Omid Shekoofa

Dr. Omid Shekoofa, Assistant Professor
Department of Mechanical Engineering, Eastern Mediterranean University
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Research Interests

- Control
- Robotic
- Space technology and applications
- Satellite electrical power subsystem
- Photovoltaic systems

Education

- **Tsinghua University** — Beijing, China
  Ph.D. in Electronic Science and Technology (Sep. 2013-Jun. 2017)
  Thesis title: *Poly-crystalline Silicon Thin Films Fabricated by Magnetron Sputtering and Metal Induced Crystallization for Photovoltaic Applications*
  Supervisor: Professor Jian Wang

- **Amirkabir University of Technology (Tehran Polytechnic)** — Tehran, Iran
  M.Sc. in Nuclear Engineering (Sep. 2000-Jun. 2003)

- **Iran University of Science and Technology** — Tehran, Iran
  B.Sc. in Electrical and Electronic Engineering (Sep. 1993-Jun. 1998)

Honors and Awards

- The 2nd rank of the *"Prominent Researcher Award,"*, the 10th ceremonial festival of Iranian prominent researchers, Tehran, Iran, 2009
- The 1st prize of the 22nd *"Khwarizmi International Award"*, Tehran, Iran, 2008
- Granted "*full scholarship from Iran Ministry of Science and Technology (MSRT)"* for Ph.D. study abroad, 2013
- The 2nd rank outstanding student prize, TianFu scholarship, Tsinghua University, Beijing, China, 2014
- Best student poster award, ICPS 2016 Conference, Beijing, China, 2016
- The 11th rank in the M.Sc. nationwide matriculation exam, among all university students throughout Iran in nuclear engineering field, 2000

Work Experiences

- Eastern Mediterranean University (EMU) — Famagusta, North Cyprus
  Assistant Professor (2021-Now)
- Satellite Research Institute (SRI) — Tehran, Iran
  Faculty member, project manager, researcher (2007-2013) & (2017-2021)
- Iranian Research Organization for Science and Technology (IROST) — Tehran, Iran
  Project manager, researcher (2006-2008)
- Iran Telecommunication Research Center (ITRC) — Tehran, Iran
  Researcher, designer (2002-2007)
- Research Center of Informatics Industries Co. (RCII) — Tehran, Iran
  Researcher, responsible for EMC testing (2000-2002)

Research Grants and Experiences

- **Satellite Research Institute (SRI)** — **Tehran, Iran (2017-2021) & (2007-2013)**
  - *Design and manufacturing of electrical power subsystem (EPS) for different classes of telecommunication and remote sensing satellites (**100-163, 100-672, 99/5052/12386**)* – As project manager / project lead
  - *Modeling and simulation of space power systems and photovoltaic systems (**99/5052/10359**)* – As principal researcher
  - *Development of an automatic system for functional testing of small satellites EPS (**390080930**)* – As project lead
  - *Design and Development of GaAs Solar panel for microsatellites (**99/5052/12383**)* – As principal researcher
  - *Design and implementation of a 5.0-meters small radio telescope (**118/1049142**)* – As project manager
  - *Design and implementation of solid-state weather radar and radiosonde systems (**94/1010/5477**)* – As project manager
  - *Remote sensing application in precision agriculture and satellite farming (**97/SAP9995-01**)* – As project manager
  - *Remote sensing application in disaster management and flood monitoring (**98/1070/15075**)* – As project manager
  - *Feasibility study of low-cost thin-film fabrication fully by magnetron sputtering technique (**99/5052/2265**)* – As project manager
  - *Improve the safe operation of Li-Ion battery by closed loop control of charge/discharge based on power level prediction (**1400/1050/4964**)* – As project advisor

- **Electronic Engineering Department of Tsinghua University** — **Beijing, China (2013-2017)**

Participating in different research projects and activities, including:

  - *Fabrication of low-cost thin film solar cells by metal induced crystallization and magnetron sputtering (**2015CB351900, 2017YFA0205800**)* – As principal researcher
  - *Development of a software tool for solar cells and modules modeling and simulations (**2015AA017101**)* – As principal researcher

