



Ramin Yousefi (Ph. D), Professor

Borne 1972, Ahvaz, Iran
Married, two children

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Education

- **Ph.D (Solid State Physics)**, University of Malaya, Kuala Lumpur, Malaysia, 2007- 2011.
Ph.D Thesis Title: *Morphological, Structural and Optical Studies of Undoped and Doped ZnO Nanostructures* (Supervisor: Prof. Muhamad Rasat Muhamad).
- **M.Sc. (Atomic and Molecular Physics, (Plasma Physics))**, Tabriz University, Tabriz, Iran, 1995- 1997
- **B.Sc. (Solid State Physics)**, Shahid Chamran University of Ahvaz, Ahvaz, Iran, 1990- 1994

Positions

- 1- Head of Research Center of Nanostructures at I.A.U
- 2- Professor at I.A.U, 2022-current
- 3- Visiting Researcher at Shiraz University, Iran, 2019-2020.
- 4- Associate Professor at I.A.U, 2015-2022
- 5- Assistant Professor at I.A.U, 2011-2015.
- 6- Head of Experimental Science at I.A.U, 2003-2006.
- 7- Physics Lecturer at I.A.U, 2001-2011.

My homepages

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Research Interests and skills

I am interested to research about Metal-Oxide and Metal-Chalcogenide nanostructures as well as semiconducting/graphene and semiconducting/g-C₃N₄, and Inorganic/Organic nanocomposites for different applications such as photocatalyst, photosensors, solar-cells, and gas-sensor.

Teaching experiments

(For undergraduate and postgraduate students on the following courses)

- **Undergraduate students:** Solid State Physics, Modern Physics, Electromagnetism, General Physics such as Mechanics, Electricity and Magnetism, Optics, Thermodynamics, Fluid Mechanics.
- **Master students:** Electrodynamics I and II, Special Topics in Nanoscience I, Fundamental of Semiconductor Properties, Advanced Physics Lab, Nanomaterials: Synthesize Characterization, and Applications, Seminars.
- **Ph.D student:** Advanced Solid State Physics, Special Topics in Nanoscience II, Seminar.

Journal Publications (ISI)

- **H-index=44 (Scopus), 48 (Google Scholar) Citation more than 9100 times**

*(*s shows corresponding author)*

- 1- M. Kavosh, F. Jamali-Sheini, M. Cheraghizade, **R. Yousefi***, “Improving the FOM of photodetectors fabricated by Sn-doped CuS nanostructures” *Solid State Sciences* 156 (2024) 107653. <https://doi.org/10.1016/j.solidstatesciences.2024.107653>
- 2- H. Li, Z. Guo, H. Azimi, M. Ebadi, A. Shirmardi, **R. Yousefi***, “Rapid tetracycline degradation by S-scheme Se/g-C₃N₄ heterostructure” Accepted to publish by *Journal of the Australian Ceramics Society*. <https://doi.org/10.1007/s41779-024-01088-6>.
- 3- M. Nouri, H. Azimi, A. Moghaddam Saray, **R. Yousefi***, “The surface plasmon resonance effects of Ag NPs on photocatalytic performance of S-scheme SnSe/Ag-polyaniline heterojunction to degrade methylene blue dye and tetracycline antibiotic” *Journal of Water Process Engineering* 63 (2024) 105459. <https://doi.org/10.1016/j.jwpe.2024.105459>
- 4- A. Saadati, M. Moradi*, G.H. Bordbar, **R. Yousefi**, “Synthesis of In₂Se₃ nanoparticles with variable molar ratio and its investigation of structural, optical, and photocatalytic activity for the degradation of hazardous organic dyes”, *Physica E* 161 (2024) 115969. <https://doi.org/10.1016/j.physe.2024.115969>
- 5- V. Khoramshahi, M. Azarang, M. Nouri, A. Shirmardi, **R. Yousefi***, “Metal oxide/g-C₃N₄ nanocomposites chemiresistive gas sensors: A review on enhanced performance”, *Talanta Open* 9 (2024) 100290. <https://doi.org/10.1016/j.talo.2024.100290>

