

# Prof. MUAMMER ERMIŞ

## Personal Information

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## Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey  
1976 - 1982

## Dissertations

Doctorate, Modelling and Analysis of a Wind Turbine Driven Self-Excited Induction Generator, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1982

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1974 -  
Continues

## Advising Theses

ERMİŞ M., Real time calculation of shem angles by metaheuristic algorithms for variable frequency motor drives,  
Doctorate, G.NALÇACI(Student), 2021

ERMİŞ M., All SiC traction converter for light rail transportation systems: Design methodology and development of a 500  
- 900 VDC, 165 kVA prototype, Doctorate, D.YILDIRIM(Student), 2021

ERMİŞ M., Design and implementation of all-SiC MPPT boost converter for grid connected photovoltaic systems,  
Postgraduate, E.Tuğçe(Student), 2019

ERMİŞ M., Design and implementation of a 130KW, 750VDC bidirectional PWM rectifier supplied from 400V, 50HZ grid,  
Postgraduate, T.Pul(Student), 2019

ERMİŞ M., A three phase all sic PWM rectifier for industry applications, Postgraduate, C.Yolaçan(Student), 2019

ERMİŞ M., HYSTERESIS BAND CONTROL OF HYBRID ACTIVE POWER FILTER: AN APPLICATION TO A MEDIUM-  
FREQUENCY INDUCTION MELTING FURNACE, Doctorate, E.DURNA(Student), 2018

ERMİŞ M., Hysteresis band control of hybrid active power filter: an application to a medium-frequency induction melting  
furnace, Doctorate, E.Durna(Student), 2018

ERMİŞ M., Design and implementation of a three phase grid connected sic solar inverter, Postgraduate,  
M.CANVER(Student), 2018

ERMİŞ M., Design and implementation of a sic based three phase grid-connected current source inverter for solar  
applications, Postgraduate, O.Bay(Student), 2017

ERMİŞ M., Design and implementation of a SiC based three phase grid connected current source inverter for solar applications, Postgraduate, O.BAY(Student), 2017

ERMİŞ M., Development of fast and robust spectral decomposition method for nonlinear industrial loads with current frequency spectrum rich in harmonic and interharmonic content, Doctorate, E.UZ(Student), 2016

ERMİŞ M., Design of an interleaved PWM rectifier for AC locomotives and implementation of its laboratory prototype, Postgraduate, M.UĞUR(Student), 2015

ERMİŞ M., Online application of SHEM to grid-connected inverters with DC link voltage by particle swarm optimization, Postgraduate, U.GÜVENGİR(Student), 2014

ERMİŞ M., Design and development of a simple power quality monitor for low voltage distribution system, Postgraduate, Ö.YAZLIK(Student), 2014

ERMİŞ M., Online application of SHEM to grid-connected inverters with variable DC link voltage by particle swarm optimization /, Postgraduate, U.Güvengir(Student), 2014

ERMİŞ M., Elimination of transformer core saturation in cascaded multilevel converter based T-statcom systems, Doctorate, C.ÖZGÜR(Student), 2014

ERMİŞ M., Design, implementation and engineering aspects of 12-pulse TCR based SVC systems for voltage regulation, Postgraduate, D.PARLAK(Student), 2014

ERMİŞ M., Adaptive control of DC link current in current source converter based statcom for improving its power losses, Postgraduate, F.KARADUMAN(Student), 2012

ERMİŞ M., Cascaded multilevel converter based transmission STATCOM: System design methodology and development of a 12kV  $\pm$ 12MvAr power-stage, Doctorate, B.GÜLTEKİN(Student), 2012

ERMİŞ M., Cascaded multilevel converter based transmission STATCOM : system design methodology and development of 12kV  $\pm$ 12MVAR power stage, Doctorate, B.Gültekin(Student), 2012

ERMİŞ M., Modeling and design of iron-core shunt reactors with discretely distributed air-gaps, Doctorate, A.DÖNÜK(Student), 2012

