Corrado Lattanzio

List of Publications by Year
in descending order

38 papers	753 citations	567281 15 h-index	526287 27 g-index
39 all docs	39 docs citations	39 times ranked	296 citing authors

#	Article	IF	Citations
1	Moving Bottlenecks in Car Traffic Flow: A PDE-ODE Coupled Model. SIAM Journal on Mathematical Analysis, 2011, 43, 50-67.	1.9	80
2	Global well-posedness and relaxation limits of a model for radiating gas. Journal of Differential Equations, 2003, 190, 439-465.	2.2	69
3	ON THE 3-D BIPOLAR ISENTROPIC EULERâ€“POISSON MODEL FOR SEMICONDUCTORS AND THE DRIFT-DIFFUSION LIMIT. Mathematical Models and Methods in Applied Sciences, 2000, 10, 351-360.	3.3	50
4	The relaxation to the drift-diffusion system for the 3-D isentropic Euler-Poisson model for semiconductors. Discrete and Continuous Dynamical Systems, 1999, 5, 449-455.	0.9	50
5	Relative Entropy in Diffusive Relaxation. SIAM Journal on Mathematical Analysis, 2013, 45, 1563-1584.	1.9	49
6	Relative Energy for the Korteweg Theory and Related Hamiltonian Flows in Gas Dynamics. Archive for Rational Mechanics and Analysis, 2017, 223, 1427-1484.	2.4	42
7	Flocking and synchronization of particle models. Quarterly of Applied Mathematics, 2011, 69, 91-103.	0.7	38
8	Convergence of a relaxation scheme for hyperbolic systems of conservation laws. Numerische Mathematik, 2001, 88, 121-134.	1.9	37
9	Shock waves for radiative hyperbolic-elliptic systems. Indiana University Mathematics Journal, 2007, 56, 2601-2640.	0.9	32
10	From gas dynamics with large friction to gradient flows describing diffusion theories. Communications in Partial Differential Equations, 2017, 42, 261-290.	2.2	29
11	The Zero Relaxation Limit for the Hydrodynamic Whitham Traffic Flow Model. Journal of Differential Equations, 1997, 141, 150-178.	2.2	28
12	Structural Properties of Stress Relaxation and Convergence from Viscoelasticity to Polyconvex Elastodynamics. Archive for Rational Mechanics and Analysis, 2006, 180, 449-492.	2.4	27
13	HYPERBOLIC-PARABOLIC SINGULAR LIMITS FOR FIRST-ORDER NONLINEAR SYSTEMS. Communications in Partial Differential Equations, 2001, 26, 939-964.	2.2	25
14	The zero relaxation limit for 2Ã—2 hyperbolic systems. Nonlinear Analysis: Theory, Methods & Applications, 1999, 38, 375-389.	1.1	18
15	Convergence of diffusive BGK approximations for nonlinear strongly parabolic systems. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2002, 132, 341-358.	1.2	17
16	COUPLING OF MICROSCOPIC AND MACROSCOPIC TRAFFIC MODELS AT BOUNDARIES. Mathematical Models and Methods in Applied Sciences, 2010, 20, 2349-2370.	3.3	14
17	A CLASS OF INTERACTING PARTICLE SYSTEMS ON THE INFINITE CYLINDER WITH FLOCKING PHENOMENA. Mathematical Models and Methods in Applied Sciences, 2012, 22, .	3.3	14
18	Contractivity of Wasserstein metrics and asymptotic profiles for scalar conservation laws. Journal of Differential Equations, 2006, 231, 425-458.	2.2	13

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19	Vehicular Traffic Flow Dynamics on a Bus Route. Multiscale Modeling and Simulation, 2013, 11, 925-942.	1.6	13
20	Analytical and numerical investigation of traveling waves for the Allenâ€“Cahn model with relaxation. Mathematical Models and Methods in Applied Sciences, 2016, 26, 931-985.	3.3	13
21	Stability of Scalar Radiative Shock Profiles. SIAM Journal on Mathematical Analysis, 2010, 41, 2165-2206.	1.9	12
22	Metastable dynamics for hyperbolic variations of the Allenâ€“Cahn equation. Communications in Mathematical Sciences, 2017, 15, 2055-2085.	1.0	12
23	Optimal <mml:math altimg="si1.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	2.7	10
24	Slow dynamics for the hyperbolic Cahnâ€Hilliard equation in oneâ€space dimension. Mathematical Methods in the Applied Sciences, 2019, 42, 2492-2512.	2.3	10
25	Dispersive shocks in quantum hydrodynamics with viscosity. Physica D: Nonlinear Phenomena, 2020, 402, 132222.	2.8	7
26	Relaxation Limit from the Quantum Navierâ€“Stokes Equations to the Quantum Driftâ€“Diffusion Equation. Journal of Nonlinear Science, 2021, 31, 1.	2.1	7
27	Numerical investigations of dispersive shocks and spectral analysis for linearized quantum hydrodynamics. Applied Mathematics and Computation, 2020, 385, 125450.	2.2	5
28	High friction limit for Eulerâ€“Korteweg and Navierâ€“Stokesâ€“Korteweg models via relative entropy approach. Journal of Differential Equations, 2020, 269, 10495-10526.	2.2	5
29	Traveling waves for quantum hydrodynamics with nonlinear viscosity. Journal of Mathematical Analysis and Applications, 2021, 493, 124503.	1.0	5
30	Metastability for nonlinear convectionâ€“diffusion equations. Nonlinear Differential Equations and Applications, 2017, 24, 1.	0.8	4
31	Kinetic schemes for assessing stability of traveling fronts for the Allenâ€“Cahn equation with relaxation. Applied Numerical Mathematics, 2019, 141, 234-247.	2.1	4
32	Two algorithms for a fully coupled and consistently macroscopic PDE-ODEsystem modeling a moving bottleneck on a road. Mathematics in Engineering, 2018, 1, 55-83.	0.9	4
33	Spectral analysis of dispersive shocks for quantum hydrodynamics with nonlinear viscosity. Mathematical Models and Methods in Applied Sciences, 2021, 31, 1719-1747.	3.3	3
34	On the diffusive stress relaxation for multidimensional viscoelasticity. Communications on Pure and Applied Analysis, 2009, 8, 645-654.	0.8	3
35	Shock Layers Interactions for a Relaxation Approximation to Conservation Laws. Nonlinear Differential Equations and Applications, 1999, 6, 319-340.	0.8	2
36	Metastability and Layer Dynamics for the Hyperbolic Relaxation of the Cahnâ€“Hilliard Equation. Journal of Dynamics and Differential Equations, 2021, 33, 75-110.	1.9	1

#	Article	IF	Citations
37	Asymptotic behavior and strong convergence for hyperbolic systems of conservation laws with damping. Quarterly of Applied Mathematics, 2004, 62, 529-540.	0.7	1
38	Propagating fronts for a viscous Hamer-type system. Discrete and Continuous Dynamical Systems, 2022, 42, 605.	0.9	0