

Raffaele Esposito

List of Publications by Year in descending order

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44
all docs

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docs citations

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times ranked

324
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| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Macroscopic Description of Microscopically Strongly Inhomogeneous Systems: A Mathematical Basis for the Synthesis of Higher Gradients Metamaterials. <i>Archive for Rational Mechanics and Analysis</i> , 2015, 218, 1239-1262. | 2.4 | 126 |
| 2 | Non-Isothermal Boundary in the Boltzmann Theory and Fourier Law. <i>Communications in Mathematical Physics</i> , 2013, 323, 177-239. | 2.2 | 93 |
| 3 | Hydrodynamic limit of the stationary Boltzmann equation in a slab. <i>Communications in Mathematical Physics</i> , 1994, 160, 49-80. | 2.2 | 61 |
| 4 | The Boltzmann equation for weakly inhomogeneous data. <i>Communications in Mathematical Physics</i> , 1987, 111, 393-407. | 2.2 | 60 |
| 5 | Stationary Solutions to the Boltzmann Equation in the Hydrodynamic Limit. <i>Annals of PDE</i> , 2018, 4, 1. | 1.8 | 54 |
| 6 | The Navier-Stokes limit of stationary solutions of the nonlinear Boltzmann equation. <i>Journal of Statistical Physics</i> , 1995, 78, 389-412. | 1.2 | 38 |
| 7 | Some Considerations on the Derivation of the Nonlinear Quantum Boltzmann Equation. <i>Journal of Statistical Physics</i> , 2004, 116, 381-410. | 1.2 | 38 |
| 8 | Equilibria of a clamped Euler beam (<i>Elastica</i>) with distributed load: Large deformations. <i>Mathematical Models and Methods in Applied Sciences</i> , 2017, 27, 1391-1421. | 3.3 | 33 |
| 9 | From the N-body Schrödinger Equation to the Quantum Boltzmann Equation: a Term-by-Term Convergence Result in the Weak Coupling Regime. <i>Communications in Mathematical Physics</i> , 2007, 277, 1-44. | 2.2 | 28 |
| 10 | Free energy minimizers for a two-species model with segregation and liquid-vapour transition. <i>Nonlinearity</i> , 2003, 16, 1075-1105. | 1.4 | 21 |
| 11 | On the derivation of the incompressible Navier-Stokes equation for Hamiltonian particle systems. <i>Journal of Statistical Physics</i> , 1994, 74, 981-1004. | 1.2 | 20 |
| 12 | Hydrodynamics of stochastic cellular automata. <i>Communications in Mathematical Physics</i> , 1989, 125, 127-145. | 2.2 | 18 |
| 13 | Some Considerations on the Derivation of the Nonlinear Quantum Boltzmann Equation II: The Low Density Regime. <i>Journal of Statistical Physics</i> , 2006, 124, 951-996. | 1.2 | 17 |
| 14 | Design of the third-generation lead-based neutron spallation target for the neutron time-of-flight facility at CERN. <i>Physical Review Accelerators and Beams</i> , 2021, 24, . | 1.6 | 17 |
| 15 | Planar Navier-Stokes flow for singular initial data. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 1985, 9, 533-545. | 1.1 | 16 |
| 16 | Droplet minimizers for the Cahn-Hilliard free energy functional. <i>Journal of Geometric Analysis</i> , 2006, 16, 233-264. | 1.0 | 15 |
| 17 | Phase Transition in a Vlasov-Boltzmann Binary Mixture. <i>Communications in Mathematical Physics</i> , 2010, 296, 1-33. | 2.2 | 15 |
| 18 | From Particles to Fluids. <i>Handbook of Mathematical Fluid Dynamics</i> , 2005, 3, 1-82. | 0.1 | 14 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Stability of the Front under a Vlasov-Fokker-Planck Dynamics. Archive for Rational Mechanics and Analysis, 2010, 195, 75-116. | 2.4 | 14 |