- *Analysis, modeling and simulation of residual stress in solar evacuated tubes **(2012AA050601)*** – As principal researcher

▪ **Iranian Research Organization of Science and Technology (IROST)** **Tehran, Iran**
Participating in different research projects and activities, including: **(2006-2008)**

- *Establishment of a laboratory for photovoltaic modules testing **(IROST-129833)*** – As principal researcher
- *Feasibility study for establishing a GaAs solar cell fabrication laboratory* – As principal researcher
- *Project manager of "Space NiCd Battery Emulator" project **(IROST-600971-841216)*** – As project manager

▪ **Iran Telecommunication Research Center (ITRC)** **Tehran, Iran**
Participating in different research projects and activities, including: **(2003-2007)**

- *Design, development and test of power subsystem of MESBAH satellite **(17296-T3591)*** – As principal researcher
- *Design and development of an outdoor test bed for solar panels testing* – As principal researcher
- *Modeling and simulation of space power systems and photovoltaic systems* – As principal researcher

▪ **Research Center of Informatics Industries Co. (RCII)** **Tehran, Iran**
Participating in different research activities and activities, including: **(2000-2002)**

- *EMC testing of IT, audio-video and medical electrical equipment **(811744)*** – As test engineer
- *Design and development of a 12-channel programmable thermometer* – As design engineer
- *Design and development of a 0.5 kW power conditioner for general appliances*– As design engineer

Teaching Experiences

▪ Department of Mechanical Engineering, EMU — Famagusta, North Cyprus
Industrial automation, and Introduction to Mechatronics and Measurement Systems — Fall 2021

▪ Faculty of New Science and Technology, Tehran University — Tehran, Iran
Lecturing the graduate course of "Spacecraft Electrical Power Subsystem Design" — Spring 2018, Spring& Fall 2019, Fall 2020

▪ Faculty of New Science and Technology, Tehran University — Tehran, Iran
Lecturing the graduate course of "Reliability and Test in Space Systems" — Spring 2021

▪ Department of Physics and Energy Engineering, Amirkabir University of Technology — Tehran, Iran
Lecturing the undergraduate course of "Electronic Circuits I" — Spring & Fall 2020

▪ Pars Electric Center for Applied Science and Technology — Tehran, Iran
Lecturing the undergraduate course of "Electronic Circuits I" — Spring 2005

▪ Iran University of Science and Technology — Tehran, Iran
Teacher assistant of "Electronic Circuits I" and "Electronic Laboratory I & II" — Fall 1996 & Spring 1997

Book Translation

1- *"Electronic Circuits Analysis and Design,"* by Professor Donald A. Neamen, University of New Mexico. Translated into Persian with collaboration of Dr. H. R. Habibbiyan, NASS publications, ISBN: 961-410-000-X, 2004.

Peer-Reviewed Journal Papers

1- Z. Ashrafi, H. Ghafoorifard, H. Habibiyan, O. Shekoofa, A. Jafargholi, *"Thermo-Electrical Performance Modeling of a Solar Cell with and without Concentrator under Different Environmental Conditions*", Journal of Iranian Association of Electrical and Electronics Engineers. (In press)

2- D. Khoshmaram, M. Haghighi, O. Shekoofa, H. Habibiyan, H. Ghafoorifard, "*A Modeling Study on Utilizing Ultra-Thin Inorganic HTLs in Inverted p-n Homojunction Perovskite Solar Cells*", Elsevier: Journal of Solar Energy, Volume 213, 1 January 2021, Pages 1-12. DOI: 10.1016/j.solener.2020.11.009. (**SCIE, Q1, IF=4.608**)

3- O. Shekoofa, J. Wang, L. Dejie, Y. Luo, "*Investigation of the Microcrystalline Silicon Thin Film fabricated by Magnetron Sputtering and Copper-induced Crystallization for Photovoltaic Applications*", MDPI: Journal of Applied Sciences, Appl. Sci. 2020, 10, 6320. DOI: 10.3390/app10186320. (**SCIE, Q2, IF= 2.474**)

