

## Prof. HULUSİ BÜLENT ERTAN

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### Advising Theses

- ERTAN H. B. , Design of a control moment gyroscope with outer rotor BLDC motor, Post Graduate, B.İnce(Student), 2019
- ERTAN H. B. , A Hardware in the loop simulator development for wind energy conversion systems, Post Graduate, S.Pourkeivannour(Student), 2019
- ERTAN H. B. , Investigation of the effects of switching technique and gan device on the performance of bidirectional buck-boost DC/DC converter, Post Graduate, İ.Koçak(Student), 2019
- ERTAN H. B. , Sizing of a series hybrid electric vehicle, Post Graduate, F.Remzican(Student), 2019
- ERTAN H. B. , Design and optimization of high torque density generator for direct drive wind turbine applications, Post Graduate, R.Zeinali(Student), 2016
- ERTAN H. B. , Implementation of sensorless vector control drive with current position estimation, Post Graduate, T.Filci(Student), 2016
- ERTAN H. B. , Design and optimziation of high torque density generator for direct drive wind turbine applications, Post Graduate, R.ZEINALI(Student), 2016
- ERTAN H. B. , Optimum pole combination to maxmize torque density in switched reluctance motors for electric vehicle applications, Post Graduate, R.TARVIRDILU(Student), 2016
- ERTAN H. B. , Design and implementation of variable frequency sine wave output buck-boost inverter, Post Graduate, Y.ŞENER(Student), 2016
- ERTAN H. B. , Prediction of rotor position from rotor slot harmonics existing in motor stator current, Post Graduate, T.FİLCİ(Student), 2016
- ERTAN H. B. , Design of an outer-rotor brushless DC motor for control moment gyroscope applications /, Post Graduate, N.ÇAĞAN(Student), 2015
- ERTAN H. B. , Development of a hardware-in-the-loop wind energy conversion system emulator /, Post Graduate, G.CENGİZ(Student), 2015
- ERTAN H. B. , The effect of DC link filter design and compensation on dynamic performance of vector controlled drive, Post Graduate, M.KAYHAN(Student), 2015
- ERTAN H. B. , The Effect of DC link filter design and compensation on dynamic performance of vector controlled drive /, Post Graduate, M.Kayhan(Student), 2015
- ERTAN H. B. , A software for analysis of permanent magnet AC motors, Post Graduate, D.BULGAN(Student), 2014
- ERTAN H. B. , Design software development for induction motors, Post Graduate, M.İZGÜDEN(Student), 2011
- ERTAN H. B. , Measurement of brushless DC motor characteristics and parameters and brushless DC motor design, Post Graduate, İ.ŞAHİN(Student), 2010
- ERTAN H. B. , A normalized set of force and permeance data for doubly-salient magnetic geometries, Post Graduate, İ.MAHARİQ(Student), 2009
- ERTAN H. B. , A novel algorithm for prediction off-line stator leakage inductance and on-line stator resistance of induction motors, Post Graduate, V.SEZGİN(Student), 2009
- ERTAN H. B. , A non-invasive speed and position sensor for induction machines using external search coils, Post Graduate, O.Keysan(Student), 2009
- ERTAN H. B. , Comparison of axial flux and radial flux brushless dc motor topologies for control moment gyroscope wheel applications, Post Graduate, K.YILMAZ(Student), 2009
- ERTAN H. B. , A switch mode power supply for producing half wave sine output, Post Graduate, İ.Kaya(Student), 2008

ERTAN H. B. , LEBLEBİCİOĞLU M. K. , A control algorithm to minimize torque ripple and acoustic noise of switched reluctance motors, Doctorate, E.BİZKEVELCİ(Student), 2008

ERTAN H. B. , Development of an electrical machines analysis and optimum design software package, Post Graduate, Y.GÖYNÜK(Student), 2008

ERTAN H. B. , A single transistor unity power factor rectifier, Post Graduate, M.Tunç(Student), 2007

ERTAN H. B. , Parameter and speed estimation on induction motors from manufactures data and measurements /, Post Graduate, Ç.Hakkı(Student), 2005

ERTAN H. B. , A software for analysis and design optimization of switched reluctance motor, Post Graduate, L.Burak(Student), 2004

ERTAN H. B. , A novel approach for synthesising sinus waveforms at power level, Post Graduate, S.Paki(Student), 2004

ERTAN H. B. , Implementation of a vector controlled induction motor drive, Post Graduate, A.Acar(Student), 2004

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ERTAN H. B. , Four quadrant computer based motor test system development, Post Graduate, T.İnan(Student), 2003

