Rouslan Krechetnikov

List of Publications by Year in descending order

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38 767 14 28 papers citations h-index g-index

38 38 38 686
all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Dissipation-induced instabilities in finite dimensions. Reviews of Modern Physics, 2007, 79, 519-553.	45. 6	108
2	Crown-forming instability phenomena in the drop splash problem. Journal of Colloid and Interface Science, 2009, 331, 555-559.	9.4	101
3	Surfactant effects in the Landau–Levich problem. Journal of Fluid Mechanics, 2006, 559, 429.	3.4	65
4	Experimental study of substrate roughness and surfactant effects on the Landau-Levich law. Physics of Fluids, 2005, 17, 102108.	4.0	63
5	Landau-Levich flow visualization: Revealing the flow topology responsible for the film thickening phenomena. Physics of Fluids, 2012, 24, .	4.0	52
6	Problems on Time-Varying Domains: Formulation, Dynamics, and Challenges. Acta Applicandae Mathematicae, 2015, 137, 123-157.	1.0	45
7	On destabilizing effects of two fundamental non-conservative forces. Physica D: Nonlinear Phenomena, 2006, 214, 25-32.	2.8	37
8	Rayleigh–Taylor and Richtmyer–Meshkov instabilities of flat and curved interfaces. Journal of Fluid Mechanics, 2009, 625, 387-410.	3.4	37
9	Stability of liquid sheet edges. Physics of Fluids, 2010, 22, .	4.0	32
10	On application of lubrication approximations to nonunidirectional coating flows with clean and surfactant interfaces. Physics of Fluids, 2010, 22, 092102.	4.0	31
11	Flat plate impact on water. Journal of Fluid Mechanics, 2018, 850, 1066-1116.	3.4	29
12	On physical mechanisms in chemical reaction-driven tip-streaming. Physics of Fluids, 2004, 16, 2556-2566.	4.0	22
13	Experimental study of a surfactant-driven fingering phenomenon in a Hele-Shaw cell. Journal of Fluid Mechanics, 2005, 527, 197-216.	3.4	20
14	On a new surfactant-driven fingering phenomenon in a Hele-Shaw cell. Journal of Fluid Mechanics, 2004, 509, 103-124.	3.4	18
15	Stability on Time-Dependent Domains. Journal of Nonlinear Science, 2014, 24, 493-523.	2.1	14
16	Dissipation-Induced Instability Phenomena in Infinite-Dimensional Systems. Archive for Rational Mechanics and Analysis, 2009, 194, 611-668.	2.4	12
17	Structure of Marangoni-driven singularities. Physics of Fluids, 2012, 24, 022111.	4.0	9
18	Stability on time-dependent domains: convective and dilution effects. Physica D: Nonlinear Phenomena, 2017, 342, 16-23.	2.8	7

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19	Hidden Invariances in Problems of Two-Dimensional and Three-Dimensional Wall Jets for Newtonian and Non-Newtonian Fluids. SIAM Journal on Applied Mathematics, 2002, 62, 1837-1855.	1.8	6
20	Flow around a corner in the water impact problem. Physics of Fluids, 2014, 26, 072107.	4.0	6
21	Thermodynamics of chemical Marangoni-driven engines. Soft Matter, 2017, 13, 4931-4950.	2.7	6
22	Pattern formation on time-dependent domains. Journal of Fluid Mechanics, 2019, 880, 136-179.	3.4	6
23	On upstream influence in supersonic flows. Journal of Fluid Mechanics, 2005, 539, 167.	3.4	5
24	On the origin and nature of finite-amplitude instabilities in physical systems. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 412004.	2.1	5
25	Origin of ejecta in the water impact problem. Physics of Fluids, 2014, 26, .	4.0	5
26	A linear stability theory on time-invariant and time-dependent spatial domains with symmetry: the drop splash problem. Dynamics of Partial Differential Equations, 2011, 8, 47-67.	0.9	5
27	Marangoni-driven singularities via mean-curvature flow. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 242001.	2.1	3
28	The nature of chemical reaction-driven tip-streaming. Journal of Applied Physics, 2013, 113, .	2.5	3
29	Stability of a growing cylindrical blob. Journal of Fluid Mechanics, 2017, 827, .	3.4	3
30	Cusps and cuspidal edges at fluid interfaces: Existence and application. Physical Review E, 2015, 91, 043019.	2.1	2
31	Soap film catastrophes. Journal of Fluid Mechanics, 2021, 926, .	3.4	2
32	Liquid film dewetting induced by impulsive Joule heating. Physical Review Fluids, 2017, 2, .	2.5	2
33	Physics of singularities in pressure-impulse theory. Physical Review Fluids, 2018, 3, .	2.5	2
34	A low-dimensional model of separation bubbles. Physica D: Nonlinear Phenomena, 2009, 238, 1152-1160.	2.8	1
35	Singular structures on liquid rims. Physics of Fluids, 2014, 26, 032109.	4.0	1
36	Viscosity, surface tension and gravity effects on acoustic reflection and refraction. Journal of Fluid Mechanics, 2019, 860, 822-836.	3.4	1

#	Article	IF	CITATIONS
37	Controlling chaos by the system size. Scientific Reports, 2021, 11, 8703.	3.3	1
38	Impulse-driven drop. Journal of Fluid Mechanics, 2020, 895, .	3.4	0