Sergey A Lurie

List of Publications by Year
in descending order

135	1,376	361045	500791
papers	citations	20 h-index	28 g-index

139	139	139	554
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Coupled problems of gradient thermoelasticity for periodic structures. Archive of Applied Mechanics, 2023, 93, 23-39.	1.2	4
2	On the elastic wedge problem within simplified and incomplete strain gradient elasticity theories. International Journal of Solids and Structures, 2022, 239-240, 111433.	1.3	18
3	Analytical Solution of Stationary Coupled Thermoelasticity Problem for Inhomogeneous Structures. Mathematics, 2022, 10, 90.	1.1	2
4	Gradient models of moving heat sources for powder bed fusion applications. International Journal of Heat and Mass Transfer, 2022, 196, 123221.	2.5	4
5	Trefftz collocation method for twoâ€dimensional strain gradient elasticity. International Journal for Numerical Methods in Engineering, 2021, 122, 823-839.	1.5	13
6	Electric field, strain and inertia gradient effects on anti-plane wave propagation in piezoelectric materials. Journal of Sound and Vibration, 2021, 494, 115898.	2.1	24
7	Dilatation gradient elasticity theory. European Journal of Mechanics, A/Solids, 2021, 88, 104258.	2.1	15
8	Generalized Brinkman-Type Fluid Model and Coupled Heat Conductivity Problem. Lobachevskii Journal of Mathematics, 2021, 42, 1786-1799.	0.1	1
9	On Structure of Fundamental Solutions for Coupled Thermoelasticity and Thermal Stationary Conductivity Problems. Lobachevskii Journal of Mathematics, 2021, 42, 1841-1851.	0.1	2
10	Development of the â€œSeparated Anisotropyâ€•Concept in the Theory of Gradient Anisotropic Elasticity. Mechanics of Composite Materials, 2021, 57, 427-438.	0.9	1
11	On the Flamant problem for a half-plane loaded with a concentrated force. Acta Mechanica, 2021, 232, 1761-1771.	1.1	10
12	Variational Formulation of Coupled Hydrodynamic Problems. PrikladnaÃ¢ Mehanika, TehniÄeskaÃ¢ Fizika, 2021, 62, 145-160.	0.0	0
13	On the failure analysis of cracked plates within the strain gradient elasticity in terms of the stress concentration. Procedia Structural Integrity, 2021, 32, 124-130.	0.3	3
14	New approach to failure of pre-cracked brittle materials based on regularized solutions of strain gradient elasticity. Engineering Fracture Mechanics, 2021, 258, 108080.	2.0	16
15	On the correctness condition in boundary value problems of gradient elasticity theory. , 2021, , .		0
16	VARIATIONAL FORMULATION OF COUPLED HYDRODYNAMIC PROBLEMS. Journal of Applied Mechanics and Technical Physics, 2021, 62, 828-841.	0.1	2
17	NEW SOLUTION TO THE PROBLEM OF A CRACK IN AN ORTHOTROPIC PLATE UNDER TENSION. Mechanics of Solids, 2021, 56, 902-910.	0.3	4
18	On the nature of the relaxation time, the Maxwellâ€“Cattaneo and Fourier law in the thermodynamics of a continuous medium, and the scale effects in thermal conductivity. Continuum Mechanics and Thermodynamics, 2020, 32, 709-728.	1.4	17

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19	On the dependence of standard and gradient elastic material constants on a field of defects. Mathematics and Mechanics of Solids, 2020, 25, 35-45.	1.5	21
20	Elasto-plastic behavior and failure of thick GLARE laminates under bending loading. Composites Part B: Engineering, 2020, 200, 108302.	5.9	13
21	On Regularization of Singular Solutions of Orthotropic Elasticity Theory. Lobachevskii Journal of Mathematics, 2020, 41, 2023-2033.	0.1	1
22	Generalized Einsteinâ€™s and Brinkmanâ€™s solutions for the effective viscosity of nanofluids. Journal of Applied Physics, 2020, 128, .	1.1	8