ERTAN H. B. , A Unity power factor resonant inverter with single transistor for induction cooking, Post Graduate, B.ÇOLAK(Student), 2002

ERTAN H. B. , A Control system for solar-electric energy conversion system, Post Graduate, A.YILMAZ(Student), 2002

ERTAN H. B. , Performance calculation of single phase permanent magnet synchronous motors for design optimization., Post Graduate, B.DAĞ(Student), 2002

ERTAN H. B. , A Software for dynamic simulation of switched reluctance motor, Post Graduate, M.ÖZGÜR(Student), 2001

ERTAN H. B. , A Study on evaluation of direct torque and field orientation control of induction machines, Post Graduate, H.KAVAKLI(Student), 2000

ERTAN H. B. , Implementation of vector control for induction motor drives, Post Graduate, H.CAN(Student), 1999

ERTAN H. B. , Fuzzy control of resonant inverter circuit for x-ray power supply, Post Graduate, T.ÇAMLİKAYA(Student), 1999

ERTAN H. B. , Computation of core losses in three phase smooth rotor induction motors using finite element method, Post Graduate, M.PİRGAİP(Student), 1998

ERTAN H. B. , Determination of equivalent circuit parameters of three phase induction machines with finite elements., Post Graduate, A.ÇEKİÇ(Student), 1998

ERTAN H. B. , Design optimization of three-phase induction motors, Post Graduate, S.HAMARAT(Student), 1997

ERTAN H. B. , An investigation on phase angle vector control for three phase induction motors., Doctorate, A.Erbil(Student), 1996

ERTAN H. B. , A Microprocessor based fuzzy controller for an induction heating system, Post Graduate, H.KARABUDAK(Student), 1995

ERTAN H. B. , Asynchronous harmonic torque effects on the torque speed curve of the squirrel cage induction motor, Post Graduate, M.AYAN(Student), 1994

ERTAN H. B. , Zero voltage switching pulse frequency modulated inverter, Post Graduate, S.MUTLU(Student), 1994

ERTAN H. B. , A Compact Pfm controller converter with wide speed range for 3 phase induction motors, Post Graduate, N.BALKAN(Student), 1994

ERTAN H. B. , Computer aided design of single phase capacitor-type induction motors., Post Graduate, M.AFTAHI(Student), 1993

ERTAN H. B. , A Software for predicting quasi stationary characteristics of sr motors, Post Graduate, F.NİAKAN(Student), 1993

ERTAN H. B. , Inverter design for maximum power transfer in induction heating, Post Graduate, M.ATAVI(Student), 1991

ERTAN H. B. , Optimum design of single phase capacitor start motors, Post Graduate, İ.GÜLER(Student), 1990

ERTAN H. B. , Design and spice simulation of a thyristorized medium frequency current fed inverter, Post Graduate, Y.DEMİRTÜRK(Student), 1989

ERTAN H. B. , New algorithms and techniques for microprocessor-controlled PWM induction drives, Doctorate, O.KÜKRER(Student), 1987

ERTAN H. B. , A Mid-point inverter for induction machine speed control, Post Graduate, A.DİNÇER(Student), 1987

ERTAN H. B. , Optimum design of switching reluctance motors., Doctorate, M.Tohumcu(Student), 1985

