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International Researcher IDs

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Publons / Web Of Science ResearcherID: HIZ-5905-2022

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Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2013 - 2017

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2011 - 2013

Undergraduate, Cukurova University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, Turkey 2006 - 2011

Dissertations

Doctorate, Modelling and analysis of fault ride through capability of grid connected wind systems using multilevel dynamic voltage restorer, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2017

Postgraduate, Modeling and analysis of multilevel inverter based dynamic voltage restorer with dc-dc converter, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2013

Research Areas

Electrical and Electronics Engineering, Power Electronics, Electric Motor Drivers, Power Converters, Power Quality

Academic Titles / Tasks

Associate Professor, Bursa Uludağ University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2025 - Continues
Associate Professor, Iskenderun Technical University, Mühendislik ve Doğa Bilimleri Fakültesi, Mekatronik Mühendisliği, 2020 - 2025

Assistant Professor, Iskenderun Technical University, Mühendislik ve Doğa Bilimleri Fakültesi, Mekatronik Mühendisliği, 2018 - 2020

Research Assistant, Cukurova University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2011 - 2018

Research Assistant, Abdullah Gul University, Mühendislik ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği, 2011 - 2018

Supervised Theses

İnci M., Impact of EV charging stations on the power quality of distribution network and optimal placement of charging stations according to network conditions, Postgraduate, C.DENİZ(Student), 2021

İnci M., Dengesiz yükler altında şebekeye bağlı hibrit enerji sisteminin tasarımı, optimizasyonu ve analizi, Postgraduate, M.SELİM(Student), 2020

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Patient performance assessment methods for upper extremity rehabilitation in assist-as-needed therapy strategies: a comprehensive review**
ÖDEMİŞ E., BAYSAL C. V., İnci M.
MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, 2025 (SCI-Expanded)
- II. **Single-stage vehicular fuel cell system with harmonic elimination capability to suppress distortion effects of electric vehicle parking lots**
İnci M., BAYINDIR K. Ç.
JOURNAL OF POWER SOURCES, vol.597, 2024 (SCI-Expanded)
- III. **Power System Integration of Electric Vehicles: A Review on Impacts and Contributions to the Smart Grid**
İnci M., Celik O., Lashab A., BAYINDIR K. Ç., Vasquez J. C., Guerrero J. M.
APPLIED SCIENCES-BASEL, vol.14, no.6, 2024 (SCI-Expanded)
- IV. **Connecting multiple vehicular PEM fuel cells to electrical power grid as alternative energy sources: A Case Study**
İnci M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.52, pp.1035-1051, 2024 (SCI-Expanded)
- V. **Improvement of energy harvesting capability in grid-connected photovoltaic micro-inverters**
Celik O., Tan A., İnci M., TEKE A.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.46, no.1, pp.2869-2893, 2024 (SCI-Expanded)
- VI. **Technoeconomic Analysis of Fuel Cell Vehicle-to-Grid (FCV2G) System Supported by Photovoltaic Energy**
İnci M.
ENERGY TECHNOLOGY, vol.11, no.4, 2023 (SCI-Expanded)
- VII. **Improved drift-free P&O MPPT method to enhance energy harvesting capability for dynamic operating conditions of fuel cells**
BÜYÜK M., İnci M.
ENERGY, vol.267, 2023 (SCI-Expanded)
- VIII. **Integrating electric vehicles as virtual power plants: A comprehensive review on vehicle-to-grid (V2G) concepts, interface topologies, marketing and future prospects**
İnci M., Savrun M. M., Celik O.
JOURNAL OF ENERGY STORAGE, vol.55, 2022 (SCI-Expanded)
- IX. **Future vision of hydrogen fuel cells: A statistical review and research on applications, socio-economic impacts and forecasting prospects**
İnci M.
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.53, 2022 (SCI-Expanded)
- X. **Sliding mode control for fuel cell supported battery charger in vehicle-to-vehicle interaction**
İnci M., BÜYÜK M., Ozbek N. S.
FUEL CELLS, vol.22, no.5, pp.212-226, 2022 (SCI-Expanded)
- XI. **A Review on Wind Power Forecasting Regarding Impacts on the System Operation, Technical Challenges, and Applications**

Depci T., Inci M., Savrun M. M., BÜYÜK M.

