

Prof. SAFFET AYASUN

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Drexel University, Elektrik-Bilgisayar Mühendisliği, United States Of America 1997 - 2002

Postgraduate, Drexel University, Mühendislik Fakültesi Elektrik Mühendisliği, United States Of America 1995 - 1998

Undergraduate, Gazi University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1984 - 1989

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Singularity analysis of differential-algebraic power system models, Drexel University, Elektrik-Bilgisayar Mühendisliği, 2002

Postgraduate, INVESTIGATION OF INTER-AREA AVAILABLE TRANSFER CAPABILITY, Drexel University, Mühendislik Fakültesi Elektrik Mühendisliği, 1998

Research Areas

Power System Analysis, Electric Power Transmission, Distribution and Protection, Renewable energy

Academic Titles / Tasks

Professor, Gazi University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği, 2019 - Continues

Professor, Nigde Omer Halisdemir University, Faculty Of Engineering, Department Of Electrical And Electronic Engineering, 2014 - 2019

Associate Professor, Nigde Omer Halisdemir University, Faculty Of Engineering, Department Of Electrical And Electronic Engineering, 2009 - 2014

Assistant Professor, Nigde Omer Halisdemir University, Faculty Of Engineering, Department Of Electrical And Electronic Engineering, 2004 - 2009

Research Assistant, Nigde Omer Halisdemir University, Faculty Of Engineering, Department Of Electrical And Electronic Engineering, 1994 - 2004

Academic and Administrative Experience

Nigde Omer Halisdemir University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2018 - 2019

Nigde Omer Halisdemir University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2009 - 2019

Nigde Omer Halisdemir University, Yabancı Diller Yüksekokulu, 2014 - 2018

Nigde Omer Halisdemir University, Yabancı Diller Yüksekokulu, 2011 - 2014

Courses

Control Systems I, Undergraduate, 2021 - 2022

Control Systems I, Undergraduate, 2020 - 2021

Circuit Theory I, Undergraduate, 2020 - 2021

Linear System Theory in Engineering, Doctorate, 2020 - 2021

Advising Theses

AYASUN S., Delay-Dependent Stability Analysis Of A Two-Area Load Frequency Control System With Electric Vehicles And Dynamic Demand Control, Postgraduate, B.TEK(Student), 2021

AYASUN S., Kesir dereceli PI kontrolör içeren zaman gecikmeli jeneratör uyarma kontrol sisteminin kararlılık analizi, Postgraduate, K.GÖKBULUT(Student), 2019

AYASUN S., Doğru akım motor hız kontrolü için kesirli dereceli PI denetleyici tasarımı ve zaman gecikmesine bağlı kararlılık analizi, Postgraduate, R.BOLAT(Student), 2019

AYASUN S., Ağ üzerinden kontrol edilen haberleşme zaman gecikmeli güç elektroniği çeviricilerinin kararlılık analizi, Postgraduate, A.SARI(Student), 2018

AYASUN S., deneme, Postgraduate, H.GÜNDÜZ(Student), 2018

AYASUN S., Kesirli dereceli kontrolör içeren zaman gecikmeli yük frekans kontrol sistemlerinin kararlılık analizi, Postgraduate, S.HORZUM(Student), 2018

AYASUN S., Zaman gecikmeli mikro şebekelerin kazanç ve faz payı tabanlı kararlılık analizi, Postgraduate, H.GÜNDÜZ(Student), 2017

AYASUN S., Zaman gecikmeli elektrik güç sistemlerinin kararlılık analizi, Doctorate, Ş.SÖNMEZ(Student), 2017

AYASUN S., Yenilenebilir enerji kaynakları içeren zaman gecikmeli yük frekans kontrol sisteminin kararlılık analizi, Postgraduate, H.SEZER(Student), 2016

AYASUN S., Zaman gecikmeli büyük güçlü rüzgâr türbinleri kanat açılı kontrol sisteminin kararlılık analizi, Postgraduate, Ö.TÜRKSOY(Student), 2016

AYASUN S., Haberleşme gecikmesi içeren yük frekans kontrol sistemlerinin kararlı olacağı maksimum zaman gecikme değerlerinin hesaplanması, Postgraduate, Ş.SÖNMEZ(Student), 2013

AYASUN S., Haberleşme gecikmelerinin jeneratör uyarma kontrol sistem kararlılığına olan etkilerinin üstel terimlerin yok edilmesi yöntemi ile araştırılması, Postgraduate, A.DOĞAN(Student), 2012