23	Determination of a Load Causing the Appearance of Plastic Deformation in a Tensile Plate with a Crack. Mechanics of Solids, 2020, 55, 490-495.	0.3	2
24	On the well posedness of static boundary value problem within the linear dilatational strain gradient elasticity. Zeitschrift Fur Angewandte Mathematik Und Physik, 2020, 71, 1.	0.7	29
25	Variational Formulation of Linear Equations of Coupled Thermohydrodynamics and Heat Conductivity. Lobachevskii Journal of Mathematics, 2020, 41, 1949-1963.	0.1	5
26	On the possible of the abnormally high damping effective properties of dispersion-reinforced composites and fibrous composites. Journal of Physics: Conference Series, 2020, 1666, 012029.	0.3	0
27	New Method for Studying the Strength of Brittle Bodies with Cracks. Russian Metallurgy (Metally), 2020, 2020, 291-297.	0.1	3
28	Impact behavior of a stiffened shell structure with optimized GFRP corrugated sandwich panel skins. Composite Structures, 2020, 248, 112479.	3.1	4
29	ESHELBY INTEGRAL FORMULAS IN SECOND GRADIENT ELASTICITY. Nanoscience and Technology, 2020, 11, 99-107.	0.6	1
30	Apparent Bending and Tensile Stiffness of Lattice Beams with Triangular and Diamond Structure. Advanced Structured Materials, 2020, , 431-442.	0.3	1
31	On the Paradox of Anomalous Relative Bending Stiffness of Ultrathin Beams in the Gradient Theory of Elasticity. Mechanics of Solids, 2020, 55, 340-347.	0.3	2
32	Extended Model of Surface-Related Effects in Second-Gradient Elasticity. Surface Waves Related to the Nature of Adhesion. Advanced Structured Materials, 2020, , 199-219.	0.3	1
33	On the Relations between Direct and Energy Based Homogenization Approaches in Second Gradient Elasticity. Advanced Structured Materials, 2020, , 443-457.	0.3	1
34	Stress Concentration Near Stiff Cylindrical Inclusions under Anti-Plane Shear Loading. Doklady Physics, 2020, 65, 390-395.	0.2	2
35	Anti-plane inclusion problem in the second gradient electroelasticity theory. International Journal of Engineering Science, 2019, 144, 103129.	2.7	13
36	Pure bending of a piezoelectric layer in second gradient electroelasticity theory. Acta Mechanica, 2019, 230, 4197-4211.	1.1	8

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37	On Variation Models of the Irreversible Processes in Mechanics of Solids and Generalized Hydrodynamics. Lobachevskii Journal of Mathematics, 2019, 40, 896-910.	0.1	4
38	On the Problem of Eigenvalues of Material Tensor Objects and Wave Velocities. Lobachevskii Journal of Mathematics, 2019, 40, 992-1009.	0.1	2
39	On the Radial Multipliers Method in the Gradient Elastic Fracture Mechanics. Lobachevskii Journal of Mathematics, 2019, 40, 984-991.	0.1	7
40	On Determination of Wave Velocities through the Eigenvalues of Material Objects. Mathematical and Computational Applications, 2019, 24, 39.	0.7	2
41	On the formulation of elastic and electroelastic gradient beam theories. Continuum Mechanics and Thermodynamics, 2019, 31, 1601-1613.	1.4	21
42	Mechanistic Model of Generalized Non-antisymmetrical Electrodynamics. Advanced Structured Materials, 2019, , 379-394.	0.3	2
43	Stress-strain state of the interfacial layer in a visco-composite composite with longitudinal shear. IOP Conference Series: Materials Science and Engineering, 2019, 683, 012036.	0.3	1
44	Refined Stress Analysis in Applied Elasticity Problems Accounting for Gradient Effects. Doklady Physics, 2019, 64, 482-486.	0.2	3
45	Estimation of the Strength of Plates with Cracks Based on the Maximum Stress Criterion in a Scale-Dependent Generalized Theory of Elasticity. Physical Mesomechanics, 2019, 22, 456-462.	1.0	12