ENERGY TECHNOLOGY, vol.10, no.8, 2022 (SCI-Expanded)

- XII. **Analysis and modeling of wireless power transfer supported by quadratic boost converter interfaced fuel cell power source**
BÜYÜK M., Savrun M. M., Inci M.
INTERNATIONAL JOURNAL OF NUMERICAL MODELLING-ELECTRONIC NETWORKS DEVICES AND FIELDS, vol.35, no.4, 2022 (SCI-Expanded)
- XIII. **Overview of smart home concepts through energy management systems, numerical research, and future perspective**
BÜYÜK M., Avsar E., Inci M.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, 2022 (SCI-Expanded)
- XIV. **Design and analysis of a high energy efficient multi-port dc-dc converter interface for fuel cell/battery electric vehicle-to-home (V2H) system**
Savrun M. M., Inci M., BÜYÜK M.
JOURNAL OF ENERGY STORAGE, vol.45, 2022 (SCI-Expanded)
- XV. **Zero-sequence current injection based power flow control strategy for grid inverter interfaced renewable energy systems**
Aygen M. S., Inci M.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.44, no.3, pp.7782-7803, 2022 (SCI-Expanded)
- XVI. **A flexible perturb & observe MPPT method to prevent surplus energy for grid-failure conditions of fuel cells**
Inci M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.79, pp.39483-39498, 2021 (SCI-Expanded)
- XVII. **A modified energy management scheme to support phase balancing in grid interfaced photovoltaic/fuel cell system**
Inci M., Aygen M. S.
AIN SHAMS ENGINEERING JOURNAL, vol.12, no.3, pp.2809-2822, 2021 (SCI-Expanded)
- XVIII. **Adaptive neuro-fuzzy inference system combined with genetic algorithm to improve power extraction capability in fuel cell applications**
Savrun M. M., Inci M.
JOURNAL OF CLEANER PRODUCTION, vol.299, 2021 (SCI-Expanded)
- XIX. **Design and analysis of fuel cell vehicle-to-grid (FCV2G) system with high voltage conversion interface for sustainable energy production**
Inci M., BÜYÜK M., Savrun M. M., Demir M. H.
SUSTAINABLE CITIES AND SOCIETY, vol.67, 2021 (SCI-Expanded)
- XX. **A review and research on fuel cell electric vehicles: Topologies, power electronic converters, energy management methods, technical challenges, marketing and future aspects**
Inci M., BÜYÜK M., Demir M. H., Ilbey G.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.137, 2021 (SCI-Expanded)
- XXI. **Active/reactive energy control scheme for grid-connected fuel cell system with local inductive loads**
Inci M.
ENERGY, vol.197, 2020 (SCI-Expanded)
- XXII. **Performance enhancement of energy extraction capability for fuel cell implementations with improved Cuckoo search algorithm**
Inci M., Caliskan A.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.19, pp.11309-11320, 2020 (SCI-Expanded)
- XXIII. **Interline fuel cell (I-FC) system with dual-functional control capability**
Inci M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.1, pp.891-903, 2020 (SCI-Expanded)
- XXIV. **Improved instantaneous power theory based current harmonic extraction for unbalanced electrical**

grid conditions

BÜYÜK M., İnci M., Tan A., TÜMAY M.

ELECTRIC POWER SYSTEMS RESEARCH, vol.177, 2019 (SCI-Expanded)