AYASUN S., Niğde ili merkezinde bulunan dağıtım trafolarının enerji kalitesinin araştırılması, Postgraduate, M.BİTİM(Student), 2012

AYASUN S., Haberleşme gecikmelerinin yük frekans ve jeneratör uyarma kontrol sistemlerinin kararlılığına olan etkilerinin araştırılması, Postgraduate, H.YILDIZ(Student), 2011

AYASUN S., Nevşehir bölgesi elektrik dağıtım şebekesinin güvenilirlik analizi, Postgraduate, E.ÜÇKARDEŞ(Student), 2010

AYASUN S., Elektrik cihazlarının testi için geliştirilen benzetim uyarım arayüzünün modellenmesi ve kararlılık analizi, Postgraduate, D.ÇADIRLI(Student), 2006

AYASUN S., Elektrik makineleri deneylerinin bilgisayar modellerinin matlab/simulink kullanılarak gerçekleştirilmesi, Postgraduate, G.KARBAYAZ(Student), 2006

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Impact of virtual inertia and damping control on stability delay margins of load frequency control systems with renewable energy sources**
Hasen S. A., AYDIN Ö., AYASUN S., Sönmez Ş.
ELECTRICAL ENGINEERING, vol.106, no.1, pp.323-341, 2024 (SCI-Expanded)
- II. **Robust stability region analysis of time-delayed load frequency control systems with EVs aggregator using Kharitonov theorem**
Naveed A., Sönmez Ş., AYASUN S., Iqbal S., Zeinoddini-Meymand H., Kamel S.
IET Generation, Transmission and Distribution, vol.17, no.19, pp.4386-4398, 2023 (SCI-Expanded)
- III. **Delay-Dependent Stability Analysis of Multi Area LFC-EVs System**
Sari A., Sonmez S., AYASUN S., Kabalci Y.
IEEE Transactions on Smart Grid, vol.14, no.3, pp.2178-2188, 2023 (SCI-Expanded)
- IV. **Enhancement of Stability Region by Virtual Inertia and Damping Control for Micro-Grids with Communication Time Delay**
Hasen S. A., SÖNMEZ Ş., AYASUN S.
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF ELECTRICAL ENGINEERING, vol.47, no.1, pp.177-191, 2023 (SCI-Expanded)
- V. **Stability delay margin computation of multi-area load frequency control system with electric vehicle using critical eigenvalue tracing method**
AYDIN Ö., Sönmez Ş., AYASUN S.
Transactions of the Institute of Measurement and Control, vol.45, no.5, pp.874-885, 2023 (SCI-Expanded)
- VI. **Computation of stability regions for time-delayed two-area load frequency control system including dynamic demand response Dinamik talep cevabı içeren zaman gecikmeli iki bölgesi yük frekans kontrol sistemlerinin kararlılık bölgelerinin hesaplanması**
Katipoğlu D., Sönmez Ş., AYASUN S.
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.39, no.1, pp.431-442, 2023 (SCI-Expanded)
- VII. **The Effect of Virtual Inertia and Damping Control on the Stability Region of Load Frequency Control Systems with Time Delays**
Hasen S., AYDIN Ö., AYASUN S., Sönmez Ş.
Electric Power Components and Systems, vol.51, no.5, pp.438-451, 2023 (SCI-Expanded)
- VIII. **Determination of stability delay margins for multi-area load frequency control systems with incommensurate time delays through eigenvalue tracing method**
AYDIN Ö., SÖNMEZ Ş., AYASUN S.
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.137, 2022 (SCI-Expanded)
- IX. **Identification of gain and phase margins based robust stability regions for a time-delayed micro-grid system including fractional-order controller in presence of renewable power generation**
Gunduz H., SÖNMEZ Ş., AYASUN S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.3, pp.1097-1115, 2022 (SCI-Expanded)
- X. **Inserting of heuristic techniques into the stability regions for multiarea load frequency control systems with time delays**
SAKA M., SÖNMEZ Ş., EKE İ., Gozde H., TAPLAMACIOĞLU M. C., AYASUN S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.6, pp.2286-2305, 2022 (SCI-Expanded)
- XI. **Stability regions in time delayed two-area LFC system enhanced by EVs**
Naveed A., Sonmez S., AYASUN S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.1, pp.249-263, 2022 (SCI-Expanded)
- XII. **Impact of participation ratios on the stability delay margins computed by direct method for multiple-area load frequency control systems with demand response**
KATİPOĞLU D., Sonmez S., AYASUN S., Naveed A.