4- H. Aliakbarian, M. Taherkhani, M. Mokhtari, F. Nazari, O. Shekoofa, "*An Efficient Design Methodology for Sandwich Radome Panels: A C-band Design Example*", IET Science, Measurement & Technology, April 2020. DOI: 10.1049/iet-smt.201 9.0209. (**SCIE, Q1, IF=1.975**)

5- J. Tayebpour, B. Ahmadi, M. Fallahzadeh, O. Shekoofa, A. Torabi, "*A Waveguide Switch Based on Contactless Gap Waveguide Technology*", IEEE Microwave and Wireless Components Letters, Volume: 29, Issue: 12, November 2019. DOI: 10.1109/LMWC.2019.2950164. (**SCIE, Q1, IF=2.374**)

6- M. J. Esfandyari, M. R. Hairi Yazdi, V. Esfahanian, M. Masih-Tehrani, H. Nehzati, O. Shekoofa, "*A Hybrid Model Predictive and Fuzzy Logic Based Control Method for State of Power Estimation of Series-Connected Lithium-Ion Batteries in HEVs*", Elsevier: Journal of Energy Storage, vol. 24, August 2019, 100758. DOI: 10.1016/j.est.2019.100758. (**SCIE, Q1, IF=5.537**)

7- M. J. Esfandyari, V. Esfahanian, M. R. Hairi Yazdi, H. Nehzati, O. Shekoofa, "*A New Approach to Consider the Influence of Aging State on Lithium-Ion Battery State of Power Estimation for Hybrid Electric Vehicle*", Elsevier: Energy, vol. 176, June 2019, 505-520. DOI: 10.1016/j.energy.2019.03.176. (**SCIE, Q1, IF=3.517**)

8- O. Shekoofa, J. Wang, L. Dejie, Y. Luo, et al., "*Nano-crystalline Thin Films Fabricated by Si-Al Co-sputtering and Metal Induced Crystallization for Photovoltaic Applications*", Elsevier: Solar Energy, vol.173, October 2018, pages 539–550. DOI: 10.1016/j.solener.2018.07.077. (**SCIE, Q1, IF=4.374**)

9- O. Shekoofa, J. Wang, L. Dejie, Y. Luo, et al., "*P-Silicon Thin Film Fabricated by Magnetron Sputtering and Aluminium Induced Crystallization for Schottky Silicon Solar Cells*", Elsevier: Materials Science in Semiconductor Processing, vol.71, November 2017, pages 366–373. DOI: 10.1016/j.mssp.2017.06.008. (**SCIE, Q2, IF=2.334**)

10-O. Shekoofa, J. Wang, Y. Luo, et al., "*Impacts of the annealing profile on AIC thin film solar cell characteristics fabricated by magnetron sputtering*", IOP Journal of Physics: conference series, July 2017, 864, 012006. DOI: 10.1088/1742-6596/864/1/012006.

11-J. Wang, O. Shekoofa, Z. Yin, J. Qi, X. Liu, W. Ke, *"Measurement of Reflectance Covering UV to MIR of Solar Selective Coatings by One Fourier Transform Spectrometer"*, Elsevier: Energy Procedia, Volume 70, May 2015, Pages 121-125. DOI: 10.1016/j.egypro.2015.02.106.

12-O. Shekoofa, J. Wang, J. Qi, J. Zhang, Z. Yin. "*Analysis of Residual Stress for Mismatch Metal–Glass Seals in Solar Evacuated Tubes*" Elsevier: Solar Energy Material and Solar Cells. September 2014; 128:421–6. DOI: 10.1016/j.solmat.2014.05.042. (**SCIE, Q1, IF=5.337**)

13-O. Shekoofa, M. Taherbaneh, *"Evaluation of the Impacts of Orbit Parameters Change on Specifications and Performance of Power Sources of LEO Satellites,"* Journal of Space Science & Technology (JSST), vol. 2, No. 4, pages 39-49, Summer 2009. (In Persian).

