

# **Dr.Öğr.Üyesi Yusuf Yaşa**

## **Kişisel Bilgiler**

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## **Uluslararası Araştırmacı ID'leri**

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## **Biyografi**

Yusuf Yasa received the B.Sc. degree in electrical engineering, and the M.S. and Ph.D. degrees in electric machinery and power electronics from the Department of Electrical Engineering, Yıldız Technical University, Istanbul, Turkey, in 2010, 2013, and 2018, respectively. He is an Assistant Professor with Istanbul Technical University, Turkey. His research interests include design, modeling and control of electrical machines and power electronics, variable speed wind generators, and electric vehicles.

## **Eğitim Bilgileri**

Doktora, Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye 2013 - 2018

Yüksek Lisans, Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye 2010 - 2013

Lisans, Yıldız Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Türkiye 2006 - 2010

## **Araştırma Alanları**

Elektrik Makineleri Kuramı ve Tasarımı, Elektrik Motoru Sürücüler, Güç Çevirgeçleri

## **Akademik Unvanlar / Görevler**

Dr.Öğr.Üyesi, İstanbul Teknik Üniversitesi, Elektrik-Elektronik, Elektrik Mühendisliği, 2022 - Devam Ediyor

## **Akademik İdari Deneyim**

Uygulama ve Araştırma Merkezi Müdürü, Bursa Teknik Üniversitesi, Rektörlük, 2021 - 2022

## **Yönetilen Tezler**

Yaşa Y., BATARYA SOĞUTMA PERFORMANSINI İYİLEŞTİRMEK İÇİN ALÜMİNYUM FİN YAPı İÇERİSİNDE GRAFEN KATKILI

## **SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler**

- I. **Acoustic Noise Mitigation of Switched Reluctance Machines with Leaf Springs**  
Yasa Y., Sozer Y., Garip M.  
IEEE Transactions on Industrial Electronics, cilt.70, sa.2, ss.1250-1260, 2023 (SCI-Expanded)
- II. **Consideration of graphene material in PCM with aluminum fin structure for improving the battery cooling performance**  
Aslan E., Aydin Y., Yaşa Y.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.46, sa.8, ss.10758-10769, 2022 (SCI-Expanded)
- III. **Acoustic Noise Mitigation in High Pole Count Switched Reluctance Machines Utilizing Skewing Method on Stator and Rotor Poles**  
Gundogmus O., Das S., Yaşa Y., Elamin M., Sozer Y., Kutz J., Tylenda J., Wright R. L.  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, cilt.69, sa.6, ss.5581-5593, 2022 (SCI-Expanded)
- IV. **Sensorless Control of Synchronous Reluctance Motor Based on Active Flux Vector and Extended Kalman Filter**  
Cebeci E., Yaşa Y.  
JOURNAL OF ELECTRICAL ENGINEERING & TECHNOLOGY, cilt.17, sa.2, ss.1207-1215, 2022 (SCI-Expanded)
- V. **Acoustic Noise Mitigation of Switched Reluctance Machines With Windows on Stator and Rotor Poles**  
Gundogmus O., Elamin M., Yasa Y., Husain T., Sozer Y., Kutz J., Tylenda J., Wright R. L.  
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, cilt.56, sa.4, ss.3719-3730, 2020 (SCI-Expanded)
- VI. **Unbalanced distributed and balanced concentrated winding comparison in servo motor applications**  
Mese E., Yasa Y., Ertugrul B. T., Sincar E.  
ELECTRIC POWER SYSTEMS RESEARCH, cilt.156, ss.64-74, 2018 (SCI-Expanded)
- VII. **High-speed switched reluctance machine: natural frequency calculation and acoustic noise prediction**  
Yasa Y., Sozer Y., GARİP M.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.26, sa.2, ss.999-1010, 2018 (SCI-Expanded)
- VIII. **Loss analysis of high speed switched reluctance machine with integrated simulation methods**  
Yasa Y., Sozer Y., GARİP M.  
INTERNATIONAL JOURNAL OF APPLIED ELECTROMAGNETICS AND MECHANICS, cilt.56, sa.3, ss.479-497, 2018 (SCI-Expanded)
- IX. **High-power density switched reluctance machine development for high-speed spindle applications**  
Yasa Y., Sozer Y., GARİP M.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.26, sa.3, ss.1572-1586, 2018 (SCI-Expanded)
- X. **A multidisciplinary design approach for electromagnetic brakes**  
Yaşa Y., Sincar E., Ertugrul B. T., Mese E.  
Electric Power Systems Research, cilt.141, ss.165-178, 2016 (SCI-Expanded)
- XI. **Investigating operating modes and converter options of dual winding permanent magnet synchronous machines for hybrid electric vehicles**  
Mese E., Yaşa Y., AKÇA H., AYDENİZ M. G., GARİP M.  
IEEE Transactions on Energy Conversion, cilt.30, sa.1, ss.285-295, 2015 (SCI-Expanded)

