

Arkadi Berezovski

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5542107/publications.pdf>

Version: 2024-02-01

95
papers

1,429
citations

331538

21
h-index

345118

36
g-index

105
all docs

105
docs citations

105
times ranked

538
citing authors

#	ARTICLE	IF	CITATIONS
1	Waves in microstructured materials and dispersion. Philosophical Magazine, 2005, 85, 4127-4141.	0.7	130
2	Numerical simulation of two-dimensional wave propagation in functionally graded materials. European Journal of Mechanics, A/Solids, 2003, 22, 257-265.	2.1	88
3	Internal Variables and Dynamic Degrees of Freedom. Journal of Non-Equilibrium Thermodynamics, 2008, 33, .	2.4	70
4	Generalized thermomechanics with dual internal variables. Archive of Applied Mechanics, 2011, 81, 229-240.	1.2	66
5	Guyer-Krumhanslâ€™type heat conduction at room temperature. Europhysics Letters, 2017, 118, 50005.	0.7	62
6	Dispersive waves in microstructured solids. International Journal of Solids and Structures, 2013, 50, 1981-1990.	1.3	58
7	Waves in microstructured solids: a unified viewpoint of modeling. Acta Mechanica, 2011, 220, 349-363.	1.1	53
8	Simulation of Thermoelastic Wave Propagation by Means of a Composite Wave-Propagation Algorithm. Journal of Computational Physics, 2001, 168, 249-264.	1.9	50
9	Interfaces in micromorphic materials: Wave transmission and reflection with numerical simulations. Mathematics and Mechanics of Solids, 2016, 21, 37-51.	1.5	47
10	Laminar free convection from a vertical plate. International Journal of Heat and Mass Transfer, 1984, 27, 869-881.	2.5	46
11	Reflections on mathematical models of deformation waves in elastic microstructured solids. Mathematics and Mechanics of Complex Systems, 2015, 3, 43-82.	0.5	43
12	Thermoelastic wave propagation in inhomogeneous media. Archive of Applied Mechanics, 2000, 70, 694-706.	1.2	35
13	Nonlinear deformation waves in solids and dispersion. Wave Motion, 2007, 44, 493-500.	1.0	32
14	On the wave dispersion in microstructured solids. Continuum Mechanics and Thermodynamics, 2020, 32, 569-588.	1.4	32
15	Multiscale modeling of microstructured solids. Mechanics Research Communications, 2010, 37, 531-534.	1.0	31
16	Thermodynamic interaction between two discrete systems in non-equilibrium. Journal of Non-Equilibrium Thermodynamics, 2004, 29, .	2.4	29
17	Thermoelasticity with Dual Internal Variables. Journal of Thermal Stresses, 2011, 34, 413-430.	1.1	29
18	Weakly nonlocal thermoelasticity for microstructured solids: microdeformation and microtemperature. Archive of Applied Mechanics, 2014, 84, 1249-1261.	1.2	24

#	ARTICLE	IF	CITATIONS
19	THERMOELASTIC WAVE AND FRONT PROPAGATION. Journal of Thermal Stresses, 2002, 25, 719-743.	1.1	23
20	Stress-induced phase-transition front propagation in thermoelastic solids. European Journal of Mechanics, A/Solids, 2005, 24, 1-21.	2.1	22
21	Numerical simulation of nonlinear elastic wave propagation in piecewise homogeneous media. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 418, 364-369.	2.6	21
22	Thermodynamic approach to generalized continua. Continuum Mechanics and Thermodynamics, 2014, 26, 403-420.	1.4	21
23	Hierarchies of Waves in Nonclassical Materials. , 2006, , 29-47.		21
24	MATERIAL FORMULATION OF FINITE-STRAIN THERMOELASTICITY AND APPLICATIONS. Journal of Thermal Stresses, 1999, 22, 421-449.	1.1	18
25	Internal structures and internal variables in solids. Journal of Mechanics of Materials and Structures, 2012, 7, 983-996.	0.4	18
26	On the thermodynamic conditions at moving phase-transition fronts in thermoelastic solids. Journal of Non-Equilibrium Thermodynamics, 2004, 29, .	2.4	17
27	Influence of microstructure on thermoelastic wave propagation. Acta Mechanica, 2013, 224, 2623-2633.	1.1	17
28	On the velocity of a moving phase boundary in solids. Acta Mechanica, 2005, 179, 187-196.	1.1	16
29	On the propagation velocity of a straight brittle crack. International Journal of Fracture, 2007, 143, 135-142.	1.1	16
30	Thermoelastic waves in microstructured solids: Dual internal variables approach. Journal of Coupled Systems and Multiscale Dynamics, 2013, 1, 112-119.	0.2	14
31	One-Dimensional Microstructure Dynamics. Lecture Notes in Applied and Computational Mechanics, 2009, , 21-28.	2.0	13
32	B-spline based finite element method in one-dimensional discontinuous elastic wave propagation. Applied Mathematical Modelling, 2017, 46, 382-395.	2.2	11
33	Internal variables representation of generalized heat equations. Continuum Mechanics and Thermodynamics, 2019, 31, 1733-1741.	1.4	11
34	Moving singularities in thermoelastic solids. International Journal of Fracture, 2007, 147, 191-198.	1.1	9
35	EDITORIAL. Special issue devoted to the International Conference on Complexity of Nonlinear Waves. Highlights in the research into complexity of nonlinear waves. Proceedings of the Estonian Academy of Sciences, 2010, 59, 61.	0.9	9
36	Internal Variables and Generalized Continuum Theories. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 149-158.	0.1	8

