

# Prof. CELALEDDİN YEROĞLU

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## International Researcher IDs

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## Education Information

Doctorate, Inonu University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2006 - 2011

Doctorate, Trakya University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, Turkey 1996 - 2000

Postgraduate, Trakya University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, Turkey 1994 - 1996

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Elektronik Mühendisliği, Turkey 1985 - 1991

## Dissertations

Doctorate, Kesirdereceli kontrol sistemlerinin frekans cevaplarının hesaplanması ve tasarımı, Inonu University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2011

Doctorate, Cam Eşya üretim sektöründe Bilgisayar Destekli üretim planlama ve bilgisayarlı üretim teknikleri, Trakya University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 2000

Postgraduate, Unix İşletim sisteminde çok boyutlu performans analizi, Trakya University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 1996

## Research Areas

Information Systems, Communication and Control Engineering, Control and System Engineering, Simulation, Modelling and Identification, Nonlinear Systems, General System Theory, Checker, Stability, Adaptive Systems, Engineering and Technology

## Academic Titles / Tasks

Professor, Inonu University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2019 - Continues

Associate Professor, Inonu University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2014 - 2019

## Academic and Administrative Experience

## Advising Theses

YEROĞLU C., Kesir dereceli diferansiyelin doğrusal olmayan denetim yöntemlerine ve sinyal işleme tekniklerine uygulanması, Doctorate, G.KAVURAN(Student), 2017

YEROĞLU C., Kesir dereceli belirsiz sistemler için dayanıklı analiz araçlarının ve arayüz programlarının geliştirilmesi, Doctorate, B.ŞENOL(Student), 2015

YEROĞLU C., Prototip helikopter sisteminin matematiksel modelinin deneysel belirlenmesi ve denetçi tasarımı, Postgraduate, A.ATEŞ(Student), 2013

YEROĞLU C., Kesir dereceli kontrol sistemlerinin frekans cevaplarının analizi için MATLAB ortamında toolbox geliştirilmesi, Postgraduate, B.ŞENOL(Student), 2011

## **Published journal articles indexed by SCI, SSCI, and AHCI**

- I. **Optimal F-domain stabilization technique for reduction of commensurate fractional-order SISO systems**  
Mahata S., Herencsar N., ALAGÖZ B. B., YEROĞLU C.  
FRACTIONAL CALCULUS AND APPLIED ANALYSIS, vol.25, no.2, pp.803-821, 2022 (SCI-Expanded)
- II. **Adaptive protection method with fault current limiting mechanism for directional over current relays coordination problem**  
YEROĞLU C., Akdag O.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.37, no.4, pp.1751-1765, 2022 (SCI-Expanded)
- III. **Modification of Harris hawks optimization algorithm with random distribution functions for optimum power flow problem**  
Akdag O., ATEŞ A., YEROĞLU C.  
NEURAL COMPUTING & APPLICATIONS, vol.33, no.6, pp.1959-1985, 2021 (SCI-Expanded)
- IV. **Optimal directional overcurrent relay coordination using MRFO algorithm: A case study of adaptive protection of the distribution network of the Hatay province of Turkey**  
Akdag O., YEROĞLU C.  
ELECTRIC POWER SYSTEMS RESEARCH, vol.192, 2021 (SCI-Expanded)
- V. **Optimal load flow via modified water cycle algorithm**  
Akdag O., YEROĞLU C.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.36, no.2, pp.1119-1131, 2021 (SCI-Expanded)
- VI. **Fine-Tuning of Feedback Gain Control for Hover Quad Copter Rotors by Stochastic Optimization Methods**  
ATEŞ A., ALAGÖZ B. B., Kavuran G., YEROĞLU C.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF ELECTRICAL ENGINEERING, vol.44, no.4, pp.1663-1672, 2020 (SCI-Expanded)
- VII. **2DOF multi-objective optimal tuning of disturbance reject fractional order PIDA controllers according to improved consensus oriented random search method**  
Özbey N., Yeroğlu C., Alagöz B. B., Herencsar N., Kartci A., Sotner R.  
Journal of Advanced Research, vol.25, pp.159-170, 2020 (SCI-Expanded)
- VIII. **An evaluation of an offshore energy installation for the Black Sea region of Turkey and the effects on a regional decrease in greenhouse gas emissions**  
Akdag O., YEROĞLU C.  
GREENHOUSE GASES-SCIENCE AND TECHNOLOGY, vol.10, no.3, pp.531-544, 2020 (SCI-Expanded)
- IX. **Fine-Tuning of Feedback Gain Control for Hover Quad Copter Rotors by Stochastic Optimization Methods**  
ATEŞ A., ALAGÖZ B. B., Kavuran G., YEROĞLU C.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF ELECTRICAL ENGINEERING, vol.1, no.2, pp.1-10, 2020 (SCI-Expanded)