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **An Unscented Kalman Filter Design on Rotating Reference Frame For Induction Machines**

- Cebeci E., Yasa Y.  
6th International Conference on Electric Power and Energy Conversion Systems (EPECS), ELECTR NETWORK, 5 - 06 Ekim 2020, ss.146-150
- II. **Design of Outer Runner-Type Brushless Permanent Magnet DC Motor for Lightweight E-Vehicles**  
Garip S., Yasa Y.  
6th International Conference on Electric Power and Energy Conversion Systems (EPECS), ELECTR NETWORK, 5 - 06 Ekim 2020, ss.151-156
- III. **A Review on the Battery State of Charge Estimation Methods for Electric Vehicle Battery Management Systems**  
Aslan E., Yasa Y.  
11th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Türkiye, 28 - 30 Kasım 2019, ss.281-285
- IV. **Acoustic Noise Mitigation of Switched Reluctance Machines with Windows in Both Stator and Rotor Poles**  
Elamin M., Yasa Y., Gundogmus O., Sozer Y., Kutz J., Tylenda J., Wright R. L.  
33rd Annual IEEE Applied Power Electronics Conference and Exposition (APEC), San-Antonio, Kuzey Mariana Adaları, 4 - 08 Mart 2018, ss.1205-1210
- V. **Acoustic noise mitigation for high pole count switched reluctance machines through skewing method with multiphysics FEA simulations**  
Yaşa Y., Elamin M., Sozer Y., Kutz J., Tylenda J. S., Wright R. L.  
9th Annual IEEE Energy Conversion Congress and Exposition, ECCE 2017, Ohio, Amerika Birleşik Devletleri, 1 - 05 Ekim 2017, cilt.2017-January, ss.738-744
- VI. **Effects of windows in stator and rotor poles of switched reluctance motors in reducing noise and vibration**  
Elamin M., Yaşa Y., Sozer Y., Kutz J., Tylenda J., Wright R. L.  
2017 IEEE International Electric Machines and Drives Conference, IEMDC 2017, Florida, Amerika Birleşik Devletleri, 21 - 24 Mayıs 2017
- VII. **Performance improvement of the delta-connected SRM driven by a standard three phase inverter**  
Elamin M., Yaşa Y., Elrayyah A., Sozer Y.  
2017 IEEE International Electric Machines and Drives Conference, IEMDC 2017, Florida, Amerika Birleşik Devletleri, 21 - 24 Mayıs 2017
- VIII. **Effect of distributed airgap in the stator for acoustic noise reduction in switched reluctance motors**  
Yaşa Y., Tekgun D., Sozer Y., Kutz J., Tylenda J.  
32nd Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2017, Florida, Amerika Birleşik Devletleri, 26 - 30 Mart 2017, ss.633-639
- IX. **The development of DC-DC buck converter with practical design methods PratiK tasarımlarıyla dusurucu Tip DA-DA dönüştürücünün geliştirilmesi**  
Cebeci E., Yaşa Y.  
2016 National Conference on Electrical, Electronics and Biomedical Engineering, ELECO 2016, Bursa, Türkiye, 1 - 03 Aralık 2016, ss.691-695
- X. **Investigation of power distribution on an axial fan**  
Hashim H. M., Yaşa Y., Dogruoz M. B., Arik M., Mese E.  
15th InterSociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, ITHERM 2016, Nevada, Amerika Birleşik Devletleri, 31 Mayıs - 03 Haziran 2016, ss.160-167
- XI. **Comparison of SVPWM, SPWM and HCC control techniques in power control of PMSG used in wind turbine systems**  
Ting N. S., Yaşa Y., Aksoy I., ŞAHİN Y.  
1st Joint International Aegean Conference on Electrical Machines and Power Electronics, ACEMP 2015, International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2015 and International Symposium on Advanced Electromechanical Motion Systems, ELECTROMOTION 2015, Side, Türkiye, 2 - 04 Eylül 2015, ss.69-74