- XXV. **Virtual Park-based control strategy for grid-connected inverter interfaced renewable energy sources**
Çelik D., Meral M. E., İnci M.
IET RENEWABLE POWER GENERATION, vol.13, no.15, pp.2840-2852, 2019 (SCI-Expanded)
- XXVI. **Review of fuel cells to grid interface: Configurations, technical challenges and trends**
İnci M., Turksoy O.
JOURNAL OF CLEANER PRODUCTION, vol.213, pp.1353-1370, 2019 (SCI-Expanded)
- XXVII. **PERFORMANCE COMPARISON OF VOLTAGE SAG/SWELL DETECTION METHODS IMPLEMENTED IN CUSTOM POWER DEVICES**
BÜYÜK M., İNCİ M., TÜMAY M.
REVUE ROUMAINE DES SCIENCES TECHNIQUES-SERIE ELECTROTECHNIQUE ET ENERGETIQUE, vol.62, no.2, pp.129-133, 2017 (SCI-Expanded)
- XXVIII. **The performance improvement of dynamic voltage restorer based on bidirectional dc-dc converter**
İNCİ M., BAYINDIR K. Ç., TÜMAY M.
ELECTRICAL ENGINEERING, vol.99, no.1, pp.285-300, 2017 (SCI-Expanded)
- XXIX. **Improved Synchronous Reference Frame based controller method for multifunctional compensation**
İNCİ M., BAYINDIR K. Ç., TÜMAY M.
ELECTRIC POWER SYSTEMS RESEARCH, vol.141, pp.500-509, 2016 (SCI-Expanded)
- XXX. **A novel method improvement for detection of voltage problems in dynamic voltage restorers**
İNCİ M., BAYINDIR K. Ç., TÜMAY M.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.31, no.4, pp.997-1006, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **MULTIPURPOSE COMPENSATION SCHEME FOR VOLTAGE SAG/SWELL AND SELECTIVE HARMONICS ELIMINATION IN DISTRIBUTION SYSTEMS**
İnci M., BÜYÜK M., Tan A., BAYINDIR K. Ç., TÜMAY M.
ADVANCES IN ELECTRICAL AND ELECTRONIC ENGINEERING, vol.16, no.1, pp.71-80, 2018 (ESCI)
- II. **Fuzzy Logic Controlled DC-DC Converter Based Dynamic Voltage Restorer**
İNCİ M., DEMİRDELEN T., TÜMAY M.
JOURNAL OF ELECTRICAL SYSTEMS, vol.11, no.4, pp.367-375, 2015 (ESCI)

Books

- I. **Hydrogen and e-Mobility: Technologies, Integration, and Optimal Management**
İNCİ M.
Elsevier, 2025

Papers Published in Refereed Scientific Meetings

- I. **Güç Kalitesi Sinyallerinde Toplam Harmonik Bozulma Tahmini için CNN Tabanlı Derin Öğrenme Yöntemi**
ÇALIŞKAN A., İNCİ M., DEMİR M. H., EREN B., TAN A., BÜYÜK M., BAYINDIR K. Ç.
Elektrik-Elektronik ve Biyomedikal Konferansı, Bursa, Turkey, 28 - 30 November 2024

- II. **Performance Analysis of High-Gain Quadratic BuckBoost Converter for Electric Vehicle Applications**
BÜYÜK M., BERBER Ö., ÖZBEK N. S., İNCİ M.
4. International World Energy Conference, Kayseri, Turkey, 6 - 08 December 2024
- III. **Fuel Cell Supported Clamping Capacitor DC-DC Boost Converter for Battery Charging Applications**
İNCİ M.
18th International Conference of Young Scientists on Energy and Natural Sciences Issues (CYSENI 2022), Kaunas, Lithuania, 24 May 2022, pp.245-252
- IV. **Performance voltage gain analysis of quadratic boost converter with a capacitor inductor diode cell for renewable energy applications**
İNCİ M.
International Conference on Engineering Technologies (ICENTE'20), Konya, Turkey, 19 - 21 November 2020, pp.56
- V. **Design and Analysis of Dual Level Boost Converter Based Transformerless Grid Connected PV System for Residential Applications**
İNCİ M.
4th International Conference on Power Electronics and their Applications (IEEE - ICPEA 2019), Elazığ, Turkey, 25 - 27 September 2019, pp.1-6
- VI. **Performance Results of Photovoltaic/Fuel Cell Based Hybrid Energy System under Variable Conditions**
Aygen M. S., İNCİ M.
4th International Conference on Power Electronics and their Applications (IEEE - ICPEA 2019), Elazığ, Turkey, 25 - 27 September 2019
- VII. **Design and Modeling of Single Phase Grid Connected Fuel Cell System**
İNCİ M.
4th International Conference on Power Electronics and their Applications (IEEE - ICPEA 2019), Elazığ, Turkey, 25 - 27 September 2019
- VIII. **Decentralized control strategy for fuel cell inverters with grid integration**
İNCİ M.
4th International Energy and Engineering Congress, Gaziantep, Turkey, 24 - 25 October 2019, pp.336-349
- IX. **Capacitor Current Feedback Active Damping for Shunt Active Power Filter with Output LLCL Filter**
BÜYÜK M., İNCİ M., TAN A., TÜMAY M.
10th International Conference on Electrical and Electronics Engineering (ELECO 2017), 30 November - 02 December 2017, pp.1-4
- X. **MVT Controlled Voltage Restorer for Fault-Ride Through Capability**
İNCİ M., BÜYÜK M., TAN A., BAYINDIR K. Ç., TÜMAY M.
10th International Conference on Electrical and Electronics Engineering (ELECO 2017), Bursa, Turkey, 30 November 2017, pp.1-6
- XI. **A notch filter based active damping of llcl filter in shunt active power filter**
BÜYÜK M., TAN A., İNCİ M., TÜMAY M.
2017 International Symposium on Power Electronics (IEEE EE2017), Novi-Sad, Serbia, 19 - 21 October 2017, pp.1-6
- XII. **EPLL based Controller for Voltage Harmonic Mitigation in Grid Connected Wind Systems**
İNCİ M., BÜYÜK M., BAYINDIR K. Ç., TÜMAY M.
4th International Conference on Control, Decision and Information Technologies (IEEE CODIT 2017), 5 - 07 April 2017, pp.1157-1161
- XIII. **Survey of Inverter Topologies Implemented in Dynamic Voltage Restorers**
İNCİ M., BÜYÜK M., TAN A., BAYINDIR K. Ç., TÜMAY M.
4th International Conference on Control, Decision and Information Technologies (IEEE CODIT 2017), Barcelona, Spain, 5 - 07 April 2017, pp.1141-1146
- XIV. **An Overview of Active Damping Methods for Grid Connected Inverters**
BÜYÜK M., İNCİ M., TAN A., TÜMAY M.