- 6- A. Moghadam Saray, H. Azimi, A. Shirmardi, M. Nouri, **R. Yousefi***, “Dual S-scheme CuSe-Cu₃Se₂/Ag-PANI heterostructures for the impressive degradation of dye pollutants”, *Surfaces and Interfaces* **42** (2023) 103416. <https://doi.org/10.1016/j.surfin.2023.103416>
- 7- M. Bigdeli Tabar, H. Azimi, **R. Yousefi***, “S-doped g-C₃N₄ (S-CN) nanosheets effects on the photocatalytic performance of ZnSe/S-CN heterostructures”, *Journal of Alloys and Compounds* **968** (2023) 172033, <https://doi.org/10.1016/j.jallcom.2023.172033>
- 8- M. Kavosh, F. Jamali-Sheini*, **R. Yousefi**, M. Cheraghizade, “Enhanced performance of visible-range nanostructured CuS photodetectors by Zn concentrations”, *Solid State Sciences* **143** (2023) 107272, <https://doi.org/10.1016/j.solidstatesciences.2023.107272>
- 9- R. Moradi, Z. Adelpour, M. Sadeghi, **R. Yousefi***, “Improvement of gas-sensing performance of rGO/g-C₃N₄ nanocomposites by Ag NPs functionalization” *Advanced Powder Technology*, **34** (2023) 104170. <https://doi.org/10.1016/j.appt.2023.104170>
- 10- M. Nouri, H. Azimi, A. Moghadam Saray, **R. Yousefi***, “Mediator-free Z-scheme structure-based Cu_xSe_y/S-CN nanocomposites for high-performance photocatalytic applications” *Materials Research Bulletin*, **164** (2023) 112274. <https://doi.org/10.1016/j.materresbull.2023.112274>
- 11- A. Moghadam Saray, H. Azimi, A. Shirmardi, M. Nouri, **R. Yousefi***, “Cu_xSe_y@polyaniline core-shell nanocomposites based type-II heterostructures as high-performance photocatalytic materials” *Journal of Alloys and Compounds*, **951** (2023) 169827. <http://dx.doi.org/10.1016/j.jallcom.2023.169827>
- 12- M. Bigdeli Tabar, H. Azimi, **R. Yousefi***, The Se role as a mediator to enhance the photocatalytic performance of the ZnSe/g-C₃N₄ nanocomposites” *Applied Surface Sciences*, **622** (2023) 156912. <https://doi.org/10.1016/j.apsusc.2023.156912>
- 13- R. Moradi, **R. Yousefi***, Z. Adelpour, M. Sadeghi, “The effects of Ag concentration on toluene gas sensing performance of Ag NPs decorated on g-C₃N₄ sheets” *Journal of Alloys and Compounds*, **932** (2023) 167539. <https://doi.org/10.1016/j.jallcom.2022.167539>
- 14- M. Zebarjad, F. Jamali-Sheini*, **R. Yousefi**, “Efficient optoelectronic properties of FeS₂ nanost Mohammed Tihitih ructures by Zn doping” *Ceramics International*, **323** (2023) 323-334. <https://doi.org/10.1016/j.ceramint.2022.08.347>
- 15- E. Kharatzadeh, M. Khademolrasool, **R. Yousefi***, “Enhanced visible-light photovoltaic and photocatalytic performances of SnSe_{1-x}S_x nanostructures” *Surfaces and Interfaces*, **30** (2022) 101916, <https://doi.org/10.1016/j.surfin.2022.101916>
- 16- M. Gharibshahi, F. Jamali-Sheini*, **R. Yousefi**, “Nanoarchitectonics of SnSe with the impacts of ultrasonic powers and ultraviolet radiations on physical and optoelectronic properties” *Advanced Powder Technology*, **33** (2022) 103517, <https://doi.org/10.1016/j.appt.2022.103517>
- 17- R. Yousefi, “The Environmental Crisis and Nanotechnology” *Micro and Nanosystems*, **14** (2021) 188-190. <http://dx.doi.org/10.2174/1876402913666211011095356>

