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Selected Scholarly Contributions [Data Provided by Scopus]

Arun, N.K., Mohan, B.M.

[Mathematical modeling of the Mamdani simplest fuzzy PI or PD TITO controller via Larsen Product inference method](#)

(2015) Proceedings of 2015 IEEE 9th International Conference on Intelligent Systems and Control, ISCO 2015, art. no. 7282226, .

Mohan, B.M., Arun, N.K.

[Modeling and computational study of the simplest fuzzy PI or PD controllers via height Defuzzification](#)

(2014) Proceedings - 2014 6th International Conference on Computational Intelligence and Communication Networks, CICN 2014, art. no. 7065644, pp. 1068-1072.

Arun, N.K., Mohan, B.M.

[Modeling and computational study of the simplest fuzzy PI or PD controllers via center of gravity defuzzification](#)

(2014) Proceedings of International Conference on Circuits, Communication, Control and Computing, I4C 2014, art. no. 7057788, pp. 192-196.

Arun, N.K., Mohan, B.M.

[Mathematical models and computational aspects of the simplest fuzzy two-term controllers](#)

(2014) IFAC Proceedings Volumes (IFAC-PapersOnline), 3 (PART 1), pp. 882-889.

Mohan, B.M., Kar, S.K.

[Optimal Control of Nonlinear Systems via Block Pulse Functions and Legendre Polynomials](#)

(2012) Differential Equations and Dynamical Systems, 20 (2), pp. 149-159.

Mohan, B.M., Ghosh, A.

[Fuzzy two-term controllers with multi-fuzzy sets: Mathematical models and analysis](#)

(2012) International Journal of Modelling, Identification and Control, 15 (3), pp. 199-218.

Mohan, B.M.

[Fuzzy PID control VIA modified Takagi-Sugeno rules](#)

(2011) Intelligent Automation and Soft Computing, 17 (2), pp. 165-174.

Mohan, B.M., Kar, S.K.

[Optimal control of nonlinear systems via orthogonal functions](#)

(2011) Proceedings - 2011 International Conference on Energy, Automation and Signal, ICEAS - 2011, art. no. 6147166, pp. 551-555.

Mohan, B.M., Kar, S.K.

[Optimal control of multi-delay systems via shifted Legendre polynomials](#)

(2011) Proceedings - 2011 International Conference on Energy, Automation and Signal, ICEAS - 2011, art. no. 6147161, pp. 520-527.

Mohan, B.M., Naresh, K.

[Mathematical models of the simplest fuzzy two-term \(PI/PD\) controllers using minimum inference](#)

(2011) 2011 IEEE Recent Advances in Intelligent Computational Systems, RAICS 2011, art. no. 6069409, pp. 745-750.

Mohan, B.M., Kar, S.K.

[Optimal control of singular systems via orthogonal functions](#)

(2011) International Journal of Control, Automation and Systems, 9 (1), pp. 145-150.

Mohan, B.M., Kar, S.K.

[Estimation and optimal control with reduced order observers via orthogonal functions](#)

(2010) International Journal of Systems Signal Control and Engineering Application, 3 (1), pp. 1-6.

Mohan, B.M., Kar, S.K.

[Optimal control of multi-delay systems via block-pulse functions](#)

(2010) 2010 5th International Conference on Industrial and Information Systems, ICIS 2010, art. no. 5578634, pp. 614-619.

Mohan, B.M., Reddy, J.M.

[Mathematical model of a Takagi-Sugeno PI/PD controller](#)

(2010) 2010 5th International Conference on Industrial and Information Systems, ICIIS 2010, art. no. 5578631, pp. 620-625.

Mohan, B.M., Kumar Kar, S.

[Orthogonal functions approach to optimal control of delay systems with reverse time terms](#)

(2010) Journal of the Franklin Institute, 347 (9), pp. 1723-1739.

Ghosh, A., Das, T.K., Mandal, S.K., Mohan, B.M.

[Analytical structure and stability analysis of a fuzzy two-term controller with multi-fuzzy sets](#)

(2009) International Conference on Automation, Robotics and Control Systems 2009, ARCS 2009, pp. 146-153.

Mohan, B.M., Kar, S.K.

[State estimation using shifted Legendre polynomials](#)

(2008) IEEE Region 10 Colloquium and 3rd International Conference on Industrial and Information Systems, ICIIS 2008, art. no. 4798340, .

Mohan, B.M., Kar, S.K.

[Block-pulse functions approach to analysis of linear optimal control systems incorporating observers](#)

(2008) IEEE Region 10 Colloquium and 3rd International Conference on Industrial and Information Systems, ICIIS 2008, art. no. 4798339, .

Mohan, B.M., Kar, S.K.

[State estimation using block-pulse functions](#)

(2008) Proceedings of the INDICON 2008 IEEE Conference and Exhibition on Control, Communications and Automation, 1, art. no. 4768840, pp. 280-285.

Mohan, B.M., Kar, S.K.

[Shifted legendre polynomials approach to analysis of linear optimal control systems incorporating observers](#)

(2008) Proceedings of the INDICON 2008 IEEE Conference and Exhibition on Control, Communications and Automation, 2, art. no. 4768754, pp. 383-387.

Mohan, B.M., Sinha, A.

