



# ALI AKBAR MOTI BIRJANDI

Faculty member

**Head of Power Electronics and Renewable Energy Research Laboratory (PeRe lab)**

## PROFILE

I am an Associate Professor in the Department of Electrical Engineering, Shahid Rajaei Teacher Training University of Iran. My research interests include the design and control of Microgrids and distributed generation and dc-dc converter for renewable energy sources, the power electronics application for flexible AC transmission systems (FACTS), renewable energy systems & applications. I am a member of IEEE and the Iranian Power Electronics society (PESI).

## CONTACT

+982122970006

EMAIL: [motiebirjandi@srttu.edu](mailto:motiebirjandi@srttu.edu)

Alternative Email:

[motiebirjandi@yahoo.com](mailto:motiebirjandi@yahoo.com)

Homepage:

<http://www.sru.ac.ir/motiebirjandi>

Address:

Electrical Engineering Faculty,  
Shahid Rajaei Teacher Training  
University, Lavizan, Tehran,  
Islamic Republic of Iran.

[CLICK HERE TO VISIT MY GOOGLE SCHOLAR](#)

[CLICK HERE TO VISIT MY ORCID PROFILE](#)

[CLICK HERE TO VISIT MY SCOPUS PROFILE](#)

[CLICK HERE TO VISIT MY RESEARCHGATE](#)

[CLICK HERE TO VISIT MY MENDELRY PROFILE](#)

## EDUCATION

### **Doctor of Philosophy in Electrical Power Engineering**

Moscow Power Engineering Institute, GPA - 5

09/2001 – 02/2005

Thesis: Analysis of operational characteristics of flexible AC transmission lines with the account of technical constrains

### **Master's Degree**

Iran University of Science and Technology, GPA – 17.01

09/1991 – 07/1994

### **Bachelor of Science**

Babol Noshirvani University of Technology, GPA – 19.16

09/1987 – 06/1991

## COURSES OFFERED

Flexibility AC transmission systems (FACTS)

Microgrids

Power Electronics I, II

Industrial Electronics

Electric Circuit I, II

Electronic I, II

Electrical Machine I, II

Relay & Protection

Engineer Mathematics

## LABORATORIES

Circuit & Megerment Lab

Industrial Electronics lab

## RESEARCH INTERESTS

- Microgrids
- Distributed Generation
- DC – DC Converter
- Flexible AC Transmission Systems (FACTS),
- Renewable Energy System
- Power Electronics
- Relay & Protection

