

## Prof. MEHMET AKBABA

### Personal Information

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### Education Information

Doctorate, Karabük Üniversitesi, Mühendislik Fakültesi, Turkey 2012 - Continues

Doctorate, University Of Strathclyde, United Kingdom 1974 - 1977

### Dissertations

Doctorate, Effect of Design Prarameter on Transients in Induction Motors, Karabük Üniversitesi, Mühendislik Fakültesi, 1977

### Academic Titles / Tasks

Professor, Karabük Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2012 - Continues

### Professional Experience

Rector's Advisor, Karabük Üniversitesi, Rektörlük, 2015 - Continues

Head of Department, Karabük Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2014 - Continues

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

- I. **Switched-capacitor converter for PV modules under partial shading and mismatch conditions**  
GÖKDAĞ M., AKBABA M., GÜLBUDAK O.  
SOLAR ENERGY, vol.170, pp.723-731, 2018 (Journal Indexed in SCI)
- II. **Detection of the space harmonics of the shaded pole induction motor**  
Dalcali A., AKBABA M.  
JOURNAL OF ENGINEERING RESEARCH, vol.5, pp.95-105, 2017 (Journal Indexed in SCI)
- III. **Comparison of the performance of bridge and bridgeless shaded pole induction motors using FEM**  
Dalcali A., AKBABA M.  
INTERNATIONAL JOURNAL OF APPLIED ELECTROMAGNETICS AND MECHANICS, vol.54, pp.341-350, 2017  
(Journal Indexed in SCI)
- IV. **A novel PV sub-module-level power-balancing topology for maximum power point tracking under partial shading and mismatch conditions**  
GÖKDAĞ M., AKBABA M.  
FRONTIERS OF INFORMATION TECHNOLOGY & ELECTRONIC ENGINEERING, vol.17, pp.1388-1396, 2016 (Journal Indexed in SCI)
- V. **Development of a new microcontroller based MPPT method for photovoltaic generators using Akbaba model with implementation and simulation**

Goksenli N., AKBABA M.

SOLAR ENERGY, vol.136, pp.622-628, 2016 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Determination of the effects of operating conditions on the output power of the inverter and the power quality using an artificial neural network**  
YILMAZ M., KAYABAŞI E., AKBABA M.  
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.22, pp.1068-1076, 2019 (Journal Indexed in ESCI)
- II. **A Detailed Study for the Determination of Phase Inductances of a Shaded-Pole Induction Motor with Variable Air Gap**  
DALCALI A., AKBABA M., ÇELİK E.  
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.7, pp.279-290, 2019 (Refereed Journals of Other Institutions)
- III. **Değişken hava aralıklı gölge kutuplu asenkron motorun faz endüktanslarının tespitine yönelik detaylı bir çalışma**  
AKBABA M., DALCALI A., ÇELİK E.  
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.7, pp.279-290, 2019 (Refereed Journals of Other Institutions)
- IV. **Torque Analysis of Shaded Pole Induction Motors Considering SpaceHarmonics Effect**  
DALCALI A., AKBABA M.  
Electronic Letters on ScienceEngineering, vol.14, pp.27-34, 2018 (Refereed Journals of Other Institutions)
- V. **A study on performance increasing in SSVEP based BCI application**  
Erkan E., AKBABA M.  
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.21, pp.421-427, 2018 (Journal Indexed in ESCI)
- VI. **FEM Study of the Effects of Geometric Changes on the Variable Reluctance Shaded-Pole Motors Performance**  
DALCALI A., AKBABA M.  
International Journal of Computing, Communication and Instrumentation Engineering, vol.4, pp.36-39, 2017 (Refereed Journals of Other Institutions)
- VII. **Analysis of space harmonics in shaded pole induction motor by discrete hartley transform**  
DALCALI A., AKBABA M.  
International Journal of Industrial Electronics and Electrical Engineering, vol.5, pp.1-4, 2017 (Refereed Journals of Other Institutions)
- VIII. **Comparison of 2D and 3D magnetic field analysis of single-phase shaded pole induction motors**  
Dalcali A., AKBABA M.  
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.19, pp.1-7, 2016 (Journal Indexed in ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Kinect Calibration and Data Optimization For Anthropometric Parameters**  
GÖKMEN M. S., AKBABA M., FINDIK O.  
International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES'18), Karabük, Turkey, 11 - 13 May 2018, vol.1, pp.791-796
- II. **Modeling and Simulation of Complex Mechanical Systems Using Electrical Circuit Analog**  
AKBABA M., DALCALI A., GÖKDAĞ M.