International Energy and Engineering Conference, Gaziantep, Turkey, 13 - 14 October 2016, pp.58-66

- XV. **FFT based Reference Signal Generation to Compensate Simultaneous Voltage Sag Swell and Voltage Harmonics**
İNCİ M., BÜYÜK M., TÜMAY M.
16th IEEE International Conference on Environment and Electrical Engineering, IEEE-EEEIC 2016, Florence, Italy, 7 - 10 June 2016, pp.1-5
- XVI. **Performance evaluation of LLCL filter for active power filter**
İNCİ M., BÜYÜK M., TÜMAY M.
16th IEEE International Conference on Environment and Electrical Engineering, IEEE-EEEIC 2016, Florence, Italy, 7 - 10 June 2016, pp.1-4
- XVII. **A New Control Approach for Shunt Hybrid Active Power Filter to Compensate Harmonics and Dynamic Reactive Power with Grid Interconnection**
DEMİRDELEN T., İNCİ M., TÜMAY M.
9th European Modelling Symposium on Mathematical Modelling and Computer Simulation, IEEE EMS 2015, Madrid, Spain, 6 - 08 October 2015, pp.247-253
- XVIII. **The Analysis and Performance Results of Bidirectional DC DC Converter Based Dynamic Voltage Restorer under Voltage Sag Swell Conditions**
İNCİ M., DEMİRDELEN T., BAYINDIR K. Ç., TÜMAY M.
9th European Modelling Symposium on Mathematical Modelling and Computer Simulation, IEEE EMS 2015, Madrid, Spain, 6 - 08 October 2015, pp.254-259
- XIX. **Performance investigation of shunt hybrid active power filter with a synchronous reference frame based controller**
TAN A., KÖROĞLU T., DEMİRDELEN T., İNCİ M., CUMA M. U., BAYINDIR K. Ç., TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), Aachen, Germany, Germany, 22 - 25 June 2015, pp.1-8
- XX. **A novel low cost sag swell generator**
İNCİ M., DEMİRDELEN T., TAN A., KÖROĞLU T., CUMA M. U., BAYINDIR K. Ç., TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), Aachen, Germany, Germany, 22 - 25 June 2015
- XXI. **Performance evaluation of a new hybrid unified power quality conditioner HUPQC**
KÖROĞLU T., CUMA M. U., TAN A., İNCİ M., DEMİRDELEN T., BAYINDIR K. Ç., TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), Aachen, Germany, Germany, 22 - 25 June 2015, pp.1-6
- XXII. **Modeling and Analysis of a Nonlinear Adaptive Filter Control for Interline Unified Power Quality Conditioner**
KÖROĞLU T., İNCİ M., BAYINDIR K. Ç., TÜMAY M.
4th International Conference on Power Engineering, Energy and Electrical Drives, İstanbul, Turkey, 13 - 17 May 2013
- XXIII. **Şebeke Gerilim Değişimlerini Sezme Amaçlı Kontrol Metodlarının İncelenmesi ve Performanslarının Değerlendirilmesi**
İNCİ M., KÖROĞLU T., BAYINDIR K. Ç., TÜMAY M.
V. Enerji Verimliliği ve Kalitesi Sempozyumu, İstanbul, Turkey, 23 - 24 May 2013
- XXIV. **Review of hybrid active power filter topologies and controllers**
DEMİRDELEN T., İNCİ M., BAYINDIR K. Ç., TÜMAY M.
4th International Conference on Power Engineering, Energy and Electrical Drives, Istanbul, Turkey, Turkey, 13 - 17 May 2013

