Marie-Therese Wolfram

List of Publications by Year
in descending order

29 papers	785 citations	623574 14 h-index	526166 27 g-index
29 all docs	29 docs citations	29 times ranked	493 citing authors

#	Article	IF	Citations
1	On a mean field game approach modeling congestion and aversion in pedestrian crowds. Transportation Research Part B: Methodological, 2011, 45, 1572-1589.	2.8	178
2	Boltzmann and Fokker–Planck equations modelling opinion formation in the presence of strong leaders. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 3687-3708.	1.0	130
3	On the Hughes' model for pedestrian flow: The one-dimensional case. Journal of Differential Equations, 2011, 250, 1334-1362.	1.1	81
4	An improved version of the Hughes model for pedestrian flow. Mathematical Models and Methods in Applied Sciences, 2016, 26, 671-697.	1.7	43
5	Socio-economic applications of finite state mean field games. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130405.	1.6	35
6	Opinion dynamics: inhomogeneous Boltzmann-type equations modelling opinion leadership and political segregation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150345.	1.0	33
7	A DRIFT–DIFFUSION–REACTION MODEL FOR EXCITONIC PHOTOVOLTAIC BILAYERS: ASYMPTOTIC ANALYSIS AND A 2D HDG FINITE ELEMENT SCHEME. Mathematical Models and Methods in Applied Sciences, 2013, 23, 839-872.	1.7	29
8	Parameter Estimation for Macroscopic Pedestrian Dynamics Models from Microscopic Data. SIAM Journal on Applied Mathematics, 2019, 79, 1475-1500.	0.8	28
9	Numerical simulation of nonlinear continuity equations by evolving diffeomorphisms. Journal of Computational Physics, 2016, 327, 186-202.	1.9	25
10	Lane Formation by Side-Stepping. SIAM Journal on Mathematical Analysis, 2016, 48, 981-1005.	0.9	25
11	Multiscale modeling of a rectifying bipolar nanopore: Comparing Poisson-Nernst-Planck to Monte Carlo. Journal of Chemical Physics, 2017, 146, 124125.	1.2	22
12	Individual based and mean-field modeling of direct aggregation. Physica D: Nonlinear Phenomena, 2013, 260, 145-158.	1.3	18
13	Cross-Diffusion Systems with Excluded-Volume Effects and Asymptotic Gradient Flow Structures. Journal of Nonlinear Science, 2017, 27, 687-719.	1.0	17
14	A Semi-Lagrangian Scheme for a Modified Version of the Hughes' Model for Pedestrian Flow. Dynamic Games and Applications, 2017, 7, 683-705.	1.1	16
15	Consensus-based global optimization with personal best. Mathematical Biosciences and Engineering, 2020, 17, 6026-6044.	1.0	14
16	On a Boltzmann Mean Field Model for Knowledge Growth. SIAM Journal on Applied Mathematics, 2016, 76, 1799-1818.	0.8	13
17	A LEVEL SET BASED SHAPE OPTIMIZATION METHOD FOR AN ELLIPTIC OBSTACLE PROBLEM. Mathematical Models and Methods in Applied Sciences, 2011, 21, 619-649.	1.7	12
18	Balanced growth path solutions of a Boltzmann mean field game model for knowledge growth. Kinetic and Related Models, 2017, 10, 117-140.	0.5	11

#	Article	IF	Citations
19	Boltzmann and Fokker–Planck Equations Modelling the Elo Rating System with Learning Effects. Journal of Nonlinear Science, 2019, 29, 1095-1128.	1.0	10
20	On the asymptotic behavior of a Boltzmann-type price formation model. Communications in Mathematical Sciences, 2014, 12, 1353-1361.	0.5	10
21	Ensemble Inference Methods for Models With Noisy and Expensive Likelihoods. SIAM Journal on Applied Dynamical Systems, 2022, 21, 1539-1572.	0.7	7
22	Parabolic Free Boundary Price Formation Models Under Market Size Fluctuations. Multiscale Modeling and Simulation, 2016, 14, 1211-1237.	0.6	6
23	Derivation and analysis of continuum models for crossing pedestrian traffic. Mathematical Models and Methods in Applied Sciences, 2017, 27, 1301-1325.	1.7	6
24	Inverse Optimal Transport. SIAM Journal on Applied Mathematics, 2020, 80, 599-619.	0.8	5
25	Identification of nonlinearities in transport-diffusion models of crowded motion. Inverse Problems and Imaging, 2013, 7, 1157-1182.	0.6	4
26	An Elo-type rating model for players and teams of variable strength. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210155.	1.6	4
27	A PDE model for unidirectional flows: Stationary profiles and asymptotic behaviour. Journal of Mathematical Analysis and Applications, 2022, 510, 126018.	0.5	2
28	Symbolic Derivation of Mean-Field PDEs from Lattice-Based Models. , 2015, , .		1
29	Comparing the best-reply strategy and mean-field games: The stationary case. European Journal of Applied Mathematics, 2022, 33, 79-110.	1.4	0