

# Michael Herty

## List of Publications by Year in descending order

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39  
papers

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citations

759233

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552781

26  
g-index

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39  
docs citations

39  
times ranked

418  
citing authors

#	ARTICLE	IF	CITATIONS
1	Gas flow in pipeline networks. <i>Networks and Heterogeneous Media</i> , 2006, 1, 41-56.	1.1	151
2	Coupling conditions for gas networks governed by the isothermal Euler equations. <i>Networks and Heterogeneous Media</i> , 2006, 1, 295-314.	1.1	124
3	Gas Pipeline Models Revisited: Model Hierarchies, Nonisothermal Models, and Simulations of Networks. <i>Multiscale Modeling and Simulation</i> , 2011, 9, 601-623.	1.6	93
4	Kinetic description of optimal control problems and applications to opinion consensus. <i>Communications in Mathematical Sciences</i> , 2015, 13, 1407-1429.	1.0	66
5	Modeling, simulation and optimization of gas networks with compressors. <i>Networks and Heterogeneous Media</i> , 2007, 2, 81-97.	1.1	37
6	A New Approach for Designing Moving-Water Equilibria Preserving Schemes for the Shallow Water Equations. <i>Journal of Scientific Computing</i> , 2019, 80, 538-554.	2.3	35
7	Contingent rerouting for enhancing supply chain resilience from supplier behavior perspective. <i>International Transactions in Operational Research</i> , 2016, 23, 775-796.	2.7	28
8	Mean-field control and Riccati equations. <i>Networks and Heterogeneous Media</i> , 2015, 10, 699-715.	1.1	23
9	Feedback boundary control of linear hyperbolic systems with relaxation. <i>Automatica</i> , 2016, 69, 12-17.	5.0	22
10	Numerical method for optimal control problems governed by nonlinear hyperbolic systems of PDEs. <i>Communications in Mathematical Sciences</i> , 2015, 13, 15-48.	1.0	21
11	Mean-field games and model predictive control. <i>Communications in Mathematical Sciences</i> , 2017, 15, 1403-1422.	1.0	17
12	An Eulerian-Lagrangian method for optimization problems governed by multidimensional nonlinear hyperbolic PDEs. <i>Computational Optimization and Applications</i> , 2014, 59, 689-724.	1.6	13
13	Numerical Discretization of Coupling Conditions by High-Order Schemes. <i>Journal of Scientific Computing</i> , 2016, 69, 122-145.	2.3	10
14	Human T cells in silico: Modelling their electrophysiological behaviour in health and disease. <i>Journal of Theoretical Biology</i> , 2016, 404, 236-250.	1.7	9
15	Consistent mean field optimality conditions for interacting agent systems. <i>Communications in Mathematical Sciences</i> , 2019, 17, 1095-1108.	1.0	9
16	Analysis of risk levels for traffic on a multi-lane highway. <i>IFAC-PapersOnLine</i> , 2018, 51, 43-48.	0.9	8
17	Human T cells in silico: Modelling dynamic intracellular calcium and its influence on cellular electrophysiology. <i>Journal of Immunological Methods</i> , 2018, 461, 78-84.	1.4	8
18	The sensitivity of optimal states to time delay. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 775-776.	0.2	7

#	ARTICLE	IF	CITATIONS
19	Optimal experimental design for reservoir property estimates in geothermal exploration. Computational Geosciences, 2016, 20, 375-383.	2.4	7
20	Coupling conditions for the transition from supersonic to subsonic fluid states. Networks and Heterogeneous Media, 2017, 12, 371-380.	1.1	7
21	New coupling conditions for isentropic flow on networks. Networks and Heterogeneous Media, 2020, 15, 605-631.	1.1	7
22	Coupling of Compressible Euler Equations. Vietnam Journal of Mathematics, 2019, 47, 769-792.	0.8	5
23	A smoothed penalty iteration for state constrained optimal control problems for partial differential equations. Optimization, 2013, 62, 379-395.	1.7	4
24	A new numerical treatment of moving wet/dry fronts in dam-break flows. Journal of Applied Mathematics and Computing, 2019, 59, 489-516.	2.5	4
25	MIP presolve techniques for a PDE-based supply chain model. Optimization Methods and Software, 2009, 24, 427-445.	2.4	3
26	Feedback control for priority rules in re-entrant semiconductor manufacturing. Applied Mathematical Modelling, 2015, 39, 4655-4664.	4.2	3
27	On an inexact gradient method using Proper Orthogonal Decomposition for parabolic optimal control problems. Computational Optimization and Applications, 2013, 55, 459-468.	1.6	2
28	Infinite Penalization for Optimal Control Problems: An infinite-dimensional optimization method for constrained optimization problems. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 587-588.	0.2	1
29	Identification of optimal material models and parameters in finite strain plasticity. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 335-336.	0.2	1
30	Model Identification for Flow Simulations in Geothermal Reservoirs: Towards Optimally Drilling Boreholes. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 345-346.	0.2	1
31	Treatment Planning Optimization for Radiotherapy. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 339-340.	0.2	1
32	Multi-scale modeling and nodal control for gas transportation networks. , 2015, , .		1
33	Boundary stabilization of hyperbolic conservation laws using conservative finite volume schemes. , 2016, , .		1
34	Collision-Free Dynamical Systems. IFAC-PapersOnLine, 2019, 52, 72-76.	0.9	1
35	Algorithmic differentiation of hyperbolic flow problems. Journal of Computational Physics, 2021, 430, 110110.	3.8	1
36	Consistent Control of a Stackelberg Game with Infinitely many Followers. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
37	Multiscale control of Stackelberg games. Mathematics and Computers in Simulation, 2022, 200, 468-488.	4.4	1
38	Feedback stabilization of forming processes. IFAC-PapersOnLine, 2021, 54, 97-102.	0.9	0
39	Efficient simulation of coupled gas and power networks under uncertain demands. European Journal of Applied Mathematics, 0, , 1-27.	2.9	0