

## Faruk Ugranlı

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Güncelleme Tarihi (Revision Date): 29.11.2021

### **EĞİTİM BİLGİLERİ (EDUCATION):**

Araştırmacı (Researcher)	2014-2015	Technical University of Denmark, Electrical-Electronics Engineering, Center for Electric Power and Energy (CEE), Copenhagen, Denmark,
Doktora (Ph.D.)	2016	Elektrik Tesisleri, Elektrik-Elektronik Mühendisliği, Ege Üniversitesi (Ege University), İzmir, Türkiye.
Yüksek lisans (Master)	2012	Elektrik Tesisleri, Elektrik-Elektronik Mühendisliği, Ege Üniversitesi (Ege University), İzmir, Türkiye.
Lisans (Bachelor)	2009	Elektrik-Elektronik Mühendisliği, Erciyes Üniversitesi (Erciyes University), Kayseri, Türkiye.

### **ÜNVAN (TITLE):**

2021-	Doç. Dr. (Assoc. Prof.)	Elektrik-Elektronik Mühendisliği, Bartın Üniversitesi (Bartın University), Bartın, Türkiye.
2017-2021	Dr. Öğr. Üyesi (Asst. Prof.)	Elektrik-Elektronik Mühendisliği, Bartın Üniversitesi (Bartın University), Bartın, Türkiye.
2016-2017	Arş. Gör. (Res. Asst.)	Elektrik-Elektronik Mühendisliği, Bartın Üniversitesi (Bartın University), Bartın, Türkiye.
2011-2016	Arş. Gör. (Res. Asst.)	Elektrik-Elektronik Mühendisliği, Ege Üniversitesi (Ege University), İzmir, Türkiye.
2010-2011	Arş. Gör. (Res. Asst.)	Elektrik-Elektronik Mühendisliği, Ege Üniversitesi (Ege University), İzmir, Türkiye.

### **ONUR ve ÖDÜLLER (HONOURS):**

- 2018 IEEE Turkey Ph.D. Thesis Award.

### **YAYIMLANMIŞ KİTAPLAR ve KİTAPLARDA BÖLÜMLER (BOOKS AND BOOKS' CHAPTERS):**

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### **PATENTLER (PATENTS):**

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**SCI, SCI-E ve E-SCI KAPSAMINDA YAYIMLANMIŞ MAKALELER (PUBLICATIONS IN THE SCI, SCI-E, AND E-SCI INDEXED JOURNALS):**

1. Alaybeyoglu, E. and Ugranlı, F. (2021). "Analog building blocks optimization for low pass filter of IEEE 802.11n wireless LAN: OTA and CCII." IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems 40(11), 2199-2210.
2. Ugranlı, F. (2020). "Probabilistic distribution planning: Including the interactions between chance constraints and renewable energy." Sustainable Energy, Grids and Networks, 23.
3. Ugranlı, F. (2020). "An insight into the impact of solar and wind powers' probability distributions on distribution-network investments." Electrica 20(1), 52-61.
4. Ugranlı, F. (2019). "Analysis of renewable generation's integration using multi-objective fashion for multistage distribution network expansion planning." International Journal of Electrical Power and Energy Systems 106, 301-310.
5. Ugranlı, F. and Karatepe, E. (2017). "Coordinated TCSC allocation and network reinforcements planning with wind power." IEEE Transactions on Sustainable Energy 8(4): 1694-1705.
6. Ugranlı, F., Karatepe, E., and Nielsen, AH. (2017). "MILP approach for bilevel transmission and reactive power planning considering wind curtailment." IEEE Transactions on Power Systems 32(1): 652-661.
7. Ugranlı, F. and Karatepe, E. (2016). "Transmission expansion planning for wind turbine integrated power systems considering contingency." IEEE Transactions on Power Systems 31(2): 1476-1485.
8. Karatepe, E., Ugranlı, F., and Hiyama, T. (2015). "Comparison of single- and multiple-distributed generation concepts in terms of power loss, voltage profile, and line flows under uncertain scenarios." Renewable and Sustainable Energy Reviews 48: 317-327.
9. Ugranlı, F. and Karatepe, E. (2015). "Multi-objective transmission expansion planning considering minimization of curtailed wind energy." International Journal of Electrical Power and Energy Systems 65: 348-356.
10. Gökmen, N., Karatepe E., Ugranlı, F., and Silvestre, S. (2013). "Voltage band based global MPPT controller for photovoltaic systems." Solar Energy 98(Part C): 322-334.
11. Ugranlı, F. and Karatepe, E. (2013). "Optimal wind turbine sizing to minimize energy loss." International Journal of Electrical Power and Energy Systems 53: 656-663.
12. Ugranlı, F. and Karatepe, E. (2013). "Multiple-distributed generation planning under load uncertainty and different penetration levels." International Journal of Electrical Power and Energy Systems 46: 132-144.
13. Ugranlı, F. and Karatepe, E. (2012). "Convergence of rule-of-thumb sizing and allocating rules of distributed generation in meshed power networks." Renewable and Sustainable Energy Reviews 16(1): 582-590.
14. Ugranlı, F. and Karatepe, E. (2012). "Long-term performance comparison of multiple distributed generation allocations using a clustering-based method," Electric Power Components and Systems 40(2): 195-218.

**YAYIMLANMIŞ DİĞER ULUSLARARASI MAKALELER (OTHER INTERNATIONAL PUBLICATIONS):**

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### **YAYIMLANMIŞ ULUSAL MAKALELER (NATIONAL PUBLICATIONS):**

1. Ugranlı, F. and Karatepe, E. (2013). "Determination of optimum penetration level in the distributed generation integrated power systems," DEÜ Mühendislik Fakültesi Mühendislik Bilimleri Dergisi 15(3): 23-34.