[The simplest fuzzy two-term controllers: Mathematical models and stability analysis](#)

(2008) International Journal of Automation and Control, 2 (1), pp. 5-21.

Mohan, B.M., Sinha, A.

[Mathematical models of the simplest fuzzy PI/PD controllers with skewed input and output fuzzy sets](#)

(2008) ISA Transactions, 47 (3), pp. 300-310.

Mohan, B.M., Sinha, A.

[Analytical structures for fuzzy PID controllers?](#)

(2008) IEEE Transactions on Fuzzy Systems, 16 (1), pp. 52-60.

Mohan, B.M., Sinha, A.

[Analytical structure and stability analysis of a fuzzy PID controller](#)

(2008) Applied Soft Computing Journal, 8 (1), pp. 749-758.

Mohan, B.M., Sinha, A.

[On the simplest fuzzy two - Term controller structure derived via algebraic product t-norm - bounded sum t-conorm - Mamdani minimum inference combination](#)

(2007) ICIS 2007 - 2nd International Conference on Industrial and Information Systems 2007, Conference Proceedings, art. no. 4579155, pp. 97-100.

Mohan, B.M., Sinha, A.

[Mathematical model and analysis op the simplest fuzzy two - Term \(PI/PD\) controller](#)

(2007) Advances in Computer Science and Eng.: Reports and Monographs - Innovative Applications of Information Technology for the Developing World - Proc. of the 3rd Asian Applied Comput. Conf., AACC 2005, 2, pp. 360-366.

Mohan, B.M., Sinha, A.

[The simplest fuzzy PID controllers: Mathematical models and stability analysis](#)

(2006) Soft Computing, 10 (10), pp. 961-975.

Mohan, B.M., Kar, S.K.

[Comments on "Optimal control via Fourier series of operational matrix of integration"](#)

(2005) IEEE Transactions on Automatic Control, 50 (9), pp. 1466-1467.

Mohan, B.M., Sinha, A.

[A simplest fuzzy PID controller: Analytical structure and stability analysis](#)

(2004) Proceedings of the IEEE INDICON 2004 - 1st India Annual Conference, pp. 288-293.

Patel, A.V., Mohan, B.M.

[Some numerical aspects of center of area defuzzification method](#)

(2002) Fuzzy Sets and Systems, 132 (3), pp. 401-409.

Mohan, B.M., Patel, A.V.

[Erratum: Analytical structures and analysis of the simplest fuzzy PD controllers](#)

(IEEE Transactions on System, Man, and Cybernetics - Part B (April 2002) 32 (239-248))

(2002) IEEE Transactions on Systems, Man, and Cybernetics, Part B: Cybernetics, 32 (4), pp. 550-551.

Patel, A.V., Mohan, B.M.

[Analytical structures and analysis of the simplest fuzzy PI controllers](#)

(2002) Automatica, 38 (6), pp. 981-993.

Mohan, B.M., Patel, A.V.

[Analytical structures and analysis of the simplest fuzzy PD controllers](#)

(2002) IEEE Transactions on Systems, Man, and Cybernetics, Part B: Cybernetics, 32 (2), pp. 239-248.

Mohan, B.M., Datta, K.B.

[On the optimal control of linear discrete-time systems via discrete orthogonal functions](#)

(1998) Journal of the Franklin Institute, 335 (4), pp. 731-738.

Mohan, B.M., Datta, K.B.

[Orthogonal functions approach to the analysis of discrete-time systems is unnecessary](#)

(1998) Journal of the Franklin Institute, 335 (3), pp. 441-449.

Mohan, B.M., Srinath, B.

[On the identification of discrete-time systems via discrete orthogonal functions](#)

(1997) Computers and Electrical Engineering, 23 (5), pp. 329-345.

Mohan, B.M., Datta, K.B.

[Analysis of linear time-invariant time-delay systems via orthogonal functions](#)

(1995) International Journal of Systems Science, 26 (1), pp. 91-111.

Mohan, B.M., Datta, K.B.

[Identification of linear time invariant single-input single-output continuous-time lumped parameter systems via orthogonal functions](#)

(1991) Control, theory and advanced technology, 7 (3), pp. 387-406.

Mohan, B.M., Datta, K.B.

[Linear time-invariant distributed parameter system identification via orthogonal functions](#)

(1991) Automatica, 27 (2), pp. 409-412.

Mohan, B.M., Datta, K.B.

[Identification of non-linear distributed parameter systems via orthogonal functions](#)

(1990) International Journal of Control, 52 (4), pp. 795-800.

Mohan, B.M., Datta, K.B.

[Identification of time-varying distributed parameter systems via orthogonal polynomials](#)

(1989) pp. 883-886.

Mohan, B.M., Datta, K.B.

[Identification Via Fourier Series for a Class of Lumped and Distributed Parameter Systems](#)

(1989) IEEE Transactions on Circuits and Systems, 36 (11), pp. 1454-1458.

Mohan, B.M., Datta, K.B.

[Lumped and distributed parameter system identification via shifted Legendre polynomials](#)

(1988) Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 110 (4), pp. 436-440.

Mohan, B.M., Datta, K.B.

[Analysis of time-delay systems via shifted chebyshev polynomials of the first and second kinds](#)

(1988) International Journal of Systems Science, 19 (9), pp. 1843-1851.