#	ARTICLE	IF	CITATIONS
37	On the Propagation of Singular Surfaces in Thermoelasticity. Journal of Thermal Stresses, 2009, 32, 557-592.	1.1	7
38	Elastic wave Talbot effect in solids with inclusions. Mechanics Research Communications, 2014, 60, 21-26.	1.0	7
39	On the influence of microstructure on heat conduction in solids. International Journal of Heat and Mass Transfer, 2016, 103, 516-520.	2.5	7
40	Waves in materials with microstructure: numerical simulation. Proceedings of the Estonian Academy of Sciences, 2010, 59, 99.	0.9	6
41	Microinertia and internal variables. Continuum Mechanics and Thermodynamics, 2016, 28, 1027-1037.	1.4	6
42	Waves in Inhomogeneous Solids. , 2009, , 55-81.		6
43	Numerical simulation of acoustic emission during crack growth in 3-point bending test. Structural Control and Health Monitoring, 2017, 24, e1996.	1.9	5
44	Simulation of wave and front propagation in thermoelastic materials with phase transformation. Computational Materials Science, 2003, 28, 478-485.	1.4	4
45	Jump conditions and kinetic relations at moving discontinuities. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2010, 90, 537-543.	0.9	4
46	Full field computing for elastic pulse dispersion in inhomogeneous bars. Composite Structures, 2018, 204, 388-394.	3.1	4
47	A Thermodynamic Approach to Modeling of Stress-Induced Phase-Transition Front Propagation in Solids. Solid Mechanics and Its Applications, 2002, , 19-26.	0.1	4
48	Simulation of non-linear heat conduction by means of thermodynamics-based algorithm. International Journal of Numerical Methods for Heat and Fluid Flow, 1997, 7, 711-721.	1.6	3
49	Numerical Simulations of One-dimensional Microstructure Dynamics. AIP Conference Proceedings, 2010, , .	0.3	3
50	Nonlinear dispersive wave equations for microstructured solids. Proceedings of the Estonian Academy of Sciences, 2015, 64, 203.	0.9	3
51	On the Mindlin microelasticity in one dimension. Mechanics Research Communications, 2016, 77, 60-64.	1.0	3
52	Internal variables associated with microstructures in solids. Mechanics Research Communications, 2018, 93, 30-34.	1.0	3
53	Influence of geometry and loading conditions on the dynamics of martensitic fronts. Smart Structures and Systems, 2008, 4, 123-135.	1.9	3
54	Method of singular perturbations in the problem of free convection with constant heat flux on a vertical surface. Fluid Dynamics, 1977, 12, 271-277.	0.2	2