- 18- M. Gharibshahi, F. Jamali-Sheini*, **R. Yousefi**, “Effect of ultrasonic irradiation time on the physical and optoelectronic properties of SnSe nanorods”, *Surfaces and Interfaces*, **27** (2021) 101433, <https://doi.org/10.1016/j.surfin.2021.101433>
- 19- M. Zebarjad, F. Jamali-Sheini*, **R. Yousefi**, “Electrodeposition of nanostructured FeS₂ films: The effect of Sn concentrations on the optoelectronic performance”, *Solid State Sciences*, **120** (2021) 106722, <https://doi.org/10.1016/j.solidstatesciences.2021.106722>
- 20- S.L. Mousavi, F. Jamali-Sheini*, M. Sabaeian, **R. Yousefi**, “Correlation of Physical Features and the Photovoltaic Performance of P3HT:PCBM Solar Cells by Cu-Doped SnS Nanoparticles”, *The Journal of Physical and Chemical C*, **125**, 29 (2021) 15841-15852, <https://doi.org/10.1021/acs.jpcc.1c03840>
- 21- M. Zebarjad, F. Jamali-Sheini*, **R. Yousefi**, “Nanostructured FeS₂ films: Influence of effective parameters on electrochemical deposition and characterization of physical properties”, *Ceramics International*, **47** (2021) 12969-21981, <https://doi.org/10.1016/j.ceramint.2021.04.215>
- 22- F. Eskandari, P. Shabani*, **R. Yousefi**, “PAni-based complementary resistive switches: the effects of Ag on physical properties and switching mechanism”, *Applied Physics A* **127** (2021) 220, <https://doi.org/10.1007/s00339-021-04349-4>
- 23- E. Kharatzadeh, S.R. Masharian, **R. Yousefi**,* “The effects of S-doping concentration on the photocatalytic performance of SnSe/S-GO nanocomposites” *Advanced Powder Technology*, **32** (2021) 346-357, <https://doi.org/10.1016/j.appt.2020.12.013>
- 24- E. Kharatzadeh, S.R. Masharian, **R. Yousefi**,* “Comparison of the photocatalytic performance of S-SnSe/GO and SnSe/S-GO nanocomposites for dye photodegradation”, *Materials Research bulletin*, **135** (2021) 111127, <https://doi.org/10.1016/j.materresbull.2020.111127>
- 25- B. Jalalian-Larki, F. Jamali-Sheini*, **R. Yousefi**, “Electrodeposition of In-doped SnSe nanoparticles films: Correlation of physical characteristics with solar cell performance”, *Solid State Sciences*, **108** (2020) 106388. <https://doi.org/10.1016/j.solidstatesciences.2020.106388>
- 26- M.R. Mahmoudian*, Y. Alias, P. Meng Woi, **R. Yousefi**, W.J. Basirun, “An electrochemical sensor based on Pt/g-C₃N₄/polyaniline nanocomposite for detection of Hg²⁺”, *Advanced Powder Technology*, **31** (2020) 3372-3380, <https://doi.org/10.1016/j.appt.2020.06.024>
- 27- F. Monjezi, F. Jamali-Sheini*, **R. Yousefi**, “Optoelectronic properties of Zn-doped Cu₃Se₂ nanosheets for photovoltaic application” *Ceramics International*, **46** (2020) 21978-21988, <https://doi.org/10.1016/j.ceramint.2020.05.031>
- 28- L. Mousavi, F. Jamali-Sheini*, M. Sabaeian, **R. Yousefi**, “The Role of Ag/Al Electrodes in the Improvement of PEDOT:PSS/P3HT:PCBM Solar Cells Performance” *IEEE Journal of Photovoltaics*, **10** (2020) 1346-1352. DOI: <https://doi.org/10.1109/JPHOTOV.2020.3004935>.

- 29- **R. Yousefi***, M. Moradi, G.H. Bordbar, M.A.M. Terid, "Role of non-stoichiometric defects in optical properties of metal-selenide nanostructures", *Journal of Luminescence* 223 (2020) 117211, <https://doi.org/10.1016/j.jlumin.2020.117211>
- 30- M. Nouri, N. Zare-Dehnavi, F. Jamali-Sheini, **R. Yousefi***, "Synthesis and characterization of type-II p(Cu_xSe_y)/n(g-C₃N₄) heterojunction with enhanced visible-light photocatalytic performance for degradation of dye pollutants" *Colloids and Surfaces A* 595 (2020) 124656. <https://doi.org/10.1016/j.colsurfa.2020.124656>
- 31- F. Borousan, **R. Yousefi***, P. Shabani, "Tuning the size of PbSe nanocubes for solar-cell applications" *Materials Letters* 268 (2020) 127590, <https://doi.org/10.1016/j.matlet.2020.127590>
- 32- M. Moghaddam Saray, N. Zare-Dehnavi, F. Jamal-Sheini, **R. Yousefi***, "Type-II p(SnSe)-n(g-C₃N₄) heterostructure as a fast visible-light photocatalytic material: Boosted by an efficient interfacial charge transfer of p-n heterojunction" *Journal of Alloys and Compounds* 829 (2020) 154436, <https://doi.org/10.1016/j.jallcom.2020.154436>
- 33- L. Mousavi, F. Jamali-Sheini*, M. Sabaeian, **R. Yousefi**, "Enhanced solar cell performance of P3HT:PCBM by SnS nanoparticles" *Solar Energy* 199 (2020) 872–884. <https://doi.org/10.1016/j.solener.2020.02.031>
- 34- M. Bigdeli Tabar, S. M. Elahi, M. Ghoranneviss, **R. Yousefi***, "The role of the Se-rich and Se-poor conditions in the photocatalytic performance of ZnSe/rGO nanocomposites" *Applied Surface Science* 513 (2020) 145819. <https://doi.org/10.1016/j.apsusc.2020.145819>
- 35- H. Mohammadpour, M. Shahriarinoor*, **R. Yousefi**, "Benzene degradation by free and immobilized bacillus glycinifermentans strain GO-13T using GO sheets, *Pol. J. Environ. Stud.* 29, (2020), 1-11, <https://doi.org/10.15244/pjoes/111512>.
- 36- F. Eskandari, P. Shabani*, **R. Yousefi**, "Simultaneous protonation/deprotonation mechanism in polyaniline-based devices as complementary resistive switches" *Organic Electronics* 79 (2020) 105628. <https://doi.org/10.1016/j.orgel.2020.105628>
- 37- M. Nouri, **R. Yousefi***, N. Zare-Dehnavi, F. Jamali-Sheini, "Tuning of crystal phase and morphology of copper selenide nanostructures and their visible-light photocatalytic applications to degrade organic pollutants", *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 586 (2020) 124196, <https://doi.org/10.1016/j.colsurfa.2019.124196>
- 38- A. Moghaddam Saray, **R. Yousefi***, N. Zare-Dehnavi, F. Jamali-Sheini, "Improvement visible-light photocatalytic performance of single-crystalline SnSe_{1-x} NPs toward degradation of organic pollutants" *Solid State Sciences* 98 (2019) 106044. <https://doi.org/10.1016/j.solidstatesciences.2019.106044>
- 39- F. Borousan, P. Shabani, **R. Yousefi***, "Improvement of visible-near-infrared (NIR) broad spectral photocurrent applications of PbSe mesostructures using tuning of morphology and optical properties" *Mater. Res. Express* 6 (2019) 095016 (IOP), <https://doi.org/10.1088/2053-1591/ab2c4f>