Selected Conference Papers

1- O. Shekoofa, F. Bagheroskouei, R. Amjadifard F. Hadadi, A.Saleki *"Evaluation of the Performance of Different Solar Array Structures in Cubesats Based on System Specification,"* 19th Iranian Aerospace Society Conference (AERO 2021), Tehran, Iran, May 2021. (In Persian)

2- O. Shekoofa, M. Khoshsima, S. Ghazanfarinia F. Bagheroskouei, *"Establishment of a National Center for Space Weather Monitoring: Goals, Missions and Organization,"* 19th Iranian Aerospace Society Conference (AERO 2021), Tehran, Iran, May 2021. (In Persian)

3- O. Shekoofa, F. Bagheroskouei, N. Namazypour, F. Hadadi, *"Comparison of Different Configurations of Modular Cubic Satellites Based on the Reliability of the Power Generation Section,"* 6th International Reliability and Safety Engineering Conference (IRSEC2020), Shiraz, Iran, February 2021. (In Persian)

4- D. Khoshmaram, H. Abnavi, H. Habibiyan, H. Ghafoorifard, O. Shekoofa, *"TDMA Based Numerical Approach on Modeling of Charge Carrier Transport and Ion Vacancy Motion in Perovskite Solar Cells",* 28th Iranian Conference on Electrical Engineering (ICEE 2020), Tabriz, Iran, May 2020.

5- O. Shekoofa, F. Bagheroskouei, *"An Introduction to Space Weather Concept Challenges and Risks in Iran,"* 18th Iranian Aerospace Society Conference (AERO 2020), Tehran, Iran, March 2020. (In Persian)

6- S. Ashoori, M. Fakoor, O. Shekoofa, *"Evaluation of the Battery-Supercapacitor Combination for Supplying the Peak Power Consumption in SAR Satellites,"* 18th Iranian Aerospace Society Conference (AERO 2020), Tehran, Iran, March 2020. (In Persian)

7- Z. Aghajani, O. Shekoofa, P. Tarakomeh, *"A Study on Space-Based Businesses in Iran,"* 18th Iranian Aerospace Society Conference (AERO 2020), Tehran, Iran, March 2020. (In Persian)

8- A. Ebrahimi, B. Ahmadi, E. Khodarahmi, O. Shekoofa, *"A Study of Cooling Efficiency Effects on Solid State Pulsed Power Amplifier Performance*," ISRC 5th experts meeting, Tehran, Iran, December 2019.

9- E. Khodarahmi, B. Ahmadi, A. Ebrahimi, O. Shekoofa, *"Temperature Compensated Microwave Detector for Automatic Level Controller in Satellite Transponders,"* ISRC 5th experts meeting, Tehran, Iran, December 2019.

10-A. Shahrooei, M. Barzegar, O. Shekoofa, *"Li-Ion Battery Lifetime Prediction by Machine Learning and Low-DOD Cycling Data,"* ISRC 5th experts meeting, Tehran, Iran, December 2019. (In Persian)

11-A. Ebrahimi, B. Ahmadi, E. Khodarahmi, O. Shekoofa, *"Design and Simulation of a High Performance Ku-Band Solid State Power Amplifier for Space Applications,"* ISRC 5th experts meeting, Tehran, Iran, December 2019. (In Persian)

12-S. Rajabzadeh, P. Shahsafi, S. Jalilian, O. Shekoofa, *"A Micro-Service Based In-House Remote Sensing System Design,"* ISRC 5th experts meeting, Tehran, Iran, December 2019. (In Persian)

13-E. Panahi, M. Khoramnejad, P. Shahsafi, S. Jalilian, O. Shekoofa, *"Advanced Design Approach Based on Publish-Subscribe for Variables Update Management in Weather Radar Software,"* ISRC 5th experts meeting, Tehran, Iran, December 2019. (In Persian)

14-P. Shahsafi, S. Rajabzadeh, P. Shavandi, S. Jalilian, O. Shekoofa, *"Developing an In-House VOIP Service for Satellite Communication,"* ISRC 5th experts meeting, Tehran, Iran, December 2019. (In Persian)

