IMSmC 2023

Topic packages

Recommended but not limited

- General Mechatronics
    - Mechatronics in Industry
    - Mechatronics in Manufacturing
    - Mechatronics Education
    - Mechatronic System Design
    - Mechatronics in Forestry and Agriculture
    - Sensors, Drivers and Actuators used in Mechatronic Systems
    - Industrial Wired- and Wireless Communication in Mechatronic Systems
    - Industry 4.0 (Cloud Technology, IoT, PLC Networks)
- Mechatronics in vehicle engineering
    - EV, HEV Vehicles (architectures, principles of operations, classifications, control)
    - Most Modern Sensors and Actuators Used in Field Vehicles (ECU, ABS, TCR, … modules used in vehicles)
    - Vehicle Communication's Networks and Methods (V2V, …, V2X)
    - Mechatronics in Logistics
    - Mechatronics in Aeronautics
    - Mechatronics of Maritime and River Vehicles (e.g.: most modern navigation's methods)
    - Mechatronics in Vehicle Engineering, regarding BUS systems used in Car Engineering (CAN Bus, …..)
- Bio-, Micro-, and Nano-mechatronic Systems
    - Biometric sensors used in vehicle engineering
    - Bionics, embodied robotics
    - Brain interfaces
    - EMG Controlled Bionic Prosthesis
    - Micro-Mechatronic Systems
    - Nano-Mechatronic Systems
    - Micro- and Nano-mechatronic Systems used in Health Industry
- Intelligent mechatronic Systems
    - Fuzzy Based Control Systems in Mechatronic
    - Neural Network Based Control Systems (CNN, RNN)
    - Neuro-Fuzzy Systems Used in Mechatronics (FCM, BIOFAM)
- Measurement, Signal Processing, Mechatronic Control Systems & Modelling
    - Controlled Mechanical Systems
    - Control Devices used in Mechatronic Systems
    - Advanced Control Systems used in Mechatronics
    - Physical Systems Modelling
- Mechatronics for Environmental Sustainability
- Material Science for Mechatronic Systems