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Education

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Kontrol Ve Otomasyon Mühendisliği, Turkey Continues
Istanbul Technical University, Fen Bilimleri Enstitüsü, Kontrol Ve Bilgisayar Mühendisliği, Turkey Continues
Undergraduate, Istanbul Technical University, Elektrik Elektronik Fakültesi, Elektrik Mühendisliği, Turkey Continues

Research Areas

Electrical and Electronics Engineering, Engineering and Technology

Journal articles indexed in SCI, SSCI, and AHCI

- I. **A Note on all-Stabilizing Proportional Controllers for Single Input-Single Output Systems**
Ustoglu I., Orenbas H., EREN Y.
ASIAN JOURNAL OF CONTROL, vol.20, no.1, pp.595-598, 2018 (SCI-Expanded)
- II. **Stabilizing constant controllers for two-input, two-output systems with reducible and irreducible characteristic equations**
Ustoglu I., EREN Y., Söylemez M. T.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.39, no.12, pp.1777-1784, 2017 (SCI-Expanded)
- III. **Internal model controller design via H dynamic output feedback**
YAMAN S., Ustoglu I., UCUN L.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.39, no.3, pp.260-266, 2017 (SCI-Expanded)
- IV. **Analytical Modeling of Dual Winding Surface-mounted Permanent Magnet Synchronous Machine for Hybrid Electric Vehicle Accessory Drive Systems**
Tezcan M., MEŞE E., Ustoglu I., AYAZ M.
ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.45, no.12, pp.1353-1369, 2017 (SCI-Expanded)
- V. **Modular Integrated Probabilistic Model of Software Reliability Estimation**
Chernigovskiy A. S., Shtarik E. N., Shtarik A. V., Durmuş M. S., ÜSTOĞLU İ.
Informatica, vol.40, no.1, pp.125-132, 2016 (SCI-Expanded)
- VI. **Specification and formal verification of safety properties in a point automation system**
Sener I., Kaymakçı Ö. t., Üstoglu İ., Cansever G.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, no.3, pp.1384-1396, 2016 (SCI-Expanded)
- VII. **Reliability assessment of fire safety systems in railway industry: a case study**
KAYMAKÇI Ö. T., Ustoglu I., Divriklioğlu E.
JOURNAL OF THE CHINESE INSTITUTE OF ENGINEERS, vol.38, no.3, pp.286-296, 2015 (SCI-Expanded)

VIII. Topology Based Automatic Formal Model Generation for Point Automation Systems

Oz M. A. N., Sener I., Kaymakci O. T., Ustoglu I., Cansever G.

INFORMATION TECHNOLOGY AND CONTROL, vol.44, no.1, pp.98-111, 2015 (SCI-Expanded)

IX. Polynomial control systems

Soylemez M. T., Uestoglu I.

IEEE CONTROL SYSTEMS MAGAZINE, vol.27, no.4, pp.124-137, 2007 (SCI-Expanded)

X. Designing control systems using exact and symbolic manipulations of formulae

Soylemez M. T., Ustoglu I.

INTERNATIONAL JOURNAL OF CONTROL, vol.79, no.11, pp.1418-1430, 2006 (SCI-Expanded)

Articles Published in Other Journals

I. Mounting location strategy of emergency call control unit in passenger cars

Apak A., ÜSTOĞLU İ.

International Journal of Vehicle Information and Communication Systems, vol.3, no.2, pp.134-157, 2017 (Scopus)

II. An Application of Discrete Event Systems based Fault Diagnosis to German Railway Signaling System

Durmuş M. S., ÜSTOĞLU İ.

International Journal of Systems Applications, Engineering and Development, pp.70-77, 2017 (Peer-Reviewed Journal)

III. Topology Based Automatic TAPN Model Generation for Railway Systems

Şener İ., Kaymakçı Ö. T., Üstoglu İ., CANSEVER G.

International Journal of Automation Mechatronics & Robotics, vol.1, no.3, pp.6-10, 2014 (Peer-Reviewed Journal)

IV. TITO sistemleri kararlı kılan sabit köşegen kontrolörler

ÜSTOĞLU İ., Söylemez M. T.

İTÜ Dergisi, Seri d, vol.9, no.1, pp.134-142, 2010 (Non Peer-Reviewed Journal)

Books

I. Compensation Model of Multi-attribute Decision Making and Its Application to N-Version Software Choice

Gruzenkin D. V., Grishina G. V., Durmuş M. S., ÜSTOĞLU İ., Tsarev R. Y.

in: Software Engineering Trends and Techniques in Intelligent Systems, Silhavy R., Silhavy P., Prokopova Z., Senkerik R., Kominkova O. Z., Editor, Springer International Publishing, Cham, pp.148-157, 2017

II. Introduction to Optimization

EREN Y., KÜÇÜKDEMİRAL İ. B., ÜSTOĞLU İ.

in: Optimization in Renewable Energy Systems, Erdiñç O., Editor, Butterworth-Heinemann, Oxford, pp.27-74, 2017

Papers Presented at Peer-Reviewed Scientific Conferences

I. An Evaluation of Safety Standards of E/E/PES Systems Regarding Information Consistency & Enhancement Proposals

Dogruguen E. H., ÜSTOĞLU İ.

