Leonid M Martyushev

List of Publications by Year
in descending order

61	526	758635	713013
papers	citations	12 h-index	21 g-index

64	64	64	246
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	FEM modeling of thermal tree structures on a water surface. AIP Conference Proceedings, 2022, , .	0.3	0
2	An Evolution Based on Various Energy Strategies. Entropy, 2021, 23, 317.	1.1	1
3	Nonstationary problem of morphological stability of radially displaced fluid in a Heleâ€“Shaw cell. Physics of Fluids, 2021, 33, 044103.	1.6	1
4	Principle of Least Effort and Sentence Length in Public Speaking. Entropy, 2021, 23, 1023.	1.1	4
5	Maximum entropy production principle: history and current status. Physics-Uspekhi, 2021, 64, 558-583.	0.8	15
6	Life Defined in Terms of Entropy Production: 20th Century Physics Meets 21st Century Biology. BioEssays, 2020, 42, 2000101.	1.2	1
7	Nonlinear Non-Equilibrium Thermodynamics Based on the Ehrenfestâ€“Klein Model. Entropy, 2020, 22, 293.	1.1	0
8	Morphological Stability of the Bubble Surface in the Dynamic Growth Regime. 2D Case. Journal of Experimental and Theoretical Physics, 2020, 130, 523-527.	0.2	0
9	Modeling dendritic structures on a water surface. AIP Conference Proceedings, 2020, , .	0.3	1
10	Analysis of sentence lengths in public speaking. AIP Conference Proceedings, 2020, , .	0.3	0
11	Nonstationary problem of morphological stability of radially displaced fluid. AIP Conference Proceedings, 2020, , .	0.3	0
12	Entropy production and luminosityâ€“effective temperature relation for main-sequence stars. Physica A: Statistical Mechanics and Its Applications, 2019, 528, 121403.	1.2	4
13	From an Entropic Measure of Time to Laws of Motion. Entropy, 2019, 21, 222.	1.1	4
14	Minimal time, Weibull distribution and maximum entropy production principle. Physics of Life Reviews, 2019, 28, 83-84.	1.5	15
15	Thermal dendrites on the surface of water and water solution. AIP Conference Proceedings, 2019, , .	0.3	3
16	Morphological stability of the interface of a bubble growing in a fluid. Two-dimensional case. AIP Conference Proceedings, 2019, , .	0.3	0
17	Living systems do not minimize free energy. Physics of Life Reviews, 2018, 24, 40-41.	1.5	3
18	Metastability at the Loss of the Morphological Stability of the Moving Boundary of a Fluid. JETP Letters, 2018, 108, 38-43.	0.4	4

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19	Entropy production guides energy budget. Physics of Life Reviews, 2017, 20, 69-71.	1.5	1
20	Nonequilibrium Thermodynamics and Scale Invariance. Entropy, 2017, 19, 126.	1.1	3
21	On Interrelation of Time and Entropy. Entropy, 2017, 19, 345.	1.1	13
22	Maximum Entropy Production Principle and Morphological Selection in Hydrodynamic Systems. Proceedings (mdpi), 2017, 2, .	0.2	0
23	Entropic Measure of Time, and Gas Expansion in Vacuum. Entropy, 2016, 18, 233.	1.1	6
24	Morphological stability of the interface between two fluids with similar-in-value viscosities during displacement in a Heleâ€“Shaw cell. Fluid Dynamics, 2016, 51, 629-632.	0.2	4
25	Invariance of specific mass increment in the case of non-equilibrium growth. Chinese Physics B, 2015, 24, 090502.	0.7	2
26	Entropy Production of Stars. Entropy, 2015, 17, 3645-3655.	1.1	3
27	Fluctuation theorem and thermodynamic entropy. JETP Letters, 2015, 102, 557-560.	0.4	4
28	Morphological stability of an interface between two non-Newtonian fluids moving in a Hele-Shaw cell. Physical Review E, 2015, 91, 013004.	0.8	5
29	Entropy Production of Main-Sequence Stars. Entropy, 2015, 17, 658-668.	1.1	6
30	A universal model of ontogenetic growth. Die Naturwissenschaften, 2015, 102, 29.	0.6	8
31	Metastability at the displacement of a fluid in a Hele-Shaw cell. JETP Letters, 2014, 99, 446-451.	0.4	13
32	Entropy Production and Morphological Selection in Crystal Growth. Understanding Complex Systems, 2014, , 383-396.	0.3	1
33	Specific mass increment and nonequilibrium crystal growth. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 3819-3826.	1.2	4
34	Ontogenetic growth: Schmalhausen or von Bertalanffy?. Physics of Life Reviews, 2013, 10, 389-390.	1.5	2
35	Entropy and Entropy Production: Old Misconceptions and New Breakthroughs. Entropy, 2013, 15, 1152-1170.	1.1	131
36	Normalized increment of crystal mass as a possible universal parameter for dendritic growth. Physical Review E, 2012, 85, 041604.	0.8	8

