

## Res. Asst. Ayşe Kübra ERENOĞLU

### Personal Information

**Email:** erenayse@yildiz.edu.tr

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### Education Information

Doctorate, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Elektrik Mühendisliği, Turkey 2018 - Continues  
Post Graduate, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Elektrik Mühendisliği, Turkey 2016 - 2018  
Under Graduate, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Elektrik Mühendisliği, Turkey 2012 - 2016

### Dissertations

Post Graduate, Mikroşebekelerde talep tarafının esnekliğini dikkate alan optimum işletim yaklaşımının geliştirilmesi, Yıldız Technical University, Graduate School of Natural and Applied Sciences, 2018

### Research Areas

Electrical and Electronics Engineering, Energy, Renewable energy, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Yıldız Technical University, Faculty of Electrical & Electronics, Electrical Engineering Department, 2017 - Continues

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Effects of On-Site PV Generation and Residential Demand Response on Distribution System Reliability**  
Güner S., Erenoğlu A. K. , Şengör İ., Erdinç O., Catalao J.  
APPLIED SCIENCES-BASEL, vol.1, pp.1, 2021 (Journal Indexed in SCI Expanded)
- II. **Implementing a Demand Side Management Strategy for Harmonics Mitigation in a Smart Home using Real Measurements of Household Appliances**  
Çiçek A., Erenoğlu A. K. , Erdinç O., Bozkurt A., Taşçıkaraoğlu A., Catalao J.  
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.01420615, pp.1, 2021 (Journal Indexed in SCI)
- III. **User-Comfort Oriented Optimal Bidding Strategy of an Electric Vehicle Aggregator in Day-Ahead and Reserve Markets**  
Şengör İ., Çiçek A., Erenoğlu A. K. , Erdinç O., Catalao J.  
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.1, pp.1, 2020 (Journal Indexed in SCI)
- IV. **Decision making mechanism for a smart neighborhood fed by multi-energy systems considering demand response**

Cicek A., Sengor I., ERENOĞLU A. K. , ERDİNÇ O.  
ENERGY, vol.208, 2020 (Journal Indexed in SCI)

V. **Optimal operation of a multi-energy system considering renewable energy sources stochasticity and impacts of electric vehicles**

Ata M., Erenoğlu A. K. , Şengör İ., Erdinç O., Taşcıkaraoğlu A., Catalao J. P.  
ENERGY, vol.186, no.115841, 2019 (Journal Indexed in SCI)

VI. **Route optimization of an electric garbage truck fleet for sustainable environmental and energy management**

Erdinc O., Yetilmezsoy K., Erenoğlu A. K. , Erdinç O.  
JOURNAL OF CLEANER PRODUCTION, vol.234, no.10, pp.1275-1286, 2019 (Journal Indexed in SCI)

VII. **A New Approach for Grid-Connected Hybrid Renewable Energy System Sizing Considering Harmonic Contents of Smart Home Appliances**

Erenoğlu A. K. , Çiçek A., Arıkan O., Erdinç O., Catalao J. P. S.  
APPLIED SCIENCES-BASEL, vol.9, no.545860, 2019 (Journal Indexed in SCI)

## Articles Published in Other Journals

I. **Characteristics of Power Consumption and Harmonic Components of Electrical Appliances Used in Residences with K-Means Clustering Method**

Yıldız M. Ş. , Arıkan O., Erenoğlu A. K. , Kekezoğlu B.  
Firat Üniversitesi Mühendislik Bilimleri Dergisi, vol.102, pp.1, 2021 (National Refreed University Journal)

II. **Güneş Kollektörlü ve Elektrikli Şofbenli Bir Akıllı Evin Talep Cevabı Programı Kapsamında Enerji Yönetimi**

Sancar S., Erenoğlu A. K. , Şengör İ., Erdinç O.  
Avrupa Bilim ve Teknoloji Dergisi, pp.1, 2020 (Other Refereed National Journals)

