

## Theme 1-5: Mechatronics and Control - 2022

Title	Authors	Scopus Source title	Volume	Issue	Pages	Publication type
Identifying Friction in a Nonlinear Chaotic System Using a Universal Adaptive Stabilizer	Wadi, A.   Mukhopadhyay, S.   Romdhane, L.	IEEE Access	10	-	39177-39192	Article
Application of Particle Swarm Optimization for the Identification of Two-Mass Electric Drive Systems	Hafez, I.   Dhaouadi, R.	2022 8th International Conference on Control, Decision and Information Technologies, CoDIT 2022	-	-	758-763	Conference Paper
Type-2 Fuzzy Adaptive PID Controller for Differential Drive Mobile Robot: A Mechatronics Approach	Pour, P.D.   Alsayegh, K.M.J.   Jaradat, M.A.	2022 Advances in Science and Engineering Technology International Conferences, ASET 2022	-	-	-	Conference Paper
An Adaptive Autotuned Polynomial-Based Extended Kalman Filter for Sensorless Surface Temperature Estimation of Li-Ion Battery Cells	Elsergany, A.M.   Hussein, A.A.   Wadi, A.   Abdel-Hafez, M.F.	IEEE Access	10	-	14038-14048	Article
Computationally Efficient State-of-Charge Estimation in Li-Ion Batteries Using Enhanced Dual-Kalman Filter†	Wadi, A.   Abdel-Hafez, M.   Hussein, A.A.	Energies	15	10	-	Article
Variational Bayesian-Based Maximum Correntropy Cubature Kalman Filter Method for State-of-Charge Estimation of Li-ion Battery Cells	Hafez, I.   Wadi, A.   Abdel-Hafez, M.F.   Hussein, A.A.	IEEE Transactions on Vehicular Technology	-	-	1-15	Article
On the equivalence between mass perturbation and DC voltage bias in coupled MEMS resonators: Theoretical and experimental investigation	Rabenimanana, T.   Najar, F.   Ghommem, M.   Walter, V.   Kacem, N.	Journal of Applied Physics	132	2	-	Article
Identifying Friction in a Nonlinear Chaotic System Using a Universal Adaptive Stabilizer	Wadi, A.   Mukhopadhyay, S.   Romdhane, L.	IEEE Access	10	-	39177-39192	Article
Mode couplings in multiplex electromechanical structures	Sayed Ahmed, M.   Ghommem, M.   Shahab, S.	Journal of Applied Physics	132	12	-	Article
Novel Design of a Hybrid Drone System for Cleaning Solar Panels	Sarkis, S.S.   Khanfar, L.A.   Ghabour, B.N.   Zaki, L.   Alahmed, M.   Jaradat, M.A.   Wadi, A.   Khalil, A.	2022 Advances in Science and Engineering Technology International Conferences, ASET 2022	-	-	-	Conference Paper