Benjamin Seibold

List of Publications by Year
in descending order

25 papers	1,082 citations	932766 10 h-index	713013 21 g-index
25 all docs	25 docs citations	25 times ranked	827 citing authors

#	Article	IF	Citations
1	Deploying Traffic Smoothing Cruise Controllers Learned from Trajectory Data. , 2022, , .		6
2	Are Commercially Implemented Adaptive Cruise Control Systems String Stable?. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 6992-7003.	4.7	117
3	High-order finite element methods for a pressure Poisson equation reformulation of the Navierâ€"Stokes equations with electric boundary conditions. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113451.	3.4	5
4	Integrated Framework of Vehicle Dynamics, Instabilities, Energy Models, and Sparse Flow Smoothing Controllers. , 2021, , .		8
5	Bringing discrete-time Langevin splitting methods into agreement with thermodynamics. Journal of Chemical Physics, 2021, 155, 184104.	1.2	3
6	The challenge of stochastic StÃ¶rmerâ€"Verlet thermostats generating correct statistics. Journal of Chemical Physics, 2020, 153, 134101.	1.2	5
7	Massively Parallel Stencil Strategies for Radiation Transport Moment Model Simulations. Lecture Notes in Computer Science, 2020, , 242-256.	1.0	2
8	Tracking vehicle trajectories and fuel rates in phantom traffic jams: Methodology and data. Transportation Research Part C: Emerging Technologies, 2019, 99, 82-109.	3.9	39
9	Two-dimensional macroscopic model for large scale traffic networks. Transportation Research Part B: Methodological, 2019, 122, 309-326.	2.8	20
10	Quantifying air quality benefits resulting from few autonomous vehicles stabilizing traffic. Transportation Research, Part D: Transport and Environment, 2019, 67, 351-365.	3.2	79
11	Unconditional stability for multistep ImEx schemes: Practice. Journal of Computational Physics, 2019, 376, 295-321.	1.9	10
12	Dissipation of stop-and-go waves via control of autonomous vehicles: Field experiments. Transportation Research Part C: Emerging Technologies, 2018, 89, 205-221.	3.9	459
13	Off-Ramp Coupling Conditions Devoid of Spurious Blocking and Re-Routing. Transportation Research Record, 2018, 2672, 12-24.	1.0	0
14	A comparative study of limiting strategies in discontinuous Galerkin schemes for the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml113" display="inline" overflow="scroll" altimg="si1.gif"><mml:msub><mml:mrow><mml:mi>M</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mm model of radiation transport. Journal of Computational and Applied Mathematics, 2018, 342, 399-418.	1.1	6
15	Unconditional Stability for Multistep ImEx Schemes: Theory. SIAM Journal on Numerical Analysis, 2017, 55, 2336-2360.	1.1	12
16	Stabilizing traffic flow via a single autonomous vehicle: Possibilities and limitations. , 2017, , .		89
17	Computational simulation of the mechanical response of brain tissue under blast loading. Biomechanics and Modeling in Mechanobiology, 2015, 14, 459-472.	1.4	16
18	StaRMAP---A Second Order Staggered Grid Method for Spherical Harmonics Moment Equations of Radiative Transfer. ACM Transactions on Mathematical Software, 2014, 41, 1-28.	1.6	21

#	ARTICLE	IF	CITATIONS
19	Data-Fitted First-Order Traffic Models and Their Second-Order Generalizations. Transportation Research Record, 2013, 2391, 32-43.	1.0	41
20	Optimal prediction for radiative transfer: A new perspective on moment closure. Kinetic and Related Models, 2011, 4, 717-733.	0.5	6
21	A rarefaction-tracking method for hyperbolic conservation laws. Journal of Engineering Mathematics, 2010, 66, 237-251.	0.6	7
22	A gradient-augmented level set method with an optimally local, coherent advection scheme. Journal of Computational Physics, 2010, 229, 3802-3827.	1.9	75
23	Optimal prediction for moment models: crescendo diffusion and reordered equations. Continuum Mechanics and Thermodynamics, 2009, 21, 511-527.	1.4	7
24	An exactly conservative particle method for one dimensional scalar conservation laws. Journal of Computational Physics, 2009, 228, 5298-5315.	1.9	10
25	Minimal positive stencils in meshfree finite difference methods for the Poisson equation. Computer Methods in Applied Mechanics and Engineering, 2008, 198, 592-601.	3.4	39