III. **Day-ahead charging operation of electric vehicles with on-site renewable energy resources in a mixed integer linear programming framework**

Sengor I., ERENOĞLU A. K. , ERDİNÇ O., Tascikaraoglu A., Catalao J. P. S.  
IET SMART GRID, vol.3, pp.367-375, 2020 (Journal Indexed in ESCI)

## Books & Book Chapters

I. **Blockchain and Its Application Fields in Both Power Economy and Demand Side Management**

Erenoğlu A. K. , Şengör İ., Erdinç O., Catalao J.  
in: Blockchain-based Smart Grids, Miadreza Shafie-khah,Joao P.S Catalao,Pierluigi Siano,Juan Corchado,Amin Hajizadeh,Jamshid Aghaei,Fei Wang, Editor, Elsevier Science, Oxford/Amsterdam , Amsterdam, pp.1, 2020

II. **History of Electricity**

Erenoğlu A. K. , Erdinç O., Taşcıkaraoğlu A.  
in: Pathways to a Smarter Power System, Ozan Erdinç,Akın Taşcıkaraoğlu, Editor, Elsevier Science, Oxford/Amsterdam , Amsterdam, pp.1-45, 2019

## Refereed Congress / Symposium Publications in Proceedings

I. **A Smart Dynamic Pricing Approach for Electric Vehicle Charging in a Distribution System**

Erdinç O., Erenoğlu A. K. , Şengör İ., Taştan İ. C. , Büyük A. F. , Catalao J.  
9th International Conference on Power Science and Engineering (ICPSE 2020), London, England, 23 - 25 October 2020, pp.0-1

II. **Optimal Sizing and Siting of EV Charging Stations in a Real Distribution System Environment**

Şengör İ., Erenoğlu A. K., Erdiñç O., Taşcıkaraoğlu A., Taştan İ. C., Büyük A. F., Catalao J.  
3rd International Conference on Smart Energy Systems and Technologies, İstanbul, Turkey, 7 - 09 September  
2020, pp.1