15-N. Bahari, M. Jalali, O. Salimi, H. Shakiba, O. Shekoofa, *"The outlook of Using HAP in Supporting the Wireless Communication Infrastructures,"* ISRC 5th experts meeting, Tehran, Iran, December 2019. (In Persian)

16-S. Karami, M.R. Hassani, M. Shafaghati, O. Shekoofa, A. Shahrooei, M. Mashaghi, *"Design, Implementation and Calibration of a Small Radio Telescope,"* ISRC 5th experts meeting, Tehran, Iran, December 2019. (In Persian)

17-S. Jillian, P. Shavandi, O. Sallimi, O. Shekoofa, *"Implementation of IIR Filter by GPU for Weather Radars"*, The 6th Iranian Radar and Surveillance Systems (Radar 2019), Esfahan, Iran, November 2019. (In Persian)

18-M. Barzegar, M. Mohsenzadeh, S.R. Hamzehlou, O. Shekoofa, A. Omidvar, *"An Analytical Model for Determination of Electromechanical Impedance of L-Shape Structure,"*, 27th annual International Conference of Mechanical Engineering (ISME 2019), Tehran, Iran, May 2019. (In Persian)

19-M. Mohsenzadeh, M. Barzegar, S.R. Hamzehlou, O. Shekoofa, M.R. Hosseini, *"Electromechanical Impedance of Cracked Frame Structures: An Analytical Approach,"* 27th Annual International Conference of Mechanical Engineering (ISME 2019), Tehran, Iran, May 2019. (In Persian)

20-D. Khoshmaram, H. Ghafoorifard, H.R. Habibiyan, O. Shekoofa, *"Analysis of Optimum Copper Oxide Hole Transporting Layer for Perovskite Solar Cells,"* 27th Iranian Conference on Electrical Engineering (ICEE 2019), Yazd, Iran, May 2019.

21-O. Shekoofa, M. Baghban, F. Bagheroskouei, N. Namazipour, E. Kosari, S. Karbasian, *"Using of Solar Power Satellite Systems as Clean Energy Source,"* 6th Annual Clean Energy Conference (ACEC 2019), Shiraz, Iran, March 2019. (In Persian)

22-M. J. Esfandyari, V. Esfahanian, M. R. Hairi Yazdi, O. Shekoofa, *"State of Power Estimation of Lithium-ion Batteries by Using of Model Predictive Control,"* ISRC 4th experts meeting, Tehran, Iran, December 2018. (In Persian).

23-O. Shekoofa, S. J. Tabatabeai, H. Yadegari, *"A Comparative Study of Space Organizations in Chania and Iran,"* ISRC 4th experts meeting, Tehran, Iran, December 2018. (In Persian).

24-O. Shekoofa, M. Baghban, S. Ghazanfarinia, *"Honeymoon on Proxima B, Engagement of Starshot and SBPP ideas,"* 69th International Astronautical Congress (IAC 2018), Bremen, Germany, October 2018.

25-M. Khoshsima, J. Haghshenas, O. Shekoofa, S. Ghazanfarinia, *"Design of Space Based Platform for Earthquake Prediction Using Atmospheric Precursors,"* 69th International Astronautical Congress (IAC 2018), Bremen, Germany, October 2018.

26-S. Ghazanfarinia, M. Khoshsima, O. Shekoofa, *"Space Startups and How They Strength the Cooperation Between Government and Private Sectors in Iran,"* ISRC Meeting on Space World, October 2018. (In Persian)

27-L. Khalajzadeh, O. Shekoofa, *"Thematic Priorities of COPUOS, and the Subject for Improving the collaborations between Member States,"* ISRC Meeting on Space World, October 2018. (In Persian)

28-A. Saleki, F. Bagheroskouei, O. Shekoofa, A. Abrishamifar, *"Failure Rate Prediction by Using Part Stress Method for Nahid2 Power Subsystem Electronic Boards,"* 17th Iranian Aerospace Society Conference (AERO 2018), Tehran, Iran, June 2018.

