Vladislav V Aleshin

List of Publications by Year
in descending order

37	540	687363 13	642732 23
papers	citations	h-index	g-index

39	39	39	304
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microcontact-based theory for acoustics in microdamaged materials. Journal of the Mechanics and Physics of Solids, 2007, 55, 366-390.	4.8	49
2	Acoustic Probing of the Jamming Transition in an Unconsolidated Granular Medium. Physical Review Letters, 2008, 100, 158003.	7.8	47
3	Two dimensional modeling of elastic wave propagation in solids containing cracks with rough surfaces and friction â€“ Part II: Numerical implementation. Ultrasonics, 2018, 82, 19-30.	3.9	39
4	Resonant bar simulations in media with localized damage. Ultrasonics, 2004, 42, 1017-1024.	3.9	36
5	Acoustic Waves in an Elastic Channel near the Free Surface of Granular Media. Physical Review Letters, 2006, 96, 214301.	7.8	33
6	Two dimensional modeling of elastic wave propagation in solids containing cracks with rough surfaces and friction â€“ Part I: Theoretical background. Ultrasonics, 2018, 82, 11-18.	3.9	32
7	Micro-potential model for stress?strain hysteresis of micro-cracked materials. Journal of the Mechanics and Physics of Solids, 2005, 53, 795-824.	4.8	31
8	Acoustic modes propagating along the free surface of granular media. Journal of the Acoustical Society of America, 2007, 121, 2600-2611.	1.1	31
9	Friction in unconforming grain contacts as a mechanism for tensorial stressâ€“strain hysteresis. Journal of the Mechanics and Physics of Solids, 2007, 55, 765-787.	4.8	27
10	Preisach analysis of the Hertzâ€“Mindlin system. Journal of the Mechanics and Physics of Solids, 2009, 57, 657-672.	4.8	26
11	Strain wave evolution equation for nonlinear propagation in materials with mesoscopic mechanical elements. Journal of the Acoustical Society of America, 2002, 112, 2666-2679.	1.1	22
12	Hertzâ€“Mindlin problem for arbitrary oblique 2D loading: General solution by memory diagrams. Journal of the Mechanics and Physics of Solids, 2012, 60, 14-36.	4.8	21
13	Method of memory diagrams for mechanical frictional contacts subject to arbitrary 2D loading. International Journal of Solids and Structures, 2015, 60-61, 84-95.	2.7	21
14	Local damage detection by nonlinear coda wave interferometry combined with time reversal. Ultrasonics, 2020, 108, 106226.	3.9	16
15	Theoretical calculation of the instantaneous friction-induced energy losses in arbitrarily excited axisymmetric mechanical contact systems. International Journal of Solids and Structures, 2019, 158, 268-276.	2.7	13
16	PROPAGATION OF ACOUSTICS WAVES OF NONSIMPLEX FORM IN A MATERIAL WITH HYSTERETIC QUADRATIC NONLINEARITY: ANALYSIS AND NUMERICAL SIMULATIONS. Journal of Computational Acoustics, 2004, 12, 319-354.	1.0	12
17	General solution to the Hertzâ€“Mindlin problem via Preisach formalism. International Journal of Non-Linear Mechanics, 2013, 49, 15-30.	2.6	12
18	Propagation of initially bi-harmonic sound waves in a 1D semi-infinite medium with hysteretic non-linearity. Ultrasonics, 2004, 42, 1053-1059.	3.9	11

#	Article	IF	Citations
19	Shift and torsion contact problems for arbitrary axisymmetric normal stress distributions. International Journal of Solids and Structures, 2013, 50, 2894-2900.	2.7	7
20	Simulation Study of the Localization of a Near-Surface Crack Using an Air-Coupled Ultrasonic Sensor Array. Sensors, 2017, 17, 930.	3.8	7
21	Reflection of Nonlinear Acoustic Waves from the Mechanically Free Surface of an Unconsolidated Granular Medium. Acta Acustica United With Acustica, 2008, 94, 215-228.	0.8	6
22	Solution to the frictional contact problem via the method of memory diagrams for general 3D loading histories. Physical Mesomechanics, 2016, 19, 130-135.	1.9	6
23	Characterization of hysteretic stressâ€“strain behavior using the integrated Preisach density. International Journal of Non-Linear Mechanics, 2008, 43, 151-163.	2.6	5
24	Explosive Instability of Gravity-Capillary Waves under Ultrasound Radiation Pressure. Physics of Wave Phenomena, 2018, 26, 234-242.	1.1	5
25	Resonance of Feshbach-type and explosive instability of magnetoelastic waves in solids. Wave Motion, 2018, 81, 15-24.	2.0	5
26	Modeling of acoustic penetration into sandy sediments: Physical and geometrical aspects. Journal of the Acoustical Society of America, 2009, 126, 2206-2214.	1.1	4
27	Modeling nonlinear response from distributed damage and kissing bonds. Proceedings of Meetings on Acoustics, 2012, , .	0.3	3
28	Preisach description for solids with frictional cracks. International Journal of Non-Linear Mechanics, 2018, 104, 28-38.	2.6	3
29	Friction-induced energy losses in mechanical contacts subject to random vibrations. International Journal of Solids and Structures, 2020, 190, 148-155.	2.7	3
30	On Applications of Semi-Analytical Methods of Contact Mechanics. Frontiers in Mechanical Engineering, 2020, 6, .	1.8	2
31	Continued fraction method in inverse problem of photothermal diagnostics. Applied Physics A: Materials Science and Processing, 1997, 64, 579-582.	2.3	1
32	Physical constitutive equations for nonlinear acoustics of materials with internal contacts. AIP Conference Proceedings, 2006, , .	0.4	1
33	General solutions to the mechanical contact problem. Proceedings of Meetings on Acoustics, 2012, , .	0.3	1
34	Qualitative analysis of a 3D multiphysics model for nonlinear ultrasonics and vibration induced heating at closed defects. Research in Nondestructive Evaluation, 2022, 33, 17-32.	1.1	1
35	Inspection of inhomogeneous samples by combined laterally scanned and frequency resolved photothermal measurements. Journal of Applied Physics, 1999, 86, 6512-6518.	2.5	0
36	Frictional contact of two spheres for arbitrary 2D loading: memory diagrams and Preisach analysis. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0

#	Article	IF	Citations
37	3D modeling for acoustic waves and vibrations in solid structures with frictional cracks. Proceedings of Meetings on Acoustics, 2019, , .	0.3	0