46	A New Approach to Non-Singular Plane Cracks Theory in Gradient Elasticity. Mathematical and Computational Applications, 2019, 24, 93.	0.7	5
47	Three-phase model of particulate composites in second gradient elasticity. European Journal of Mechanics, A/Solids, 2019, 78, 103853.	2.1	25
48	Radial multipliers in solutions of the Helmholtz equations. Integral Transforms and Special Functions, 2019, 30, 254-263.	0.8	16
49	On a combined thermal/mechanical performance of a foam-filled sandwich panels. International Journal of Engineering Science, 2019, 134, 66-76.	2.7	21
50	Numerical modeling of a composite auxetic metamaterials using micro-dilatation theory. Continuum Mechanics and Thermodynamics, 2019, 31, 1099-1107.	1.4	15
51	Optimal Damping Behavior of a Composite Sandwich Beam Reinforced with Coated Fibers. Applied Composite Materials, 2019, 26, 389-408.	1.3	12
52	From Generalized Theories of Media with Fields of Defects to Closed Variational Models of the Coupled Gradient Thermoelasticity and Thermal Conductivity. Advanced Structured Materials, 2019, , 135-154.	0.3	6
53	Comparison between the Mori-Tanaka and generalized self-consistent methods in the framework of anti-plane strain inclusion problem in strain gradient elasticity. Mechanics of Materials, 2018, 122, 133-144.	1.7	27
54	Revisiting bending theories of elastic gradient beams. International Journal of Engineering Science, 2018, 126, 1-21.	2.7	40

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55	Modeling the effective mechanical properties of â€œfuzzy fiberâ€•composites across scales length. Composites Part B: Engineering, 2018, 142, 24-35.	5.9	17
56	Design of the corrugated-core sandwich panel with external active cooling system. Composite Structures, 2018, 188, 278-286.	3.1	18
57	Bending problems in the theory of elastic materials with voids and surface effects. Mathematics and Mechanics of Solids, 2018, 23, 787-804.	1.5	16
58	Continuum micro-dilatation modeling of auxetic metamaterials. International Journal of Solids and Structures, 2018, 132-133, 188-200.	1.3	23
59	Mechanical behavior of porous Si3N4 ceramics manufactured with 3D printing technology. Journal of Materials Science, 2018, 53, 4796-4805.	1.7	32
60	Nonlocal Solutions to Singular Problems of Mathematical Physics and Mechanics. Mechanics of Solids, 2018, 53, 135-144.	0.3	7
61	Green Tensor and Solution of the Boussinesq Problem in the Generalized Theory of Elasticity. Mechanics of Solids, 2018, 53, 440-453.	0.3	4
62	On the Generalized Heat Conduction Laws in the Reversible Thermodynamics of a Continuous Medium. Doklady Physics, 2018, 63, 503-507.	0.2	7
63	Semi-Inverse Solution of a Pure Beam Bending Problem in Gradient Elasticity Theory: The Absence of Scale Effects. Doklady Physics, 2018, 63, 161-164.	0.2	4
64	Numerical predictions for the effective size-dependent properties of piezoelectric composites with spherical inclusions. Composite Structures, 2018, 202, 1099-1108.	3.1	20
65	Model of Media with Conserved Dislocation. Special Cases: Cosserat Model, Aero-Kuvshinskii Media Model, Porous Media ÂModel. Advanced Structured Materials, 2018, , 215-249.	0.3	3
66	MODELING THE EFFECTIVE DYNAMIC PROPERTIES OF FIBER COMPOSITES MODIFIED ACROSS LENGTH SCALES. Nanoscience and Technology, 2018, 9, 117-138.	0.6	3
67	Symmetry conditions in strain gradient elasticity. Mathematics and Mechanics of Solids, 2017, 22, 683-691.	1.5	27
68	Influence of mean distance between fibers on the effective gas thermal conductivity in highly porous fibrous materials. International Journal of Heat and Mass Transfer, 2017, 109, 511-519.	2.5	13