- X. **Electronically reconfigurable two-path fractional-order PI/D controller employing constant phase blocks based on bilinear segments using CMOS modified current differencing unit**  
SOTNER R., JERABEK J., KARTCI A., DOMANSKY O., HERENC SAR N., KLEDROWETZ V., ALAGÖZ B. B., YEROĞLU C.  
MICROELECTRONICS JOURNAL, vol.86, pp.114-129, 2019 (SCI-Expanded)
- XI. **A theoretical investigation on moving average filtering solution for fixed-path map matching of noisy position data**  
ALAGÖZ B. B., ERTÜRKLER M., YEROĞLU C.  
INTERNATIONAL JOURNAL OF SENSOR NETWORKS, vol.29, no.4, pp.213-225, 2019 (SCI-Expanded)
- XII. **Modified Artificial Physics Optimization for Multi-parameter Functions**  
ATEŞ A., YEROĞLU C.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF ELECTRICAL ENGINEERING, vol.42, no.4, pp.465-478, 2018 (SCI-Expanded)
- XIII. **Model Reference Adaptive Control Scheme for Retuning Method-Based Fractional-Order PID Control with Disturbance Rejection Applied to Closed-Loop Control of a Magnetic Levitation System**  
TEPLJAKOV A., ALAGÖZ B. B., GONZALEZ E., PETLENKOV E., YEROĞLU C.  
JOURNAL OF CIRCUITS SYSTEMS AND COMPUTERS, vol.27, no.11, 2018 (SCI-Expanded)
- XIV. **Stability Analysis of Fractional Order Multiple Linear Uncertain Systems: Exposed Edge Sampling Approach**  
ŞENOL B., ATEŞ A., ALAGÖZ B. B., YEROĞLU C.  
CONTROL ENGINEERING AND APPLIED INFORMATICS, vol.20, no.2, pp.14-21, 2018 (SCI-Expanded)
- XV. **An Experimental Study on Model Reference Adaptive Control of TRMS by Error-Modified Fractional Order MIT Rule**  
Kavuran G., ATEŞ A., ALAGÖZ B. B., YEROĞLU C.  
CONTROL ENGINEERING AND APPLIED INFORMATICS, vol.19, no.4, pp.101-111, 2017 (SCI-Expanded)
- XVI. **Reference-shaping adaptive control by using gradient descent optimizers**  
ALAGÖZ B. B., Kavuran G., ATEŞ A., YEROĞLU C.  
PLOS ONE, vol.12, no.11, 2017 (SCI-Expanded)
- XVII. **Implementation of fractional order filters discretized by modified Fractional Order Darwinian Particle Swarm Optimization**  
ATEŞ A., ALAGÖZ B. B., Kavuran G., YEROĞLU C.  
MEASUREMENT, vol.107, pp.153-164, 2017 (SCI-Expanded)
- XVIII. **Linear systems with unstructured multiplicative uncertainty: Modeling and robust stability analysis**  
Matusu R., ŞENOL B., YEROĞLU C.  
PLOS ONE, vol.12, no.7, 2017 (SCI-Expanded)
- XIX. **Master-Slave Stochastic Optimization for Model-Free Controller Tuning**  
ATEŞ A., ALAGÖZ B. B., YEROĞLU C.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF ELECTRICAL ENGINEERING, vol.41, no.2, pp.153-163, 2017 (SCI-Expanded)
- XX. **Simplified Frequency Response Computation of Fractional Order Systems with Multiple Linear Uncertainty Structures**  
ŞENOL B., YEROĞLU C.  
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES INDIA SECTION A-PHYSICAL SCIENCES, vol.86, no.3, pp.361-369, 2016 (SCI-Expanded)
- XXI. **Optimal fractional order PID design via Tabu Search based algorithm**  
ATEŞ A., YEROĞLU C.  
ISA TRANSACTIONS, vol.60, pp.109-118, 2016 (SCI-Expanded)
- XXII. **Robust Stabilizing PID Controllers for Multiple Time Delay Systems with Parametric Uncertainty**  
Yeroglu C.  
CONTROL ENGINEERING AND APPLIED INFORMATICS, vol.17, no.3, pp.20-29, 2015 (SCI-Expanded)
- XXIII. **Probabilistic robust stabilization of fractional order systems with interval uncertainty**  
ALAGÖZ B. B., YEROĞLU C., ŞENOL B., ATEŞ A.