Annual Reliability and Maintainability Symposium (RAMS) - R and M in the Second Machine Age - The Challenge of Cyber Physical Systems, Florida, United States Of America, 28 - 31 January 2019, (Full Text)

II. Optimal Decoupled Control of Two-Input Two-Output Systems

Şen S., ÜSTOĞLU İ., UCUN L.

6th International Conference on Control Engineering & Information Technology, İstanbul, Turkey, 25 October 2018, pp.195-200

- III. **IEC61508-3 ile Emniyetli Yazılım Geliştirme**
ÜSTOĞLU İ., Durmuş M. S.
UBMK 2016 Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı, 01 October 2016
- IV. **Ayrık Olay Sistem Tabanlı Arıza Teşhisi Yapabilen Ankleşman Yazılımı Tasarımı**
Tokmak G., Şeremet O., Durmuş M. S., ÜSTOĞLU İ.
TOK Konferansı, 01 September 2016
- V. **İki Girişli İki Çıkışlı Süreçler için Tüm Güvenilir Kararlılaştıran Oransal Kontrolörler**
ÜSTOĞLU İ., Subaşı N., Durmuş M. S.
TOK Konferansı, 01 September 2016
- VI. **Modular Fault Diagnosis in Fixed-Block Railway Signaling Systems**
ÜSTOĞLU İ., Tsarev R. Y., Schwarz M.
14th IFAC Symposium on Control in Transportation Systems (CTS 2016), 01 May 2016
- VII. **Reliable Code Generation and Test Environment demonstrated on a PI Controller Design**
Sheng H., ÜSTOĞLU İ., Chaaban W., Börcsök J.
14th IFAC Symposium on Control in Transportation Systems (CTS 2016), 01 May 2016, (Full Text)
- VIII. **A Tool for Automatic Formal Modeling of Railway Interlocking Systems**
Şener İ., Kaymakçı Ö. T., Üstoğlu İ., CANSEVER G.
16. International Conference on Computer as a Tool. EUROCON 2015, 01 September 2015
- IX. **H_sonsuz Dinamik Çıkış Geribeslemeli İç Model Kontrolör Tasarımı**
ÜSTOĞLU İ., Uzun L.
TOK Konferansı, 01 September 2015, (Full Text)
- X. **Frequency Domain Analysis of the Quadruple Tank System**
ÜSTOĞLU İ., Örenbaş H., Ayabakan Ö.
The 15th International Conference on Technological Advances in Electrical, Electronics and Computer Engineering (ICTAEECE-2015), 01 February 2015
- XI. **Hot Box Detection System Design for Railway Vehicle Safety**
ÜSTOĞLU İ., Mumcu T. V., Kaymakçı Ö. T., Börcsök J.
5th International Conference on Design and Product Development, 01 December 2014
- XII. **Effects of varying diagnostic coverage on functional safety**
ÜSTOĞLU İ., Kaymakçı Ö. T., Börcsök J.
International Symposium on Fundamentals of Electrical Engineering 2014, 01 November 2014
- XIII. **ÇBAG tabanlı rüzgar türbini donanım simülâtörü kurulumu ve deneysel kontrol uygulamaları**
Aykut O., Şimşek C., Akçıl L., ÜSTOĞLU İ., Kaymakçı Ö. T.
TOK Konferansı, 01 September 2014
- XIV. **Özdeğer atama probleminde sayısal olarak uygulanabilir algoritmaların gerçekleştirilmesi ve karşılaştırılması**
ÜSTOĞLU İ., Kaymakçı Ö. T.
TOK Konferansı, 01 September 2014, (Full Text)
- XV. **Yankı durumu ağları ile zaman serilerinin modellenmesi**
Ersöz A., Yeşil E., ÜSTOĞLU İ.
TOK Konferansı, 01 September 2014
- XVI. **Specification and formal verification of safety properties in point automation system by using timed-arc Petri nets**
Kaymakçı Ö. T., ÜSTOĞLU İ., Cansever G.
19th IFAC World Congress, 01 August 2014
- XVII. **Energy benefit analysis of centre and wheel-hub drives for electric vehicles**
ÜSTOĞLU İ., Karcı A. E. H.
AVTECH13 Automotive and Vehicle Technologies Conference, 01 October 2013
- XVIII. **Signaling System Solution for Urban Railways: Esenler Railway Depot**
Durmuş M. S., Özmal K., Akçıl L., ÜSTOĞLU İ., Kaymakçı Ö. T.
1st IFAC Workshop on Advances in Control and Automation Theory for Transportation Applications, 01