AUTOMATIKA, vol.63, no.1, pp.185-197, 2022 (SCI-Expanded)

- XIII. **Enhancement of stability delay margins by virtual inertia control for microgrids with time delay**
Hasen S. A., SÖNMEZ Ş., AYASUN S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.6, pp.2221-2238, 2022 (SCI-Expanded)
- XIV. **Impact of electric vehicles aggregators with communication delays on stability delay margins of two-area load frequency control system**
Naveed A., Sonmez S., AYASUN S.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.43, no.12, pp.2860-2871, 2021 (SCI-Expanded)
- XV. **Impact of Electric Vehicle Aggregator with Communication Time Delay on Stability Regions and Stability Delay Margins in Load Frequency Control System**
Naveed A., Sonmez S., Ayasun S.
JOURNAL OF MODERN POWER SYSTEMS AND CLEAN ENERGY, vol.9, no.3, pp.595-601, 2021 (SCI-Expanded)
- XVI. **Impact of load sharing schemes on the stability delay margins computed by Rekasius substitution method in load frequency control system with electric vehicles aggregator**
Naveed A., Sonmez S., AYASUN S.
INTERNATIONAL TRANSACTIONS ON ELECTRICAL ENERGY SYSTEMS, vol.31, no.5, 2021 (SCI-Expanded)
- XVII. **GAIN-PHASE MARGINS BASED STABILITY ANALYSIS OF TIME DELAYED HYBRID LOAD FREQUENCY CONTROL SYSTEM**
EROL H., AYASUN S.
REVUE ROUMAINE DES SCIENCES TECHNIQUES-SERIE ELECTROTECHNIQUE ET ENERGETIQUE, vol.66, no.2, pp.119-124, 2021 (SCI-Expanded)
- XVIII. **The effect of demand response control on stability delay margins of load frequency control systems with communication time-delays**
Katipoglu D., Sonmez S., AYASUN S., Naveed A.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.29, no.3, pp.1383-1401, 2021 (SCI-Expanded)
- XIX. **Computation of Robust PI-Based Pitch Controller Parameters for Large Wind Turbines**
Turksoy O., Ayasun S., Hames Y., Sonmez S.
CANADIAN JOURNAL OF ELECTRICAL AND COMPUTER ENGINEERING-REVUE CANADIENNE DE GENIE ELECTRIQUE ET INFORMATIQUE, vol.43, no.1, pp.57-63, 2020 (SCI-Expanded)
- XX. **Gain-phase margins-based delay-dependent stability analysis of pitch control system of large wind turbines**
Turksoy O., Ayasun S., Hames Y., Sonmez S.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.41, no.13, pp.3626-3636, 2019 (SCI-Expanded)
- XXI. **Gain and phase margins-based delay margin computation of load frequency control systems using Rekasius substitution**
Sonmez S., Ayasun S.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.41, no.12, pp.3385-3395, 2019 (SCI-Expanded)
- XXII. **Gain and phase margins based stability analysis of micro grid systems with time delay by using Rekasius substitution**
Gunduz H., Ayasun S., Sonmez S.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, no.1, pp.553-567, 2019 (SCI-Expanded)
- XXIII. **Gain and phase margin based stability analysis of time delayed single area load frequency control system with fractional order PI controller**
Sonmez S., Ayasun S.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, no.2, pp.946-959,

2019 (SCI-Expanded)