- ISA TRANSACTIONS, vol.57, pp.101-110, 2015 (SCI-Expanded)
- XXIV. **An experimental investigation for error-cube PID control**  
ALAGÖZ B. B., ATEŞ A., YEROĞLU C., ŞENOL B.  
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.37, no.5, pp.652-660, 2015 (SCI-Expanded)
- XXV. **Note on describing function analysis of fractional order nonlinear control systems**  
YEROĞLU C., TAN N.  
Control and Cybernetics, vol.44, no.2, pp.233-255, 2015 (SCI-Expanded)
- XXVI. **Limit cycles in nonlinear systems with fractional order plants**  
ATHERTON D. P., TAN N., YEROĞLU C., Kavuran G., Yüce A.  
Machines, vol.2, no.3, pp.176-201, 2014 (SCI-Expanded)
- XXVII. **A stochastic multi-parameters divergence method for online auto-tuning of fractional order PID controllers**  
YEROĞLU C., ATEŞ A.  
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.351, no.5, pp.2411-2429, 2014 (SCI-Expanded)
- XXVIII. **A numerical investigation for robust stability of fractional-order uncertain systems**  
ŞENOL B., ATEŞ A., ALAGÖZ B. B., YEROĞLU C.  
ISA TRANSACTIONS, vol.53, no.2, pp.189-198, 2014 (SCI-Expanded)
- XXIX. **Sliding mode controller design with fractional order differentiation: applications for unstable time delay systems**  
YEROĞLU C., Kavuran G.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.22, no.5, pp.1270-1286, 2014 (SCI-Expanded)
- XXX. **Investigation of robust stability of fractional order multilinear affine systems: 2q-convex parpolygon approach**  
YEROĞLU C., ŞENOL B.  
SYSTEMS & CONTROL LETTERS, vol.62, no.10, pp.845-855, 2013 (SCI-Expanded)
- XXXI. **Auto-tuning of PID controller according to fractional-order reference model approximation for DC rotor control**  
ALAGÖZ B. B., ATEŞ A., YEROĞLU C.  
MECHATRONICS, vol.23, no.7, pp.789-797, 2013 (SCI-Expanded)
- XXXII. **Frequency boundary of fractional order systems with nonlinear uncertainties**  
ŞENOL B., YEROĞLU C.  
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.350, no.7, pp.1908-1925, 2013 (SCI-Expanded)
- XXXIII. **Note on fractional-order proportional-integral-differential controller design**  
YEROĞLU C., TAN N.  
IET CONTROL THEORY AND APPLICATIONS, vol.5, no.17, pp.1978-1989, 2011 (SCI-Expanded)
- XXXIV. **Classical controller design techniques for fractional order case**  
YEROĞLU C., TAN N.  
ISA TRANSACTIONS, vol.50, no.3, pp.461-472, 2011 (SCI-Expanded)
- XXXV. **Frequency Response Computation of Fractional Order Interval Transfer Functions**  
Yeroglu C., OZYETKIN M. M., TAN N.  
INTERNATIONAL JOURNAL OF CONTROL AUTOMATION AND SYSTEMS, vol.8, no.5, pp.1009-1017, 2010 (SCI-Expanded)
- XXXVI. **Effect of dielectric barrier discharge on the sorption properties of disperse porous materials in CO<sub>2</sub>-silicagel and SF<sub>6</sub>-silicagel systems**  
ALISOY H. Z., Yeroglu C., KOSEOGLU M., TAN N.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.46, no.13, pp.4468-4473, 2007 (SCI-Expanded)
- XXXVII. **The evaluations of the influence of surface conductivity to the energy of particles in discharge**

### **channel and interaction force in contact charging process**

ALISOY H. Z., ALISOY G. T., SAHIN A., Yeroğlu C.

PHYSICS LETTERS A, vol.360, no.1, pp.14-21, 2006 (SCI-Expanded)

### **XXXVIII. Computation of stabilizing PI and PID controllers using the stability boundary locus**

Tan N., KAYA I., Yeroğlu C., ATHERTON D. P.

ENERGY CONVERSION AND MANAGEMENT, vol.47, pp.3045-3058, 2006 (SCI-Expanded)

### **XXXIX. Investigation of the characteristics of dielectric barrier discharge in the transition region**

ALISOY H., Yeroğlu C., KOSEOĞLU M., HANSU F.

JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.38, no.24, pp.4272-4277, 2005 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **Proportional Integral Accelerator Controller Design and Theoretical Investigation of Disturbance Rejection Performance**  
Özbey N., Yeroğlu C.  
Technium: Romanian Journal of Applied Sciences and Technology, vol.2, no.6, pp.112-121, 2020 (Peer-Reviewed Journal)
- II. **Harris Şahini Optimizasyon Algoritması ile Aktif Güç Kayıplarının Minimizasyonu**  
AKDAĞ O., ATEŞ A., YEROĞLU C.  
Dokuz Eylül Üniversitesi Fen ve Mühendislik Dergisi, vol.22, no.65, pp.481-490, 2020 (Peer-Reviewed Journal)
- III. **PIDA Denetçilerin Bozucu Dışlama Performansının Teorik İncelenmesi**  
ÖZBEY N., YEROĞLU C., ALAGÖZ B. B.  
Avrupa Bilim ve Teknoloji Dergisi, no.18, 2020 (Peer-Reviewed Journal)
- IV. **Multi-Loop Model Reference Proportional Integral Derivative Controls: Design and Performance Evaluations**  
ALAGÖZ B. B., Tepljakov A., Petlenkov E., YEROĞLU C.  
ALGORITHMS, vol.13, no.2, 2020 (ESCI)
- V. **Multi-loop Model Reference Adaptive PID Control for Fault-Tolerance**  
ALAGÖZ B. B., KAVURAN G., ATEŞ A., YEROĞLU C., ALİSOY H.  
BALKAN JOURNAL OF ELECTRICAL AND COMPUTER ENGINEERING, vol.7, no.3, pp.276-285, 2019 (Peer-Reviewed Journal)
- VI. **Time-domain identification of One Noninteger Order Plus Time Delay models from step response measurements**  
ALAGÖZ B. B., TEPLJAKOV A., ATEŞ A., PETLENKOV E., YEROĞLU C.  
INTERNATIONAL JOURNAL OF MODELING SIMULATION AND SCIENTIFIC COMPUTING, vol.10, no.1, 2019 (ESCI)
- VII. **Multi-Parameter Optimization of Sliding-Mode Controller for Quadcopter Application**  
Dikmen İ. C., Karadağ T., Yeroğlu C.  
Anatolian Science, vol.3, no.1, pp.14-28, 2018 (Peer-Reviewed Journal)
- VIII. **Fractional Order Darwinian PSO with Constraint Threshold for Load Flow Optimization of Energy Transmission System**  
AKDAG O., Okumus F., KOCAMAZ A. F., YEROĞLU C.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.31, no.3, pp.831-844, 2018 (ESCI)
- IX. **Effects of fractional order integration on ASDM signals**  
Kavuran G., YEROĞLU C., ATEŞ A., ALAGÖZ B. B.  
International Journal of Dynamics and Control, vol.5, no.1, pp.10-17, 2017 (Scopus)
- X. **Kesir dereceli model referans denetleyici ile görüntü işleme destekli nesne takip uygulaması**  
Kavuran G., ATEŞ A., ALAGÖZ B. B., YEROĞLU C.  
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.22, pp.659-665, 2016 (Peer-Reviewed Journal)
- XI. **SMDO algoritması ile iki serbestlik dereceli FOPID kontrol çevrimi tasarımı**  
ATEŞ A., YEROĞLU C.

Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.22, pp.671-676, 2016 (Peer-Reviewed Journal)

- XII. **Implementation of Model Reference Adaptive Controller with Fractional Order Adjustment Rules for Coaxial Rotor Control Test System**  
Kavuran G., ALAGÖZ B. B., ATEŞ A., YEROĞLU C.  
BALKAN JOURNAL OF ELECTRICAL AND COMPUTER ENGINEERING, vol.4, pp.84-88, 2016 (Peer-Reviewed Journal)
- XIII. **Online Tuning of Two Degrees of Freedom Fractional Order Control Loops**  
ATEŞ A., YEROĞLU C.  
BALKAN JOURNAL OF ELECTRICAL AND COMPUTER ENGINEERING, vol.4, pp.5-10, 2016 (Peer-Reviewed Journal)
- XIV. **Two degrees of freedom FOPID control loop design via SMDO algorithm**  
ATEŞ A., YEROĞLU C.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.22, no.8, pp.671-676, 2016 (ESCI)
- XV. **Image processing based object tracking application with fractional-order model reference controller**  
Kavuran G., ATEŞ A., ALAGOZ B. B., YEROĞLU C.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.22, no.8, pp.659-665, 2016 (ESCI)
- XVI. **Fuzzy Velocity and Fuzzy Acceleration in Fractional Order Motion**  
ATEŞ A., ALAGÖZ B. B., Alisoy G., YEROĞLU C., Alisoy H.  
BALKAN JOURNAL OF ELECTRICAL AND COMPUTER ENGINEERING, vol.3, pp.98-102, 2015 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Fractional Order Filter Discretization by Particle Swarm Optimization Method**  
İMİK O., ALAGÖZ B. B., ATEŞ A., YEROĞLU C.  
in: Mathematical Methods in Engineering, Taş K., Baleanu D., Machado T., Editor, Springer-Verlag , Cham, pp.133-144, 2019

## Refereed Congress / Symposium Publications in Proceedings

- I. **Development of CNN architecture for Honey Bees Disease Condition**  
YEROĞLU C., HANBAY D., ÜZEN H.  
2019 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 21 - 22 September 2019, pp.1-5
- II. **Feature Selection by Using Heuristic Methods for Text Classification**  
YEROĞLU C., HANBAY D., Sel İ.  
2019 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 21 - 22 September 2019, pp.1-6
- III. **Fractional Order Model Identification of Receptor-Ligand Complexes Formation by Equivalent Electrical Circuit Modeling**  
ATEŞ A., ALAGÖZ B. B., Tepljakov A., Petlenkov E., YEROĞLU C., Kuznetsov A., Sobolev I.  
International Conference on Artificial Intelligence and Data Processing, Malatya, Turkey, 21 - 22 September 2019, vol.7, no.1, pp.1-6
- IV. **Fractional Order Filter Discretization by Particle Swarm Optimization Method**  
İmik O., ALAGÖZ B. B., ATEŞ A., YEROĞLU C.  
International Symposium on Mathematical Methods in Engineering (MME), Ankara, Turkey, 27 - 29 April 2017, vol.23, pp.133-144
- V. **Analogue Implementation of a Fractional-Order PI lambda Controller for DC Motor Speed Control**

Herencsar N., Kartci A., Koton J., Sotner R., Alogoz B. B., Yeroğlu C.

28th IEEE International Symposium on Industrial Electronics (IEEE-ISIE), Vancouver, Canada, 12 - 14 June 2019, pp.467-472

