

# List of Publications\*

Bart De Schutter

December 28, 2023

## Contents

<b>1 Books</b>	<b>1</b>
<b>2 Edited books</b>	<b>1</b>
<b>3 International journal papers</b>	<b>2</b>
<b>4 National journal papers</b>	<b>16</b>
<b>5 Contributions to books</b>	<b>17</b>
<b>6 International conference papers</b>	<b>19</b>
<b>7 National conference papers</b>	<b>47</b>
<b>8 PhD thesis</b>	<b>49</b>
<b>9 Project reports</b>	<b>49</b>
<b>10 Abstracts</b>	<b>50</b>
<b>11 Lecture notes</b>	<b>54</b>
<b>12 Reviews for Mathematical Reviews</b>	<b>55</b>
<b>13 Technical reports</b>	<b>57</b>
<b>14 Papers submitted for publication</b>	<b>60</b>
<b>15 Other publications</b>	<b>60</b>

## 1 Books

- [B1] Y. Wang, B. Ning, T. van den Boom, and B. De Schutter, *Optimal Trajectory Planning and Train Scheduling for Urban Rail Transit Systems. Advances in Industrial Control*, Switzerland: Springer, ISBN 978-3-319-30888-3, 180 pp., 2016.
- [B2] L. Buşoniu, R. Babuška, B. De Schutter, and D. Ernst, *Reinforcement Learning and Dynamic Programming Using Function Approximators*. Boca Raton, Florida: CRC Press, ISBN 978-1-4398-2108-4, 270 pp., 2010.
- [B3] Zs. Lendek, T.M. Guerra, R. Babuška, and B. De Schutter, *Stability Analysis and Nonlinear Observer Design Using Takagi-Sugeno Fuzzy Models*. vol. 262 of *Studies in Fuzziness and Soft Computing*, Berlin, Germany: Springer, ISBN 978-3-642-16775-1, 196 pp., 2010.

## 2 Edited books

- [E1] M. Heemels, B. De Schutter, and M. Lazar (eds.), *Proceedings of the 4th IFAC Conference on Analysis and Design of Hybrid Systems (ADHS 12)*. Eindhoven, The Netherlands: IFAC, ISBN 978-3-902823-00-7, 452 pp., June 2012.

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\*See <https://pub.deschutter.info/> for the most up-to-date list of my publications.

### 3 International journal papers (published or accepted)

- [J1] K. He, S. Shi, T. van den Boom, and B. De Schutter, “Approximate dynamic programming for constrained linear systems: A piecewise quadratic approximation approach,” *Automatica*, vol. 160, p. 111456, Feb. 2024.
- [J2] X. Liu, A. Dabiri, Y. Wang, and B. De Schutter, “Real-time train scheduling with uncertain passenger flows: A scenario-based distributed model predictive control approach,” *IEEE Transactions on Intelligent Transportation Systems*, 2024. To appear.
- [J3] T. Tao, S. Roy, B. De Schutter, and S. Baldi, “Distributed adaptive synchronization in Euler Lagrange networks with uncertain interconnections,” *IEEE Transactions on Automatic Control*, 2024. To appear.
- [J4] D. Yue, S. Baldi, J. Cao, and B. De Schutter, “Model reference adaptive stabilizing control with application to leaderless consensus,” *IEEE Transactions on Automatic Control*, 2024. To appear.
- [J5] A. Alloul, A. Moradvandi, D. Puyol, R. Molina, G. Gardella, S.E. Vlaeminck, B. De Schutter, E. Abraham, R.E.F. Lindeboom, and D.G. Weissbrodt, “A novel mechanistic modelling approach for microbial selection dynamics: Towards improved design and control of raceway reactors for purple bacteria,” *Bioresour. Technology*, vol. 390, p. 129844, Dec. 2023.
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- [J7] D. Yue, S. Baldi, J. Cao, Q. Li, and B. De Schutter, “Distributed adaptive resource allocation: An uncertain saddle-point dynamics viewpoint,” *IEEE/CAA Journal of Automatica Sinica*, vol. 10, no. 12, pp. 2209–2221, Dec. 2023.
- [J8] E. de Gelder, K. Adjenughwure, J. Manders, R. Sniijders, J.P. Paardekooper, O. Op den Camp, A. Tejada, and B. De Schutter, “PRISMA: A novel approach for deriving probabilistic surrogate safety measures for risk evaluation,” *Accident Analysis & Prevention*, vol. 192, p. 107273, Nov. 2023.
- [J9] A. Jamshidnejad, D. Sun, A. Ferrara, and B. De Schutter, “A novel bi-level temporally-distributed MPC approach: An application to green urban mobility,” *Transportation Research Part C*, vol. 156, p. 104334, Nov. 2023.
- [J10] A.D. Sadowska, J.M. Maestre, R. Kassing, P.J. van Overloop, and B. De Schutter, “Predictive control of a human-in-the-loop network system considering operator comfort requirements,” *IEEE Transactions on Systems, Man and Cybernetics: Systems*, vol. 53, no. 8, pp. 4610–4622, Aug. 2023.
- [J11] J. Fu, S. Peyghami, A. Núñez, F. Blaabjerg, and B. De Schutter, “A tractable failure probability prediction model for predictive maintenance scheduling of large-scale modular-multilevel-converters,” *IEEE Transactions on Power Electronics*, vol. 38, no. 5, p. 6533–6544, May 2023.
- [J12] J. Jeschke, D. Sun, A. Jamshidnejad, and B. De Schutter, “Grammatical-evolution-based parameterized model predictive control for urban traffic networks,” *Control Engineering Practice*, vol. 132, p. 105431, Mar. 2023.
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- [J14] M. Lv, B. De Schutter, and S. Baldi, “Non-recursive control for formation-containment of HFV swarms with dynamic event-triggered communication,” *IEEE Transactions on Industrial Informatics*, vol. 19, no. 3, Mar. 2023.
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