

Design of a generalized fractional-order PID controller using operational amplifiers

Gonzalez, Emmanuel A.; Alimisis, Vassilis; Psychalinos, Costas; **Tepljakov, Aleksei** 2018 25th IEEE International Conference on Electronics Circuits and Systems (ICECS), Bordeaux, France, December 9–12, 2018 / p. 253-256 : ill <http://dx.doi.org/10.1109/ICECS.2018.8617954>

Design of a MATLAB-based teaching tool in introductory fractional-order systems and controls [Electronic resource]

Tepljakov, Aleksei; Petlenkov, Eduard; Gonzalez, Emmanuel A.; Petraš, Ivo 2017 IEEE Frontiers in Education Conference (FIE) : proceedings 2017 / 4 p. : ill [USB] <https://doi.org/10.1109/FIE.2017.8190681>

Design of retuning fractional PID controllers for a closed-loop magnetic levitation control system

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri; Gonzalez, Emmanuel A. 2014 13th International Conference on Control, Automation, Robotics & Vision (ICARCV 2014) : Marina Bay Sands, Singapore, 10-12th December 2014 / p. 1345-1350 : ill

Digital realization of retuning fractional-order controllers for an existing closed-loop control system

Tepljakov, Aleksei; Petlenkov, Eduard; Gonzalez, Emmanuel A.; **Belikov, Juri** Journal of circuits, systems, and computers 2017 / art. 1750165, p. 1-26 <https://doi.org/10.1142/S0218126617501651>

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, Aleksei; Alagoz, Baris Baykant; Gonzalez, Emmanuel A.; **Petlenkov, Eduard**; Yeroglu, Celaledin Journal of circuits, systems, and computers 2018 / 1850176 <https://doi.org/10.1142/S0218126618501761> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A numerical study for plant-independent evaluation of fractional-order PID controller performance

Alagoz, Baris Baykant; **Tepljakov, Aleksei**; Yeroglu, Celaledin; Gonzalez, Emmanuel A.; Hossein Nia, S. Hassan; **Petlenkov, Eduard** IFAC-PapersOnLine 2018 / p. 539-544 : ill <https://doi.org/10.1016/j.ifacol.2018.06.151> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Retrofitting fractional-order dynamics to an existing feedback control system : from classical proportional-integral (PI) control to fractional-order proportional-derivative (FOPD) control

Gonzalez, Emmanuel A.; **Tepljakov, Aleksei**; Monje, Concepcion A.; Petraš, Ivo International research journal on innovations in engineering, science and technology 2017 / 6 p https://www.researchgate.net/publication/325989325_Retrofitting_Fractional-Order_Dynamics_to_an_Existing_Feedback_Control_System_From_Classical_Proportional-Integral_PI_Control_to_Fractional-Order_Proportional-Derivative_FOPD_Control

Towards industrialization of FOPID controllers : a survey on milestones of fractional-order control and pathways for future developments

Tepljakov, Aleksei; Alagoz, Baris Baykant; Yeroglu, Celaledin; Gonzalez, Emmanuel A.; Hosseinnia, Hassan; **Petlenkov, Eduard**; **Ates, Abdullah; Cech, Martin** IEEE Access 2021 / p. 21016-21042 <https://doi.org/10.1109/ACCESS.2021.3055117> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)