- VI. **Optimal Fractional Order PID Controller Design for Fractional Order Systems by Stochastic Multi Parameter Divergence Optimization Method with Different Random Distribution Functions**  
ATEŞ A., ALAGÖZ B. B., Chen Y. Q., YEROĞLU C., HosseinNia S. H.  
7th IEEE International Conference on Control, Mechatronics and Automation (ICCMA), Delft, Netherlands, 6 - 08 November 2019, no.2, pp.9-14
- VII. **Biyocografya Tabanlı Optimizasyon ile Yangın Görüntülerinin Ayırıştırılması**  
Toptaş B., HANBAY D., YEROĞLU C.  
International Conference on Artificial Intelligence and Data Processing (IDAP 2018), Malatya, Turkey, 28 - 30 September 2018, pp.1000-1004
- VIII. **SOS Algoritması ile Tasarlanan PIDA Denetçinin Bozucu Bastırma Etkisi**  
KARADENİZ E., ÖZBEY N., YEROĞLU C., KAHRAMAN H. T.  
International Conference on Artificial Intelligence and Data Processing (IDAP 2018), 28 - 30 September 2018
- IX. **PIDA Denetçi Parametrelerinin PSO Algoritması ile Belirlenmesi**  
DONUK K., ÖZBEY N., İNAN M., YEROĞLU C., HANBAY D.  
International Conference on Artificial Intelligence and Data Processing (IDAP 2018), 28 - 30 September 2018
- X. **Malatya Public Transportation Route Optimization via Ant Colony Algorithm**  
ÖZTEMİZ F., YEROĞLU C.  
2018 International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XI. **Optimization of the FO[PI] Controller for MTDS using MAPO with Multi Objective Function**  
Ateş A., Yeroğlu C., Yuan J., Chen Y., Hamamcı S. E.  
The International Conference on Fractional Differentiation and its Applications, Amman, Jordan, 16 - 18 July 2018
- XII. **A Set-point Filter Type 2DOF Fractional Order PID Control System Design Scheme for Improved Disturbance Rejection Control**  
ÖZBEY N., ALAGÖZ B. B., YEROĞLU C.  
Proceedings of International Conference on Fractional Differentiation and its Applications (ICFDA) 2018, Amman, Jordan, 16 - 18 July 2018
- XIII. **Optimization of the FO[PI] Controller for MTDS using MAPO with Multi Objective Function**  
Ateş A., YEROĞLU C., Yuan J., Hamamcı S. E., Chen Y.  
ICFDA'18 International Conference on Fractional Differentiation and its Applications, Amman, Jordan, 16 - 18 July 2018, pp.1-6
- XIV. **A Numerical Study for Plant-Independent Evaluation of Fractional-order PID Controller Performance**  
ALAGÖZ B. B., TEPLJAKOV A., YEROĞLU C., GONZALEZ E., HOSSEINNIA S. H., PETLENKOV E.  
3rd IFAC Conference on Advances in Proportional-Integral-Derivative Control (PID), Ghent, Belgium, 9 - 11 May 2018, vol.51, pp.539-544
- XV. **Investigation of PIDA Controller Parameters via PSO Algorithm**  
Donuk K., ÖZBEY N., İnan M., YEROĞLU C., HANBAY D.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XVI. **PID2018 Benchmark Challenge: Multi-Objective Stochastic Optimization Algorithm**  
ATEŞ A., Yuan J., DEHGHAN S., ZHAO Y., YEROĞLU C., Chen Y.  
3rd IFAC Conference on Advances in Proportional-Integral-Derivative Control (PID), Ghent, Belgium, 9 - 11 May 2018, vol.51, pp.877-881
- XVII. **Malatya Public Transportation Route Optimization via Ant Colony Algorithm**  
OZTEMIZ F., YEROĞLU C.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XVIII. **FOPID Controllers and Their Industrial Applications: A Survey of Recent Results**

TEPLJAKOV A., ALAGÖZ B. B., YEROĞLU C., GONZALEZ E., HOSSEINNIA S. H., PETLENKOV E.

3rd IFAC Conference on Advances in Proportional-Integral-Derivative Control (PID), Ghent, Belgium, 9 - 11 May 2018, vol.51, pp.25-30

- XIX. **Disturbance Rejection Effect of PIDA Controller Designed via SOS Algorithm**  
Karadeniz E., ÖZBEY N., YEROĞLU C., KAHRAMAN H. T.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XX. **Cat Swarm Based Shadow Detection Method**  
Firildak K., Karaduman M., TALU M. F., YEROĞLU C.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XXI. **Genetic Algorithm Based Tree Segmentation**  
Varjovi M. H., ALTUN S., TALU M. F., YEROĞLU C.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XXII. **Obstructive Sleep Apnea Detection Using Lomb-Scargle Periodogram Method**  
Kavuran G., YEROĞLU C.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XXIII. **Vortex Optimization Algorithm Based Fabric Defect Detection**  
Yazan E., Celik G., TALU M. F., YEROĞLU C.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XXIV. **Separation of Fire Images with Biogeography-Based Optimization**  
TOPTAS B., HANBAY D., YEROĞLU C.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XXV. **DISTURBANCE REJECTION FOPID CONTROL OF ROTOR BY MULTI-OBJECTIVE BB-BC OPTIMIZATION ALGORITHM**  
ATEŞ A., ALAGÖZ B. B., YEROĞLU C., YUAN J., CHEN Y.  
Proceedings of the ASME 2017 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference IDETC/CIE 2017, Cleveland, United States Of America, 6 - 09 August 2017, pp.1-6
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Alisoy H., Kavuran G., ATEŞ A., ALAGÖZ B. B., YEROĞLU C.  
International Conference of Mathematical Modelling and Engineering (MME), Ankara, Turkey, 27 - 29 April 2017, pp.1
- XXVII. **A Model Reference Control Scheme by MIT Rule with Fractional Order Sliding Surface**  
Kavuran G., ALAGÖZ B. B., ATEŞ A., YEROĞLU C.  
International Conference of Mathematical Modelling and Engineering (MME), Ankara, Turkey, 27 - 29 April 2017, pp.1
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ICEN M., ATEŞ A., YEROĞLU C.  
2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17 September 2017
- XXIX. **Artificial Immune System Optimization Based Duplex Kinect Skeleton Fusion**  
Gunduz A. F., ŞEN M. O., KARCI A., YEROĞLU C.  
2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17 September 2017
- XXX. **Multi-loop Model Reference Adaptive Control of Fractional-order PID Control Systems**



ALAGÖZ B. B., TEPLJAKOV A., PETLENKOV E., YEROĞLU C.