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

- I. **Real-Time Speed and Position Estimation Using Rotor Slot Harmonics**  
Keysan O., ERTAN H. B.  
IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, vol.9, no.2, pp.899-908, 2013 (Journal Indexed in SCI)
- II. **High-frequency loss calculation in a smooth rotor induction motor using FEM**  
Ertan H. B., Leblebicioglu K., Avenoglu B., Pirgaip M.  
IEEE TRANSACTIONS ON ENERGY CONVERSION, vol.22, no.3, pp.566-575, 2007 (Journal Indexed in SCI)
- III. **Archery performance level and repeatability of event-related EMG**  
Soylu A. R., Ertan H., Korkusuz F.  
HUMAN MOVEMENT SCIENCE, vol.25, no.6, pp.767-774, 2006 (Journal Indexed in SCI)
- IV. **Steady-state modeling of a phase-shift PWM parallel resonant converter**  
Iskender I., Uctug Y., Ertan H. B.  
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- V. **DSP microcontroller-based fuzzy control of a DC/DC parallel resonant converter using phase-shift PWM technique**  
Iskender I., Uctug Y., Ertan H. B.  
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- VI. **Calculation of parameters of single-phase PM motor for design optimization**  
Ertan H., Dag M., Capolino G.  
IEEE TRANSACTIONS ON ENERGY CONVERSION, vol.20, no.3, pp.538-548, 2005 (Journal Indexed in SCI)
- VII. **Reliability and validity testing of an archery chronometer**  
Ertan H., Kentel B., Tumer S., Korkusuz F.  
JOURNAL OF SPORTS SCIENCE AND MEDICINE, vol.4, no.2, pp.95-104, 2005 (Journal Indexed in SCI)
- VIII. **Powder metal development for electrical motor applications**  
Bayramli E., Golgelioglu O., Ertan H.  
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- IX. **Quantification the relationship between FITA scores and EMG skill indexes in archery**  
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- X. **Comparison of PWM and PFM induction drives ID in, egarding audible noise and vibration for household applications**  
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IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.40, no.6, pp.1621-1628, 2004 (Journal Indexed in SCI)
- XI. **Factors affecting the shoulder proprioceptive sense among male volleyball players**  
Kablan N., Ertan H., Unver F., Kirazci S., Korkusuz F.  
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- XII. **Activation patterns in forearm muscles during archery shooting**  
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HUMAN MOVEMENT SCIENCE, vol.22, no.1, pp.37-45, 2003 (Journal Indexed in SCI)
- XIII. **Optimum geometry for torque ripple minimization of switched reluctance motors**  
Sahin F., Ertan H., Leblebicioglu K.  
IEEE TRANSACTIONS ON ENERGY CONVERSION, vol.15, no.1, pp.30-39, 2000 (Journal Indexed in SCI)
- XIV. **Prediction of torque and inductance displacement characteristics of asymmetrically slotted variable-reluctance motors using a simplified model for numerical field solution**  
Ertan H.  
IEEE TRANSACTIONS ON MAGNETICS, vol.35, no.5, pp.4247-4258, 1999 (Journal Indexed in SCI)
- XV. **VARIOUS INDUCTION GENERATOR SCHEMES FOR WIND ELECTRICITY-GENERATION**  
ERMIS M., ERTAN H., DEMIREKLER M., SARIBATIR B., UCTUG Y., SEZER M., CADIRCI I.

## Articles Published in Other Journals

- I. **Analytical Modelling, Simulation and Comparative Study of Multi-Junction Solar Cells Efficiency**  
Hadjdida A., Bourahla M., ERTAN H. B. , Bekhti M.  
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.8, no.4, pp.1824-1832, 2018 (Journal Indexed in ESCI)

## Books & Book Chapters

- I. **Transformers Analysis Design and Measurement**  
ERTAN H. B.  
CRC press, 2012

## Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of the Effects of Switching Technique on the Performance of Four Switch Buck-Boost Bidirectional DC/DC Converters**  
Kocak I., ERTAN H. B.  
International Aegean Conference on Electrical Machines and Power Electronics (ACEMP) / International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), İstanbul, Turkey, 27 - 29 August 2019, pp.395-401
- II. **Integration of Offshore Wind Farm Plants to the Power Grid using an HVDC line Transmission**  
Berkani A., Pourkeivannour S., Negadi K., Boumediene B., Allaoui T., Ertan H. B.  
International Aegean Conference on Electrical Machines and Power Electronics (ACEMP) / International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), İstanbul, Turkey, 27 - 29 August 2019, pp.486-492
- III. **FEM-Based Design Modifications and Efficiency Improvements of a Brushed Permanent Magnet DC Motor**  
Tarvirdilu-Asl R., Zeinali R., ERTAN H. B.  
International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) / Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), Brasov, Romania, 25 - 27 May 2017, pp.401-407
- IV. **Magnetically Geared Direct Drive Wind Generator Thermal Analysis**  
Zeinali R., ERTAN H. B. , Yamali C., Tarvirdilu-Asl R.  
International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) / Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), Brasov, Romania, 25 - 27 May 2017, pp.462-469
- V. **Development of Model for DC Link Filter Design**  
ERTAN H. B. , Kayhan M.  
IEEE Transportation Electrification Conference and Expo (ITEC), Michigan, United States Of America, 27 - 29 June 2016
- VI. **PM brushed DC motor optimization**  
Rasul T., Reza Z., ERTAN H. B. , Yavuz T.  
ISEF, Valencia, Spain, 10 - 12 September 2015
- VII. **Evaluation of a 6 pole axial flux PM motor for Control Moment Gyroscope Application**  
Zeinali R., ERTAN H. B.  
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(ELECTROMOTION), Side, Turkey, 2 - 04 September 2015

