

Maarten Schoukens

List of Publications by Year in descending order

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498
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Feedback identification of conductance-based models. <i>Automatica</i> , 2021, 123, 109297. | 3.0 | 5 |
| 2 | Artificial Neural Network Hysteresis Operators for the Identification of Hammerstein Hysteretic Systems. <i>IFAC-PapersOnLine</i> , 2021, 54, 702-707. | 0.5 | 8 |
| 3 | Non-linear State-space Model Identification from Video Data using Deep Encoders. <i>IFAC-PapersOnLine</i> , 2021, 54, 697-701. | 0.5 | 5 |
| 4 | Bayesian optimization for Tuning Lithography Processes. <i>IFAC-PapersOnLine</i> , 2021, 54, 827-832. | 0.5 | 1 |
| 5 | Toolbox for Discovering Dynamic System Relations via TAG Guided Genetic Programming. <i>IFAC-PapersOnLine</i> , 2021, 54, 379-384. | 0.5 | 2 |
| 6 | Nonlinear Finite Impulse Response Estimation using Regularized Neural Networks. <i>IFAC-PapersOnLine</i> , 2021, 54, 174-179. | 0.5 | 3 |
| 7 | Data-driven modeling of impedance biosensors: a subspace approach. <i>Measurement Science and Technology</i> , 2021, 32, 104009. | 1.4 | 4 |
| 8 | Improved Initialization of State-Space Artificial Neural Networks. , 2021, , . | | 4 |
| 9 | Extending the Best Linear Approximation Framework to the Process Noise Case. <i>IEEE Transactions on Automatic Control</i> , 2020, 65, 1514-1524. | 3.6 | 9 |
| 10 | A Tree Adjoining Grammar representation for models of stochastic dynamical systems. <i>Automatica</i> , 2020, 119, 109099. | 3.0 | 4 |
| 11 | Best Linear Approximation of Nonlinear Continuous-Time Systems Subject to Process Noise and Operating in Feedback. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, , 1-1. | 2.4 | 3 |
| 12 | On the Initialization of Nonlinear LFR Model Identification with the Best Linear Approximation. <i>IFAC-PapersOnLine</i> , 2020, 53, 310-315. | 0.5 | 7 |
| 13 | System identification of biophysical neuronal models. , 2020, , . | | 2 |
| 14 | Data-driven Modelling of Dynamical Systems Using Tree Adjoining Grammar and Genetic Programming. , 2019, , . | | 4 |
| 15 | Feedback for nonlinear system identification. , 2019, , . | | 3 |
| 16 | Sampled-data adaptive observer for state-affine systems with uncertain output equation. <i>Automatica</i> , 2019, 103, 96-105. | 3.0 | 14 |
| 17 | Grammar-based Representation and Identification of Dynamical Systems. , 2019, , . | | 4 |
| 18 | Frequency Response Functions of Linear Parameter-Varying Systems. <i>IFAC-PapersOnLine</i> , 2019, 52, 32-37. | 0.5 | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | On Behavioral Interpolation in Local LPV System Identification. IFAC-PapersOnLine, 2019, 52, 20-25. | 0.5 | 3 |
| 20 | Modeling the Nonlinear Cortical Response in EEG Evoked by Wrist Joint Manipulation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 205-215. | 2.7 | 14 |
| 21 | Comparison of least squares and exponential sine sweep methods for Parallel Hammerstein Models estimation. Mechanical Systems and Signal Processing, 2018, 104, 851-865. | 4.4 | 7 |
| 22 | On the Simulation of Polynomial NARMAX Models. , 2018, , . | | 7 |
| 23 | From Nonlinear Identification to Linear Parameter Varying Models: Benchmark Examples. IFAC-PapersOnLine, 2018, 51, 419-424. | 0.5 | 6 |
| 24 | Sampled-Data Based State and Parameter Estimation for State-Affine Systems with Uncertain Output Equation. IFAC-PapersOnLine, 2018, 51, 491-496. | 0.5 | 2 |
| 25 | Linear Parameter Varying Representation of a class of MIMO Nonlinear Systems. IFAC-PapersOnLine, 2018, 51, 94-99. | 0.5 | 7 |
| 26 | Nonparametric Data-Driven Modeling of Linear Systems: Estimating the Frequency Response and Impulse Response Function. IEEE Control Systems, 2018, 38, 49-88. | 1.0 | 36 |
| 27 | Structure Detection of Wiener-Hammerstein Systems With Process Noise. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 569-576. | 2.4 | 20 |
| 28 | Obtaining the Preinverse of a Power Amplifier Using Iterative Learning Control. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 4266-4273. | 2.9 | 17 |
| 29 | Three Benchmarks Addressing Open Challenges in Nonlinear System Identification * *We thank Torbjorn Wigren and Per Mattsson (Uppsala University, Sweden) for their help in realizing the cascaded tanks benchmark. This work was funded by the Fund for Scientific Research (FWO), the Methusalem grant of the Flemish Government (METH-1), the IAP VII/19 DYSCO program, and the ERC advanced grant SNLSID under contract 320378. The author J.P. Noel is a Postdoctoral Researcher of Discrete Time Approximation of Continuous Time Nonlinear State Space Models ** This work was supported in part by the Fund for Scientific Research (FWO-Vlaanderen), by the Flemish Government (Methusalem), the Belgian Government through the Inter university Poles of Attraction (IAP VII) Program, and by the ERC advanced grant SNLSID, under contract 320378.. IFAC-PapersOnLine, 2017, 50, 8339-8346. | 0.5 | 21 |
| 30 | Discrete Time Approximation of Continuous Time Nonlinear State Space Models ** This work was supported in part by the Fund for Scientific Research (FWO-Vlaanderen), by the Flemish Government (Methusalem), the Belgian Government through the Inter university Poles of Attraction (IAP VII) Program, and by the ERC advanced grant SNLSID, under contract 320378.. IFAC-PapersOnLine, 2017, 50, 8339-8346. | 0.5 | 3 |
| 31 | Identification of block-oriented nonlinear systems starting from linear approximations: A survey. Automatica, 2017, 85, 272-292. | 3.0 | 150 |
| 32 | Filter-based regularisation for impulse response modelling. IET Control Theory and Applications, 2017, 11, 194-204. | 1.2 | 33 |
| 33 | Tuning the hyperparameters of the filter-based regularization method for impulse response estimation. IFAC-PapersOnLine, 2017, 50, 12841-12846. | 0.5 | 3 |
| 34 | Filter interpretation of regularized impulse response modeling. , 2016, , . | | 1 |
| 35 | Decoupling static nonlinearities in a parallel Wiener-Hammerstein system: A first-order approach. , 2015, , . | | 8 |
| 36 | Structure discrimination in block-oriented models using linear approximations: A theoretic framework. Automatica, 2015, 53, 225-234. | 3.0 | 28 |