ERMİŞ M., Design and implementation of thyristor switched shunt capacitors, Postgraduate, E.UZ(Student), 2010

ERMİŞ M., Design and implementation of a current source converter based active power filter for medium voltage applications, Doctorate, A.TERCİYANLI(Student), 2010

ERMİŞ M., A current source converter based STATCOM for reactive power compensation at low voltage, Postgraduate, N.BİÇER(Student), 2010

ERMİŞ M., Flicker source identification at a point of common coupling of the power system, Postgraduate, E.ALTINTAŞ(Student), 2010

ERMİŞ M., Calibration of conventional measurement transformers against harmonic components by using field measurements of optical transducers and resistive-capacitive voltage transformers, Postgraduate, C.AZİZ(Student), 2010

ERMİŞ M., Investigation of multilevel inverters for D-statcom applications, Postgraduate, M.DENİZ(Student), 2009

ERMİŞ M., Design and implementation of a voltage source converter based hybrid active power filter, Postgraduate, O.UÇAK(Student), 2009

ERMİŞ M., A new field-data based eaf model applied to power quality studies, Postgraduate, M.Göl(Student), 2009

ERMİŞ M., Comparison of various SVC topologies and control strategies for heavy industry, Postgraduate, E.YALVAÇ(Student), 2009

ERMİŞ M., A new field-data based EAF (electric arc furnace) model applied to power quality studies, Postgraduate, M.GÖL(Student), 2009

ERMİŞ M., Design, implementation and engineering aspects of TCR for industrial SVC systems, Doctorate, H.BİLGE(Student), 2008

ERMİŞ M., Prediction of hot-spot and top-oil temperatures of power transformers according to IEEE standards C57.110-1998 and C57.91-1995, Postgraduate, H.KARACA(Student), 2007

ERMİŞ M., Design and digital implementation of thyristor controlled reactor control, Postgraduate, M.GENÇ(Student), 2007

ERMİŞ M., Design and implementation of a voltage source converter based statcom for reactive power compensation and harmonic filtering, Doctorate, A.ÇETİN(Student), 2007

ERMİŞ M., Optimizing transient and filtering performance of a C-type 2nd harmonic power filter by the use of solid-state switches, Postgraduate, C.ÖZGÜR(Student), 2007

ERMİŞ M., Electromagnetic compatibility of electric power quality monitor according to EN 61326 standard, Postgraduate, Ö.YAMAN(Student), 2007

ERMİŞ M., Design and implementation of a current source converter based statcom for reactive power compensation, Doctorate, H.FARUK(Student), 2007

ERMİŞ M., Fully digital parallel operated switch-mode power supply modules for telecommunications, Doctorate, K.KUTLUAY(Student), 2005

ERMİŞ M., Performance of a dynamic voltage restorer for a practical situation, Postgraduate, G.ÖĞÜZ(Student), 2004

ERMİŞ M., Design of a reactive power compensation and harmonic filtering by using field data, Postgraduate, B.Gültekin(Student), 2003

ERMİŞ M., Design of a reactive power compensation and harmonic filtering system by using field data, Postgraduate, B.GÜLTEKİN(Student), 2003

ERMİŞ M., The Analysis of a dynamic voltage restorer based on load side connected shunt converter topology, Postgraduate, Ç.ACAR(Student), 2002

ERMİŞ M., Investigation of passive and active shunt power filter combination., Postgraduate, Ö.ŞEVİK(Student), 2002

ERMİŞ M., Brushless dc motor position control for a control actuation system., Postgraduate, A.YILMAZKOÇLAR(Student), 2002

ERMİŞ M., The analysis of a dynamic voltage restorer based on load side connected shunt converter topology., Postgraduate, Ç.Acar(Student), 2002

