L. El Mir, Study of defects in Li-doped ZnO thin films, *Materials Science in Semiconductor Processing*, 89 (2019) 149–153.
25. N. Zahmouli, S. G. Leonardi, A. Bonavita, **M. Hjiri**, L. El Mir, N. Donato and G. Neri, High Performance VOCs Sensor Based on Fe<sub>2</sub>O<sub>3</sub>/Al-ZnO Nanocomposites, *Sensors*, 2019, Lecture Notes in Electrical Engineering 539
26. Nassim Zahmouli, Silvia Marini, Mouna Guediri, Nabil Ben Mansour, **Mokhtar Hjiri**, Lassaad El Mir, Claudia Espro, Giovanni Neri, Salvatore Gianluca Leonardi, Nanostructured Nickel on Porous Carbon-Silica Matrix as an Efficient Electrocatalytic Material for a Non-Enzymatic Glucose Sensor, *Chemosensors*, 6 (2018) 54.
27. N. Zahmouli, **M. Hjiri**, L. El Mir, A. Bonavita, N. Donato, G. Neri, S. G. Leonardi, High performance acetone sensor based on  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>/Al-ZnO nanocomposites, *Nanotechnology*, 30 (2018) 5.
28. Silvia Marini, Nabil Ben Mansour, **Mokhtar Hjiri**, Ramzi Dhahri, Lassaad El Mir, Claudia Espro, Anna Bonavita, Signorino Galvagno, Giovanni Neri and Salvatore Gianluca Leonardi, Non-enzymatic Glucose Sensor Based on Nickel/Carbon Composite Electroanalysis, 2018
29. R. Dhahri, S.G. Leonardi, **M. Hjiri**, L. El Mir, A. Bonavita, N. Donato, D. Iannazzo, G. Neri, Enhanced performance of novel calcium/aluminum co-doped zinc oxide for CO<sub>2</sub> sensors, *Sensors and Actuators B: Chemical* 239 (2017) 36-44.
30. R. Dhahri, **M. Hjiri**, L. El Mir, H. Alamri, A. Bonavita, D. Iannazzo, S.G. Leonardi, G. Neri, CO sensing characteristics of In-doped ZnO semiconductor nanoparticles, *Journal of Science: Advanced Materials and Devices* xxx (2017) 1-7.
31. **M. Hjiri**, N. Zahmouli, R. Dhahri, S. G. Leonardi, L. El Mir, G. Neri, Doped-ZnO nanoparticles for selective gas sensors, *J. Mater. Sci: Mater Electron*, 2017, DOI 10.1007/s10854-017-6717-9.
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36. I. Najeh, H. Dahman, N. Ben Mansour, **M. Hjiri**, L. El Mir, Electrical Investigations, Dielectric and Sensing Properties of Nanoporous Carbon, *sens. Lett.*, 13 (2015) 1-7.
37. R. Dhahri, **M. Hjiri**, L. El Mir, E. Fazio, F. Neri, F. Barreca, N. Donato, A. Bonavita, G.S. Leonardi, G. Neri, ZnO:Ca nanopowders with enhanced CO<sub>2</sub> sensing properties, *J. Phys D: Appl. Phys.*, 48 (2015) 255503-255509.
38. **M. Hjiri**, R. Dhahri, L. El Mir, S.G. Leonardi, G. Neri, Excellent CO gas sensor based on Ga-doped ZnO nanoparticles *J. Mater. Sci: Mater Electron*, DOI 10.1007/s10854-015-3178-x.
39. E. Fazio, **M. Hjiri**, R. Dhahri, L. El Mir, G. Sabatino, F. Barreca, F. Neri, S.G. Leonardi, A. Pistone, G. Neri, Ammonia sensing properties of V-doped ZnO:Ca nanopowders prepared by sol-gel synthesis, *J. Sol. Stat. Chem.*, 226 (2015) 192-200.
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44. **M. Hjiri**, R. Dhahri, K. Omri, L. El Mir, S.G. Leonardi, N. Donato, G. Neri; Effect of indium doping on ZnO based-gas sensor for CO, *Materials Science in Semiconductor Processing*, 27 (2014) 319–325
45. R. Dhahri, **M. Hjiri**, K. Omri, L. El Mir, D. Aloisio, N. Donato, S.G. Leonardi, G. Neri; Optical, Electrical and Sensing Properties of ZnO Nanoparticles Synthesized by Sol–Gel Technique, *IEEE Transactions on Nanotechnology*, (2014) 100-103
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49. L. El Mir, F. Ghribi, **M. Hajiri**, Z. Ben Ayadi, K. Djessas, M. Cubukcu, H.J. von Bardeleben, Multifunctional ZnO:V thin films deposited by rf-magnetron sputtering from aerogel nanopowder target material, *Thin solid films*, 519 (2011) 5787-5791.