International Conference on Advanced Technologies, Computer Engineering and Science, Karabük, Turkey, 11 - 13 May 2018, pp.630-634

- III. **3-D Modeling and Analysis of Shaded Pole Motors Using Finite Elements Method**  
DALCALI A., AKBABA M.  
International Conference on Advanced Technologies, Computer Engineering and Science, Karabük, Turkey, 11 - 13 May 2018, pp.635-638
- IV. **A Study on BCI Speller Design and Analysis of Signal Window Length**  
ERKAN E., AKBABA M.  
International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES), 16 May 2018
- V. **Transient Analysis of DC-DC Power Supplies**  
AKBABA M., GÖKDAĞ M.  
INTERNATIONAL CONFERENCE ON MATHEMATICS AND ENGINEERING, 10 - 12 May 2017
- VI. **Mode Identification in 3-Phase DC Drives**  
AKBABA M.  
INTERNATIONAL CONFERENCE ON MATHEMATICS AND ENGINEERING, 10 May 2017
- VII. **Fotovoltaic Jeneratörler İçin Akbaba Modeli Kullanılarak Yeni Bir Mikrodenetleyici Tabanlı MPPT Yönteminin Geliştirilmesi**  
GÖKŞENLİ N., AKBABA M.  
Elektrik Elektronik Mühendisleri Kongresi, EMKON 2017, 12 - 14 August 2017
- VIII. **Analysis of space harmonics in shaded pole induction motor by discrete hartley transform**  
DALCALI A., AKBABA M.  
50th International Conference on Science, Engineering Technology, Tallinn, Estonia, 18 - 19 July 2017
- IX. **Improving the Energy Efficiency in Iron and Steel Industry by Electric Motor Retrofit**  
AKBABA M.  
3rd International Iron and Steel Symposium (IJDCS'xx17), 3 - 05 April 2017
- X. **FEM Study of the Effects of Geometric Changes on the Variable Reluctance Shaded-Pole Motors Performance**  
DALCALI A., AKBABA M.  
6th PARIS International Conference on "Recent Trends in Engineering and Technology", Paris, France, 25 - 26 April 2017
- XI. **FEM Analysis of the Effect of Geometric Changes on the Variable Reluctance Shaded-Pole Motors Performance**  
DALCALI A., AKBABA M.  
6th PARIS International Conference on Recent Trends in Engineering and Technology (ICSET) Paris France, 25 - 26 April 2017
- XII. **Şebekeden Bağımsız Çalışan Sincap Kafesli Bir Asenkron Generatörün Sürekli ve Geçici Durum Analizi**  
YILMAZ M., ALTINKAYA H., AKBABA M.  
4th International Symposium on Innovative Technologies in Engineering and Science, Antalya, Turkey, 3 - 05 November 2016, vol.1, no.1, pp.393-402
- XIII. **Uzaktan Eğitim Öğrencilerine yönelik çevrimiçi mantık devreleri laboratuvarı**  
Muti M. H. , AKBABA M., DURGUT R.  
EPRA INTERNATIONAL CONGRESSES ON EDUCATION 2016, 2 - 04 June 2016
- XIV. **A Novel Switched-Capacitor Topology for Sub-module Level Maximum Power Point Tracking under Partial Shading and Mismatch Conditions**  
GÖKDAĞ M., AKBABA M.  
6th International Conference on Modeling, Simulation, and Applied Optimization (ICMSAO), İstanbul, Turkey, 27 - 29 May 2015
- XV. **An Active Battery Cell Balancing Topology without Using External Energy Storage Elements**  
GÖKDAĞ M., AKBABA M.  
6th International Conference on Modeling, Simulation, and Applied Optimization (ICMSAO), İstanbul, Turkey, 27 -

29 May 2015

- XVI. **Implementation of Differential Power Processing Concept to Switched-Capacitor Topology for PV Sub-module Level Power Balancing**  
GÖKDAĞ M., AKBABA M.  
9th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 26 - 28 November 2015, pp.660-664
- XVII. **A Simple-Novel Indirect Algorithm for Tracking Maximum Power Under Rapid or Slow Irradiation and Temperature Changes**  
GÖKDAĞ M., AKBABA M.  
3rd THE INTERNATIONAL CONFERENCE on RENEWABLE ENERGY RESEARCH and APPLICATIONS (ICRERA), Wisconsin, United States Of America, 19 - 22 October 2014, pp.680-683
- XVIII. **Optimization of the performance of solar powered permanent magnet dc drives**  
AKBABA M.  
International Conference on Electrical Machines and Power Electronics, ACEMPT'xx07, MIT, USA, 15 - 17 September 2007
- XIX. **Dynamic performance photovoltaic-boost converter powered DC motor pump system**  
AKBABA M.  
IEMDC 201 IEEE INTERNATIONAL ELECTRIC MACHINES AND DRIVE CONERENCE, BOSTON, United States Of America, 28 - 30 September 2001

## Supported Projects

AKBABA M., GÖKMEN M. S. , Project Supported by Higher Education Institutions, Dinamik ve Antropometrik Parametreler Kullanılarak Yürüyüş Özelliklerinin Çıkarılması ve Kimlik Tespiti, 2017 - 2019

AKBABA M., Project Supported by Higher Education Institutions, YENİ BİR MAKSİMUM GÜÇ NOKTASI İZLEME METODU İÇEREN GÜNEŞ PV SİSTEMİ, 2014 - 2016

## Citations

Total Citations (WOS):18

h-index (WOS):3