- 40- F. Salehi-Babarsad, E. Derikvand, M. Razaz, **R. Yousefi**, A. Shirmardi, "Heavy metal removal by using ZnO/organic and ZnO/inorganic nanocomposite heterostructures" *International Journal of Environmental Analytical, Chemistry* **100** (2020) 702-719. <https://doi.org/10.1080/03067319.2019.1639685>
- 41- A. Saaedi, P. Shabani, **R. Yousefi***, "High performance of methanol gas sensing of ZnO/PAni nanocomposites synthesized under different magnetic field" *Journal of Alloys and Compounds* **802** (2019) 335-344, <https://doi.org/10.1016/j.jallcom.2019.06.088>
- 42- A. Saaedi, P. Shabani, **R. Yousefi***, "Study on the effects of magneto assisted deposition on ammonia gas sensing properties of polyaniline" *Journal of Materials Science: Materials in Electronics* **30** (2019) 10765–10775, <https://doi.org/10.1007/s10854-019-01420-y>
- 43- V. Khoramshahi, J. Karamdel*, **R. Yousefi**, "High acetic acid sensing performance of Mg-doped ZnO/rGO nanocomposites" *Ceramics International* **45** (2019) 7034-7043. <https://doi.org/10.1016/j.ceramint.2018.12.205>
- 44- M. R. Mahmoudian, W.J. Basirun, Pei Meng Woi, **R. Yousefi**, "L-Glutamine-assisted synthesis of ZnO oatmeal-like/silver composites as an electrochemical sensor for Pb²⁺ detection" *Analytical and Bioanalytical Chemistry* **411** (2019) 517-526. <https://doi.org/10.1007/s00216-018-1476-x>
- 45- F. Monjezi, F. Jamali-Sheini*, **R. Yousefi**, "Ultrasound-assisted electrodeposition of Cu₃Se₂ nanosheets and efficient solar cell performance" *Journal of Alloys and Compounds* **780** (2019) 626-633. <https://doi.org/10.1016/j.jallcom.2018.11.267>
- 46- P. Molaei*, M. Cheraghizade, **R. Yousefi**, "Impact of rGO on photocatalytic performance of Cd-doped ZnO nanostructures synthesized via a simple aqueous co-precipitation route" *Mater. Res. Express* **6** (2019) 025051. <https://doi.org/10.1088/2053-1591/aaf1d9>
- 47- M.M. Hosseini-Hajivar, F. Jamali-Sheini, **R. Yousefi**, "Microwave-assisted solvothermal synthesis and physical properties of Zn-doped MnS nanoparticles" *Solid State Science* **93** (2019) 31-36, <https://doi.org/10.1016/j.solidstatesciences.2018.10.010>
- 48- M.A. Baghchesara, H.R. Azimi, A. Ghorban Shiravizadeh, M.A.M. Teridi, **R. Yousefi***, "Improving the intrinsic properties of rGO sheets by S-doping and the effects of rGO improvement on the photocatalytic performance of Cu₃Se₂/rGO nanocomposites" *Applied Surface Science* **466** (2019) 401–410, <https://doi.org/10.1016/j.apsusc.2018.10.082>
- 49- S. Khosravi Ghandomani, B. Khoshnevisan, **R. Yousefi***, "The capability of SnTe QDs as QDSCs working in the visible–NIR region and the effects of Eu-doping on improvement of solar cell parameters" *Journal of Materials Science: Materials in Electronics*, **29** (2018) 18989-18996, <https://doi.org/10.1007/s10854-018-0023-z>.
- 50- M. Azarang, M. Aliahmad, A. Ghorban Shiravizadeh, H.R. Azimi, **R. Yousefi***, "Zn-doped PbO NPs/FTO as photoanode for enhancement of visible-NIR broad spectral photocurrent application of narrow band-gap nanostructures: SnSe NPs as a case

study” *J. Appl. Phys. (JAP)* **124**, 123101 (2018). DOI: <https://doi.org/10.1063/1.5050289>