69	Identification of gradient elasticity parameters based on interatomic interaction potentials accounting for modified Lorentz-Berthelot rules. Physical Mesomechanics, 2017, 20, 392-398.	1.0	11
70	Modeling of the localy-functional properties of the material damaged by fields of defects. Doklady Physics, 2017, 62, 46-49.	0.2	3
71	Design of the corrugated-core sandwich panel for the arctic rescue vehicle. Composite Structures, 2017, 160, 1007-1019.	3.1	34
72	New Solution of Axisymmetric Contact Problem of Elasticity. Mechanics of Solids, 2017, 52, 479-487.	0.3	8

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73	MECHANICAL PROPERTIES OF Si3N4-BASED COMPOSITE CERAMICS WITH NANOSIZED POROSITY. Nanoscience and Technology, 2017, 8, 347-357.	0.6	2
74	IDENTIFICATION OF KINETIC PARAMETERS OF THE MODEL OF INTERPHASE LAYER GROWTH IN A FIBROUS COMPOSITE. Composites: Mechanics, Computations, Applications, 2016, 7, 175-187.	0.2	2
75	New solution of the plane problem for an equilibrium crack. Mechanics of Solids, 2016, 51, 557-561.	0.3	9
76	New optimization problems arising in modelling of 2D-crystal lattices. AIP Conference Proceedings, 2016, , .	0.3	2
77	An identification algorithm of model kinetic parameters of the interfacial layer growth in fiber composites. IOP Conference Series: Materials Science and Engineering, 2016, 124, 012071.	0.3	0
78	Application of optimization methods for finding equilibrium states of two-dimensional crystals. Computational Mathematics and Mathematical Physics, 2016, 56, 2001-2010.	0.2	6
79	Scale effects in tribological properties of solid-lubricating composites made of ultra-high molecular weight polyethylene filled with calcium stearate particles. IOP Conference Series: Materials Science and Engineering, 2016, 124, 012035.	0.3	3
80	Classification of Gradient Adhesion Theories Across Length Scale. Advanced Structured Materials, 2016, , 261-277.	0.3	5
81	On correct nonlocal generalized theories of elasticity. Physical Mesomechanics, 2016, 19, 269-281.	1.0	11
82	Solution of the Eshelby problem in gradient elasticity for multilayer spherical inclusions. Mechanics of Solids, 2016, 51, 161-176.	0.3	7
83	Generalized solution of the problem on a circular membrane loaded by a lumped force. Mechanics of Solids, 2016, 51, 334-338.	0.3	6
84	Microstructure and mechanical properties of silicon carbide ceramics reinforced with multi-walled carbon nanotubes. IOP Conference Series: Materials Science and Engineering, 2016, 124, 012142.	0.3	4
85	Multiscale modelling of aluminium-based metalâ€“matrix composites with oxide nanoinclusions. Computational Materials Science, 2016, 116, 62-73.	1.4	33
86	Exact solution of Eshelbyâ€“Christensen problem in gradient elasticity for composites with spherical inclusions. Acta Mechanica, 2016, 227, 127-138.	1.1	21
87	DESIGNING A MULTILAYER PANEL WITH HEAT-INSULATING FILLER AND HEAT-SHIELDING EXTERNAL COATING. Composites: Mechanics, Computations, Applications, 2016, 7, 135-159.	0.2	2
88	DO NANOSIZED RODS HAVE ABNORMAL MECHANICAL PROPERTIES? ON SOME FALLACIOUS IDEAS AND DIRECT ERRORS RELATED TO THE USE OF THE GRADIENT THEORIES FOR SIMULATION OF SCALE-DEPENDENT RODS. International Journal of Nanomechanics Science and Technology, 2016, 7, 261-295.	0.5	3
89	Mechanical properties of a metallic composite material based on an aluminum alloy reinforced by dispersed silicon carbide particles. Russian Metallurgy (Metally), 2015, 2015, 790-794.	0.1	11