## PUBLICATIONS

---

### Articles:

1. Davood FATEH , Ali Akbar Moti Birjandi and Josep M. GUERRERO, "A sub-synchronous resonance prevention for DFIG-based wind farms", Turk J Elec Eng & Comp Sci, doi:10.3906/elk 2020.
2. Motiebirjandi, D. Fateh," Analysis and Damp of Oscillations Caused by SSR Mode in DFIG Based Wind Farm by Controlling of Stator Voltage in Conditions of Maintaining MPPT" (In Persian), TABRIZ JOURNAL OF ELECTRICAL ENGINEERING Vol 49, No 3,pp. 1307-1316, 2019.
3. Ebrahim Alizadeh, Mohsen Hamzeh and Aliakbar Motie Birjandi," A Multi-Functional Control Strategy for Oscillatory Current Sharing in DC Microgrids", IEEE Transactions on Energy Conversion, Vol 32 , No 2, 2017.
4. Ebrahim Alizadeh ,Aliakbar Motie Birjandi and Mohsen Hamzeh," A New Decentralized Power Sharing Control Strategy in LV Microgrids under Unbalanced Load Conditions",IET Generation, Transmission & Distribution, Vol 11 , No 7 , 2017.
5. Ali Akbar Motiebirjandi, Davood Fateh," Optimal placement method of multi UPFCs to damp power system oscillations", International Transactions on Electrical Energy Systems(ETEP), Volume27, No 9,2017.
6. Faramarz Farajia, S.M.Mousavi, G.b Aliasghar Hajirayatcd, Ali Akbar Moti Birjandi, KamalAl-Haddad, "Single-stage single-phase three-level neutral-point-clamped transformerless grid-connected photovoltaic inverters: Topology review", Renewable and Sustainable Energy Reviews, Vol 80, pp. 197-214,2017.
7. Majid Kazemi Khafri, Ali Badri, Ali akbar Motie Birjandi," Demand Response based model for optimal decision making for distribution networks", Journal of Operation and Automation in Power Engineering (JOAPE), Volume 5, No 2, pp. 139-149, 2017.
8. E. Alizadeh , A.M.Birjandi, M. Hamzeh,"Decentralized Control Strategy for Optimal Energy Management in Grid-Connected and Islanded DC Micro". Iranian journal of Electrical and Electronic Engineering (IJEEE), Vol.13,No 4, pp. 399-408, 2017.
9. E. Alizadeh , A. M. Birjandi, M. Hamzeh," Economic Droop Scheme for Decentralized Power Management in DC Microgrids", Iranian Journal of Electrical & Electronic Engineering, Vol. 12, No. 4, pp. 322-330, 2016.
10. M LotfiNejad, B Poorali, E Adib, Ali Akbar Motie Birjandi," New cascade boost converter with reduced losses", IET Power Electronics, Vol 9 , No 6 , 2016.
11. Ali A. Motie Birjandi and Sayed Ahmad E.Shoushtari," Equalizing the use of voltage sources in multi – level structures", Bulletin de la Societe Royal des Sciences de Liege, Vol. 85, 2016.
12. Motiebirjandi,D.Dateh,M. Abbasi," Voltage Stability Margin Improvement By Using Multi Upfcs", Jee(Journal of Electrical Engineering),Vol 16, No 4, 2016.
13. Ali Akbar Moti, Mojtaba Eldoromi, "Optimal structural design and implementation to increase the focus of solar energy on photovoltaic cells" (In Persian), Electronics Industries Quarterly, Vol 7, No 2, 2016.
14. E. Alizadeh ,A.M.Birjandi ,M. Hamzeh, "Economic Droop Scheme for Decentralized Power Management in DC Microgrids", Iranian journal of Electrical and Electronic Engineering (IJEEE), Vol.12,No 4, pp. 322-330, 2016.
15. Moslem Salehi, Aliakbar Motie Birjandi, "Optimal Selection of UPFC Parameters and Input Controlling Signal for Damping Power System Oscillations", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 2, No. 1, pp. 61 - 68 , 2016.

