

Ali khayatian



Education:

B.Sc. in physics: Isfahan University of Technology, Isfahan, Iran.

M.Sc. in solid state physics: University of kashan, kashan,

Title of M. Sc. Thesis: "Fabrication and analysis of magnetic Co nanowire", supervisor: M. Almasi Kashi, A. Ramazani.

Ph.D in solid state physics: University of Kashan, Kashan,

Title of Ph.D. Thesis: "Parameters variation of ZnO nanorods sensors due to Fe and Cu impurities", supervisor: M. Almasi Kashi, R. Azimirad.

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Academic Position:

Assistant Professor

Research area:

Nanomaterials;

Thin films; ZnO nanostructures;

UV & gas sensors;

Courses:

Physics 1, 2, 3;

Fluid mechanics;

Semiconductors;

Students:

Ph.D.

S. F. Akhtarian Far (Graduated);

R. Shakernejad (Graduated);

Z. Hajijamali (Working);

M.Sc

B. Falsafein (Working);

F. Zareefar (Working);

Jahangiri (Working);

S. A. miremad (Working);

R. Abdoalraof (Working);

Publications:

- 1- The influence of the ac electrodeposition conditions on the magnetic properties and microstructure of Co nanowire arrays, M Almasi Kashi, A Ramazani and A Khayyatian, *J. Phys. D: Appl. Phys.* 39 (2006) 4130–4135.
- 2- The Influence of the concentration on the ordering of Pore Formation in long time anodization of Anodic Alumina, A. Ramazani, M. Almasi Kashi, A. Khayyatian and R. Golipour, *IJNN* (1381).
- 3- R. Golipour, A. Khayyatian, A. Ramazani, M. Almasi Kashi, The effect of crystalline and shape anisotropy on the magnetic properties of Co and Ni nanowires, *Iranian Journal of Physics Research*, 7(2) (2007).
- 4- M. Almasi Kashi, A. Ramazani, H. Abbasian, A. Khayyatian, Capacitive humidity sensors based on large diameter porous alumina prepared by high current anodization, *Sensors and Actuators A* 174 (2012) 69– 74.
- 5- H Abbasian, M Almasi Kashi, A Ramazani, A Khayyatian, The effect of different oxide layers on the sensing properties of anodic alumina nanoporous film, *Iranian Journal of Physics Research*, 13(4) (2013).
- 6- A Khayyatian, M Almasi Kashi, R Azimirad and S Safa, Enhanced gas-sensing properties of ZnO nanorods encapsulated in an Fe-doped ZnO shell, *J. Phys. D: Appl. Phys.* 47 (2014) 075003.
- 7- Azimirad, R., et al. "Electrical investigation and ultraviolet detection of ZnO nanorods encapsulated with ZnO and Fe-doped ZnO layer." *Journal of sol-gel science and technology* 71.3 (2014): 540-548.
- 8- R. Azimirad, A. Khayyatian, S. Safa, M. Almasi Kashi, Enhancing photoresponsivity of ultra violet photodetectors based on Fe doped ZnO/ZnO shell/core nanorods, *Journal of Alloys and Compounds* 615 (2014) 227–233.
- 9- S. Safa, R. Azimirad, Kh. Mohammadi, R. Hejazi, A. Khayyatian, Investigation of ethanol vapor sensing properties of ZnO flower-like nanostructures, *Measurement* 73 (2015) 588–595.
- 10- A. Khayyatian, M. Almasi Kashi, R. Azimirad, S. Safa, S.F.Akhtarianfar Akhtarian, Effect of annealing process in tuning of defects in ZnO nanorods and their application in UV photodetectors, *Optik* 127 (2016) 4675–4681,
- 11- S. Safa, A. Khayyatian, E. Rokhsat, M. Najafi, Investigation of Structural, Optical, and Photocatalytic Properties of Hydrothermally Synthesized ZnO Nanorod Arrays with Various Aspect Ratios, *Journal of Advanced Materials and Processing*, 3(4) (2015) 51-64.
- 12- Seyed Farshad Akhtarianfar, Ali Khayyatian, Mohammad Almasi-Kashi, Large scale ZnO nanorod-based UV sensor induced by optimal seed layer, *Ceramics International* 42 (2016) 13421–13431.
- 13- A Khayyatian , S Safa, R Azimirad, M Almasi Kashi, S F Akhtarianfar, The effect of Fe-dopant concentration on ethanol gas sensing properties of Fe doped ZnO/ZnO shell/core nanorods, *Physica E* 84 (2016) 71-78.
- 14- Mokhtari S, Safa S, Khayyatian A, Azimirad R. Effects of Chromium Dopant on Ultraviolet Photoresponsivity of ZnO Nanorods. *Journal of Electronic Materials*. July 2017, Volume 46, Issue 7, pp 4250–4255