- 51- F. Niknia, F. Jamali-Sheini, **R. Yousefi**, M. Cheraghizade, “Effect of thickness on the optoelectronic properties of electrodeposited nanostructured SnS films” *Optical and Quantum Electronics*, **50** (2018) 339, DOI: <https://doi.org/10.1007/s11082-018-1598-6>
- 52- V. Khoramshahi, J. Karamdel*, **R. Yousefi**, “Acetic acid sensing of Mg-doped ZnO thin films fabricated by the sol-gel method” *Materials Science: Materials in Electronics*, **29** (2018)14679–14688 DOI: <https://doi.org/10.1007/s10854-018-9604-0>
- 53- S. Khosravi Ghandomani, B. Khoshnevisan, **R. Yousefi***, “The effects of Sn:Te ratio on optical properties of SnTe NPs”. *Journal of Luminescence* **203** (2018) 481–485. DOI: <https://doi.org/10.1016/j.jlumin.2018.07.004>
- 54- M. Bigdeli Tabar, S.M. Elahi, M. Ghoranneviss, **R. Yousefi***, “Controlled morphology of ZnSe nanostructure by varying Zn/Se molar ratio: The effects of different morphologies on optical properties and photocatalytic performance”. *CrystEngComm*, **20** (2018), 4590–4599. DOI: 10.1039/c8ce00775f.
- 55- A. Shirmardi, M.A.A. Teridi, H.R. Azimi, W.J. Basirun, F. Jamali-Sheini, **R. Yousefi***, “Enhanced photocatalytic performance of ZnSe/PANI nanocomposites for degradation of organic and inorganic pollutions” *Applied Surface Science* **462** (2018) 730–738, <https://doi.org/10.1016/j.apsusc.2018.06.252>.
- 56- F. Monjezi, F. Jamali-Sheini*, **R. Yousefi**, “Pb-doped Cu₃Se₂ nanosheets: Electrochemical synthesis, structural features and optoelectronic properties” *Solar Energy* **171** (2018) 508-518, <https://doi.org/10.1016/j.solener.2018.06.082>.
- 57- B. Ghanbari, F. Jamali-Sheini*, **R. Yousefi**, “Microwave-assisted solvothermal synthesis and optoelectronic properties of γ -MnS nanoparticles”, *Journal of Materials Science: Materials in Electronics* **29** (2018)10976–10985, <https://doi.org/10.1007/s10854-018-9179-9>.
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- 59- A. Eskanderi, F. Jamali-Sheini*, M. Cheraghizade, **R. Yousefi**, “Investigation of the optoelectronic behavior of Pb-doped CdO nanostructures” *Applied Nanoscience*, **8** (2018)937–948 <https://doi.org/10.1007/s13204-018-0705-0>
- 60- F. Jamali-Sheini*, M. Cheraghizade, **R. Yousefi**, “Electrochemically synthesis and optoelectronic properties of Pb- and Zn-doped nanostructured SnSe films” *Applied Surface Science* **443** (2018) 345–353, <https://doi.org/10.1016/j.apsusc.2018.03.011>
- 61- A. Ghorban Shiravizadeh, S. M. Elahi, S.A. Sebt, **R. Yousefi***, “High performance of visible-NIR broad spectral photocurrent application of monodisperse PbSe nanocubes decorated on rGO sheets” *Journal of Applied Physics (AIP)* **123**, 083102 (2018). <https://doi.org/10.1063/1.5017226>