16. Esmael Hassani and Ali-Akbar Motie Birjandi, " Induction Motor Drive Performance Improvement of Indirect Vector Control using Fuzzy PID controller", Modares Journal of Electrical Engineering Special Issue on Power Electronics, Vol 15, No 3, 2015.
17. M. Salehi, A. A. MotieBirjandi, F. Namdari, " Unified Power Flow Controller Placement to Improve Damping of Power Oscillations", International Journal of Electrical, Computer, Energetic, Electronic and Communication Engineering, Vol 9, No2, pp. 1293-1298, 2015.
18. Mohammad Lotfinejad, Ali Akbar Moti Birjandi, Davood Fateh, "High-efficiency boost converter design with particle optimization algorithm"( In Persian), Karafan Journal two Quarterly, No 37, pp. 4-11,2015
19. D Fateh , A A Motie Birjandi , R Ebrahimpour, " Enhancement of Damping of Power System Oscillations through UPFC Placement based on Residue Factor and Critical Modes" (In Persian), TABRIZ JOURNAL OF ELECTRICAL ENGINEERING Vol 44, No 3,pp. 23-31, 2014.
20. Ebrahim Alizadeh, Ali Mostaan, Aliakbar Motie Birjandi, " Comment On " A KY Boost Converter", IEEE trans. On Power Electronics, Vol 30, No 2, 2014.
21. Ali Akbar Motiebirjandi, Davood Fateh, Ali Reza Mohammad Jafari, Hesamoddin Arab Bafrani, " Optimal Placement Of Upfc to enhance voltage Stability Margin By Using Loading Factor", Indian Journal of Scientific Research, Vol 2, No 1, pp. 126-131, 2014.
22. A Aref, A. Motie, A. Daman Khorshid, " Application Soft Ware's in Electrical-Power Engineering Education" (In Persian), Technology of Education Journal Quarterly (TEJ), Vol 7, No 2, pp 121-128, 2014.
23. Hassan Abniki, Saeed NateghiJahromi, Ali Akbar Moti, " Best Mutual Demand Response and Load Profile In Smart Grids", Revue Roumaine Des Sciences Techniques, Vol 58, No 4, 2013.
24. Ali Akbar Motie Birjandi, Saeed Rahimi gholami, " Comparison between learning mechanism and pattern presentation techniques in voltage stability assessment", International Journal of Engineering and Advanced Technology (IJEAT), Vol11, No 3 pp.7-11, 2012.
25. Mohammad Reza Modabernya, Yekta Nazarpour, Ali Akbar Moti Birjandi, " Review and comparison of thyristor models in Pspice and MATLAB"( In Persian), Karafan Journal two Quarterly, No 32, pp. 85-113, 2012.
26. Ali Akbar Motie Birjandi, Zahra Ameli, " Three Phase Controlled Rectifier Study in Terms of firing angle variations", International Journal on Electrical and Power Engineering(IJEPE), Vol. 3, No2 , 2012.
27. A.A. Motiebirjandi, J. Hatami, V.A. Fekri, " The Effectiveness Examination of Using Analogies as a Teaching Methodology in the Complicated Concepts Learning" (In Persian), Technology of Education Journal Quarterly (TEJ), Vol 5, No 4, pp 273-287, 2012.
28. Ali Akbar Motie Birjandi, Mohsen Poorfallah, " Optimal coordination of Overcurrent and Distance Relays by a New Particle Swarm Optimization Method", International Journal of Engineering and Advanced Technology (IJEAT), Vol11, No 2, pp.93-98, 2011,
29. Ali Akbar Motie Bjandi, Kauomars Sabzawari, " The modeling of UPFC based on circuit elements in an exact transmission line model", International Journal of Engineering (IJE), Vol 4, No 3, pp 105-118, 2010.
30. Reza Ebrahimpour, Easa Kazemi Abharian, Seyed Zeinolabedin Moussavi and Ali Akbar Motie Birjandi, " Transient Stability Assessment of a Power System by Mixture of Experts", International Journal of Engineering (IJE), Vol 4, No1, pp. 93-104, 2010.
31. R.Ebrahimpour, E.K.Abharian, A.M.Birjandi, S.Z.Moussavi, " Transient Stability Assessment of a Power System with a UPFC by Mixture of Experts", International Journal of Computer and Electrical Engineering (IJCEE), Vol 2, No 4, pp. 643-648, 2010.

32. Youri Petrovich, A.A. Motiebirjandi,,“Transmission line operation specifications using vector control (Russian language), Electro Energy Journal, Vol 30 ,No4 ,pp.2-10, 2005.
33. Youri Petrovich, A.A. Motiebirjandi,” Possible restrictions on flexible lines 220 and 500 kV (series capacitor)” (Russian language), Electro Energy Journal,Vol 29 , No 6 ,pp.26-31,2004.
34. Youri Petrovich, A.A. Motiebirjandi,” Effects of transmission line model on flexible line parameters of alternating current” (Russian language), Electro Energy Journal, Vol29 ,No7 ,pp.119-124,2004