Supported Projects

İnci M., Bayındır K. Ç., Çalışkan A., Tan A., Demir M. H., TUBITAK Project, TÜBİTAK 1001 Projesi - Güç Kalitesi

Problemlerinin Tespiti Ve Görüntülenmesinin Derin Öğrenme Yöntemiyle Uygulamalı Analizi, 2024 - 2026

İnci M., Özbek N. S., Büyük M., TUBITAK Project, TÜBİTAK 1001 Projesi - Afet, Elektrik Kesintileri ve Acil Şarj Durumları için Elektrikli Araçtan-Araca (V2V) Şarj Sisteminin Tasarımı ve Deneysel Analizi, 2023 - 2025

İnci M., Project Supported by Other Official Institutions, TÜBİTAK 2209 A Projesi - Nesnelerin İnterneti Tabanlı Mobil Enerji İzleme Sistemi Tasarımı İle Reaktif Enerji Tüketimi Ve Gerilim Problemlerinin Takibi, 2023 - 2024

İnci M., Bahçeci E., Duman F., Kenanoğlu R., Baltacıoğlu M. K., Arat H. T., Tanç B., Demir M. H., Project Supported by Higher Education Institutions, PEM yakıt hücreli araçların yol testleri ve uygulamalarında enerji verimliliğinin araştırılması, 2019 - 2022

İnci M., Büyük M., Tan A., Tümay M., Project Supported by Higher Education Institutions, LLCL Çıkış Filtreli Şönt Aktif Güç Filtreleri için Aktif Sönümleme Yöntemlerinin İncelenmesi ve Uygulaması, 2017 - 2018

İnci M., Tan A., Büyük M., Project Supported by Higher Education Institutions, Gerilim Çukuru ve Tepesi Tespit Yöntemlerinin Uygulamalı Performans Analizi, 2017 - 2018

İnci M., Tümay M., TUBITAK Project, TÜBİTAK 1002 Projesi - Şebekeye Bağlı Rüzgâr Sistemlerinin Çok Seviyeli Dinamik Gerilim İyileştirici Kullanılarak Arıza Sonrası Sisteme Katkı Yeteneğinin Modellenmesi ve Analizi, 2016 - 2017

İnci M., Büyük M., Tan A., Project Supported by Higher Education Institutions, Dinamik Gerilim İyileştiricilerde Gerilim Tespit Metotlarının Karşılaştırılması ve Anahtarlama Dalgacık Filtrelerinin İncelenmesi, 2016 - 2016

İnci M., Büyük M., Tümay M., Project Supported by Higher Education Institutions, Üç Faz Üç Tel Paralel Aktif Güç Filtreleri için LCL Çıkış Filtresinin Pasif ve Aktif Damping Metotlarının İncelenmesi ve Analizi, 2015 - 2016

Bayındır K. Ç., Tümay M., Cuma M. U., TUBITAK Project, TÜBİTAK 1001 Projesi - DA-DA Yükseltici Çeviricili Melez Birleştirilmiş Güç Kalitesi Düzenleyicisi Tasarımı Ve Gerçekleştirilmesi Projesi, 2013 - 2015

Memberships / Tasks in Scientific Organizations

EDİDER (Enerjide Dijitalleşme Derneği), Member, 2021 - 2024, Turkey

IEEE (Institute of Electrical and Electronics Engineers), Member, 2015 - 2023, United States Virgin Islands

Metrics

Publication: 57