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- 63- **R. Yousefi***, H.R. Azimi, M.R. Mahmoudian, Wan Jeffrey Basirun, "The effects of defect emissions on enhancement photocatalytic performance of ZnSe QDs and ZnSe/rGO nanocomposites", *Applied Surface Science* **435** (2018) 886-893. <https://doi.org/10.1016/j.apsusc.2017.11.183>
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- 65- **R. Yousefi***, H.R. Azimi, M.R. Mahmoudian, Mohsen Cheraghizade, "Highly enhanced photocatalytic performance of $Zn_{(1-x)}Mg_xO/rGO$ nanostars under sunlight irradiation synthesized by one-pot refluxing method", *Advanced Powder Technology* **29** (2018) 78–85. <https://doi.org/10.1016/j.appt.2017.10.014>
- 66- M. Nouri, A. Moghaddam Saray, H.R. Azimi, **R. Yousefi***, "High Solar-light photocatalytic activity of using Cu_3Se_2/rGO nanocomposites synthesized by a green co-precipitation method", *Solid State Sciences*, **73** (2017) 7-12. <https://doi.org/10.1016/j.solidstatesciences.2017.09.001>
- 67- M. Nouri, A. Moghaddam Saray, H.R. Azimi, **R. Yousefi***, "S-doping effects on optical properties and highly enhanced photocatalytic performance of Cu_3Se_2 nanoparticles under solar-light irradiation", *Ceramics International*, **43** (2017) 14983-14988. <https://doi.org/10.1016/j.ceramint.2017.08.018>
- 68- A. Ghorban Shiravizadeh, **R. Yousefi***, S. M. Elahi, S.A. Sebt, "Effects of annealing atmosphere and rGO concentration on optical properties and enhanced photocatalytic performance of $SnSe/rGO$ nanocomposites" *Phys. Chem. Chem. Phys.*, **19** (2017) 18089-18098. DOI:10.1039/C7CP02995K
- 69- M. Cheraghizade, F. Jamali-Sheini*, **R. Yousefi**, F. Niknia, M.R. Mahmoudian, M. Sokhakian, "The effect of tin sulfide quantum dots size on photocatalytic and photovoltaic performance" *Materials Chemistry and Physics* **195** (2017) 187-194, <http://doi.org/10.1016/j.matchemphys.2017.04.008>
- 70- M. Cheraghizade, F. Jamali-Sheini, **R. Yousefi***, "Optical, electrical, and photovoltaic properties of PbS thin films by anionic and cationic dopants" *Appl. Phys. A* **123** (2017) 390 , <https://doi.org/10.1007/s00339-017-0932-3>.
- 71- F. Jamali-Sheini*, F. Niknia, M. Cheraghizade, **R. Yousefi**, M.R. Mahmoudian, "Broad Spectral Response of Se-Doped SnS Nano-rods Synthesized by Electrodeposition Method" *ChemElectroChem* **4** (2017) 1478–1486, <http://dx.doi.org/10.1002/celc.201600826>
- 72- M. A. Baghchesara, M. Cheraghizade, F. Jamali-Sheini, **R. Yousefi*** "Photovoltaic and photodetector performance of metal telluride nanowires grown by a simple CVD

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Books & Book Chapters

- 1- **R. Yousefi** Editor of “**Optical Properties of Semiconducting Nanostructures for the Photocatalysis: Fundamental, Materials Design, and Applications**”, published by Elsevier (2024). <https://shop.elsevier.com/books/optical-properties-of-semiconducting-nanostructures-for-photocatalysis/yousefi/978-0-443-36362-7#full-description>
- 2- A. Sáaedi, M. Moradi, M.H. Alkordi, M.R. Mahmoudian, G.H. Bordbar, **R. Yousefi***, “*Graphene-Metal-Organic Framework Modified Gas Sensor*” A chapter of “**Functional Nanomaterials: Advances in Gas sensing Technology**” Edited by S. Thomas, N. Joshi, V.K. Tomer, Published by Springer Publisher (2020), https://link.springer.com/chapter/10.1007/978-981-15-4810-9_5
- 3- M. Kumar, A.V. Agrawal, M. Moradi, and **R. Yousefi***, “*Nanosensors for Gas Sensing Applications*” A chapter of “**Nanomaterials for Air Remediation**” Edited by A. Abdeltif, A. Amine Assadi, T.A. Nguyen, S. Rtimi. Published by Elsevier Publisher (2020), <https://doi.org/10.1016/B978-0-12-818821-7.00006-3>
- 4- **R. Yousefi***, M. Cheraghizade, “*Semiconductor/graphene nanocomposites: Synthesize, Characterization, and Applications.*” A chapter book of “**Applications of Nanomaterials: Advances and Key Technologies**” Sneha MohanSamuel Oluwatobi Oluwafemi Nandakumar, Kalarikkal Sabu Thomas, Eds. Published by Elsevier (2018). <https://doi.org/10.1016/B978-0-08-101971-9.00002-8>
- 5- **R. Yousefi***, F. Jamali-Sheini, A. Khorsand-Zak. “*Metal Chalcogenide Hierarchical Nanostructures for Energy Conversion Devices*”, A chapter book of “**Metal Chalcogenide Semiconductor Nanostructures and Their Applications in Renewable Energy**” Ahsanulhaq Qurashi, Ed. Published by Wiley publisher (2015). DOI: 10.1002/9781119008934.ch9. <https://doi.org/10.1002/9781119008934.ch9>
- 6- **R. Yousefi***. “*Metal Selenide Nanostructures: Growth and Properties*” A chapter book of “**Metal Chalcogenide Semiconductor Nanostructures and Their Applications in Renewable Energy**” Ahsanulhaq Qurashi, Ed. Published by Wiley publisher (2015). DOI: 10.1002/9781119008934.ch4. <https://doi.org/10.1002/9781119008934.ch4>.