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|----|---|-----|-----------|
| 37 | Initial estimates for Wiener-Hammerstein models using phase-coupled multisines. Automatica, 2015, 60, 201-209. | 3.0 | 20 |
| 38 | Parametric identification of parallel Wiener-Hammerstein systems. Automatica, 2015, 51, 111-122. | 3.0 | 32 |
| 39 | Comparison of several data-driven nonlinear system identification methods on a simplified glucoregulatory system example. IET Control Theory and Applications, 2014, 8, 1921-1930. | 1.2 | 8 |
| 40 | Fast identification of Wiener-Hammerstein systems using discrete optimisation. Electronics Letters, 2014, 50, 1942-1944. | 0.5 | 16 |
| 41 | Identification of Wiener-Hammerstein systems by a nonparametric separation of the best linear approximation. Automatica, 2014, 50, 628-634. | 3.0 | 55 |
| 42 | Generation of initial estimates for Wiener-Hammerstein models via basis function expansions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 481-486. | 0.4 | 4 |
| 43 | Study of the effective number of parameters in nonlinear identification benchmarks. , 2013, , . | | 12 |
| 44 | Combining the best linear approximation and dimension reduction to identify the linear blocks of parallel Wiener systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 372-377. | 0.4 | 3 |
| 45 | Parametric Identification of Parallel Wiener Systems. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 2825-2832. | 2.4 | 28 |
| 46 | Parametric MIMO parallel Wiener identification. , 2011, , . | | 5 |
| 47 | Parametric Identification of Parallel Hammerstein Systems. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 3931-3938. | 2.4 | 51 |
| 48 | Vector network analysis for nonlinear systems. , 0, , 309-344. | | 0 |