

A theoretical investigation on consideration of initial conditions in fractional-order transfer function modeling

Alagoz, Baris Baykant; **Tepljakov, Aleksei; Petlenkov, Eduard**; Yeroglu, Celaledin 2017 40th International Conference on Telecommunications and Signal Processing TSP : July 5-7, 2017, Barcelona, Spain 2017 / p. 710-713 : ill <https://doi.org/10.1109/TSP.2017.8076080>

An evolutionary field theorem : evolutionary field optimization in training of power-weighted multiplicative neurons for nitrogen oxides-sensitive electronic nose applications

Alagoz, Baris Baykant; Simsek, Ozlem Imik; Ari, Davut; **Tepljakov, Aleksei; Petlenkov, Eduard; Alimohammadi, Hossein** Sensors 2022 / art. 3836 <https://doi.org/10.3390/s22103836> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

FOPID controllers and their industrial applications: a survey of recent results

Tepljakov, Aleksei; Alagoz, Baris Baykant; **Petlenkov, Eduard** IFAC-PapersOnLine 2018 / p. 25-30 <https://doi.org/10.1016/j.ifacol.2018.06.014> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Fractional order model identification of receptor-ligand complexes formation by equivalent electrical circuit modeling

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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

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Multi-loop model reference adaptive control of fractional-order PID control systems

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Multi-loop model reference proportional integral derivative controls: design and performance evaluations

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A NARX model reference adaptive control scheme: Improved disturbance rejection fractional-order PID control of an experimental magnetic levitation system

Alimohammadi, Hossein; Alagoz, Baris Baykant; **Tepljakov, Aleksei; Vassiljeva, Kristina; Petlenkov, Eduard** Algorithms 2020 / p. 1-27 <https://doi.org/10.3390/a13080201> [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](#)

Software implementation of FOPID controllers with tuning capability for fractional FOPDT plants

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

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