#	ARTICLE	IF	CITATIONS
55	On the stability of a microstructure model. Computational Materials Science, 2012, 52, 193-196.	1.4	2
56	On modelling of wave propagation in microstructured solids. Estonian Journal of Engineering, 2013, 19, 171.	0.3	2
57	Pattern formation of elastic waves and energy localization due to elastic gratings. International Journal of Mechanical Sciences, 2015, 101-102, 137-144.	3.6	2
58	On Nonlinear Waves in Media with Complex Properties. Advanced Structured Materials, 2018, , 275-286.	0.3	2
59	Heat conduction in microstructured solids under localised pulse loading. Continuum Mechanics and Thermodynamics, 2021, 33, 2493-2507.	1.4	2
60	Numerical Simulation of Phase-Transition Front Propagation in Thermoelastic Solids. , 2006, , 703-711.		2
61	On wave propagation in laminates with two substructures. Estonian Journal of Engineering, 2010, 16, 228.	0.3	2
62	Rising vortex ring in a viscous fluid. Fluid Dynamics, 1989, 24, 361-366.	0.2	1
63	Application of Wave-Propagation Algorithm to Two-Dimensional Thermoelastic Wave Propagation in Inhomogeneous Media. , 2001, , 109-116.		1
64	Driving Force in Simulation of Phase Transition Front Propagation. , 2005, , 289-297.		1
65	TWO-SCALE MICROSTRUCTURE DYNAMICS. Journal of Multiscale Modeling, 2011, 03, 177-188.	1.0	1
66	Single slit diffraction: From optics to elasticity. Wave Motion, 2016, 60, 35-45.	1.0	1
67	Instead of Introduction. Solid Mechanics and Its Applications, 2017, , 1-18.	0.1	1
68	Internal Variables and Microinertia. Solid Mechanics and Its Applications, 2017, , 75-84.	0.1	1
69	Microdeformation and Microtemperature. Solid Mechanics and Its Applications, 2017, , 175-190.	0.1	1
70	Dynamics of discontinuities in elastic solids. Mathematics and Mechanics of Solids, 2020, 25, 1416-1428.	1.5	1
71	A two-layer elastic strip under transverse impact loading: Analytical solution, finite element, and finite volume simulations. Mathematics and Computers in Simulation, 2021, 189, 126-140.	2.4	1
72	Experimental, analytical, and numerical study of transient elastic waves from a localized source in an aluminium strip. Applied Acoustics, 2021, 178, 107983.	1.7	1

#	ARTICLE	IF	CITATIONS
73	Modeling and Numerical Simulation of Nonclassical Effects of Waves, Including Phase Transition Front. , 2006, , 203-219.		1
74	Numerical Simulation of Thermoelastic Wave and Phase-Transition Front Propagation. , 2003, , 759-764.		1
75	Dispersive Wave Equations for Solids with Microstructure. Springer Proceedings in Physics, 2011, , 699-705.	0.1	1
76	An Explicit Finite Volume Numerical Scheme for 2D Elastic Wave Propagation. Mathematics of Planet Earth, 2019, , 257-280.	0.1	1
77	Elastic Waves in Microstructured Solids. , 2020, , 830-837.		1
78	Internal Variables as a Tool for Extending Navier-Stokes Equations. Journal of Non-Equilibrium Thermodynamics, 2022, .	2.4	1
79	Dynamics of impact-induced phase transition fronts. European Physical Journal Special Topics, 2003, 112, 167-170.	0.2	0
80	DEFORMATION WAVES IN MICROSTRUCTURED SOLIDS AND DISPERSION. , 2006, , .		0
81	Thermoelastic Waves in Microstructured Solids. , 2016, , 137-150.		0
82	One-Dimensional Thermoelasticity with Dual Internal Variables. Solid Mechanics and Its Applications, 2017, , 147-162.	0.1	0
83	Heat Conduction in Microstructured Solids. Solid Mechanics and Its Applications, 2017, , 131-145.	0.1	0
84	Thermomechanical Single Internal Variable Theory. Solid Mechanics and Its Applications, 2017, , 35-58.	0.1	0
85	Dual Internal VariablesDual internal variables. Solid Mechanics and Its Applications, 2017, , 59-72.	0.1	0
86	Dispersive Elastic Waves. Solid Mechanics and Its Applications, 2017, , 85-98.	0.1	0
87	One-Dimensional Microelasticity. Solid Mechanics and Its Applications, 2017, , 99-111.	0.1	0
88	Influence of Nonlinearity. Solid Mechanics and Its Applications, 2017, , 113-120.	0.1	0
89	The Role of Heterogeneity in Heat Pulse Propagation in a Solid with Inner Structure. Solid Mechanics and Its Applications, 2017, , 123-130.	0.1	0
90	Elastic Waves in Microstructured Solids. , 2018, , 1-7.		0

#	ARTICLE	IF	CITATIONS
91	SOLITARY WAVES IN DISPERSIVE MATERIALS. , 2008, , .		0
92	Internal Variables and Scale Separation in Dynamics of Microstructured Solids. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 69-80.	0.1	0
93	Deformation Waves in Microstructured Materials: Theory and Numerics. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 19-29.	0.1	0
94	ON COMPUTING OF PULSE PROPAGATION AND REFLECTION IN 2D ELASTIC WAVEGUIDE. , 2019, , .		0
95	Discontinuity-driven mesh alignment for evolving discontinuities in elastic solids. Journal of Computational Physics, 2020, 416, 109542.	1.9	0