Conference Presentation

- 1- “Photocurrent application of PbS nanoparticles under NIR illumination conditions” *European Advanced Materials Congress (EMAC 2016)*, Stockholm, Sweden. (Oral presentation)

- 2- “Effects of Planar Defects to form ZnO Nanorings” 3rd Conference ICNT2015, Istanbul, Turkey. (Oral presentation)
- 3- “IR detectors fabrication of undoped and doped PbS nanostructures”, *The Energy & Materials Research Conference (EMR 2105)*, Madrid, Spain (2015), (Oral presentation).
- 4- “Optical and Structural Properties of ZnO Nanowires Grown on Different Kinds of Silicon Substrates”, 2nd International Conference on Functional Materials & Devices (ICFMD-2008), Kuala Lumpur, Malaysia. (Poster)
- 5- “Investigation Effect of Catalyst and Different Temperature of Substrates on Morphological and Optical Properties of ZnO Nanowires” *ThinFilm 2008*, Singapore. (Oral presentation)
- 6- “Characterization and Fabrication of ZnO Nanowires Grown on AlN Thin Film”, 3rd International Meeting on Frontiers of Physics (IMFP 2009), Kuala Lumpur, Malaysia (Oral presentation) and published in *AIP conference processing* **1150** (2009) 371-375 (Scopus cited).
- 7- “High Optical Properties and Rectifying Behavior of ZnO (Nano and Microstructures)/Si Heterostructures”, *International Conference on Nanotechnology, Optoelectronics and Photonics* (2011), Penang, Malaysia (Oral presentation) and published in *Proceedings of World Academy of Science, Engineering and Technology* **74** (2011) 583-587 (Scopus cited).
- 8- “The Effect of Gold Catalyst on Optical and Field Emission Properties of Zn_xMg_{1-x}O Nanowires”, 28th European Conference on Surface Science (ECOSS-28) (2011), Poland (Oral presentation)
- 9- “Growth and X-ray peak broadening studies of Zn_{1-x}Mg_xO nanoparticles”, 9th International Conference on Nanosciences & Nanotechnologies (NN12) (2012) (Greece) (Oral).

Visiting Researcher

- 1- Visiting researcher as a sabbatical position at Shiraz University, Iran, 2019-2020.
- 2- Senior researcher grant included traveling grant from the University of Malaya (UM), Malaysia on Jun-Sept 2014.
- 3- Visiting researcher grant included traveling grant from the University of Malaya (UM), Malaysia on Feb 2014.
- 4- Visiting researcher grant included traveling grant from the University of Malaya (UM), Malaysia on Aug 2013.

Honors & Awards

- 1- I have been featured among World's Top 2% Scientists by Stanford University, together with the publishing house Elsevier and SciTech Strategies.

- 2- Web of Science Peer Review Awards <https://www.webofscience.com/wos/author/record/A-1476-2010>: I rated among top reviewers internationally as one of the top 1 per cent of peer review in **Materials Science** and **Physics and Astronomy** in 2017, 2018, and 2019.
- 3- Winner of Bronze medal in 4th festival of researcher of the I.A.U (2016), in Materials Science Engineering branch.
- 4- The first researcher winner of the I.A.U, in Nanotechnology research (2017).
- 5- The first researcher winner in 3rd nano festival of I.A.U in 2016.

Leader and Co-Operative of Projects and Research Grants:

