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Personal Information

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International Researcher IDs
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Publons / Web Of Science ResearcherID: AAW-6175-2020
Yoksis Researcher ID: 340625

Research Areas

Control and System Engineering, Robotics and Mechatronics Systems, Equipment, Artificial Intelligence, Computer Learning and Pattern Recognition

Academic Titles / Tasks

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2021 - Continues

Courses

Swarm Systems, Doctorate, 2021 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

I. **On the existence of Equivalent-Input-Disturbance and multiple integral augmentation via H-Infinity Synthesis for unmatched systems**
Kürkçü B., Kasnakoğlu C., Efe M. Ö., Su R.
ISA TRANSACTIONS, vol.131, pp.299-310, 2022 (SCI-Expanded)

II. **A New Adaptive Disturbance/Uncertainty Estimator Based Control Scheme For LTI Systems**
BAYRAK A., KÜRKÇÜ B., EFE M. Ö.
IEEE ACCESS, vol.10, pp.106849-106858, 2022 (SCI-Expanded)

III. **Robust Autopilot Design Based on a Disturbance/Uncertainty/Coupling Estimator**
Kurkcu B., Kasnakoglu C.
IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY, vol.27, no.6, pp.2622-2629, 2019 (SCI-Expanded)

IV. **Disturbance/Uncertainty Estimator Based Integral Sliding-Mode Control**
Kurkcu B., Kasnakoğlu C., Efe M. Ö.
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, vol.63, no.11, pp.3940-3947, 2018 (SCI-Expanded)

V. **Disturbance/Uncertainty Estimator Based Robust Control of Nonminimum Phase Systems**
Kurkcu B., Kasnakoğlu C., Efe M. Ö.
IEEE-ASME TRANSACTIONS ON MECHATRONICS, vol.23, no.4, pp.1941-1951, 2018 (SCI-Expanded)

VI. **Robust Temperature Control of a Thermoelectric Cooler via -Synthesis**
Kurkcu B., Kasnakoglu C.

JOURNAL OF ELECTRONIC MATERIALS, vol.47, no.8, pp.4421-4429, 2018 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. **Experimental Comparison of H-Infinity Synthesis and Feedback Linearization on a MIMO Gimbal Example**
Ozcelik M., Kurkcu B., Bayraktaroğlu Z. Y.
2023 IEEE Conference on Control Technology and Applications, CCTA 2023, Bridgetown, Barbados, 16 - 18 August 2023, pp.984-991

II. **Modelling and Simulation of 2 DOF Gimbal System with Experimental System Identification**
Ozcelik M., KÜRKÇÜ B., Bayraktaroğlu Z. Y.
10th International Conference on Systems and Control, ICSC 2022, Marseille, France, 23 - 25 November 2022, pp.508-515

III. **Switching Based MIMO Robust Autopilot Design: A Munition Example**
Albayrak M., KÜRKÇÜ B., AYASUN S.
13th IEEE International Conference on Mechanical and Intelligent Manufacturing Technologies (ICMIMT), ELECTR NETWORK, 25 - 27 May 2022, pp.302-307

IV. **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), ELECTR NETWORK, 25 - 27 May 2022, pp.275-280

V. **A Comparison of H8-Synthesis and Feedback Linearization for Rotary Inverted Pendulum**
Gunes U., Sel A., Kurkcu B., Kasnakoglu C.
11th International Conference on Mechanical and Aerospace Engineering, ICMAE 2020, Athens, Greece, 14 - 17 July 2020, pp.180-185

VI. **Control Loss Recovery Autopilot Design for Fixed-Wing Aircraft**
Akyurek S., KÜRKÇÜ B., Kaynak U., Kasnakoglu C.
6th IFAC Symposium on System Structure and Control (SSSC), İstanbul, Turkey, 22 - 24 June 2016, vol.49, pp.117-123

VII. **LQG/LTR Position Control of an BLDC Motor with Experimental Validation**
Kurkcu B., Kasnakoglu C.
9th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 26 - 28 November 2015, pp.796-800

VIII. **Design of a Flight Stabilizer for Fixed-Wing Aircrafts Using H-infinity Loop Shaping Method**
Akyurek S., Ozden G. S., Kurkcu B., Kaynak U., Kasnakoglu C.
9th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 26 - 28 November 2015, pp.790-795

Supported Projects

KAYA A., YALIM KELEŞ H., ERKENT Ö., KEÇELİ A. S., KÜRKÇÜ B., ÇİÇEKLİ İ., Project Supported by Higher Education Institutions, Derin öğrenme ile yapay zeka ve robotik tabanlı otonom sistem uygulamalarının geliştirilmesi, 2022 - Continues

Activities in Scientific Journals

TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, Assistant Editor/Section Editor, 2023 - Continues

MEASUREMENT AND CONTROL, Assistant Editor/Section Editor, 2023 - Continues

Memberships / Tasks in Scientific Organizations

Türkiye Otomatik Kontrol Milli Komitesi, Member, 2021 - Continues, Turkey

Scientific Refereeing

IEEE ACCESS, SCI Journal, October 2022
ROBOTICA, SCI Journal, February 2022
IEEE TRANSACTIONS ON CYBERNETICS, SCI Journal, December 2021
ROBOTICA, SCI Journal, November 2021
MECHATRONICS, SCI Journal, October 2021
IEEE TRANSACTIONS ON CYBERNETICS, SCI Journal, September 2021
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, September 2021
ISA TRANSACTIONS, SCI Journal, July 2021
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, June 2021
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, April 2021
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, April 2021
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, February 2021
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, December 2020

Metrics

Publication: 19
Citation (WoS): 62
Citation (Scopus): 94
H-Index (WoS): 5
H-Index (Scopus): 5

Awards

Kürkçü B., IEEE Turkey Best PhD Thesis Award, Ieee, January 2021
Kürkçü B., En iyi bildiri ödülü, Xvı. Ulusal Mekanik Kongresi, June 2009