

## Saadat Mokhtari

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Gender: Male  
Marriage status: Married  
Birth date: 6th of August 1987  
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### **EDUCATION:**

- 2010-2012     Master of Photonics (Physics)  
                  Department of Physics  
                  Faculty of science  
                  Shahid Bahonar University, Kerman, Iran  
                  GPA: 17.31 (out of 20.00).  
                  Top Student
- 2005-2009     Bachelor of Science in Solid State Physics  
                  Department of physics  
                  Kordestan University, Sanandaj, Iran



### **EMPLOYMENT:**

- Research assistant**, Department of Physics, Shahid Beheshti University, Tehran, Iran, 2016-now  
**Research assistant**, Islamic Azad University, Tehran, Iran, 2013-2016.

### **RESEARCH INTEREST:**

- Nanophotonics
- 2D materials
- Biophysics

### **RESEARCH EXPERIENCES:**

- Energy storage application of 2D material.
- Nanoporous CoS electrode as a high energy density electrode.
- Physical properties of porous material
- Growth of ZnO nanorods and investigating its response as an UV and gas sensor.
- Growth of Cr-doped ZnO nanorods and investigating its response as an UV detector and gas sensor.
- Toxicology effect of ZnO nanoparticle with different morphology on reproductive cells.

## **TEACHING EXPERIENCE:**

**Assistant Teacher**, Shahid Bahonar University, 2011.

- Electromagnetic 1 (Fall 2011)
- Electromagnetic 2 (Spring 2011)

## **HONORS AND AWARDS:**

- Shahid Bahonar University distinguish top student (2010-2012).
- Honored as member of Young Researchers and Elite Club.

## **Funding/Grant:**

- Research grant from Iran National Science Foundation (No. 96007487).

## **Publication list**

- **S. Mokhtari**, S. M. Mohseni, L. Jamilpanah, Partial removal of composite thin films at high temperatures: towards fabrication of porous structures (submitted to bulletin of materials science).
- **S. Mokhtari**, S. M. Mohseni, sulfurized cobalt based nanoporous alloy electrode for high performance supercapacitor (Under revision, Materials letters).
- M. Saber, R.-S. Hayaei-Tehrani, **S. Mokhtari**, P. Hoorzad, F. Esfandiari, In vitro cytotoxicity of zinc oxide nanoparticles in mouse ovarian germ cells, Toxicology in Vitro (2020) 105032.
- A. Javadi, **S. Mokhtari**, S.-F. Moraveji, F.-A. Sayahpour, M. Farzaneh, H. Gourabi, F. Esfandiari, Short time exposure to low concentration of zinc oxide nanoparticles up-regulates self-renewal and spermatogenesis-related gene expression, The International Journal of Biochemistry & Cell Biology 127 (2020) 105822.
- Farzaneh M, **Mokhtari S**, Moraveji SF, Gouarbi H, Esfandiari F, Zinc oxide nanoparticles impair testicular cells karyotype by inducing ROS production and interfere with cell cycle. (submitted to Toxicology in Vitro).
- A. Javadi, **S. Mokhtar**, R. Azimirad, F. Esfandiari, H. Gourabi, Mechanisms of the Effects of Zinc Oxide Nanostructures on Living Cells, Journal of Fasa University of Medical Sciences.
- S. Safa, M. Asghari, **S. Mokhtari**, R. Azimirad, Improving gas sensor properties of encapsulated ZnO nanorods for ethanol detection using ZnO: Cr layer as an encapsulated layer, Iranian Journal of Physics Research 17(4) (2017) 561-571.
- S. Safa\*, **S. Mokhtari\***, A. Khayatian, R. Azimirad, Improving ultraviolet photodetection of ZnO nanorods by Cr doped ZnO encapsulation process, Optics Communications 413 (2018) 131-135 (\*co-first author).
- M. Zare, S. Safa, R. Azimirad, **S. Mokhtari**, Graphene oxide incorporated ZnO nanostructures as a powerful ultraviolet composite detector, Journal of Materials Science: Materials in Electronics 28(9) (2017) 6919-6927

- **S. Mokhtari**, S. Safa, A. Khayatian, R. Azimirad, Effects of chromium dopant on ultraviolet photoresponsivity of ZnO nanorods, Journal of Electronic Materials 46(7) (2017) 4250-4255.

### **SKILLS:**

- Raman spectroscopy
- Fourier transform infrared spectroscopy (FT-IR) analysis
- Capacitance measurements
- X-ray diffraction analysis (XRD)
- Scanning electron microscopy (SEM) analysis
- Transmission electron microscopy (TEM) analysis
- High resolution transmission electron microscopy (HrTEM) analysis
- Atomic force microscopy (AFM) analysis
- Dynamic light scattering (DLS)
- Diffuse reflectance spectroscopy (DRS)
- Photoluminescence (PL) analysis
- Sputtering
- Chemical vapor deposition (CVD)
- Hydrothermal synthesis
- Sol-Gel synthesis
- Spin coating
- Dip-coating
- Electrodeposition
- Ultra-violet detection
- Gas sensor
- Giant magnetoimpedance (GMI)

### **LANGUAGE:**

- **English:** Advanced skill in reading, writing, listening and speaking.
- **Persian (Farsi):** Mother tongue.

### **LANGUAGE TEST:**

TOEFL: 92

- **Reading: 25**
- **Listening: 25**
- **Speaking: 23**
- **Writing: 19**

### **SOFTWARE:**

- OriginLab
- XPert High Score
- EndNote
- Image J
- Digimizer

### **HOBBIES:**

- Playing Setar (Iranian instrument).
- Watching movies.
- Reading books.
- Swimming.

### **REFERENCE:**

#### **Dr. Majid Mohseni**

Associated Professor of physics  
Faculty of physics, Shahid Beheshti University  
Email: majidmohseni@gmail.com