- XXIV. **Gain and phase margins based delay-dependent stability analysis of single-area load frequency control system with constant communication time delay**
Sonmez S., Ayasun S.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.40, no.5, pp.1701-1710, 2018 (SCI-Expanded)
- XXV. **Computation of PI Controllers Ensuring Desired Gain and Phase Margins for Two-Area Load Frequency Control System with Communication Time Delays**
Sonmez S., Ayasun S.
ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.46, no.8, pp.938-947, 2018 (SCI-Expanded)
- XXVI. **Comprehensive gain and phase margins based stability analysis of micro-grid frequency control system with constant communication time delays**
Guenduez H., Soenmez S., Ayasun S.
IET GENERATION TRANSMISSION & DISTRIBUTION, vol.11, no.3, pp.719-729, 2017 (SCI-Expanded)
- XXVII. **An Exact Method for Computing Delay Margin for Stability of Load Frequency Control Systems With Constant Communication Delays**
Sonmez S., Ayasun S., Nwankpa C. O.
IEEE TRANSACTIONS ON POWER SYSTEMS, vol.31, no.1, pp.370-377, 2016 (SCI-Expanded)
- XXVIII. **Stability Region in the Parameter Space of PI Controller for a Single-Area Load Frequency Control System With Time Delay**
Sonmez S., Ayasun S.
IEEE TRANSACTIONS ON POWER SYSTEMS, vol.31, no.1, pp.829-830, 2016 (SCI-Expanded)
- XXIX. **Effect of load increase and power system stabilizer on stability delay margin of a generator excitation control system**
Sonmez S., Ayasun S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, no.6, pp.5183-5195, 2016 (SCI-Expanded)
- XXX. **Modeling and Design Optimization of Variable-Speed Wind Turbine Systems**
Eminoglu U., Ayasun S.
ENERGIES, vol.7, no.1, pp.402-419, 2014 (SCI-Expanded)
- XXXI. **Computation of Stability Delay Margin of Time-Delayed Generator Excitation Control System with a Stabilizing Transformer**
Ayasun S., Eminoglu U., Sonmez S.
MATHEMATICAL PROBLEMS IN ENGINEERING, vol.2014, 2014 (SCI-Expanded)
- XXXII. **Stability analysis of time-delayed DC motor speed control system**
Ayasun S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.21, no.2, pp.381-393, 2013 (SCI-Expanded)
- XXXIII. **A Comprehensive Review and Adequacy Evaluation of Voltage Stability Indices for Modern Distribution Systems**
Eminoglu U., Hocaoglu M. H., Ayasun S.
INTERNATIONAL REVIEW OF ELECTRICAL ENGINEERING-IREE, vol.5, no.2, pp.698-708, 2010 (SCI-Expanded)
- XXXIV. **Probabilistic Evaluation of Small-Signal Stability of Power Systems with Time Delays**
Ayasun S., Nwankpa C. O.
INTERNATIONAL REVIEW OF ELECTRICAL ENGINEERING-IREE, vol.5, no.1, pp.205-216, 2010 (SCI-Expanded)
- XXXV. **Stability analysis of a generator excitation control system with time delays**
Ayasun S., Gelen A.
ELECTRICAL ENGINEERING, vol.91, no.6, pp.347-355, 2010 (SCI-Expanded)
- XXXVI. **Computation of time delay margin for power system small-signal stability**
Ayasun S.
EUROPEAN TRANSACTIONS ON ELECTRICAL POWER, vol.19, no.7, pp.949-968, 2009 (SCI-Expanded)

- XXXVII. **Realization of Power Electronic Converter Based DC Motor Speed Control Methods Using MATLAB/Simulink**
 Gelen A., Ayasun S.
 INTERNATIONAL JOURNAL OF ENGINEERING EDUCATION, vol.25, no.1, pp.33-41, 2009 (SCI-Expanded)
- XXXVIII. **Effects of algebraic singularities on the voltage dynamics of differential-algebraic power system model**
 Ayasun S.
 EUROPEAN TRANSACTIONS ON ELECTRICAL POWER, vol.18, no.6, pp.547-561, 2008 (SCI-Expanded)
- XXXIX. **DC motor speed control methods using MATLAB/Simulink and their integration into undergraduate electric machinery courses**
 Ayasun S., Karbeyaz G.
 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.15, no.4, pp.347-354, 2008 (SCI-Expanded)
- XL. **Modeling and stability analysis of a simulation-stimulation interface for hardware-in-the-loop applications**
 Ayasun S., Fischl R., Vallieu S., Braun J., Cadirli D.
 SIMULATION MODELLING PRACTICE AND THEORY, vol.15, no.6, pp.734-746, 2007 (SCI-Expanded)
- XLI. **Voltage stability toolbox for power system education and research**
 Ayasun S., Nwankpa C. O., Kwatny H. G.
 IEEE TRANSACTIONS ON EDUCATION, vol.49, no.4, pp.432-442, 2006 (SCI-Expanded)
- XLII. **Transformer tests using MATLAB/Simulink and their integration into undergraduate electric machinery courses**
 Ayasun S., Nwankpa C. O.
 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.14, no.2, pp.142-150, 2006 (SCI-Expanded)
- XLIII. **A sensitivity approach for computation of the probability density function of critical clearing time and probability of stability in power system transient stability analysis**
 Ayasun S., Liang Y., Nwankpa C. O.
 APPLIED MATHEMATICS AND COMPUTATION, vol.176, no.2, pp.563-576, 2006 (SCI-Expanded)
- XLIV. **An efficient method to compute singularity induced bifurcations of decoupled parameter-dependent differential-algebraic power system model**
 Ayasun S., Nwankpa C., Kwatny H.
 APPLIED MATHEMATICS AND COMPUTATION, vol.167, no.1, pp.435-453, 2005 (SCI-Expanded)
- XLV. **Induction motor tests using MATLAB/Simplink and their integration into undergraduate electric machinery courses**
 Ayasun S., Nwankpa C.
 IEEE TRANSACTIONS ON EDUCATION, vol.48, no.1, pp.37-46, 2005 (SCI-Expanded)
- XLVI. **Computation of singular and singularity induced bifurcation points of differential-algebraic power system model**
 Ayasun S., Nwankpa C., Kwatny H.
 IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS I-REGULAR PAPERS, vol.51, no.8, pp.1525-1538, 2004 (SCI-Expanded)