29-O. Shekoofa, N. Namazipour, F. Bagheroskouei, M. Baghban, S. Karbasian, E. Kosari, *"Using of Supercapacitor in Microsatellite Electrical Power Subsystem, and Its Impacts on Battery Configuration,"* 17th Iranian Aerospace Society Conference (AERO 2018), Tehran, Iran, June 2018. (In Persian)

30-O. Shekoofa, *"Model Philosophy Selection Based on Design Philosophy and TRLs in Space Projects,"* 17th Iranian Aerospace Society Conference (AERO 2018), Tehran, Iran, June 2018. (In Persian)

31-S. Karbasian, F. Bagheroskouei, R. Amjadifard, O. Shekoofa, A. Abrishamifar, *"Design and Manufacturing of GaAs Solar Panel for Domestic Microsatellites,"* 17th Iranian Aerospace Society Conference (AERO 2018), Tehran, Iran, June 2018. (In Persian)

32-S. Karbasian, F. Bagheroskouei, Y. Sadeghi, O. Shekoofa, *"Management of Redundant OBC boards in Nahid-1 Satellite,"* 17th Iranian Aerospace Society Conference (AERO 2018), Tehran, Iran, June 2018. (In Persian)

33-E. Kosari, F. Bagheroskouei, A. Abrishamifar, O. Shekoofa, *"Battery Pack Design with an Active Balancer for a LEO Satellite,"* 17th Iranian Aerospace Society Conference (AERO 2018), Tehran, Iran, June 2018. (In Persian)

34-O. Shekoofa, J. Wang, "*Fabrication of P-Type Microcrystalline Silicon Thin Film by Magnetron Sputtering and Copper Induced Crystallization*", 26th Iranian Conference on Electrical Engineering (ICEE 2018), Mashahd, Iran, May 2018.

35-O.Shekoofa, A.Saleki, et al. , "*Reliability Considerations in Concentrated Solar Cells*", 5th International Reliability and Safety Engineering Conference (IRSEC 2018), Shiraz, Iran, May 2018. (In Persian)

36-O. Shekoofa, J. Wang, Y. Luo, D. Li, et al, "*Polycrystalline p-Si Thin Film Fabrication by Magnetron Sputtering and Al Induced Crystallization*", 3rd Annual Symposium of Beijing Vacuum Society, Beijing, China, September 2016.

37-O. Shekoofa, J. Wang, Y. Luo, C. Sun, and B. Xiong, "*PVSim-GUI, a characterization tool for parameter extraction, modeling and simulation of PV devices*", 31st European Photovoltaic Solar Energy Conference (EU PVSC 2015), Hamburg, Germany, September 2015.

38-O. Shekoofa, J. Wang, "*Multi-Diode Modeling of Multi-Junction Solar Cells*", 23rd Iranian Conference on Electrical Engineering (ICEE 2015), Tehran, Iran, May 2015.

39-O.Shekoofa, E. Kosari, *"An Overview on Using Ultra-Low Power Circuits in Space Applications",* 13th Iranian Aerospace Society Conference (AERO 2014), Tehran, Iran, March 2014.

40-E. Kosari, O.Shekoofa, N. Namazipour, A.R. Kosari, *"Electrical Power Subsystem Topology Selection Based on System Level Specifications",* 13th Iranian Aerospace Society Conference (AERO 2014), Tehran, Iran, March 2014. (In Persia

41-O. Shekoofa, S. Karbasian, *"Design Criteria for Electrical Power Subsystem's Topology Selection,"* 6th conference on recent advances in space technology (RAST 2013), Istanbul, Turkey, June 2013.

42-O. Shekoofa, E. Kosari, *"Comparing the Topologies of Satellite Electrical Power Subsystem Based on System Level Specifications,"* 6th conference on recent advances in space technology (RAST 2013), Istanbul, Turkey, June 2013.

43-M. Baghban, O. Shekoofa, *"A Review on the Mechanisms of Electrical Arcing and Electrostatic Discharge on Space Solar Arrays,"* 6th conference on recent advances in space technology (RAST 2013), Istanbul, Turkey, June 2013.