| 20 | Stability for Rayleigh-Benard Convective Solutions of the Boltzmann Equation. Archive for Rational Mechanics and Analysis, 2010, 198, 125-187. | 2.4 | 14 |
| 21 | Hydrodynamic Limit of a Kinetic Gas Flow Past an Obstacle. Communications in Mathematical Physics, 2018, 364, 765-823. | 2.2 | 14 |
| 22 | Ghost effect by curvature in planar Couette flow. Kinetic and Related Models, 2011, 4, 109-138. | 0.9 | 12 |
| 23 | Droplet minimizers for the Ginzburg-Landau free energy functional. Nonlinearity, 2009, 22, 2919-2952. | 1.4 | 11 |
| 24 | Phase transitions in equilibrium systems: microscopic models and mesoscopic free energies. Molecular Physics, 2005, 103, 3141-3151. | 1.7 | 10 |
| 25 | Design of the third-generation neutron spallation target for the CERN's n_TOF facility. Journal of Neutron Research, 2020, 22, 221-231. | 1.1 | 9 |
| 26 | Hydrodynamics of Binary Fluid Phase Segregation. Physical Review Letters, 2002, 89, 235701. | 7.8 | 8 |
| 27 | Displacement Convexity and Minimal Fronts at Phase Boundaries. Archive for Rational Mechanics and Analysis, 2009, 194, 823-847. | 2.4 | 7 |
| 28 | Approach to the Steady State in Kinetic Models with Thermal Reservoirs at Different Temperatures. Journal of Statistical Physics, 2018, 172, 522-543. | 1.2 | 7 |
| 29 | 10.1007/s10955-006-9040-z. Journal of Statistical Physics, 2006, 124, 445-483. | 1.2 | 5 |
| 30 | Nonunique stationary states in driven collisional systems with application to plasmas. Physical Review E, 1995, 52, R40-R43. | 2.1 | 4 |
| 31 | Propagation of Chaos for a Thermostated Kinetic Model. Journal of Statistical Physics, 2014, 154, 265-285. | 1.2 | 4 |
| 32 | Kinetic limits of the HPP cellular automaton. Journal of Statistical Physics, 1992, 66, 403-464. | 1.2 | 3 |
| 33 | Fluctuations à l'équilibre pour des gaz réactifs. Annales De L'institut Henri Poincare (B) Probability and Statistics, 2003, 39, 743-777. | 1.1 | 3 |
| 34 | Diffusive limit for a Boltzmann-like equation with non-conserved momentum. Nonlinearity, 2019, 32, 4834-4852. | 1.4 | 3 |
| 35 | Exponential stability of the solutions to the Boltzmann equation for the Benard problem. Kinetic and Related Models, 2012, 5, 673-695. | 0.9 | 3 |
| 36 | Froth-like Minimizers of a Non-Local Free Energy Functional with Competing Interactions. Communications in Mathematical Physics, 2013, 322, 593-632. | 2.2 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Rigorous validity of the Boltzmann equation for a thin layer of a rarefied gas. Kinetic and Related Models, 2010, 3, 281-297. | 0.9 | 2 |
| 38 | Stability of a Vlasov-Boltzmann binary mixture at the phase transition on an interval. Kinetic and Related Models, 2013, 6, 761-787. | 0.9 | 2 |
| 39 | Validity of the Boltzmann equation with an external force. Kinetic and Related Models, 2011, 4, 499-515. | 0.9 | 1 |
| 40 | Gibb's variational principles for the equilibrium of continuous systems with an interface. Zeitschrift Fur Angewandte Mathematik Und Physik, 1984, 35, 460-469. | 1.4 | 0 |
| 41 | Mesoscopic Analysis of Droplets in Lattice Systems with Long-Range Kac Potentials. Acta Applicandae Mathematicae, 2013, 123, 221-237. | 1.0 | 0 |
| 42 | Scaling Laws: Microscopic and Macroscopic Behavior. , 2003, , 79-85. | | 0 |
| 43 | Transport coefficients in the S^2 -dimensional Boltzmann equation. Kinetic and Related Models, 2013, 6, 789-800. | 0.9 | 0 |