40th International Conference on Telecommunications and Signal Processing (TSP), Barcelona, Spain, 5 - 07 July 2017, pp.702-705

**XXXI. Overcurrent Relay Coordination of 154/34,5 kV Hasancelebi Substation by League Championship Algorithm**

Seyyarer A., AKDAG O., HARK C., KARCI A., YEROĞLU C.

2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17 September 2017

**XXXII. Load Flow Optimization of 154 kV Malatya Transmission Line Using Differential Evolution Algorithm**

AKDAG O., KARADOGAN I., OKUMUS F., YEROĞLU C., KARCI A.

2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17 September 2017

**XXXIII. DISTURBANCE REJECTION FOPID CONTROL OF ROTOR BY MULTI-OBJECTIVE BB-BC OPTIMIZATION ALGORITHM**

ATEŞ A., ALAGÖZ B. B., YEROĞLU C., YUAN J., CHEN Y.

ASME International Design Engineering Technical Conferences / Computers and Information in Engineering Conference (IDETC/CIE 2017), Ohio, United States Of America, 6 - 09 August 2017

**XXXIV. A Theoretical Investigation on Consideration of Initial Conditions in Fractional-order Transfer Function Modeling**

ALAGÖZ B. B., TEPLJAKOV A., PETLENKOV E., YEROĞLU C.

40th International Conference on Telecommunications and Signal Processing (TSP), Barcelona, Spain, 5 - 07 July 2017, pp.710-713

**XXXV. Applicability of homotopy perturbation method for analytical solution of fractional order nonlinear systems**

ATEŞ A., ALAGÖZ B. B., YEROĞLU C.

International Conference on Fractional Differentiation and its Applications, Novi Sad, Serbia And Montenegro, 18 - 20 July 2016, pp.841-850

**XXXVI. Optimized fractional order controller for multiple time delay systems**

ATEŞ A., YEROĞLU C.

International Conference on Fractional Differentiation and its Applications, Novi Sad, Serbia And Montenegro, 18 - 20 July 2016, pp.211-220

**XXXVII. Implementation of fractional order filters by embedded programming techniques**

KAVURAN G., ALAGÖZ B. B., ATEŞ A., YEROĞLU C.

International Conference on Fractional Differentiation and its Applications, Novi Sad, Serbia And Montenegro, 18 - 20 July 2016, pp.532-541

**XXXVIII. Improvement of IIR Filter Discretization for Fractional Order Filter by Discrete Stochastic Optimization**

ATEŞ A., KAVURAN G., ALAGÖZ B. B., YEROĞLU C.

39th International Conference on Telecommunications and Signal Processing (TSP), Vienna, Austria, 27 - 29 June 2016, pp.583-586

**XXXIX. Detection of RR Interval Alterations in ECG Signals by Using First Order Fractional Filter**

ALAGÖZ B. B., YEROĞLU C., KAVURAN G., ATEŞ A.

39th International Conference on Telecommunications and Signal Processing (TSP), Vienna, Austria, 27 - 29 June 2016, pp.579-582

**XL. A NOTE ON EFFECTS OF FRACTIONAL ORDER INTEGRATION ON ASDM SIGNALS**

KAVURAN G., ATEŞ A., ALAGÖZ B. B., YEROĞLU C.

The International Symposium on Fractional Signals and Systems 2015, Cluj-Napoca, Romania, 1 - 03 October 2015, pp.1-6

**XLI. Kesir Dereceli Model Referans Denetleyici ile Görüntü İşleme Destekli Kapalı Çevrim Nesne Takip Uygulaması**

KAVURAN G., ATEŞ A., ALAGÖZ B. B., YEROĞLU C.