44-O. Shekoofa, "*A Study of Different Equivalent Circuits for Silicon Solar Panel,*" 21st Iranian Conference on Electrical Engineering (ICEE 2013), Mashhad, Iran, May 2013. (In Persian)

45-O. Shekoofa, *"Comparing the Operation of Different Solar Cells in a GEO Mission,"* 4th International symposium on Communication Satellite Technology and Applications, Yogyakarta, Indonesia, November 2012.

46-O. Shekoofa, K. Kaki, S. Jalilian, *"A Simulation Environment for Small Satellite Development,"* 1st Conference on Satellites for Sustainable Development (SSD 2012), Tehran, Iran, October 2012. (In Persian)

47-O. Shekoofa, M. Baghban, *"Evaluation of ESD Effects on Solar Array in Different Space Missions,"* 1st International Conference on Telecommunication and Remote Sensing (ICTRS 2012), Sophia, Bulgaria, August 2012.

48-A. Hossaini, A.H. Fegh'hi, O. Shekoofa, H. Daneshvar, "*Comparison of Radiation Damage on BYV27 and BYV95C Diodes by Using C-V Method*," 20th Iranian Conference on Electrical Engineering (ICEE 2012), Tehran, Iran, May 2012. (In Persian)

49-O. Shekoofa, *"Solar Arrays Testing for Space Applications,"* 5th conference on recent advances in space technology (RAST 2011), Istanbul, Turkey, June 2011.

50-O. Shekoofa, "*A Simple Approach for Determination of Cubesats Solar Panels Orientation,"* 1st International conference on small satellites systems (CSSS 2011), Paris, France, April 2011.

51-O. Shekoofa, K. Kaki, S. Jalilian, "*Satellite Integrated Development Environment (SIDE), a comprehensive simulation environment for small satellites development*," 1st International conference on small satellites systems (CSSS 2011), Paris, France, April 2011.

52-O. Shekoofa, *"A Comparison of Different Standards for Space Solar Panels Testing,"* 10th Iranian Aerospace Society Conference (AERO 2011), Tehran, Iran, 1-3 March 2011 (In Persian)

53-S. Karbasiyan, O. Shekoofa, *"The Role of Topology Selection in Electrical Power Subsystem Design,"* 10th Iranian Aerospace Society Conference (AERO 2011), Tehran, Iran, March 2011. (In Persian)

54-O. Shekoofa, R. Amjadifard, S. Karbasian, *"A New Approach for Modeling and Calculation of the Received Solar Irradiance on Solar Panels of a Cube-Sat,"* 9th Iranian Aerospace Society Conference (AERO 2010), Tehran, Iran, February 2010. (In Persian)

55-O. Shekoofa, M. Taherbaneh, "*Power Sources Sizing in Electrical Power Subsystem Design Based on Orbit Parameters Change in LEO Satellites,"* 4th conference on recent advances in space technology (RAST 2009), Istanbul, Turkey, June 2009.

56-O. Shekoofa, N. Pouryaie, and others, *"Improving the EGSE of Power Subsystem by Design and Development of a Battery Emulator for Space Applications*," 4th conference on recent advances in space technology (RAST 2009), Istanbul, Turkey, June 2009.

57-O. Shekoofa, M. Taherbaneh, *"Orbit Altitude Change and its Influences on the Required Specifications and Performances of Power Sources in LEO Satellites,"* 8th Iranian Aerospace Society Conference (AERO 2009), Isfahan, Iran, February 2009. (In Persian)

58-O. Shekoofa, K. Sohrabzadeh and others, "*Design and Development of a Space Battery Simulator*,*"* 7th Iranian Aerospace Society Conference (AERO 2008), Tehran, Iran, February 2008. (In Persian)

59-M. Taherbaneh, H.Ghaforifard, A.H. Rezaie, O. Shekoofa, S. Karbasian, "*Evaluation of Silicon Solar Panel's Electrical Parameters in Different Environmental Conditions Using a Comprehensive Measurement System*,*"* 17th international photovoltaic science and engineering conference (PVSEC 2007), Fukuoka, Japan, December 2007.

60-O. Shekoofa, M. Taherbaneh, *"MATLAB/Simulink Modeling of Silicon Solar Panel and Evaluating the Importance of Its Parameters in a Space Application*,*"* 3rd conference on recent advances in space technology (RAST 2007), Istanbul, Turkey, June 2007.