**Conferences:**

1. Hajirayat, Aliasghar and Faraji, Faramarz and Birjandi, Ali Akbar Motie and Gazafroudi, Seyed Mohammad Mousavi,” A Novel Nested T-Type Four-Level Inverter for Medium Voltage Applications”, Proceedings of the 31th Annual International power system conference (PSC 2016). Tehran. Iran,2016.
2. Kavehvasht, Zahra , Rajaii, Meraj , Birjandi, Aliakbar Moti , Gholamrezaei, Hossein and Gholamrezaei Ali,” An energy efficient refractive structure for energy concentration on PV cells”, IEEE International Energy Conference, Manama, Bahrain,2010.
3. Vazini, Hossein, Asadi, Mehdi, Karimadini, Mohammad, Hajisadeghian, Hossein, Birjandi, Ali A Moti, Moghbeli, Hassan,” State feedback controller for sinusoidal current charging of li-ion battery”, IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018), Doha, Qatar,2018.
4. Kashani, Navid Zare, Amiri, Parviz, Refan, Mohammad Hossein, Birjandi, Ali Akbar Motie ,” Bidirectional Grid-Connected Single-Stage Converter with Unfolding Circuit”, Proceedings of the 11th Power Electronics, Drive Systems, and Technologies Conference (PEDSTC), Tehran. Iran, 2020.
5. Hajisadeghian, Hossein, Birjandi, Ali A Moti , Asadi, Mehdi , Vazini, Hossein, “An On-Line Battery Parameter Detection Algorithm for Sinusoidal Ripple Charge (SRC) Method, Proceedings of the 11th Power Electronics, Drive Systems, and Technologies Conference (PEDSTC), Tehran. Iran, 2020.
6. Darini, Meysam, Birjandi, Ali A Moti, Hajisadeghian, Hossein, “A New High Gain Modified Boost-Derived Hybrid Converter with Simultaneous DC and AC Outputs”, Proceedings of the 11th Power Electronics, Drive Systems, and Technologies Conference (PEDSTC), Tehran. Iran, 2020.
7. Hajisadeghian, Hossein, Birjandi, Ali A Moti,” Sliding Mode Controller (SMC) For Sinusoidal Ripple Current (SRC) Charge of Li-ion Battery”, Proceedings of the 10th Annual International Conference on Power Electronics, Drive Systems and Technologies (PEDSTC 2019), Shiraz, Iran, 2019.
8. Hossein Hajisadeghian, Mehdi Asadi, Ali A. Moti Birjandi Hassan Moghbeli, “Design of a 60 kW Electric Vehicle Fast Charger Using Active Current Sharing”, Proceedings of the 32th Annual International Power System Conference (PSC 2017), Tehran, Iran, 2017.
9. Babbii Mahdi, Moti Birjandi Ali Akbar, Ghandehari Reza, “Design and provide a hybrid controller for DC-DC impedance source converters to improve transient and lasting response” (In Persian), Proceedings of the 31th Annual International power system conference (PSC 2016). Tehran. Iran, 2016.
10. Moti Birjandi Ali Akbar, Emamzadeh Shooshtari sied Ahmad,” Reduce the number of keys and modify the switching method in multi-level converters”( In Persian), 24th Iranian Conference on Electrical Engineering (ICEE 2016),Shiraz,Iran,2016.
11. Hassani Esmail, Moti Birjandi Ali Akbar, “Improving the performance of the indirect induction motor control drive using fuzzy PID controller” ”( In Persian), 21th Iranian Conference on Electrical Engineering (ICEE 2013),Mashhad,Iran,2013.
12. Moti Birjandi Ali Akbar, Ranaeei Bahram, Ghandehari Reza, “New power factor correction converter based on the Fly back converter structure”( In Persian), 6th Iranian conference on electrical and electronic engineering (ICEEE 06), Gonabad , Iran. 2014.

