Sergey G Abaimov

List of Publications by Year
in descending order

44 papers	601 citations	623188 14 h-index	676716 22 g-index
44 all docs	44 docs citations	44 times ranked	527 citing authors

#	Article	IF	Citations
1	In-plane permeability characterization of engineering textiles based on radial flow experiments: A benchmark exercise. Composites Part A: Applied Science and Manufacturing, 2019, 121, 100-114.	3.8	75
2	Earthquakes: Recurrence and Interoccurrence Times. Pure and Applied Geophysics, 2008, 165, 777-795.	0.8	46
3	Recurrence and interoccurrence behavior of self-organized complex phenomena. Nonlinear Processes in Geophysics, 2007, 14, 455-464.	0.6	44
4	On the closed form expression of the Mori–Tanaka theory prediction for the engineering constants of a unidirectional fiber-reinforced ply. Composite Structures, 2016, 142, 1-6.	3.1	34
5	Out-of-plane permeability measurement for reinforcement textiles: A benchmark exercise. Composites Part A: Applied Science and Manufacturing, 2021, 148, 106480.	3.8	27
6	Experimental characterisation of textile compaction response: A benchmark exercise. Composites Part A: Applied Science and Manufacturing, 2021, 142, 106243.	3.8	23
7	Recurrence-time and frequency-slip statistics of slip events on the creeping section of the San Andreas fault in central California. Geophysical Journal International, 2007, 170, 1289-1299.	1.0	22
8	Technique of rock thermal conductivity evaluation on core cuttings and non-consolidated rocks. International Journal of Rock Mechanics and Minings Sciences, 2018, 108, 15-22.	2.6	22
9	Inverse homogenization problem: Evaluation of elastic and electrical (thermal) properties of composite constituents. International Journal of Engineering Science, 2018, 129, 34-46.	2.7	21
10	Very High Cycle Fatigue Behavior of Additively Manufactured 316L Stainless Steel. Materials, 2020, 13, 3293.	1.3	20
11	Statistical Physics of Non-Thermal Phase Transitions. Springer Series in Synergetics, 2015, , .	0.2	18
12	Multi-step homogenization in the Mori-Tanaka-Benveniste theory. Composite Structures, 2019, 223, 110801.	3.1	17
13	Effect of elastic contrast on the contribution of helical fibers into overall stiffness of a composites. International Journal of Engineering Science, 2017, 120, 31-50.	2.7	16
14	Overall elastic properties of a material containing inhomogeneities of concave shape. International Journal of Engineering Science, 2018, 132, 30-44.	2.7	15
15	Statistical Variability and Tokunaga Branching of Aftershock Sequences Utilizing BASS Model Simulations. Pure and Applied Geophysics, 2013, 170, 155-171.	0.8	14
16	Interface strength of glass fibers in polypropylene: Dependence on the cooling rate and the degree of crystallinity. Polymer Composites, 2020, 41, 1310-1322.	2.3	13
17	Self-diagnostic carbon nanocomposites manufactured from industrial epoxy masterbatches. Composite Structures, 2021, 259, 113244.	3.1	13
18	Experimental and theoretical study of multiscale damage-failure transition in very high cycle fatigue. Physical Mesomechanics, 2017, 20, 78-89.	1.0	12

#	Article	IF	Citations
19	Multiscale Numerical Modeling for Prediction of Piezoresistive Effect for Polymer Composites with a Highly Segregated Structure. Nanomaterials, 2021, 11, 162.	1.9	12
20	Rescaled earthquake recurrence time statistics: application to microrepeaters. Geophysical Journal International, 2009, 176, 256-264.	1.0	11
21	On the bounds of applicability of two-step homogenization technique for porous materials. International Journal of Engineering Science, 2018, 123, 117-126.	2.7	11
22	The effect of multiple contacts between crack faces on crack contribution to the effective elastic properties. International Journal of Solids and Structures, 2019, 163, 75-86.	1.3	11
23	Clusters and avalanches of fibre breaks in a model of an impregnated unidirectional fibre bundle under tension. International Journal of Solids and Structures, 2021, 225, 111061.	1.3	10
24	Replacement relations for thermal conductivities of heterogeneous materials having different matrices. Mechanics of Materials, 2018, 121, 50-56.	1.7	9
25	Review—Recent Advances in Thermally Conductive Paper-Like Films. ECS Journal of Solid State Science and Technology, 2021, 10, 033001.	0.9	9
26	Nonlinear Dynamics of Natural Hazards. , 2007, , 557-580.		9
27	Modeling of an effect of uniaxial deformation on electrical conductance of polypropylene-based composites filled with agglomerated nanoparticles. International Journal of Engineering Science, 2019, 144, 103132.	2.7	8
28	Conductive CNT-polymer nanocomposites digital twins for self-diagnostic structures: Sensitivity to CNT parameters. Composite Structures, 2022, 291, 115617.	3.1	8
29	Applicability and non-applicability of equilibrium statistical mechanics to non-thermal damage phenomena. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P09005.	0.9	7
30	Modeling the effect of uniaxial deformation on electrical conductivity for composite materials with extreme filler segregation. Journal of Composite Materials, 2020, 54, 299-309.	1.2	7
31	Applicability and non-applicability of equilibrium statistical mechanics to non-thermal damage phenomena: II. Spinodal behavior. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P03039.	0.9	6
32	Nucleation phenomena in an annealed damage model: Statistics of times to failure. Physical Review E, 2014, 90, 062401.	0.8	6
33	On the applicability of replacement relations to tetrahedron-like inhomogeneities. International Journal of Solids and Structures, 2019, 167, 1-13.	1.3	6
34	CNT/Epoxy-Masterbatch Based Nanocomposites: Thermal and Electrical Properties. , 2021, , .		4
35	Edge flow profile under radial injection at constant pressure: Analytical predictions vs. experiment. Composite Structures, 2020, 242, 112101.	3.1	3
36	COMPUTATIONAL DESCRIPTION OF THE GEOMETRY OF ALIGNED CARBON NANOTUBES IN POLYMER NANOCOMPOSITES. , 2021, , .		3

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37	Recurrent frequency-size distribution of characteristic events. Nonlinear Processes in Geophysics, 2009, 16, 333-350.	0.6	2
38	Detailed comparison of analytical and finite elementâ€"based homogenization approaches for fibre-reinforced composites. , 2021, , 141-177.		2
39	Non-thermal quenched damage phenomena: The application of the mean-field approach for the three-dimensional case. AIP Advances, 2016, 6, 095116.	0.6	1
40	Non-equilibrium Annealed Damage Phenomena: A Path Integral Approach. Frontiers in Physics, 2017, 5, .	1.0	1
41	Non-Linearity of Electrical Conductivity for Aligned Multi-Walled Carbon Nanotube Nanocomposites: Numerical Estimation of Significance of Influencing Factors. , 2021, , .		1
42	Discussion of the statistical representativeness of the results in: Lomov, Breite, Melnikov, Mesquita, Swolfs and Abaimov [Int. J. Solids Struct 225 (2021) 111061]. International Journal of Solids and Structures, 2022, 236-237, 111356.	1.3	1
43	NANOENGINEERED GLASS FIBER REINFORCED COMPOSITE LAMINATES WITH INTEGRATED MULTIFUNCTIONALITY. , 2021, , .		1
44	Implications of an inverse branching aftershock sequence model. Physical Review E, 2009, 79, 016101.	0.8	0