- III. **Comprehensive Performance Comparison of Supervised Machine Learning Algorithms in Non-Intrusive Load Monitoring**  
Erşen A. F., Erenoğlu A. K., Şengör İ., Erdiñç O., Catalão J. P.  
3rd International Conference on Smart Energy Systems and Technologies, İstanbul, Turkey, 7 - 09 September  
2020, pp.1
- IV. **Çoklu Enerji Sistemleri ve İlgili Yaklaşımların İrdelenmesi**  
Ata M., Erenoğlu A. K., Erdiñç O.  
ELEKTRİK ELEKTRONİK MÜHENDİSLİĞİ KONGRESİ (EEMKON), İstanbul, Turkey, 14 - 17 November 2019, pp.1
- V. **Development of a Smart Thermostat Controller for Direct Load Control Based Demand Response Applications**  
Yener B., Erenoğlu A. K., Şengör İ., Erdiñç O., Taşcıkaraoğlu A., Catalão J. P. S.  
2nd International Conference on Smart Energy Systems and Technologies, SEST 2019, Porto, Portugal, 9 - 11  
September 2019, pp.1-5
- VI. **An Interoperability Platform for Electric Vehicle Charging Service Considering Dual System Operator and Electric Vehicle Owner Sides**  
Güldorum H. C., Erenoğlu A. K., Şengör İ., Erdiñç O., Catalão J. P. S.  
2nd International Conference on Smart Energy Systems and Technologies, SEST 2019, Porto, Portugal, 9 - 11  
September 2019, pp.1-6
- VII. **User-Comfort Oriented Bidding Strategy for Electric Vehicle Parking Lots**  
Şengör İ., Çiçek A., Erenoğlu A. K., Erdiñç O., Taşcıkaraoğlu A., Catalão J. P. S.  
13th IEEE PES PowerTech Conference, Milan, Italy, 23 - 27 June 2019, pp.1-6
- VIII. **Optimal Operation of a Smart Multi-Energy Neighborhood**  
Ata M., Erenoğlu A. K., Şengör İ., Erdiñç O., Taşcıkaraoğlu A., Catalão J. P. S.  
13th IEEE PES PowerTech Conference, Milan, Italy, 23 - 27 June 2019, pp.1-5
- IX. **Economic Operation of a Micro-Grid Considering Demand Side Flexibility and Common ESS Availability**  
Erenoğlu A. K., Şengör İ., Erdiñç O., Taşcıkaraoğlu A., Catalão J. P. S.  
8th IEEE PES International Conference on Innovative Smart Grid Technologies — ISGT Europe 2018, Sarajevo,  
Bosnia And Herzegovina, 21 - 25 October 2018, pp.1-6
- X. **Optimal Coordination of EV Charging through Aggregators under Peak Load Limitation Based DR Considering Stochasticity**  
Şengör İ., Erenoğlu A. K., Erdiñç O., Taşcıkaraoğlu A., Catalão J. P. S.  
2018 International Conference on Smart Energy Systems and Technologies (SEST), Sevilla, Spain, 10 - 12  
September 2018, pp.1-6
- XI. **Scenario Based Analysis of an EV Parking Lot Equipped with Roof-Top PV Unit within Distribution Systems**  
Alkan B., Uzun B., Erenoğlu A. K., Erdiñç O., Turan M. T., Catalão J. P. S.  
2018 International Conference on Smart Energy Systems and Technologies (SEST), Sevilla, Spain, 10 - 12  
September 2018, pp.1-5
- XII. **Rüzgar Türbinlerinin Matlab GUI Ortamında Fizibilite Analizi**  
Erenoğlu A. K., Sönmez B. N., Kekezoğlu B., Erdiñç O.  
9. Yenilenebilir Enerji Kaynakları Sempozyumu ve Sergisi, Antalya, Turkey, 3 - 05 November 2017, pp.1-4
- XIII. **Talep Cevabı ve Mikro Şebekelerdeki Rolü**  
Erenoğlu A. K., Erdiñç O.  
1. Ulusal Elektrik Enerjisi Dönüşümü Kongresi, Elazığ, Turkey, 21 - 22 September 2017, pp.27-32

## Supported Projects

Erdiñç O., Taşcıkaraođlu A., TUBITAK Project, Elektrikli Araçların Dađıtım Şebekesinde Akıllı Şarj Yönetimi İçin Sistem Operatörü Karar Verme Mekanizmasının Geliştirilmesi, 2019 - 2021

Erdiñç O., Erenođlu A. K. , Şengör İ., Project Supported by Other Official Institutions, Şarj İstasyonları ve Elektrik Araçların Şebekeye Etkisinin İncelenmesi ve Bu Yüklerin Optimize Edilmesi İçin Gerekli Yerli Yazılım Geliştirilmesi, 2019 - 2020

## Memberships / Tasks in Scientific Organizations

IEEE Power&Energy Society, Member, 2017 - Continues, United States Of America

## Scientific Refereeing

IEEE TRANSACTIONS ON SUSTAINABLE ENERGY, SCI Journal, August 2020

IEEE TRANSACTIONS ON SUSTAINABLE ENERGY, SCI Journal, January 2020

IET Renewable Power Generation, SCI Journal, July 2018

IEEE Transactions on Sustainable Energy, SCI Journal, June 2018

Conference, Other journals, May 2018

## Tasks In Event Organizations

Erdiñç O., Catalao J., Erenođlu A. K. , Akboy E., Şengör İ., 3rd International Conference on Smart Energy Systems and Technologies (SEST), Scientific Congress, İstanbul, Turkey, Eylül 2020

Erdiñç O., Erenođlu A. K. , Şengör İ., Türkiye'de Elektrik Güç Sisteminin Mevcut Durumu ve Geleceđi: Akıllı Şebekeler ve Yenilenebilir Enerji Sistemleri, Workshop Organization, İstanbul, Turkey, Kasım 2018

## Citations

Total Citations (WOS):5

h-index (WOS):1