



Dissemination of results - published papers:

1. A.R. Ynineb, D. Copot, E. Yumuk, R. De Keyser, H. Farbakhsh, G. Ben Othman, C. Muresan, I. Birs, S. Ladaci, M. Neckebroek, C.M. Ionescu (2024), Pharmacokinetic modelling during long term anesthesia: minimizing the gap, *Journal of Advanced Research*, în recenzie
2. P.A. Pintea, E. Dulf (2024), Modelling Nonlinear Systems For Drug Administration Via Koopman Operator, *International Conference on Mathematical Analysis and Applications in Science and Engineering*, June 20-22 , Porto, Portugalia, în curs de publicare
3. P.A. Pintea, E. Dulf (2024), Weight Matrix Syntheses Using the Controllability Gramian for LQR Anaesthesia Control, *IEEE International Conference on Automation, Quality and Testing, Robotics - AQTR 2024*, May 16-18, 2024, Cluj-Napoca, Romania, în curs de publicare
4. P.A. Pintea, E. Dulf (2024), Robust Feedback Linearization for Anaesthesia Control During the Inducing Phase, *Computer Methods and Programs in Biomedicine*, în recenzie
5. P.A. Pintea, E. H. Dulf, C.I. Muresan, C.M. Ionescu (2024), Inducing Anaesthesia via Exact Feedback Linearization control, *4th IFAC Conference on Advances in Proportional-Integral-Derivative Control (PID 2024)*, June 12-14, Almería, Spain, în curs de publicare
6. E. Hegedus, M.D. Mihai, I.R. Birs, H. Farbakhsh, E. Yumuk, D. Copot, E.H. Dulf, R. De Keyser, C.M. Ionescu, C.I. Muresan (2024), Analysis and Preliminary Results of a Feedback-Feedforward Controller for Depth of Anesthesia, *4th IFAC Conference on Advances in Proportional-Integral-Derivative Control (PID 2024)*, June 12-14, Almería, Spain, în curs de publicare
7. M.D. Mihai, I.R. Birs, E. Hegedus, D. Copot, M. Neckebroek, R. De Keyser, C.M. Ionescu, C.I. Muresan (2024), First-Hand Design of a Fractional order PID for Controlling the Depth of Hypnosis during Induction, *4th IFAC Conference on Advances in Proportional-Integral-Derivative Control (PID 2024)*, June 12-14, Almería, Spain, în curs de publicare
8. A.R. Ynineb, M.D. Mihai, E. Yumuk, H. Farbakhsh, G. Ben Othman, R. De Keyser, C.I. Muresan, I.R. Birs, D. Copot, C. M. Ionescu (2024), Fractional Order PID Control of Propofol Dosage and Optimization in Lean and Obese Patients, *4th IFAC Conference on Advances in Proportional-Integral-Derivative Control (PID 2024)*, June 12-14, Almería, Spain, în curs de publicare
9. E. Hegedus, M.D. Mihai, I.R. Birs, H. Farbakhsh, E. Yumuk, D. Copot, R. De Keyser, C.M. Ionescu, C.I. Muresan (2024), A Decoupled Fractional Order Control Strategy to Increase Patient Safety During Anesthesia-Hemodynamic Interactions, *22nd European Control Conference*, June 25-28, Stockholm, Sweden, în curs de publicare
10. E.T. Hegedüs, I.R. Birs, C.M. Ionescu, C.I. Muresan (2024), An optimal decentralized-decoupled fractional order control strategy for complete anesthesia-hemodynamic stabilization in patients undergoing surgical procedures, *Fractal and Fractional*, în recenzie



Special sessions organized:

1. C.M. Ionescu, A. Visioli, C.I. Muresan, Special session on “Drug dosing control in anesthesia”, *4th IFAC Conference on Advances in Proportional-Integral-Derivative Control (PID 2024)*, June 12-14, Almería, Spain
2. C.I. Muresan, D. Copot, E. Yumuk. M. Neckebroek, Special session on “Multi-Drug Control and Optimization”, *22nd European Control Conference*, June 25-28, Stockholm, Sweden.