- VIII. **Three phase Inverter Speed Control of AC Drives Motor using DSPic microcontroller**  
Dida A. H. , Bourahla M., ERTAN H. B. , Benghanem M., Benzina M. E.  
Int Aegean Conference on Electrical Machines and Power Electronics (ACEMP) / Int Conference on Optimization of Electrical and Electronic Equipment (OPTIM) / Int Symposium on Advanced Electromechanical Motion Systems (ELECTROMOTION), Side, Turkey, 2 - 04 September 2015, pp.93-101
- IX. **Sinus Output 3-Phase Inverter Topology for Improved Drive Efficiency**  
ERTAN H. B. , Sener Y.  
16th International Power Electronics and Motion Control Conference and Exposition (PEMC), Antalya, Turkey, 21 - 24 September 2014, pp.1350-1357
- X. **Design, Development and Implementation of Sensorless Digital Control of an Electric Motorization**  
Dida A. H. , Bourahla M., ERTAN H. B. , Benghanem M.  
16th International Power Electronics and Motion Control Conference and Exposition (PEMC), Antalya, Turkey, 21 - 24 September 2014, pp.482-489
- XI. **Comparison of Outer Rotor Radial Flux and Axial Flux PM Motors for CMG Application**  
ERTAN H. B. , Cagan N.  
International Conference on Electrical Machines (ICEM), Berlin, Germany, 2 - 05 September 2014, pp.1031-1036
- XII. **Implementation issues of real time position estimation for induction motors using rotor slot harmonics**  
ERTAN H. B. , Keysan O.  
2013 4th International Conference on Power Engineering, Energy and Electrical Drives, POWERENG 2013, İstanbul, Turkey, 13 - 17 May 2013, pp.1826-1832
- XIII. **Evaluation of Inductance Measurement Methods for PM Machines**  
ERTAN H. B. , ŞAHİN İ.  
20th International Conference on Electrical Machines (ICEM), Marseille, France, 2 - 05 September 2012, pp.1672-1678
- XIV. **Comparison of Efficiency of Two dc-to-ac Converters for Grid Connected Solar Applications**  
ERTAN H. B. , Dogru E., Yilmaz A.  
13th International Conference on Optimization of Electrical and Electronic Equipment, Brasov, Romania, 24 - 26 May 2012, pp.879-886
- XV. **A Proposal for Improving Efficiency of Inverter Driven Electrical Motors**  
ERTAN H. B. , Dogru E.  
General Meeting of the IEEE-Power-and-Energy-Society (PES), Michigan, United States Of America, 24 - 28 July 2011
- XVI. **Higher Order Rotor Slot Harmonics for Rotor Speed & Position Estimation**  
Keysan O., ERTAN H. B.  
12th International Conference on Optimization of Electrical and Electronic Equipment, Brasov, Romania, 20 - 21 May 2010, pp.416-417
- XVII. **Determination of rotor slot number of an induction motor using an external search coil**  
KEYSAN O., ERTAN H. B.  
16th International Symposium on Electrical Apparatus and Technologies, SIELA 2009, Burgas, Bulgaria, 4 - 06 June 2009, vol.2, pp.141-148
- XVIII. **Performance Calculation of SR Motors for Optimum Design and a Washing Machine Application**  
ERTAN H. B. , Yalciner L. B.  
International Conference on Electrical Machines, Vilamoura, Portugal, 6 - 09 September 2008, pp.2081-2082
- XIX. **Identification of parameters of an induction motor from field solution**  
Ertan H., Leblebicioglu K., Avenoglu B., Ercan B.  
6th International Conference on Electrical Machines and Systems, Beijing, China, 9 - 11 November 2003
- XX. **A new technique for shortening the EMI filter development stage**  
Colak B., Ertan H.  
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**XXI. An induction motor design tool combining analytical and field solution techniques**

Ertan H., Bizkevelci E., Avenoglu B.

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**XXII. A software for simulation and controller development for high frequency high voltage power supplies**

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3rd International Power Electronics and Motion Control Conference (IPEMC 2000), Beijing, China, 15 - 18 August 2000, pp.665-670

**XXIII. A FIELD ORIENTATION SCHEME FOR VOLTAGE FED INDUCTION MOTOR, WITH CLOSED LOOP PHASE ANGLE CONTROL**

NALCACI A., ERTAN H.

5th International Conference on Power Electronics and Variable-Speed Drives (PEVD94), London, Canada, 26 - 28 October 1994, pp.72-77

## **Supported Projects**

ERTAN H. B. , Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

## **Citations**

Total Citations (WOS):310

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