- Türkiye Otomatik Kontrol Milli Kurultayı 2015, Denizli, Turkey, 10 - 12 September 2015, pp.1-6
- XLII. **FGATool - Kesir Dereceli Sistemler için Grafikselsel Analiz Programı**  
ŞENOL B., YEROĞLU C.  
Otomatik Kontrol Türk Milli Komitesi, Turkey, 10 - 12 September 2015
- XLIII. **SMDO Algoritması ile İki Serbestlik Dereceli FOPID Kontrol Çevrimi Tasarımı**  
ATEŞ A., YEROĞLU C.  
Türkiye Otomatik Kontrol Milli Kurultayı 2015, Denizli, Turkey, 10 - 12 September 2015, pp.12-18
- XLIV. **Darbe Genişliği Modülasyonlu PID Kontrolör İle Rotor Kontrolü**  
ALAGÖZ B. B., ATEŞ A., Kavuran G., YEROĞLU C.  
Türkiye Otomatik Kontrol Milli Kurultayı 2015, Denizli, Turkey, 10 - 12 September 2015, pp.6-11
- XLV. **Yapısız Çarpımsal Belirsizlik İçeren Kesir Dereceli Sistemlerin Dayanırlı Kararlılık Analizi**  
ŞENOL B., Matusu R., YEROĞLU C.  
Otomatik Kontrol Türk Milli Komitesi, Turkey, 10 - 12 September 2015
- XLVI. **Investigation of Periodic Modes in Nonlinear Systems with Fractional Order Integrator**  
Kavuran G., YEROĞLU C.  
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.519-522
- XLVII. **Sigmoid Based PID Controller Implementation for Rotor Control**  
ATEŞ A., ALAGÖZ B. B., YEROĞLU C., Alisoy H.  
European Control Conference (ECC), Linz, Austria, 15 - 17 July 2015, pp.458-463
- XLVIII. **Tuning of fractional order PID with master slave stochastic multi parameter divergence optimization method**  
ATEŞ A., YEROĞLU C., ALAGÖZ B. B., ŞENOL B.  
International Conference on Fractional Differentiation and its Applications, Catania, Italy, 23 - 25 June 2014, pp.1-5
- XLIX. **Toolbox for Fractional Order Systems with Linear and Nonlinear Uncertainties**  
ŞENOL B., YEROĞLU C.  
Fractional Differentiation and Its Applications 2012, 23 - 25 June 2014
- L. **Tabu search algorithm for fractional order PID via nonlinear multi objective functions**  
ATEŞ A., YEROĞLU C.  
International Conference on Fractional Differentiation and its Applications, Catania, Italy, 23 - 25 June 2014, pp.7-11
- LI. **Filter Approximation and Model Reduction Comparison for Fractional Order Systems**  
ŞENOL B., YEROĞLU C.  
International Conference on Fractional Differentiation and its Applications (ICFDA), Catania, Italy, 23 - 25 June 2014
- LII. **Computation of Limit Cycles in Nonlinear Feedback Loops with Fractional Order Plants**  
Atherton D. P., TAN N., YEROĞLU C., Kavuran G., Yuce A.  
International Conference on Fractional Differentiation and its Applications (ICFDA), Catania, Italy, 23 - 25 June 2014
- LIII. **Analysis of Fractional Order Polynomials Using Hermite-Biehler Theorem**  
ŞENOL B., YEROĞLU C., TAN N.  
International Conference on Fractional Differentiation and its Applications (ICFDA), Catania, Italy, 23 - 25 June 2014
- LIV. **Tabu Search Algorithm for Fractional Order PID via Nonlinear Multi Objective Functions**  
ATEŞ A., YEROĞLU C.  
International Conference on Fractional Differentiation and its Applications (ICFDA), Catania, Italy, 23 - 25 June 2014
- LV. **Tuning of Fractional Order PID with Master-Slave Stochastic Multi-parameter Divergence Optimization Method**  
ATEŞ A., YEROĞLU C., ALAGÖZ B. B., ŞENOL B.  
International Conference on Fractional Differentiation and its Applications (ICFDA), Catania, Italy, 23 - 25 June

2014

- LVI. **Sliding Mode Control for Fractional Order Plants via Limit Cycle Prediction**  
Kavuran G., YEROĞLU C.  
International Conference on Fractional Differentiation and its Applications (ICFDA), Catania, Italy, 23 - 25 June 2014
- LVII. **Hata K p  Kontrol Yapısının Teorik İncelenmesi Otomatik Kontrol Ulusal Toplantısı**  
ALAG Z B. B., ATEŐ A., YEROĞLU C.  
T rkiye Otomatik Kontrol Milli Kurultayı 2013, Malatya, Turkey, 26 - 28 September 2013, pp.18-23
- LVIII. **Kesir Dereceli PID Kontrol rler İin Referans Model Tabanlı Optimizasyon Y ntemi**  
ATEŐ A., ALAG Z B. B., YEROĞLU C.  
T rkiye Otomatik Kontrol Milli Kurultayı 2013, Malatya, Turkey, 26 - 28 September 2013, pp.45-50
- LIX. **Kesir Dereceli PID Kontrol rler iin Referans Model Tabanlı Optimizasyon Y ntemi**  
ATEŐ A., ALAG Z B. B., ŐENOL B., YEROĞLU C.  
Otomatik Kontrol T rk Milli Komitesi Toplantısı 2013, Malatya, Turkey, 26 - 28 September 2013, pp.764-769
- LX. **Kesir Dereceli PID Kontrol rler iin Referans Model Tabanlı Optimizasyon Y ntemi**  
ATEŐ A., ALAG Z B. B., ŐENOL B., YEROĞLU C.  
Otomatik Kontrol T rk Milli Komitesi Toplantısı 2013, Malatya, Turkey, 26 - 28 September 2013, pp.764-769
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ŐENOL B., YEROĞLU C.  
Otomatik Kontrol T rk Milli Komitesi Toplantısı 2012, NiĐde, Turkey, 11 - 13 October 2012
- LXII. **TRMS İin Referans Modele Dayalı Optimal Kesir Dereceli PID Tasarımı**  
ATEŐ A., YEROĞLU C.  
T rkiye Otomatik Kontrol Milli Kurultayı 2012, NiĐde, Turkey, 11 - 13 October 2012, pp.78-83
- LXIII. **Gerek Zamanlı TRMS iin Geliřtirilen YSA Algoritması**  
ATEŐ A., YEROĞLU C., TALU M. F.  
T rkiye Otomatik Kontrol Milli Kurultayı 2012, NiĐde, Turkey, 11 - 13 October 2012, pp.1-5
- LXIV. **Belirsiz Parametrelili Kesir Dereceli Polinomların  slerinin Kararlılık AralıĐının İncelenmesi**  
ŐENOL B., YEROĞLU C.  
Otomatik Kontrol T rk Milli Komitesi Toplantısı 2012, NiĐde, Turkey, 11 - 13 October 2012
- LXV. **PID Controller Synthesis for Fractional Order Systems**  
Avsar S. F., Hamamcı S. E., YeroĐlu C.  
5th IFAC Symposium on Fractional Differentiation and its Applications, Nanjing, China, 14 - 17 May 2012, pp.1-3
- LXVI. **Development of a User Friendly Toolbox for Advanced Control Education**  
ŐENOL B., YEROĐLU C., ERTURKLER M.  
Fractional Differentiation and Its Applications 2012, Nanjing, China, 14 - 17 May 2012
- LXVII. **Robust Stability Analysis of Fractional Order Uncertain Polynomials**  
ŐENOL B., YEROĐLU C.  
Fractional Differentiation and Its Applications 2012, Nanjing, China, 14 - 17 May 2012
- LXVIII. **Computation of the Value Set of Fractional Order Uncertain Polynomials: A 2q Convex Parpolygonal Approach**  
ŐENOL B., YEROĐLU C.  
IEEE International Conference on Control Applications (CCA) Part of 6th IEEE Multi-Conference on Systems and Control (IEEE MSC), Dubrovnik, Croatia, 3 - 05 October 2012, pp.686-691
- LXIX. **Kesir Dereceli Kontrol Sistemlerinin Analizi iin Kolay Kullanılmalı Program**  
ŐENOL B., YEROĐLU C., TAN N.  
Otomatik Kontrol T rk Milli Komitesi Toplantısı 2011, İzmir, Turkey, 14 - 16 September 2011
- LXX. **Design of PI and PID controllers for fractional order time delay systems**  
 zyetkin M. M., YeroĐlu C., Tan N., TaĐluk M. E.  
9th IFAC Workshop on Time Delay Systems (IFAC TDS 2010), Prague, Czech Republic, June 7-9, 2010., Praha, Czech Republic, 7 - 09 June 2010, pp.1-6