13. Salehi Moslem, Moti Birjandi Ali Akbar, "UPFC Placement for damping power system oscillations" ( In Persian), Proceedings of the 25th Annual International power system conference (PSC 2010). Tehran. Iran, 2010.
14. Moti Birjandi Ali Akbar, Damankhorshid Ali Reza, "The effect of energy storage systems on increasing the power generation capacity of the network and reducing fluctuations in wind power plants" "( In Persian), 3rd Iranian conference on electrical and electronic engineering (ICEEE 03), Gonabad , Iran. 2011.
15. Motie Birjandi , M.Pourfallah," Optimal coordination of overcurrent relays by mixed genetic and particle swarm optimization algorithm and comparison of both", International conference on signal, Image Processing and Applications with workshop of ICEEA 2011.
16. Valiollah Jalal, Moti Birjandi Ali Akbar , " Take a look at clean energy and environmentally friendly structures and design cities and buildings"( In Persian), 4th Fuel Cell Seminar of Iran , Tehran, Iran,2010.
17. Moti Birjandi Ali Akbar, Hatami Javad, Fekri Valiollah, "Investigating the effect of using the pattern of innovation (direct analogy) in improving the teaching of e-learning curricula in secondary schools" (In Persian), 2nd National Conference on Education, Tehran, Iran, 2010.
18. Moti Birjandi Ali Akbar, Barmak Jafar, "Learn how to change the state of the keys at zero voltage (ZVT) for power electronic circuits"(In Persian), 2nd National Conference on Education, Tehran, Iran,2010.
19. Moti Birjandi Ali Akbar , Poorfalah Mohsen, "Optimal coordination of high current and distillation relays by CAL-PSO hybrid model"(In Persian), Power Systems Protection & Control Conference,Tehran,Iran,2012.
20. Aref Ali Akbar, Afsharnia Saeed, Moti Birjandi Ali Akbar, "Simulation and study of the effects of Binalood wind farm on the distribution network connected to it "(In Persian), 16th Electric Power Distribution Conference, Bandar Abbas, Iran, 2011.
21. Moti Birjandi Ali Akbar, Ghamari Hadi. "Reducing the adverse effects of a teacher's lack of distance learning (e-learning) using comparative animation "Iran's first national conference on education in 1404, Tehran, Iran, 2011.
22. Moti Birjandi Ali Akbar, Ghamari Hadi "Investigating the Effect of Alcoholism on Alcoholism (Direct Comparison) in Improving Learning Concepts in Electrical and Magnetic Physics"( In Persian), 10th Annual Physics Conference of Iran, Tehran, Iran, 2011.
23. Aref Ali Akbar, Moti Birjandi Ali Akbar, Afsharnia Saeed, "Modeling and simulation of Binalood wind farm and study of its effects on Khorasan distribution network" (In Persian), 19th Iranian Conference on Electric Engineering, Tehran, Iran, 2011.
24. Moti Birjandi Ali Akbar, Soltani Anvar, Sadoughi Jamil, "The need to teach Renewable Energy to students with a project-based learning approach (PBL)" (In Persian), 3rd National Conference on Education, Tehran, Iran, 2011.
25. Moti Birjandi Ali Akbar, Ahmadi Gholamali, Ghamari Hadi, "The function of auxiliary poles in electric machines and the use of analogy to improve its performance training" (In Persian), 3rd National Conference on Education, Tehran, Iran, 2011.
26. Ahmadi Gholamali ,Moti Birjandi Ali Akbar, Ghamari Hadi, "Incorporating a model of innovation into the curriculum of training the technical secretary in order to use this model in teaching abstract concepts (a case study of electrotechnics field)" (In Persian), 10th Iranian Curriculum Studies Association conference, Tehran, Iran, 2011.
27. Arjmand Hadi, Moti Birjandi Ali Akbar, Jafari Babak, "Provide a practical model for bringing the distance between university and industry closer with using interactive 3D environments" (In Persian), 4th National Conference on Education, Tehran, Iran, 2012.