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37	Thermodynamic model of nonequilibrium phase transitions. Physical Review E, 2011, 84, 011113.	0.8	13
38	Coexistence of axially disturbed spherical particles during their nonequilibrium growth. Europhysics Letters, 2010, 90, 10012.	0.7	7
39	The maximum entropy production principle: two basic questions. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 1333-1334.	1.8	49
40	10.1007/s11455-008-3011-5. , 2010, 34, 213.		0
41	Experimental investigation of the onset of instability in a radial Hele-Shaw cell. Physical Review E, 2009, 80, 066306.	0.8	14
42	Morphological stability of the interphase boundary of a fluid displaced in a finite Hele-Shaw cell. Technical Physics Letters, 2008, 34, 213-216.	0.2	8
43	Specific features of the loss of stability during radial displacement of fluid in the Heleâ€“Shaw cell. Journal of Physics Condensed Matter, 2008, 20, 045201.	0.7	20
44	Entropy production and stability during radial displacement of fluid in Heleâ€“Shaw cell. Journal of Physics Condensed Matter, 2008, 20, 465102.	0.7	8
45	On the problem of the minimum entropy production in the nonequilibrium stationary state. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 371-380.	0.7	44
46	Some interesting consequences of the maximum entropy production principle. Journal of Experimental and Theoretical Physics, 2007, 104, 651-654.	0.2	26
47	Morphological stability of a crystal with respect to arbitrary boundary perturbations. Technical Physics Letters, 2006, 32, 614-617.	0.2	5
48	Dendritic growth of snow crystals. Crystallography Reports, 2005, 50, 499-503.	0.1	2
49	Morphological stability of a two-dimensional cylindrical crystal with a square-law supersaturation dependence of the growth rate. Journal of Physics Condensed Matter, 2005, 17, 2889-2902.	0.7	1
50	Weakly nonlinear analysis of the morphological stability of a two-dimensional cylindrical crystal. Journal of Experimental and Theoretical Physics, 2004, 98, 986-996.	0.2	6
51	Morphological phase diagram of a spherical crystal growing under nonequilibrium conditions at the growth rate as a quadratic function of supersaturation. Physics of the Solid State, 2004, 46, 2115-2120.	0.2	2
52	The Curie principle and diffusion limited aggregation. Technical Physics Letters, 2003, 29, 544-546.	0.2	3
53	Separating a weak periodic component from a nonstationary time series. Technical Physics Letters, 2003, 29, 732-735.	0.2	0
54	From dendrites and S-shaped growth curves to the maximum entropy production principle. JETP Letters, 2003, 78, 476-479.	0.4	16

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55	Calculations of the complete morphological phase diagram for nonequilibrium growth of a spherical crystal under arbitrary surface kinetics. Journal of Experimental and Theoretical Physics, 2002, 94, 307-314.	0.2	15
56	Determining the order parameter for the morphological analysis of two-dimensional structures. Technical Physics Letters, 2001, 27, 301-304.	0.2	2
57	The effect of the concentration dependence of a diffusion coefficient on the stability of a growing spherical particle. Technical Physics, 2000, 45, 794-796.	0.2	0
58	Kinetic growth characteristics of a single dendrite during crystallization from a solution. Technical Physics Letters, 1999, 25, 830-832.	0.2	3
59	Self-similarity in the kinetic growth regime of a crystal in a phase-separating medium. Technical Physics Letters, 1999, 25, 833-835.	0.2	3
60	Reentrant kinetic phase transitions during dendritic growth of crystals in a two-dimensional medium with phase separation. Technical Physics Letters, 1997, 23, 495-497.	0.2	3
61	Treelike Thermal Structures on the Water Surface. Physics of Fluids, 0, , .	1.6	3