Articles Published in Other Journals

- I. **Determination of the robust stability delay margins for the load frequency control systems**
 GÜL K. N., sonmez s., Ayasun S.
 Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.13, no.2, pp.611-620, 2024 (Peer-Reviewed Journal)
- II. **Online Parameter Identification of a Simplified Composite Load Model by Voltage Sag Events**
 Karadeniz M., Aydemir M. T., Ayasun S., , ,
 Turkish Journal of Electrical Power and Energy Systems, vol.2, no.1, pp.21-31, 2022 (Peer-Reviewed Journal)

- III. **Zaman Gecikmeli Elektrik Güç Sistemlerinin Gecikmeye Bağlı Kararlılık Bölgelerinin Hesaplanması**
Sönmez Ş., Ayasun S.
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.26, no.2, pp.581-592, 2022 (Peer-Reviewed Journal)
- IV. **Time delay margins computation for stability of load frequency control in hybrid renewable energy power generation/storage system**
Erol H., Ayasun S.
El-Cezeri Fen ve Mühendislik Dergisi, vol.9, no.2, pp.382-393, 2021 (Scopus)
- V. **Delay-dependent Stability Analysis Considering Dynamic Demand Response and Electric Vehicle Aggregator Integration in Two-Area Load Frequency Control Systems**
SÖNMEZ Ş., AYASUN S.
Turkish Journal of Electrical Power and Energy Systems, vol.1, no.1, pp.20-25, 2021 (Peer-Reviewed Journal)
- VI. **Time Delay Margins Computation for Stability of Hybrid Power Systems**
Erol H., Ayasun S.
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.23, no.4, pp.1131-1139, 2020 (ESCI)
- VII. **REKASİUS YÖNTEMİ KULLANILARAK ZAMAN GECİKMELİ JENERATÖR UYARMA KONTROL SİSTEMİNİN MAKSİMUM ZAMAN GECİKMESİNİN HESAPLANMASI**
SÖNMEZ Ş., AYASUN S.
Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.8, no.2, pp.783-795, 2019 (Peer-Reviewed Journal)
- VIII. **Ağ Üzerinden Kontrol Edilen Yükselten DA-DA Dönüştürücünün Zaman Gecikmesine Bağlı Kararlılık Analizi**
SARI A., SÖNMEZ Ş., AYASUN S.
EMO BİLİMSEL DERGİ, vol.8, no.1, pp.5-11, 2018 (Peer-Reviewed Journal)
- IX. **Stability Region of Fractional-Order PI Controller for a Single-Area Load Frequency Control System with Communication Time Delay**
SÖNMEZ Ş., AYASUN S.
Journal of Multidisciplinary Engineering Science and Technology, vol.4, no.7, pp.7705-7709, 2017 (Peer-Reviewed Journal)
- X. **Stability regions in controller parameter space of DC motor speed control system with communication delays**
SÖNMEZ Ş., AYASUN S.
International Journal of Scientific Engineering and Applied Science (IJSEAS), vol.2, no.6, pp.86-93, 2016 (Peer-Reviewed Journal)
- XI. **IMPACT OF GAIN PHASE MARGINS ON THE DELAYMARGIN FOR STABILITY OF DC MOTOR SPEEDCONTROL SYSTEM WITH TIME DELAYS**
GÜNDÜZ H., AYASUN S.
Journal of Basic and Applied ResearchInternational, vol.17, no.4, pp.302-311, 2016 (Peer-Reviewed Journal)
- XII. **An exact Method to Compute Time Delay Margin for Stability of Time Delayed Generator Excitation Control System**
SÖNMEZ Ş., Ulaş E., AYASUN S.
International Research Journal of Engineering and Technology (IRJET), vol.2, no.8, pp.276-283, 2015 (Peer-Reviewed Journal)
- XIII. **Computation of Time Delay Margins for Stability of a Single Area Load Frequency Control System with Communication Delays**
SÖNMEZ Ş., AYASUN S., Ulaş E.
WSEAS TRANSACTIONS on POWER SYSTEMS, vol.9, pp.67-76, 2014 (Scopus)
- XIV. **Computation of Time Delay Margin for DC Motor Speed Control System with Time Delays**
AYASUN S.
International Review of Automatic Control (IREACO), vol.3, no.5, pp.485-491, 2010 (Peer-Reviewed Journal)
- XV. **Zaman Gecikmeli Analog Benzetim Uyarım Arayüzünün DC Motor Kontrolüne Uygulanması ve Kararlılık Analizi**
Dilek Ç., AYASUN S.

