

A flexible MATLAB tool for optimal fractional-order PID controller design subject to specifications

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Active and reactive power control of DFIG using optimized fractional order-PI controller

Javed, Umar; Arshad, Muhammad Asad; **Shabbir, Noman; Kütt, Lauri; Rassölikin, Anton** 2021 IEEE 19th International Power Electronics and Motion Control Conference, The Silesian University of Technology Gliwice, Poland, 25 - 29 April, 2021 (PEMC) : proceedings 2021 / p. 398-404 <https://doi.org/10.1109/PEMC48073.2021.9432608>

Application of Newton's method to analog and digital realization of fractional-order controllers

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Digital fractional-order control of a position servo

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Digital implementation of retuning fractional controllers for an existing closed-loop magnetic levitation control system

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FOMCON : fractional-order modeling and control toolbox for MATLAB

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

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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](#)

Tuning and digital implementation of a fractional-order PD controller for a position servo

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