Viacheslav Slesarenko

List of Publications by Year
in descending order

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43 papers	819 citations	430754 18 h-index	526166 27 g-index
44 all docs	44 docs citations	44 times ranked	662 citing authors

#	Article	IF	Citations
1	Emergence of instability-driven domains in soft stratified materials. Npj Computational Materials, 2022, 8, .	3.5	7
2	Programmable Auxeticity in Hydrogel Metamaterials via Shapeâ€Morphing Unit Cells. Advanced Science, 2022, 9, .	5.6	9
3	The Emergence of Sequential Buckling in Reconfigurable Hexagonal Networks Embedded into Soft Matrix. Materials, 2021, 14, 2038.	1.3	5
4	Fault-tolerant elasticâ€“plastic lattice material. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190107.	1.6	11
5	Microscopic and long-wave instabilities in 3D fiber composites with non-Gaussian hyperelastic phases. International Journal of Engineering Science, 2020, 157, 103408.	2.7	13
6	Tunable permittivity in dielectric elastomer composites under finite strains: Periodicity, randomness, and instabilities.. International Journal of Mechanical Sciences, 2020, 186, 105880.	3.6	18
7	Synthesis of metal-metal oxide (Me-MenOm) nanocomposites by partial reduction and cold sintering. Materials Letters, 2020, 276, 128197.	1.3	2
8	Planar Mechanical Metamaterials with Embedded Permanent Magnets. Materials, 2020, 13, 1313.	1.3	20
9	Rupture of 3D-printed hyperelastic composites: Experiments and phase field fracture modeling. Journal of the Mechanics and Physics of Solids, 2020, 140, 103941.	2.3	45
10	Microscopic instabilities and elastic wave propagation in finitely deformed laminates with compressible hyperelastic phases. European Journal of Mechanics, A/Solids, 2019, 73, 126-136.	2.1	35
11	On the Influence of Inhomogeneous Interphase Layers on Instabilities in Hyperelastic Composites. Materials, 2019, 12, 763.	1.3	22
12	Domain Formations and Pattern Transitions via Instabilities in Soft Heterogeneous Materials. Advanced Materials, 2019, 31, e1807309.	11.1	21
13	The PHEMU15 catalogue and astrometric results of the Jupiter's Galilean satellite mutual occultation and eclipse observations made in 2014â€“2015. Monthly Notices of the Royal Astronomical Society, 2018, 474, 4730-4739.	1.6	18
14	Instabilities and pattern formations in 3D-printed deformable fiber composites. Composites Part B: Engineering, 2018, 148, 114-122.	5.9	27
15	Oblique shear wave propagation in finitely deformed layered composites. Mechanics Research Communications, 2018, 87, 21-28.	1.0	14
16	Towards mechanical characterization of soft digital materials for multimaterial 3D-printing. International Journal of Engineering Science, 2018, 123, 62-72.	2.7	66
17	Auxetic multiphase soft composite material design through instabilities with application for acoustic metamaterials. Soft Matter, 2018, 14, 6171-6180.	1.2	48
18	Foreshadowing elastic instabilities by negative group velocity in soft composites. Applied Physics Letters, 2018, 113, .	1.5	18

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19	Instability-Induced Pattern Transformation in Soft Metamaterial with Hexagonal Networks for Tunable Wave Propagation. Scientific Reports, 2018, 8, 11834.	1.6	25
20	Strategies to Control Performance of 3D-Printed, Cable-Driven Soft Polymer Actuators: From Simple Architectures to Gripper Prototype. Polymers, 2018, 10, 846.	2.0	24
21	Elastic instabilities and shear waves in hyperelastic composites with various periodic fiber arrangements. International Journal of Engineering Science, 2018, 130, 51-61.	2.7	28
22	Mathematical and Numerical Simulation of Equilibrium of an Elastic Body Reinforced by a Thin Elastic Inclusion. Computational Mathematics and Mathematical Physics, 2018, 58, 761-774.	0.2	20
23	Distinct failure modes in bio-inspired 3D-printed staggered composites under non-aligned loadings. Smart Materials and Structures, 2017, 26, 035053.	1.8	49
24	Numerical simulation of equilibrium of an elastic two-layer structure with a through crack. Numerical Analysis and Applications, 2017, 10, 63-73.	0.2	5
25	Shear wave propagation in finitely deformed 3D fiber-reinforced composites. International Journal of Solids and Structures, 2017, 110-111, 294-304.	1.3	26
26	Understanding the strength of bioinspired soft composites. International Journal of Mechanical Sciences, 2017, 131-132, 171-178.	3.6	29
27	Microscopic and macroscopic instabilities in hyperelastic fiber composites. Journal of the Mechanics and Physics of Solids, 2017, 99, 471-482.	2.3	61
28	Experimental investigation of dynamic crack propagation in PMMA plates. Procedia Structural Integrity, 2017, 6, 83-89.	0.3	3
29	Harnessing viscoelasticity and instabilities for tuning wavy patterns in soft layered composites. Soft Matter, 2016, 12, 3677-3682.	1.2	48
30	Elastic Wave Propagation in Soft Microstructured Composites Undergoing Finite Deformations. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 627-628.	0.2	3
31	Astrometrical observations of Plutoâ€“Charon system with the automated telescopes of Pulkovo observatory. Planetary and Space Science, 2016, 122, 66-69.	0.9	1
32	The Simulation of the Pseudoelastic Behavior for Amorphous-crystalline Shape Memory Alloys. Materials Today: Proceedings, 2015, 2, S767-S770.	0.9	0
33	Stability of an Amorphous TiCuNi Alloy Subjected to Highâ€Pressure Torsion at Different Temperatures. Advanced Engineering Materials, 2015, 17, 1728-1732.	1.6	16
34	Influence of crystalline phase volume fraction on the two-way shape memory effect in amorphousâ€“crystalline Ti40.7Hf9.5Ni44.8Cu5 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 627, 65-71.	2.6	12
35	Evolution of the amorphous structure in melt-spun Ti50Ni25Cu25 alloy subjected to high pressure torsion deformation. Intermetallics, 2015, 66, 77-81.	1.8	17
36	On chromatic effects in observations of the Sun near the horizon. Izvestiya - Atmospheric and Oceanic Physics, 2014, 50, 385-389.	0.2	1

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37	Formation of amorphous states in Ti₅₀Ni₂₅Cu₂₅alloy subjected to severe plastic deformation: Nanoglass issue. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012166.	0.3	5
38	Structure and Properties of TiNi Alloy Subjected to Severe Plastic Deformation and Subsequent Annealing. Materials Science Forum, 2013, 738-739, 518-524.	0.3	3
39	Near Earth Objects Research in Pulkovo Observatory. Proceedings of the International Astronomical Union, 2012, 10, 472-473.	0.0	0
40	Observations of extrasolar planet transits with the automated telescopes of the Pulkovo Astronomical Observatory. Astronomy Letters, 2012, 38, 180-190.	0.1	27
41	Mechanical and functional properties of amorphous-crystalline ribbons of Ti40.7Hf9.5Ni44.8Cu5 alloy. Inorganic Materials: Applied Research, 2011, 2, 512-516.	0.1	3
42	Astrometric and photometric studies of the asteroid 2008 TC3. Solar System Research, 2011, 45, 34-42.	0.3	2
43	Mechanical and functional properties of amorphousâ€“crystalline thin ribbons of Ti50Ni25Cu25and Ti40.7Hf9.5Ni44.8Cu5shape memory alloys. Smart Materials and Structures, 2011, 20, 082003.	1.8	11