28. Moti Birjandi Ali Akbar, Najibi Atefeh, "Production of electronic content based on program-based training, using modeling of teacher teaching method in face-to-face class" (In Persian), 4th National Conference on Education, Tehran, Iran, 2012.
29. Moti Birjandi Ali Akbar, Poorfalah Mohsen, "Use of Smart Optimal Combination Method Algorithm for Particle Optimization and Linear Planning Algorithm for Solving Nonlinear Problems" (In Persian), 4th Conference on Information and Knowledge Technology, Babul, Iran, 2012.
30. Ghafari Nematollah, Ghandehari Reza, Moti Birjandi Ali Akbar, "Reactive power compensation using three-phase AC / AC converter" (In Persian), Majlesi Conference on Electrical Engineering, Isfahan, Iran, 2012.
31. Ghandehari Reza, Ghafari Nematollah, Moti Birjandi Ali Akbar, "Provide a new pattern switching for three-phase AC / AC matrix converter to reduce switching losses and improve the harmonic distortions" (In Persian), Congress on Electrical, Computer and Information Technology, Mashhad, Iran, 2012.
32. Moti Birjandi Ali Akbar, Fateh Davood, "Determining the place UPFC with use loading coefficient in order to increasing the voltage margin" (In Persian), 1st National Conference on Electrical and Computer, Bandar Anzali, Iran, 2013.
33. Moti Birjandi Ali Akbar, Ebrahimpoor Reza, Fateh Davood, "Determining the optimal location of UPFC based on voltage stability index and optimizing UPFC model parameters" (In Persian), 1st National Conference on Electrical and Computer, Bandar Anzali, Iran, 2013.
34. Kazemi Majid, Zanganeh Ali, Badri Ali, Moti Birjandi Ali Akbar, "Priority of demand response programs in electricity markets with fuzzy TOPSIS method" (In Persian), 2nd Conference on Smart Electrical Grids Technology, Tehran, Iran, 2013.
35. Fekeri Valiollah, Moti Birjandi Ali Akbar, Hatami Javad, "Teaching the basics of electricity with an approach to increasing creativity" (In Persian), 5th National Conference on Education, Tehran, Iran, 2013.
36. Moti Birjandi Ali Akbar, Shayganrad Ali, "Learning to review power systems based on Matpower software" (In Persian), 5th National Conference on Education, Tehran, Iran, 2013.
37. Moti Birjandi Ali Akbar, Ebrahimpoor Reza, Fateh Davood, "Determining the optimal location of UPFC with voltage stability index and UPFC parameters based on genetic algorithm" (In Persian), Proceedings of the 28th Annual International power system conference (PSC 2013). Tehran. Iran, 2013.
38. Emadifar Reza, Eldoromi Mojtaba, Gouhari Valiollah, Moti Birjandi Ali Akbar, "Design and simulation of a three-level control structure for Microgrids with energy storage systems and photovoltaic cells" (In Persian), 1st International Conference and Exhibition on Solar Energy, Tehran, Iran, 2014.
39. Emadifar Reza, Eldoromi Mojtaba, Moti Birjandi Ali Akbar, "Design, manufacture and study of new thermos photovoltaic collectors and compare it with conventional collectors and panels." (In Persian), 1st International Conference and Exhibition on Solar Energy, Tehran, Iran, 2014.
40. Moti Birjandi Ali Akbar, Rahimi Ashjordi Behrouz, "Sensorless BLDC motor control using a combination of back EMF observer AMRAS and improve its performance with fuzzy logic" (In Persian), 1st International Conference on Science and Engineering, UAE-DUBAI, 2015.
41. Rahimi Ashjordi Behrouz, Moti Birjandi Ali Akbar, "Sensorless BLDC motor control using Back EMF voltage values and the observer speed estimate based on constant assessment torque" (In Persian), International Conference in New Research of Electrical Engineering and Computer, Tehran, Iran, 2015.
42. Moti Birjandi Ali Akbar, Rahimi Ashjordi Behrouz, "Sensorless BLDC motor control using adaptive reference model-based estimator reactive power (Q-MRAS)" (In Persian), 1st International Conference on Electrical Engineering and Computer Science, Tehran, Iran, 2015.

43. Moti Birjandi Ali Akbar ,Rahimi Ashjordi Behrouz, "Sensorless BLDC motor control using Back EMF voltage observer and improve its performance with fuzzy logic "(In Persian), 1st International Conference on Electrical Engineering and Computer Science, Tehran, Iran, 2015.
44. Moti Birjandi Ali Akbar, Fateh Davood, Rajabimoghadam Sajad, "Training using simulation to facilitate understanding of DC to DC converters" "(In Persian), ),7th National Conference on Education, Tehran, Iran, 2015.

**Books:**

1. Babaeii, Moshtaghi, Moti Birjandi," Simulation of power electronic circuits with SimPower Systems Matlab" (In Persian), 3rd Edition, Sep 2017.
2. Moti Birjandi, Keshavarz, Moghari, "ETAP Application Reference", ( In Persian ),Sahar Publisher, Nov. 2011.
3. Moti Birjandi, "Technical knowledge", (Book Chapter, In Persian), 2nd Edition, Printing and publishing educational textbooks in Iran, Sep 2019.
4. Moti Birjandi, A. Alimadadi," Electrical Machine – AC" (In Persian), 4nd Edition, Printing and publishing educational textbooks in Iran, September 2014- 2018.
5. Hidari, Arabpoorian, Ghitrani, Moti Birjandi," Home appliance repair workshop technology"(In Persian), 13nd Edition ,Printing and publishing educational textbooks in Iran, September 2000- 2013.