ERMİŞ M., Modeling and simulation methods in power electronics and design and simulation of a shunt active power filter using MATLAB/SIMULINK, Postgraduate, K.ÇAĞATAY(Student), 2000

ERMİŞ M., DSP based implementation of a shunt active power filter with instantaneous reactive power theory, Postgraduate, C.TOKGÖZ(Student), 2000

ERMİŞ M., Design and simulation of single quadrant DC motor drive based on buck type PWM rectifier at unity power factor, Postgraduate, H.FARUK(Student), 2000

ERMİŞ M., Transient over voltage protection in low voltage power electronic systems: Subject review and case studies, Postgraduate, A.SERKAN(Student), 1999

ERMİŞ M., Design of reactive power compensator and its filter reactor, Postgraduate, G.ELİŞ(Student), 1997

ERMİŞ M., Design and implementation of a 20 kw 20 kHz unity power factor boost chopper, Postgraduate, S.VARMA(Student), 1997

ERMİŞ M., Design and implementation of a medium voltage thyristor controlled reactor, Postgraduate, M.Volkan(Student), 1996

ERMİŞ M., Design and implementation of a medium voltage thyristor controller reactor, Postgraduate, M.UTALAY(Student), 1996

ERMİŞ M., A High power, four quadrant modified for high power DC machines, Postgraduate, A.KOÇ(Student), 1996

ERMİŞ M., Performance optimization of an AC arc furnace system, Postgraduate, D.ALPER(Student), 1996

ERMİŞ M., A thyristorized induction motor softstarter: Analysis and performance optimization by a hybrid model, Postgraduate, C.BARLAK(Student), 1996

ERMİŞ M., Analysis and implementation of resonant demagnetization forward converter, Postgraduate, B.BİLGİN(Student), 1994

ERMİŞ M., Steady- state and transient performance analyses of a double output induction generator operating at subsynchronous and supersynchronous speeds, Postgraduate, I.ÇADIRCI(Student), 1994

ERMİŞ M., A thyristor dc circuit breaker controlled by a microcomputer, Postgraduate, H.Zengince(Student), 1993

ERMİŞ M., Thyristor dc circuit breaker controlled by a microcomputer, Postgraduate, H.ZENGİNCE(Student), 1993

ERMİŞ M., A Solar pumping system with maximum power point tracking, Postgraduate, Ü.ORLU(Student), 1993

ERMİŞ M., Implementation of an autonomous photovoltaic based DC supply with motor generator backup, Postgraduate, L.SİNAN(Student), 1993

ERMİŞ M., De 24000 diesel electric locomotive: Simulation of the train dynamics and analysis of the rheostatic braking, Postgraduate, N.BÜKÜLMEZ(Student), 1993

ERMİŞ M., De 24000 diesel electric locomotive: simulation of the Train dynamics and analysis of the rheostatic braking system., Postgraduate, N.Bükülmez(Student), 1993

ERMİŞ M., Implementation of an autonomous photovoltaic based DC supply with motor generator backup, Postgraduate,

L.Sinan(Student), 1993

ERMİŞ M., A new method for the analysis of induction through heating of cylindrical work-pieces, Postgraduate, Ö.Tanboga(Student), 1992

ERMİŞ M., A New method for the analysis of induction through heating of cylindrical work-prices, Postgraduate, Ö.TANBOĞA(Student), 1992

ERMİŞ M., A 6-3 KV thyristorized switch for direct-on starting of induction motors, Postgraduate, M.RAHMAN(Student), 1991

ERMİŞ M., Programmable logic controller-based modernization of a plate normalizing furnace, Postgraduate, N.TUNABOYLU(Student), 1990

ERMİŞ M., A Microprocessor based adaptive controller for hybrid solar and wind energy conversion systems, Postgraduate, M.BURSLAN(Student), 1989

ERMİŞ M., Software development for maximum power transfer in photovoltaic systems, Postgraduate, C.MEKİK(Student), 1989