- LXXI. Nyquist Envelope of Fractional Order Transfer Functions with Parametric Uncertainty**  
TAN N., Ozyetkin M. M., YEROĞLU C.  
International Workshops on New Trends in Science and Technology (NTST 08)/ Fractional Differentiation and its Applications (FDA08), Ankara, Turkey, 01 November 2008, pp.487-494
- LXXII. Limit cycle prediction for fractional order systems with static -nonlinearities**  
Yeroğlu C., Tan N.  
IFAC International Workshop on Periodic Control Systems, PSYCO 2010, Antalya, Turkey, 26 - 28 August 2010, vol.4, pp.144-149
- LXXIII. Development of a Toolbox for Frequency Response Analysis of Fractional Order Control Systems**  
YEROĞLU C., TAN N.  
European Conference on Circuit Theory Design, Antalya, Turkey, 23 - 27 August 2009, pp.866-869
- LXXIV. Space Charge Formation In Non-cristalline Polymers And GaSe By DBD In SF6 Medium**  
ALISOY H. Z., YEROĞLU C., KÖSEOĞLU M.  
23rd International Symposium on Discharges and Electrical Insulation in Vacuum, Bucharest, Romania, 15 - 19 September 2008, pp.491-494
- LXXV. Computation of stabilizing PI parameters for vehicle suspension system using the stability boundary locus**  
Yeroglu C., TAN N.  
IEEE International Conference on Mechatronics (ICM 2004), İstanbul, Turkey, 3 - 05 June 2004, pp.50-55
- LXXVI. An application for a production system by using simulation modelling techniques**  
Yeroglu C., AKDENİZ R.  
6th World Multi-Conference on Systemics, Cybernetics and Informatics (SCI 2002)/8th International Conference on Information Systems Analysis and Synthesis (ISAS 2002), Florida, United States Of America, 14 - 18 July 2002, pp.127-131

## Supported Projects

YEROĞLU C., KAVURAN G., GÖKHAN Ş., Project Supported by Higher Education Institutions, COVID19 İlişkili İnsani Gelişim Seviyesinin Sınıflandırılması için Yeni Bir Derin Evrimsel Sinir Ağı Modeli, 2021 - 2022

İNCE K., YILDIRIM S., İNCE C., AKKAYA A. E., KUZU B., TOPAL A., ÇİÇEKLİ M., ADANUR K., GENÇAY A., YEROĞLU C., et al., Project Supported by Higher Education Institutions, Yüksek Öğretim Kurumlarında Bilişim Altyapısının Geliştirilmesi ve Akademik Çalışmalardaki Etkisinin Analizi : İnönü Üniversitesi Örneği, 2018 - 2021

YEROĞLU C., KARCI A., AKKAYA A. E., Project Supported by Higher Education Institutions, International Conference on Artificial Intelligence and Data Processing (IDAP 2018), 2018 - 2019

YEROĞLU C., HAMAMCI S. E., Project Supported by Higher Education Institutions, Çoklu Zaman Gecikmeli sistemlerin kontrolü için Kesir Dereceli [PI] denetçi tasarımında Optimizasyon tekniklerinin araştırılması, 2018 - 2018

Yeroğlu C., Alagöz B. B., TÜBİTAK Project, Rotor Kontrolü İçin Gömülü Programlama İle Kesir Dereceli Model Referans Uyarlamalı Denetçi Tasarımı, 2016 - 2017

## Metrics

Publication: 149  
Citation (WoS): 823  
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H-Index (Scopus): 11

## Non Academic Experience

Business Establishment Private, ŐŐsecam, Üretim Müdürlüğü

Other Public Institution, Bayındırlık Ve İskan Bakanlığı, Sismoloji Őube Müdürlüğü