- XII. **Design of a high performance servo motor for low speed high torque application**  
Mese E., Yaşa Y., Ertugrul B. T., Sincar E.  
21st International Conference on Electrical Machines, ICEM 2014, Berlin, Almanya, 2 - 05 Eylül 2014, ss.2014-2020
- XIII. **Thermal management of power LED system**  
AKÇA H., Yaşa Y., AYAZ R., DURUSU A., AJDER A., NAKİR İ., Tanrioven M.  
3rd International Conference on Renewable Energy Research and Applications, ICRERA 2014, Wisconsin, Amerika Birleşik Devletleri, 19 - 22 Ekim 2014, ss.760-764
- XIV. **Design and analysis of generator and converters for outer rotor direct drive gearless small-scale wind turbines**  
Yaşa Y., Mese E.  
3rd International Conference on Renewable Energy Research and Applications, ICRERA 2014, Wisconsin, Amerika Birleşik Devletleri, 19 - 22 Ekim 2014, ss.689-694
- XV. **Design considerations of electromagnetic brakes for servo applications**  
Yaşa Y., Sincar E., Ertugrul B. T., Mese E.  
2014 IEEE 23rd International Symposium on Industrial Electronics, ISIE 2014, İstanbul, Türkiye, 1 - 04 Haziran 2014, ss.768-774
- XVI. **Harmonic analysis of doubly fed induction generator based utility interactive wind turbine systems during fault conditions**  
Yaşa Y., Sozer Y., Mese E.  
5th Annual IEEE Energy Conversion Congress and Exhibition, ECCE 2013, Denver, CO, Amerika Birleşik Devletleri, 15 - 19 Eylül 2013, ss.2270-2276
- XVII. **Analysis of doubly fed induction generator wind turbine system during one phase-to-ground fault**  
Yaşa Y., Isen E., Sozer Y., Mese E., Gurleyen H.  
2013 15th European Conference on Power Electronics and Applications, EPE 2013, Lille, Fransa, 2 - 06 Eylül 2013
- XVIII. **Fault ride through of DFIG-based wind turbine with saturable transformer model**  
Gurleyen H., Mese E., Yaşa Y.  
2013 15th European Conference on Power Electronics and Applications, EPE 2013, Lille, Fransa, 2 - 06 Eylül 2013
- XIX. **Comparative design of direct drive PM synchronous motors in gearless elevator systems**  
Yetiş H., Boztepeli H., Yaşa Y., Meşe E.  
2013 3rd International Conference on Electric Power and Energy Conversion Systems, EPECS 2013, İstanbul, Türkiye, 2 - 04 Ekim 2013
- XX. **Investigating converter options for automotive grade permanent magnet synchronous generators**  
Mese E., Yaşa Y., AKÇA H., AYDENİZ M. G., AYAZ M., Tezcan M.  
2013 3rd International Conference on Electric Power and Energy Conversion Systems, EPECS 2013, İstanbul, Türkiye, 2 - 04 Ekim 2013
- XXI. **Servo motor driver design for high performance applications**  
Yaşa Y., Sahin E., Acar C., Gozutok A., Firat E., Mese E.  
2013 3rd International Conference on Electric Power and Energy Conversion Systems, EPECS 2013, İstanbul, Türkiye, 2 - 04 Ekim 2013
- XXII. **Unbalanced fault analysis of doubly fed induction generator drive system for wind turbine applications**  
Yaşa Y., Sozer Y., Mese E.  
28th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2013, Long Beach, CA, Amerika Birleşik Devletleri, 17 - 21 Mart 2013, ss.2953-2960
- XXIII. **A new electric accessory drive system for hybrid electric vehicles**  
Mese E., Yaşa Y., AKÇA H., AYDENİZ M. G., GARİP M.  
4th Annual IEEE Energy Conversion Congress and Exposition, ECCE 2012, Raleigh, NC, Amerika Birleşik Devletleri, 15 - 20 Eylül 2012, ss.1909-1916
- XXIV. **Design considerations for dual winding permanent magnet synchronous machines**  
Mese E., Tezcan M., AYAZ M., Yaşa Y., YILMAZ K.  
4th Annual IEEE Energy Conversion Congress and Exposition, ECCE 2012, Raleigh, NC, Amerika Birleşik Devletleri,

15 - 20 Eylül 2012, ss.1894-1901

**Patent**

Yaşa Y., ACOUSTIC NOISE MITIGATION SYSTEM FOR AN ELECTRIC MACHINE, Patent, BÖLÜM H Elektrik, Buluşun Tescil No: 11233445 , Standart Tescil, 2022