ERMİŞ M., Investigation of battery chargers for telecommunication equipment and design of an automatic gain control unit, Postgraduate, M.ŞEN(Student), 1989

ERMİŞ M., An optimum solar lighting system powered by photovoltaics, Postgraduate, M.Başlı(Student), 1989

ERMİŞ M., An Optimum solar lighting system powered by photovoltaics, Postgraduate, M.BAŞLI(Student), 1989

ERMİŞ M., The double output induction generator for variable speed applications., Postgraduate, I.Çadircı(Student), 1988

ERMİŞ M., The Double output induction generator for variable speed applications, Postgraduate, I.ÇADIRCI(Student), 1988

ERMİŞ M., A DC/DC converter system for maximum power point tracking in small photovoltaic systems, Postgraduate, T.MALERİ(Student), 1988

ERMİŞ M., A DC/DC converter system for maximum power point in small photovoltaic systems, Postgraduate, T.Maleri(Student), 1988

ERMİŞ M., Analysis and design of induction heating work coils, Postgraduate, A.EL(Student), 1988

ERMİŞ M., Implementation of a prototype thyristorized reactive power compensator, Postgraduate, M.PIŞKİN(Student), 1988

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **All-SiC Traction Converter for Light Rail Transportation Systems: Design Methodology and Development of 165 kVA Prototype**  
Yıldırım D., Akşit M. H., ÇADIRCI I., ERMİŞ M.  
Electronics (Switzerland), vol.11, no.9, 2022 (SCI-Expanded)
- II. **Full-Scale Physical Simulator of All SiC Traction Motor Drive With Onboard Supercapacitor ESS for Light-Rail Public Transportation**  
Yıldırım D., Akşit M. H., Yolacan C., Pul T., Ermis C., Aghdam B. H., ÇADIRCI I., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol.67, no.8, pp.6290-6301, 2020 (SCI-Expanded)
- III. **All SiC PWM rectifier-based off-board ultrafast charger for heavy electric vehicles**  
Yıldırım D., Ozturk S., ÇADIRCI I., ERMİŞ M.  
IET POWER ELECTRONICS, vol.13, no.3, pp.483-494, 2020 (SCI-Expanded)
- IV. **Real-Time Detection of Interharmonics and Harmonics of AC Electric Arc Furnaces on GPU Framework**  
Uz-Logoglu E., Salor O., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.55, no.6, pp.6613-6623, 2019 (SCI-Expanded)
- V. **Operating principles and practical design aspects of all SiC DC/AC/DC converter for MPPT in grid-connected PV supplies**  
ÖZTÜRK S., Popos P., Utalay V., Koc A., ERMİŞ M., ÇADIRCI I.  
SOLAR ENERGY, vol.176, pp.380-394, 2018 (SCI-Expanded)
- VI. **Exponential Smoothing of Multiple Reference Frame Components With GPUs for Real-Time Detection**

**of Time-Varying Harmonics and Interharmonics of EAF Currents**

Balouji E., Salor O., ERMİŞ M.

IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.54, no.6, pp.6566-6575, 2018 (SCI-Expanded)