Otomasyon, vol.182, no.8, pp.124-132, 2007 (Peer-Reviewed Journal)

XVI. Bir Tekstil Fabrikasının Harmonik Analizi

Ayetül K, Ceylan Y., AYASUN S., YALÇINÖZ T.

3e Electrotech, vol.142, no.4, pp.118-122, 2006 (Peer-Reviewed Journal)

Books & Book Chapters

I. IMPACT OF VIRTUAL INERTIA AND DEMAND RESPONSE CONTROLS ON STABILITY DELAY MARGINS IN LOAD FREQUENCY CONTROL SYSTEM

Naveed A., Aydın Ö., SÖNMEZ Ş., AYASUN S.

in: Research and Reviews in Engineering-I, Nergis Banu, Bardak Selahattin, Kayar Mahmut, Mendi Furkan, Editor, Gece Kitaplığı, Ankara, pp.122-142, 2021

II. Havai Hat İletkenleri ve Yer altı Kabloları

AYASUN S.

in: Elektrik Enerjisi İletimi ve Dağıtımı, Prof. Dr. Süleyman Demir, Editor, Anadolu Üniversitesi Açıköğretim Fakültesi Yayınları, Eskişehir, pp.86-117, 2017

Refereed Congress / Symposium Publications in Proceedings

I. Robust Stability Region for Time-Delayed Single-Area LFC-EV System

AYDIN Ö., Hasen S. A., AYASUN S.

5th IEEE Global Power, Energy and Communication Conference, GPECOM 2023, Cappadocia, Turkey, 14 - 16 June 2023, pp.317-322

II. Design of an Optimal PI Controller for Time-Delayed Two-Area LFC-VID System

Hasen S. A., AYDIN Ö., AYASUN S.

5th IEEE Global Power, Energy and Communication Conference, GPECOM 2023, Cappadocia, Turkey, 14 - 16 June 2023, pp.288-293

III. The Impact of the EV Aggregator on the Stability Regions of the Time-Delayed LFC-EV with FOPI Controller

Sari A., Sonmez S., AYASUN S., Kabalci Y.

4th IEEE Global Power, Energy and Communication Conference, GPECOM 2022, Cappadocia, Turkey, 14 - 17 June 2022, pp.311-315

IV. Impact of Virtual Inertia on Stability Delay Margins of Micro grids with Communication Time Delay

Hasen S. A., Sonmez S., AYASUN S.

4th IEEE Global Power, Energy and Communication Conference, GPECOM 2022, Cappadocia, Turkey, 14 - 17 June 2022, pp.250-255

V. Adaptive Notch Filter Design for Flexible Modes of Guided Munitions

Eser A. O., KÜRKÇÜ B., AYASUN S.

13th IEEE International Conference on Mechanical and Intelligent Manufacturing Technologies, ICMIMT 2022, Virtual, Online, South Africa, 25 - 27 May 2022, pp.275-280

VI. Delay Margin Computation of Generator Excitation Control System with Incommensurate Time Delays Using Critical Eigenvalue Tracing Method

AYDIN Ö., Sonmez S., AYASUN S.

4th IEEE Global Power, Energy and Communication Conference, GPECOM 2022, Cappadocia, Turkey, 14 - 17 June 2022, pp.244-249

VII. Switching Based MIMO Robust Autopilot Design: A Munition Example

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