- 15- Khayatian A, Asgari V, Ramazani A, Akhtarianfar SF, Kashi MA, Safa S. Diameter-controlled synthesis of ZnO nanorods on Fe-doped ZnO seed layer and enhanced photodetection performance. *Materials Research Bulletin*. 2017 Oct 31;94:77-84.
- 16- Akhtarianfar SF, Khayatian A, Shakernejad R, Almasi-Kashi M, Hong SW. Improved sensitivity of UV sensors in hierarchically structured arrays of network-loaded ZnO nanorods via optimization techniques. *RSC Advances*. 2017;7(51):32316-26.
- 17- R. Shakernejad, A. Khayatian, A. Ramazani, S. F. Akhtarianfar, M. Almasi Kashi, Analysis of structural and UV photodetecting properties of ZnO nanorod arrays grown on rotating substrate, *J Sol-Gel Sci Technol*, 2018; 85(2): 458-469.
- 18- S. Safa, S. Mokhtari, A. Khayatian, R. Azimirad, Improving ultraviolet photodetection of ZnO nanorods by Cr doped ZnO encapsulation process, *Optics Communications*. 2018; 413 :131–135.
- 19- R. Shakernejad, A. Khayatian, A. Ramazani, S.F. Akhtarianfar, M. Almasi Kashi, The role of different initial rest times on synthesized buffer layer and UV sensing of ZnO nanorods grown on rotational substrate, *Journal of Materials Science: Materials in Electronics* 2018; 29:8303–8312.
- 20- E Rokhsat, A khayatian, Enhanced photocatalytic activity of Fe doped ZnO hierarchical nanosheets on the degradation of p-nitrophenol under visible light, *Inorganic and Nano-Metal Chemistry* 2018

Conference papers:

- ۱- سید مصطفی ساداتی، حسین تارقلی زاده، امید بیات، علی خیاطیان، ذخیره سازی هیدروژن در آلیاژ LaNi_5 ، سومین سمینار پیل سوختی ایران (۱۳۸۸).
- ۲- ساداتی، سید مصطفی، تارقلی زاده، حسین؛ خیاطیان، علی؛ طحان، امین، طراحی و ساخت دستگاه اندازه گیری جذب گاز در مواد، کنفرانس فیزیک ایران (۱۳۸۹).
- 3- Seyed Farshad Akhtarianfar, Suck Won Hong, Ali khayatian, Mohammad Almasi kasha, Fabrication of field-effect transistor (FET) based on ZnO nanowire/grapheme nanoribbon heterostructures, 5TH RIAPA Meeting On Low Dimensional Systems :RIAPA-LDS 2017 -23 & 24 MAY, Research Institute for Applied Physics & Astronomy, University of Tabriz, Tabriz, Iran.
- 4- R. Shakernejad, A. Khayatian, A. Ramazani, S.F. Akhtarianfar, M. Almasi Kashi, UV Photodetecting Performance Analysis of ZnO Nanorod Arrays Grown on Rotating Substrate: Evaluation of the Initial Rest Time, International Biennial Conference on UltraFine Grained and Nanostructured Materials (UFGNSM), 12-13 November 2017, International Convention Center, Kish Island, Iran.
- 5- Z. haji jamali, A. Khayatian, M. Almasi Kashi, Improvement of Ultra-Violet Sensory of ZnO Nanorods Array Grown In Solution Including Zno Nrs, International Congress on Nanoscience & Nanotechnology (ICNN2018), 26-28 September 2018, Research Institute of petroleum Industry, Tehran, Iran.
- 6- Z. haji jamali, A. Khayatian, M. Almasi Kashi, ZnO Nanorods Spin Coating on ZnO Nanorods Array in Different Growth Steps, International Congress on Nanoscience & Nanotechnology (ICNN2018), 26-28 September 2018, Research Institute of petroleum Industry, Tehran, Iran.