90	Refined gradient theory of scale-dependent superthin rods. Mechanics of Solids, 2015, 50, 135-146.	0.3	3

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91	Generalized theory of elasticity. Mechanics of Solids, 2015, 50, 379-388.	0.3	20
92	Estimation of effective dynamic properties of bristled fiber composite materials based on a self-consistent Eshelby method. Journal of Engineering Mathematics, 2015, 95, 7-29.	0.6	4
93	EXPERIMENTAL INVESTIGATION AND MODELING OF THE THERMOCYCLING EFFECT ON THE MECHANICAL PROPERTIES OF THE CFRP. Composites: Mechanics, Computations, Applications, 2015, 6, 279-291.	0.2	1
94	ON ACCOUNT OF SCALE EFFECTS IN THE SIMULATION OF MECHANICAL AND TRIBOLOGICAL PROPERTIES OF TWO-PHASE MICRO- AND NANOMODIFIED POLYMER COATINGS. PNRPU Mechanics Bulletin, 2015, , 36-54.	0.1	0
95	Scale effects in brittle fracture mechanics. Russian Metallurgy (Metally), 2014, 2014, 800-806.	0.1	2
96	Intermediate layer formation between inclusion and matrix during synthesis of unidirectional fibrous composite. , 2014, , .		5
97	Application of generalized self-consistent method to predict effective elastic properties of bristled fiber composites. Composites Part B: Engineering, 2014, 61, 26-40.	5.9	26
98	On Remarkable Loss Amplification Mechanism in Fiber Reinforced Laminated Composite Materials. Applied Composite Materials, 2014, 21, 179-196.	1.3	17
99	Application of the Nonlocal and Nonlinear Models of Elasticity for Description and Physical Interpretation of Stress-strain State in Vicinity of Singular Points. , 2014, 3, 2086-2091.		0
100	Gradient effects in fracture mechanics for nano-structured materials. Engineering Fracture Mechanics, 2014, 130, 3-11.	2.0	25
101	Identification method of gradient models parameters of inhomogeneous structures based on discrete atomistic simulations. PNRPU Mechanics Bulletin, 2014, , 89-111.	0.1	1
102	DEFORMATION OF A THIN LAYER THAT IS BONDED TO A MASSIVE SUBSTRATE IN THE THEORY OF THERMOELASTIC MATERIALS WITH VOIDS. International Journal of Nanomechanics Science and Technology, 2014, 5, 33-49.	0.5	2
103	On the solution singularity in the plane elasticity problem for a cantilever strip. Mechanics of Solids, 2013, 48, 388-396.	0.3	5
104	Simulation of the mechanical properties of nanostructured porous ceramics. Russian Metallurgy (Metally), 2013, 2013, 272-281.	0.1	4
105	METHODS FOR PREDICTING EFFECTIVE THERMOELASTIC PROPERTIES OF COMPOSITE CERAMICS REINFORCED WITH CARBON NANOTUBES. International Journal of Nanomechanics Science and Technology, 2012, 3, 141-154.	0.5	2
106	Ideal nonsymmetric 4D-medium as a model of invertible dynamic thermoelasticity. Mechanics of Solids, 2012, 47, 580-590.	0.3	7
107	WAVE-RELAXATION DUALITY OF HEAT PROPAGATION IN FERMIâ€“PASTAâ€“ULAM CHAINS. Modern Physics Letters B, 2012, 26, 1250145.	1.0	9
108	THEORY OF SPACETIME ELASTICITY. International Journal of Modern Physics B, 2012, 26, 1250032.	1.0	3

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109	Eshelbyâ€™s inclusion problem in the gradient theory of elasticity: Applications to composite materials. International Journal of Engineering Science, 2011, 49, 1517-1525.	2.7	45
110	MODELING OF ANOMALOUS MECHANICAL PROPERTIES OF POLYURETHANE MODIFIED BY CARBON SINGLE-WALL NANOTUBES. International Journal of Nanomechanics Science and Technology, 2011, 2, 71-83.	0.5	0
111	Eshelby integral formulas in gradient elasticity. Mechanics of Solids, 2010, 45, 648-656.	0.3	5
112	Strainâ€Gradient Elasticity for Bridging Continuum and Atomistic Estimates of Stiffness of Binary Lennardâ€Jones Crystals. Advanced Engineering Materials, 2010, 12, 529-533.	1.6	21