- VII. **On-Line Application of SHEM by Particle Swarm Optimization to Grid-Connected, Three-Phase, Two-Level VSCs with Variable DC Link Voltage**  
Guvengir U., ÇADIRCI I., ERMİŞ M.  
ELECTRONICS, vol.7, no.8, 2018 (SCI-Expanded)
- VIII. **All SiC Grid-Connected PV Supply with HF Link MPPT Converter: System Design Methodology and Development of a 20 kHz, 25 kVA Prototype**  
ÖZTÜRK S., Canver M., ÇADIRCI I., ERMİŞ M.  
ELECTRONICS, vol.7, no.6, 2018 (SCI-Expanded)
- IX. **Square prism micropillars improve osteogenicity of poly(methyl methacrylate) surfaces**  
Hasturk O., ERMİŞ M., Demirci U., Hasirci N., HASIRCI V. N.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE, vol.29, no.5, 2018 (SCI-Expanded)
- X. **Suppression of the Second Harmonic Subgroup Injected by an AC EAF: Design Considerations and Performance Estimation of a Shunt APF**  
Durna E., Gercek C. O., Salor O., ERMİŞ M.  
ELECTRONICS, vol.7, no.4, 2018 (SCI-Expanded)
- XI. **Suppression of Time-Varying Interharmonics Produced by Medium-Frequency Induction Melting Furnaces by a HAPF System**  
Durna E., Yilmaz I., ERMİŞ M.  
IEEE TRANSACTIONS ON POWER ELECTRONICS, vol.32, no.2, pp.1030-1043, 2017 (SCI-Expanded)
- XII. **Correlation Between Multiple Electric Arc Furnace Operations and Unscheduled Power Flows in the Interconnection Lines at the Eastern Cross Border of ENTSO-E**  
Altintas E., Salor O., Buyukdagli U., ÇADIRCI I., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.52, no.4, pp.3508-3517, 2016 (SCI-Expanded)
- XIII. **Design and Implementation of a Hybrid System for the Mitigation of PQ Problems of Medium-Frequency Induction Steel-Melting Furnaces**  
Yilmaz I., Durna E., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.52, no.3, pp.2700-2713, 2016 (SCI-Expanded)
- XIV. **Online Characterization of Interharmonics and Harmonics of AC Electric Arc Furnaces by Multiple Synchronous Reference Frame Analysis**  
Uz-Logoglu E., Salor O., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.52, no.3, pp.2673-2683, 2016 (SCI-Expanded)
- XV. **Elimination of Coupling Transformer Core Saturation in Cascaded Multilevel Converter-Based T-STATCOM Systems**  
Gercek C. O., ERMİŞ M.  
IEEE TRANSACTIONS ON POWER ELECTRONICS, vol.29, no.12, pp.6796-6809, 2014 (SCI-Expanded)
- XVI. **Identification of Harmonic Current Contributions of Iron and Steel Plants Based on Time-Synchronized Field Measurements-Part II: Inside Plants**  
Unsar O., Salor O., ÇADIRCI I., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.50, no.6, pp.4348-4355, 2014 (SCI-Expanded)
- XVII. **Identification of Harmonic Current Contributions of Iron and Steel Plants Based on Time-Synchronized Field Measurements-Part I: At PCC**  
Unsar O., Salor O., ÇADIRCI I., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.50, no.6, pp.4336-4347, 2014 (SCI-Expanded)
- XVIII. **Enhanced Nationwide Wind-Electric Power Monitoring and Forecast System**  
Terciyanlı E., Demirci T., Kucuk D., Sarac M., ÇADIRCI I., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, vol.10, no.2, pp.1171-1184, 2014 (SCI-Expanded)
- XIX. **Multipurpose Platform for Power System Monitoring and Analysis With Sample Grid Applications**  
Atalik T., ÇADIRCI I., Demirci T., ERMİŞ M., İNAN T., Kalaycioglu A. S., Salor O.

- IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol.63, no.3, pp.566-582, 2014 (SCI-Expanded)
- XX. **Cascaded Multilevel Converter-Based Transmission STATCOM: System Design Methodology and Development of a 12 kV +/- 12 MVar Power Stage**  
Gultekin B., ERMİŞ M.  
IEEE TRANSACTIONS ON POWER ELECTRONICS, vol.28, no.11, pp.4930-4950, 2013 (SCI-Expanded)
- XXI. **Assessment of extensive countrywide electrical power quality measurements through a database architecture**  
Kucuk D., Salor O., Guder M., Demirci T., Inan T., Akkaya Y., Cadirci I., ERMİŞ M.  
ELECTRICAL ENGINEERING, vol.95, no.1, pp.1-19, 2013 (SCI-Expanded)
- XXII. **Multi-DSP and -FPGA-Based Fully Digital Control System for Cascaded Multilevel Converters Used in FACTS Applications**  
Atalik T., Deniz M., Koc E., Gercek C. O., Gultekin B., ERMİŞ M., ÇADIRCI I.  
IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, vol.8, no.3, pp.511-527, 2012 (SCI-Expanded)
- XXIII. **Medium-Frequency Induction Melting Furnace as a Load on the Power System**  
Yilmaz I., ERMİŞ M., Cadirci I.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.48, no.4, pp.1203-1214, 2012 (SCI-Expanded)
- XXIV. **A Current Source Converter-Based Active Power Filter for Mitigation of Harmonics at the Interface of Distribution and Transmission Systems**  
Terciyanlı A., Avci T., Yilmaz I., Ermis C., Kose K. N., Acik A., Kalaycioglu A. S., Akkaya Y., Cadirci I., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.48, no.4, pp.1374-1386, 2012 (SCI-Expanded)
- XXV. **Field-Data-Based Modeling of Medium-Frequency Induction Melting Furnaces for Power Quality Studies**  
Yilmaz I., Salor O., ERMİŞ M., Cadirci I.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.48, no.4, pp.1215-1224, 2012 (SCI-Expanded)
- XXVI. **Design and Implementation of a 154-kV +/- 50-Mvar Transmission STATCOM Based on 21-Level Cascaded Multilevel Converter**  
Gultekin B., Gercek C. O., Atalik T., Deniz M., Bicer N., ERMİŞ M., Kose K. N., Ermis C., Koc E., Cadirci I., et al.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.48, no.3, pp.1030-1045, 2012 (SCI-Expanded)
- XXVII. **Power Quality Solutions for Light Rail Public Transportation Systems Fed by Medium-Voltage Underground Cables**  
Terciyanlı A., Acik A., Cetin A., ERMİŞ M., ÇADIRCI I., Ermis C., Demirci T., Bilgin H. F.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.48, no.3, pp.1017-1029, 2012 (SCI-Expanded)
- XXVIII. **Effects of Distributed Air-Gaps in the Iron-Core of Shunt Reactors on Inductance Components and Losses**  
Donuk A., Bilgin H. F., ERMİŞ M.  
INTERNATIONAL REVIEW OF ELECTRICAL ENGINEERING-IREE, vol.7, no.3, pp.4428-4436, 2012 (SCI-Expanded)
- XXIX. **Design, Implementation, and Operation of a New C-Type 2nd Harmonic Filter for Electric Arc and Ladle Furnaces**  
Gercek C. O., ERMİŞ M., Ertas A., Kose K. N., Unsar O.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.47, no.4, pp.1545-1557, 2011 (SCI-Expanded)
- XXX. **Nationwide real-time monitoring system for electrical quantities and power quality of the electricity transmission system**  
Demirci T., Kalaycioglu A., Kucuk D., Salor O., Guder M., Pakhuyul S., Atalik T., Inan T., Cadirci I., Akkaya Y., et al.  
IET GENERATION TRANSMISSION & DISTRIBUTION, vol.5, no.5, pp.540-550, 2011 (SCI-Expanded)
- XXXI. **Current source converter based STATCOM: Operating principles, design and field performance**  
Bilgin H. F., ERMİŞ M.  
ELECTRIC POWER SYSTEMS RESEARCH, vol.81, no.2, pp.478-487, 2011 (SCI-Expanded)
- XXXII. **A Selective Harmonic Amplification Method for Reduction of kVA Rating of Current Source Converters in Shunt Active Power Filters**  
Terciyanlı A., ERMİŞ M., Cadirci I.

