

PUBLICATIONS

Helmut Maurer

BOOK and EDITED VOLUMES

1. Advances in Mathematical Modeling, Optimization and Optimal Control (**J.B. Hiriart-Urruty, A. Korytowski, H. Maurer, M. Szymkat**, Eds.), Springer Optimization and Its Application, Vol. 109, Springer International Publishing, Switzerland, 2016.
2. **N. P. Osmolovskii and H. Maurer**, Applications to Regular and Bang-Bang Control: Second-Order Necessary and Sufficient Optimality Conditions in Calculus of Variations and Optimal Control, **SIAM Advances in Design and Control, Vol. DC 24**, SIAM Publications, Philadelphia, 2012.
3. New Approaches in Dynamic Optimization to Assessment of Economic and Environmental Systems (**H. Maurer, T. Palokangas and A. Tarasyev**, Eds.), Special Issue of Applied Mathematics and Computation, Vol. 204 (2), pp. 515–643 (2008).

BOOK CHAPTERS

4. **N.P. Osmolovskii and H. Maurer**, Second-Order Optimality Conditions for Broken Extremals and Bang-Bang Controls: Theory and Applications, In: Advances in Mathematical Modeling, Optimization and Optimal Control, J.-B. Hiriart-Urruty, A. Korytowski, H. Maurer, M. Szymkat (Eds.), **Springer Optimization and Its Application**, Vol. **109**, pp. 147–201, Springer International Publishing, Switzerland, 2016.
5. **H. Maurer, J.J. Preuss, W. Semmler**, Policy Scenarios in a Model of Optimal Economic Growth and Climate Change, in : **The Oxford Handbook of the Macroeconomics of Global Warming** (Lucas Bernard and Willi Semmler, eds.), Chapter 5, pp. 82–113, Oxford University Press, 2015.
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11. **D. Augustin, H. Maurer**: Sensitivity analysis and real-time control of a container crane under state constraints, in: **Online Optimization of Large Scale Systems** (M. Grötschel, S. O. Krumke, J. Rambau, Eds.), Springer, Berlin, pp. 69–82, 2001.
12. **C. Büskens, H. Maurer**: Real-time control of an industrial robot under control and state constraints, in: **Online Optimization of Large Scale Systems** (M. Grötschel, S. O. Krumke, J. Rambau, Eds.), Springer, Berlin, pp. 83–92, 2001.

REFEREED JOURNAL ARTICLES and CONFERENCE PROCEEDINGS

1. **U. Ledzewicz, H. Maurer, H. Schättler**, Bang-bang optimal controls for a mathematical model of chemo- and immunotherapy in cancer, to appear in **Discrete and Continuous Dynamical Systems - Series B**. doi:10.3934/dcdsb.2023141
2. **H. Maurer, Y.C. Kaya**, Optimization over the Pareto front of nonconvex multi-objective optimal control problems, **Computational Optimization and Applications**, 2023, doi: 10.1007/s10589-023-00535-7
3. **W. Semmler, J. Henry, H. Maurer**, Pandemic meltdown and economic recovery A multi-phase dynamic model, empirics, and policy, **Research in Globalization**, **6** (1), 100106 (2023), DOI:10.1016/j.resglo.2022.100106
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