113	A Generalized Solution of Eshelby and Eshelby Self-Consistent Method for Gradient Models in Mechanics of Composites. , 2010, , .		0
114	Gradient Theory of Media with Conserved Dislocations: Application toÂMicrostructured Materials. Advances in Mechanics and Mathematics, 2010, , 223-232.	0.2	3
115	MODELING OF DEGRADATION OF THE COMPOSITE PROPERTIES ON CRACKING AND DELAMINATION WHEN SUBJECTED TO STATIC AND CYCLIC LOADING. Composites: Mechanics, Computations, Applications, 2010, 1, 315-331.	0.2	2
116	A continuum model of microheterogeneous media. Prikladnaya Matematika I Mekhanika, 2009, 73, 599-608.	0.4	12
117	Loss Amplification Effect in Multiphase Materials with Viscoelastic Interfaces. Macromolecules, 2009, 42, 5372-5377.	2.2	32
118	Advanced theoretical and numerical multiscale modeling of cohesion/adhesion interactions in continuum mechanics and its applications for filled nanocomposites. Computational Materials Science, 2009, 45, 709-714.	1.4	46
119	Cohesion field: Barenblattâ€™s hypothesis as formal corollary of theory of continuous media with conserved dislocations. International Journal of Fracture, 2008, 150, 181-194.	1.1	25
120	Theory of 4D-media with stationary dislocations. Mechanics of Solids, 2008, 43, 545-557.	0.3	1
121	General theory of continuous media with conserved dislocations. International Journal of Solids and Structures, 2007, 44, 7468-7485.	1.3	17
122	Gradient second-order interphase-layer theory of continuous media with micro-structures. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 2090001-2090002.	0.2	0
123	Computational mechanics modelling of nanoparticle-reinforced composite materials across the length scales. International Journal of Computational Science and Engineering, 2006, 2, 228.	0.4	3
124	General theory of defects in continuous media. International Journal of Solids and Structures, 2006, 43, 91-111.	1.3	9
125	Calculation of deformations in nanocomposites using the block multipole method with the analytical-numerical account of the scale effects. Computational Mathematics and Mathematical Physics, 2006, 46, 1234-1253.	0.2	15
126	Interphase layer theory and application in the mechanics of composite materials. Journal of Materials Science, 2006, 41, 6693-6707.	1.7	50

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127	The application of the multiscale models for description of the dispersed composites. Composites Part A: Applied Science and Manufacturing, 2005, 36, 145-152.	3.8	9
128	Nanomechanical modeling of the nanostructures and dispersed composites. Computational Materials Science, 2003, 28, 529-539.	1.4	49
129	Multiscale Modeling in the Mechanics of Materials: Cohesion, Interfacial Interactions, Inclusions and Defects. Lecture Notes in Applied and Computational Mechanics, 2003, , 101-110.	2.0	8
130	<title>Special feature of SMA composite materials deformation</title>. , 2000, , .		1
131	Calculation of edge stresses in multilayer composite materials. Mechanics of Composite Materials, 1994, 30, 36-42.	0.9	0
132	On Refined Theories of Beams, Plates, and Shells. Journal of Composite Materials, 1992, 26, 546-557.	1.2	21
133	Investigations on the development of superconducting DC power transmission lines. IEEE Transactions on Magnetics, 1977, 13, 188-191.	1.2	2
134	A variant of the refined theory of bending for a laminar plastic beam. Polymer Mechanics, 1974, 8, 582-588.	0.1	3
135	Axially symmetrical deformation of an orthotropic layered cylindrical shell. Polymer Mechanics, 1974, 8, 713-719.	0.1	1