61-O. Shekoofa, M. Taherbaneh, *"Evaluation of the Role of Various Parameters in Silicon Solar Cell Modeling*,*"* 15th Iranian Conference on Electrical Engineering (ICEE 2007), Tehran, March 2007.

62-O. Shekoofa, M. Taherbaneh*, "Modeling and In-Orbit Simulation of Silicon Solar Panels and Evaluation of the Importance of Each Model's Parameters*,*"* 6th National Conference of Iranian Aerospace Society (AERO 2007), Tehran, February 2007. (In Persian)

63-O. Shekoofa, M. Taherbaneh and others, *"In-orbit Simulation of Dynamic Behaviors of NiH2 Batteries' Characteristics*,*"* 2nd International Conference of Iranian Aerospace Society (AERO 2004), Esfahan, Iran, February 2004. (In Persian)

64-O. Shekoofa, M. Firouznia, "*Fundamental Concepts and Methods of Electromagnetic Compatibility Measurements,"* ISIRI official journal, Volume 132, pages 2-13, September 2002. (In Persian)

M.Sc. Thesis Supervision

- Advisor of M.Sc. thesis, entitled *"Simulation, characterization and optimization of Perovskite solar cells with considering the various structural parameters of hole/electron transport layer,"* Student: D. Khoshmaram, Department of Energy Engineering and Physics, Amirkabir University of Technology, June 2020
- Supervisor of M.Sc. thesis, entitled *"Designing an Electrical Power Subsystem Using Super-capacitors In The Energy Storage Section; For High Power Payloads,"* Student: S. Ashoori, Faculty of New Science and Technology, Tehran University, February 2020
- Advisor of M.Sc. thesis, entitled *"Measurement of Radiation Damage on Electronic Devices and Evaluation of the Impacts on Their Operations,"* Student: A. Hossainni, Physics Department of Shahid Beheshti University, December 2011

Reviewing Journal Papers

- Reviewer of Journal of Energy (Elsevier)
- Reviewer of Journal of Cleaner Production (Elsevier)
- Reviewer of Renewable Power Generation (IET)

Presented Seminars

- *"Economic Impacts of Space Weather Events,"* ISRC, Tehran, Iran, July 2021.
- *"How do Satellites Improve Human Life,"* ISRC, Tehran, Iran, October 2020.
- *"Space Weather, Risks and Challenges,"* SRI, Tehran, Iran, August 2020.
- *"Flood Monitoring and Damage Assessment in Agriculture by Space Remote Sensing - 2019 Floods in Iran,"* presented in the 57th United Nations-COPUOS scientific and technical subcommittee STSC 2020, Vienna, Austria, February 2020.
- *"Space 4.0 Era and the New Players in Iran Space Sector,"* ISRC, Tehran, Iran, May 2020.
- *"Moon Explorations and their Impacts on Human Daily Life,"* Tehran Book Garden, Iran, September 2019.
- *"Space Weather and Growing International Concerns,"* SRI, Tehran, Iran, October 2019.
- *"Lessons Learned from Flood Monitoring and Flood Damage Assessment by Space Remote Sensing-Case Study: 2019 Floods in Iran,"* presented in the 25th UNOOSA Symposium on "Space: A Tool for Accessibility, Diplomacy and Cooperation", Graz, Austria, September 2019.
- *"Satellite and 5G Convergence,"* ISRC, Tehran, Iran, September 2019.
- *"Introduction to Space Technology and Its Applications,"* ISRC, Tehran, Iran, August 2019.
- *"International Space Organizations and Their Key Role in the World Unification,"* presented in the Symposium of "Challenges and Opportunities in the Use of Remote Sensing for Environmental Management, Planning, Monitoring and Evaluation," by Remote Sensing and GIS Research Center, The Faculty of Geoscience, Shahid Beheshti University, Tehran, Iran, November 2018.
- *"An Overview on China Space Organizations,"* SRI, Tehran, Iran, February 2016.
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