### **YAYIMLANMIŞ KONFERANS MAKALELERİ (CONFERENCE PUBLICATIONS):**

1. Ugranlı, F. (2020). "On the importance of renewable data's spatial dependence for planning of distribution systems." 19th International Symposium INFOTEH-JAHORINA (INFOTEH), Bosnia-Herzegovina.
2. Ugranlı, F. (2019). "Probabilistic distribution network planning considering critical contingencies." 5th International Engineering, Architecture and Design Congress, Istanbul, Turkey.
3. Ugranlı, F. (2019). "Power flow for distribution network with renewable energy source." 18th International Symposium INFOTEH-JAHORINA (INFOTEH), Bosnia-Herzegovina.
4. Ugranlı, F. (2018). "A dynamic distribution network planning considering intermittency of load and renewable power generation." 6th International Istanbul Smart Grids and Cities Congress and Fair (ICSG), Istanbul, Turkey.
5. Alaybeyoğlu, E. and Ugranlı, F. (2018). "A new approach for electronic design automation of analog building blocks." 26th Signal Processing and Communications Applications Conference (SIU), Izmir, Turkey.
6. Cankurtaran, M.F., Ugranlı, F., and Karatepe, E. (2017). "Transmission expansion planning including power loss cost using linearized AC model." 5th International Conference on Advanced Technology and Sciences (ICAT), Istanbul, Turkey.
7. Ugranlı, F., Karatepe, E., and Nielsen, A.H. (2015). "Combined transmission and reactive power planning considering wind curtailment." 14th Wind Integration Workshop, Brussels, Belgium.
8. Ugranlı, F. and Karatepe, E. (2014). "Effect of wind turbine penetration and location on transmission expansion planning considering wind power curtailment." 7th International Ege Energy Symposium and Exhibition (IEESE), Usak, Turkey.
9. Ugranlı, F. and Karatepe, E. (2013). "Power system planning for maximizing intermittent energy sources using AC model." IEEE 4th European Innovative Smart Grid Technologies Conference (ISGT), Copenhagen, Denmark.
10. Ugranlı, F. and Karatepe, E. (2013). "Transmission expansion planning considering maximizing penetration level of renewable sources." International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Albena, Bulgaria.
11. Ugranlı, F. and Karatepe, E. (2012). "Analysis and optimization of impact of distributed power generation on transient stability." National Conference on Electrical-Electronics and Computer Engineering (ELECO), Bursa, Turkey.
12. Ugranlı, F. and Karatepe, E. (2012). "Genetic algorithm for weight assignment in optimum planning of multiple distributed generations to minimize energy losses." International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Trabzon, Turkey.
13. Uzal, H., Zonturlu, A., Kalaycı, B., Karatepe, E., Ugranlı, F., and Bülbül, K. (2011). "Assesment

of Izmir region of electrical power systems under different scenarios." II. National Conference on Electrical Power Systems, Izmir, Turkey.

14. Ugranlı, F. and Karatepe, E. (2011). "Broad-view of distributed power generation in power systems." II. National Conference on Electrical Power Systems, Izmir, Turkey.
15. Ugranlı, F., Ersavaş, C., and Karatepe, E. (2011). "Analysis of the impacts of distributed generation systems on LTC transformers." VI. National Symposium on Renewable Energy Resource, Denizli, Turkey.
16. Ugranlı, F., Ersavaş, C., and Karatepe, E. (2011). "Neural network based distributed generation allocation for minimizing voltage fluctuation due to uncertainty of the output power." International Symposium on Innovations in Intelligent Systems and Applications (INISTA) - Special Session on Soft Computing Technologies in Integrated Power Systems, Istanbul, Turkey.
17. Ersavaş, C., Ugranlı, F., Umar, H.U., and Karatepe, E. (2011). "Analysis of power systems with flexible AC transmission systems (FACTS) and distributed generation." IV. National Symposium on Energy Efficiency and Quality, Kocaeli, Turkey.
18. Ugranlı, F. and Karatepe, E. (2010). "The impact of size and placement of distributed power generation for different networks." 5th International Ege Energy Symposium and Exhibition (IEESE), Denizli, Turkey.
19. Ugranlı, F. and Karatepe, E.: "Interaction between distributed generation and electric power systems: penetration level and power factor aspects." The Fourth International Student Conference on Advanced Science and Technology (ICAST), Izmir, Turkey.

#### **ARAŞTIRMA PROJELERİ (PROJECTS):**

1. Bursiyer/Araştırmacı, Rüzgar Türbinleri Entegre Edilmiş Şebekelerde İletim Hatları ve Reaktif Güç Kaynaklarının Planlanması, (TÜBİTAK 1001), 2015-2017.
2. Araştırmacı, Gerçek Zamanlı Fotovoltaik Sistem Tasarımı ve Analizi, (EGE BAP), 2011-2013.

#### **SCI ve SCI-E DERGİLERDE HAKEMLİK (REVIEWING ACTIVITIES):**

1. IEEE Transactions on Power Systems.
2. IEEE Transactions on Sustainable Energy.
3. IET Generation, Transmission, and Distributions.
4. Turkish Journal of Electrical Engineering and Computer Sciences.
5. Electric Power Components and Systems.
6. International Transactions on Electrical Energy Systems.
7. IET Renewable Power Generation.
8. International Journal of Electrical Power and Energy Systems.

#### **ÜYELİKLER (MEMBERSHIPS):**

1. IEEE
2. IEEE Power and Energy Society