September 2013

- XIX. Signaling system design for urban transportation: The case of Istanbul Esenler Depot**
ÜSTOĞLU İ., Kaymakçı Ö. T., Durmuş M. S., Yıldırım U., Akçil L.
FORMS/FORMAT 2012: Symposium on Formal Methods for Automation and Safety in Railway and Automotive Systems, 01 December 2012
- XX. Otomatik Gazlı Söndürme Sistemlerinde Hata Ağacı Analizi Uygulaması**
ÜSTOĞLU İ., Kaymakçı Ö. T.
TOK Konferansı, 01 October 2012
- XXI. Hatada güvenli sistemlerde periyodik doğrulama testinin güvenlik bütünlük seviyesine etkisi**
Kaymakçı Ö. T., ÜSTOĞLU İ.
TOK Konferansı, 01 October 2012
- XXII. Endüstriyel otomasyon sistemlerinde IEC 61508 tabanlı güvenlik bütünlük seviyesinin belirlenmesi**
ÜSTOĞLU İ., Börcsök J.
TOK Konferansı, 01 October 2012
- XXIII. Kent içi raylı ulaşımında sabit-blok sinyalizasyon sistemi tasarımı: Esenler Depo Sahası**
Yıldırım U., ÜSTOĞLU İ., Kaymakçı Ö. T., Akçil L.
TOK Konferansı, 01 October 2012
- XXIV. The Relationship between Diagnostic Coverage and Proof Test Interval for 1oo2 and 1oo2D Architectures**
ÜSTOĞLU İ., Kaymakçı Ö. T., Börcsök J.
IFAC Symposium on Control in Transportation Systems, CTS 2012, 01 September 2012, (Full Text)
- XXV. Fast calculation of robust stabilizing proportional controllers**
ÜSTOĞLU İ., Çiçek E.
MED 2012, 20th Mediterranean Conference on Control and Automation, 01 July 2012
- XXVI. Fonksiyonel güvenlik sistemlerinde tanılama kapsam katsayısı ile periyodik test süresinin ilişkisi**
ÜSTOĞLU İ., Kaymakçı Ö. T.
TOK Konferansı, 01 September 2011, (Full Text)
- XXVII. The functional safety calculation of a real interlocking system in Turkey**
ÜSTOĞLU İ., Kaymakçı Ö. T.
IEEE International Conference on Mechatronics, 01 April 2011
- XXVIII. A local modular supervisory controller for a real signalling system**
ÜSTOĞLU İ., Anık V. G.
The 5th International System Safety Conference, 01 October 2010
- XXIX. A Local Modular Supervisory Controller for a Real Railway Station**
KAYMAKÇI Ö. T., ÜSTOĞLU İ., Anık V.
The 5th IET International System Safety Conference, 01 October 2010
- XXX. Feasibility conditions on PID controller synthesis using dominant pole assignment**
ÜSTOĞLU İ., Söylemez M. T.
ECC07, European Control Conference, 01 July 2007
- XXXI. Statik çıkış geribeslemesi probleminin parametre uzayında LMI problemine indirgenmesi**
ÜSTOĞLU İ., Söylemez M. T.
TOK Konferansı, 01 November 2006
- XXXII. Stability of Takagi-Sugeno fuzzy systems**
ÜSTOĞLU İ.
3rd International Conference on Informatics in Control, Automation and Robotics, 01 August 2006, (Full Text)
- XXXIII. Parça parça lineer sistemlerin geribesleme ile lineerleştirilmesi**
ÜSTOĞLU İ., Çamlıbel M. K.
TOK Konferansı, 01 June 2005, (Full Text)
- XXXIV. Exponential stability of discrete-time Takagi-Sugeno fuzzy systems**
ÜSTOĞLU İ., Yeşil E., Güzelkaya M., Eksin İ.
ISSCI 2004 - 5th International Symposium on Soft Computing for Industry, 01 June 2004

XXXV. Sistemlerin bulanık modellenmesi

ÜSTOĞLU İ., Güzelkaya M.

ELECO Elektrik, Elektronik ve Bilgisayar Mühendisliği Sempozyumu, 01 November 2000

XXXVI. Analytical Modelling of Electromagnetic Torque in Dual Winding Surface Mounted Permanent Magnet Synchronous Machine for Hybride Electric Vehicles

TEZCAN M. M., Mese E., Üstoğlu İ., Ayaz M.

ISEF 2015

Funded Projects

ÜSTOĞLU İ., TUBITAK Project, Sabit-Blok Demiryolu Sinyalizasyon Sistemleri için Arıza Teşhisi Yapabilen Ankleşman Sistemi Tasarımı ve Hatada-Güvenli PLC'Ler ile Gerçeklenmesi (Proje No: 115E394), 2015 - Continues

ÜSTOĞLU İ., TUBITAK Project, Ulusal Demiryolu Sinyalizasyonu Projesi (Proje No: 108G186), 2009 - 2011

ÜSTOĞLU İ., TUBITAK Project, Evsel Atıksular ve Organik Katı Atıkların Birlikte Arıtımı Yoluyla Yenilenebilir Enerji (Biyometan) Geri Kazanım Teknolojilerinin Araştırılması (Proje No:105G024), 2006 - 2009

Metrics

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Citation (WoS): 21

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H-Index (Scopus): 3