- IEEE TRANSACTIONS ON POWER DELIVERY, vol.26, no.1, pp.65-78, 2011 (SCI-Expanded)
- XXXIII. **A new flicker contribution tracing method based on individual reactive current components of multiple EAFs at PCC**  
Altintas E., Salor Ö., Çadirci I., Ermiş M.  
IEEE Transactions on Industry Applications, vol.46, no.5, pp.1746-1754, 2010 (SCI-Expanded)
- XXXIV. **Design and Implementation of a Current-Source Converter for Use in Industry Applications of D-STATCOM**  
Bilgin H. F., ERMİŞ M.  
IEEE TRANSACTIONS ON POWER ELECTRONICS, vol.25, no.8, pp.1943-1957, 2010 (SCI-Expanded)
- XXXV. **An extensible database architecture for nationwide power quality monitoring**  
Kucuk D., Inan T., Salor O., Demirci T., Akkaya Y., Buhan S., Boyrazoglu B., Unsar O., Altintas E., Haliloglu B., et al.  
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.32, no.6, pp.559-570, 2010 (SCI-Expanded)
- XXXVI. **A New Field-Data-Based EAF Model for Power Quality Studies**  
Gol M., Salor O., ALBOYACI B., Mutluer B., ÇADIRCI I., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.46, no.3, pp.1230-1242, 2010 (SCI-Expanded)
- XXXVII. **PQONT: A domain ontology for electrical power quality**  
Kucuk D., Salor O., Inan T., Cadirci I., ERMİŞ M.  
ADVANCED ENGINEERING INFORMATICS, vol.24, no.1, pp.84-95, 2010 (SCI-Expanded)
- XXXVIII. **Electrical Power Quality of Iron and Steel Industry in Turkey**  
Salor O., Gultekin B., Buhan S., Boyrazoglu B., Inan T., Atalik T., Acik A., Terciyani A., Unsar O., Altintas E., et al.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.46, no.1, pp.60-80, 2010 (SCI-Expanded)
- XXXIX. **VSC-Based D-STATCOM With Selective Harmonic Elimination**  
Cetin A., ERMİŞ M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.45, no.3, pp.1000-1015, 2009 (SCI-Expanded)
- XL. **Mobile monitoring system to take nationwide PQ measurements on electricity transmission systems**  
Salor O., Buhan S., Uensar O., Boyrazoglu B., Altintas E., Atalik T., Haliloglu B., Inan T., Kalaycioglu A., Terciyani A., et al.  
MEASUREMENT, vol.42, no.4, pp.501-515, 2009 (SCI-Expanded)
- XLI. **Reactive-power compensation of coal mining excavators by using a new-generation STATCOM**  
Bilgin H. F., Ermis M., Kose K. N., Cadirci I., Acik A., Demirci T., Terciyani A., Kocak C., Yorukoglu M.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.43, no.1, pp.97-110, 2007 (SCI-Expanded)
- XLII. **Understanding the modelling and analysis of a shunt active power filter using MATLAB/Simulink**  
Bayindir K. C., Ermis M.  
INTERNATIONAL JOURNAL OF ELECTRICAL ENGINEERING EDUCATION, vol.43, no.3, pp.185-205, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Suppression factor as evaluation criterion for wide-frequency filtering equipment**  
Durna E., ERMİŞ M.  
JOURNAL OF ENGINEERING-JOE, no.17, pp.3923-3927, 2019 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Cost Function Determination for a WIG in Predefined Path and Height Using Conjugate Gradient Method**  
Shabani R., Nağacı G., Leblebicioğlu M. K., Ermiş M.  
6th IEEE International Conference on Control Science and Systems Engineering, ICCSSE 2020, Beijing, China, 17 -

19 July 2020, pp.172-177

- II. **Effect of Grey Wolf Optimization on THD of 3-Phase Voltage Source Inverter with Selective Harmonic Elimination Base**  
NALÇACI G., ERMİŞ M.  
4th International Conference on Power Electronics and their Applications (ICPEA), Elazığ, Turkey, 25 - 27 September 2019
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## **Non Academic Experience**

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