**Research projects:**

1. Moti Birjandi Ali Akbar, Emadifar Reza, Eldoromi Mojtaba, "New way to increase the efficiency of solar cells", Shahid Rajae Teacher Training University, Tehran, Iran, 2012- 2013.
2. Moti Birjandi Ali Akbar, Nazaryan Fatholah, "Design and manufacture of Variable Frequency Drive training (set model is7) for industrial electronics laboratory", Shahid Rajae Teacher Training University, Tehran, Iran, 2010- 2011.
3. Moti Birjandi, Rajae, Kavehvas, Alirezae, "Increase solar energy based on light concentrators with converter", Shahid Rajae Teacher Training University, Tehran, Iran, 2009- 2011.
4. Kaviani, Amani, Nazaryan, Moti Birjandi, "Improving the electrical Machine lab operating and update methods", Shahid Rajae Teacher Training University, Tehran, Iran, 2008- 2010.
5. Khodadadi, Moti Birjandi, Dameshghi, "Design and construction of electrical cars", Shahid Rajae Teacher Training University, Tehran, Iran, 2008- 2009.
6. Moti Birjandi Ali Akbar, "Improving the structure and updating of the Electronic Industrial Laboratory", Shahid Rajae Teacher Training University, Tehran, Iran, 2015- 2016.
7. Moti Birjandi Ali Akbar, "Production of e-content for teachers and students and virtual education (in two stages)", Vice President for Science and Technology Tehran, Iran, 2012-2014.
8. Moti Birjandi Ali Akbar, "Simulation, design and manufacture of 60 kW fast charger battery for lithium-ion battery", Niroo Research Institute (NRI), 2017-2020.

**Invention:**

- Moti Birjandi Ali Akbar, Emadifar Reza, Eldoromi Mojtaba, "Simultaneous production of solar electricity and heat with compound share", Iranian Research Organization for Science and Technology 2012- 2013.

## **Journal Reviewer**

- IEEE Access
- IEEE Transactions on Industrial Informatics
- IEEE Transactions on Industrial Electronics
- IET Renewable Power Generation
- IET Generation, Transmission & Distribution
- International Journal of Numerical Modelling: Electronic Networks, Devices and Fields
- Electronics Letters
- Technology of Education Journal (TEJ)
- Tabriz Journal of Electrical Engineering (TJEE)
- Iranian Journal of Electrical and Electronic Engineering( IJEEE)
- Iranian Journal of Electrical and Computer Engineering (IJECE)
- Journal of Electrical and Computer Engineering Innovations (JECEI)

## **HONORS AND AWARDS**

---

- Received Honorary Letter from Minister of Education and President of University for the Best Teacher in Country, 2011.
- Received Honorary Letter from Deputy Ministry of Science, Research and Technology for Education, for the Activities regarding Vice President of Education and Graduate Programs Shahid Rajaei Teacher Training University, 2012.
- Received Honorary Letter from Minister of Education and President of University for the Best Teacher in Tehran Capital, 2010.
- Received Honorary Letter from President of Shahid Rajaei Teacher Training University for the activities regarding Dean of Faculty of Electrical and Computer Engineering, 2009.
- Received Honorary Letter from Dean of Faculty of Electrical and Computer Engineering for Research and Scientific Activities, 2014.
- Received Honorary Letter from President of University for the Best Teacher in Shahid Rajaei Teacher Training University, 2010.
- Received Honorary Letter from President of University for the Best Teacher in Shahid Rajaei Teacher Training University, 2007.
- Received Honorary Letter from Dean of Electrical Engineering Department of Iran University of Science and Technology for Best M.Sc. Thesis, 1994.
- Awarded First Rank in B.Sc. At University of Mazandaran, 1991.

## **ACADEMIC POSITIONS**

---

- Vice President of Education and Graduate Programs, Shahid Rajaei Teacher Training University, 2010-2014.
- Dean of Faculty of Electrical and Computer Engineering, Shahid Rajaei Teacher Training University, 2005-2010.
- Vice-Chancellor for Education and Research of Faculty of Electrical and Computer Engineering, Shahid Rajaei Teacher Training University, 1995-2001.
- Head of Electronic Education Department SRTTU, 2010- 2016.

- Member of Commission Electro technical Curriculum Planning Council Ministry of Education, 2007-
- Associate Professor in Shahid Rajae Teacher Training University (SRTTU), Faculty of Electrical and Computer Engineering, 2016 -
- Assistant Professor in Shahid Rajae Teacher Training University (SRTTU), Faculty of Electrical and Computer Engineering, 2005-2015.
- Instructor of Shahid Rajae Teacher Training University (SRTTU), Faculty of Electrical and Computer Engineering, 1997-2004.