- 1- Leader of project with title **“Synthesis, characterization, and photoelectrochemical applications of nanocomposites based on semiconductor metal-chalcogenide/g-C₃N₄”** (Finished) (\$6.000.000 from *Iran National Science Foundation (INSF)*)
- 2- Leader of project with title **“The use of nanotechnology in preventing corrosion of metal pipe and equipment of Shahid Abbaspour Dam”** (Finished) (\$20000 From, *Ministry of Energy of Iran*)
- 3- Leader of project with title **“Synthesis of semiconducting nanostructures/graphene nanocomposites as different applications”** (Finished) (\$4000 From the *I.A.U*)
- 4- Co-leader of project **“Using of Nanotechnology to Solve Water Pumps of Ramhormoz City of Khuzestan Province, Iran”** (Finished) (2014-2015) (\$24000) (from *Ministry of Energy of Iran*).
- 5- Co-leader of project with title **“Synthesize and characterization of Cu-Chalcogenide/Graphene Nanocomposites as Optoelectronic Applications”** (Finished) (\$4000 From the *I.A.U*)
- 6- Leader of project with title **“Synthesize of Zinc Selenide/Graphene as Application in the Photodetectors”** (Finished, 2021) (\$4.000.000) (from *Iran National Science Foundation (INSF)*).
- 7- Leader of project with title **“Growth of ZnO nanodiodes by modification of a thermal evaporation set-up”** (2010-2011) (Finished) (\$4000 From the *I.A.U*)
- 8- Leader of project with title **“Investigation of structural and optical properties of group-I-element doped ZnO nanostructures”** (2011-2012) (Finished) (\$6000 From the *I.A.U*)
- 9- Leader of project with title **“Effect of anionic dopants on structural and optical properties of ZnO nanostructures”** (2011- 2012) (Finished) (\$6000 From the *I.A.U*)
- 10- Leader of project with title **“Growth Characterization of Pb-doped ZnO nanoparticles by a CVD method”** (2012-2013) (Finished) (\$6000 From the *I.A.U*)
- 11- Leader of project with title **“Growth and characterization of PbO nanostructures.”** (2013-2014) (Finished) (\$6000 From the *I.A.U*)

- 12- Leader of project with title “**Growth of Pb-Chalcogenide nanostructures as IR sensor.**” (2013-2014) (Finished) (\$6000) (from *Iran National Science Foundation (INSF)*)
- 13- Leader of project with title “**Investigation of Sr-doped ZnO nanoparticles as photocatalyst materials to remove organic dyes**” (2013-2014) (Finished) (\$6000 From the *I.A.U.*).

Ph.D. students’ supervisor and adviser

The supervisor of more than 20 Ph.D. students

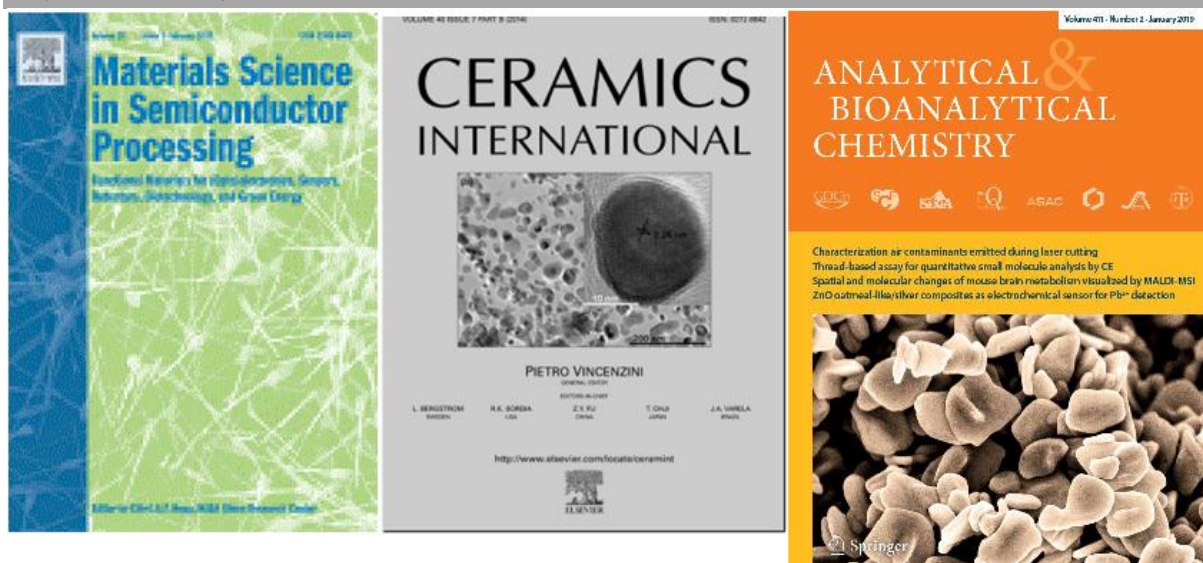
M.Sc. students’ supervisor and adviser

The supervisor of more than 20 M.s students

Reviewer of ISI Journals and Conference processing

Reviewer for the Elsevier, Springer, Wiley, IOP, AIP, ACS, RSC, MDPI publishers, and several international conferences.

My works as journals’ cover



Refereee:

- 1- Prof. Farid Jamali-Sheini, Department of Physics, Islamic Azad University, Iran, faridjamali2003@yahoo.com
- 2- Prof. Dr. Wan J. Basirun, Department of Chemistry, University of Malaya, Kuala Lumpur, Malaysia, jeff@um.edu.my