Anatoliy P Bovsunovsky

List of Publications by Year
in descending order

44 papers	608 citations	687363 13 h-index	610901 24 g-index
45 all docs	45 docs citations	45 times ranked	311 citing authors

#	Article	IF	Citations
1	Non-linearities in the vibrations of elastic structures with a closing crack: A state of the art review. Mechanical Systems and Signal Processing, 2015, 62-63, 129-148.	8.0	137
2	Considerations regarding superharmonic vibrations of a cracked beam and the variation in damping caused by the presence of the crack. Journal of Sound and Vibration, 2005, 288, 865-886.	3.9	99
3	ANALYTICAL APPROACH TO THE DETERMINATION OF DYNAMIC CHARACTERISTICS OF A BEAM WITH A CLOSING CRACK. Journal of Sound and Vibration, 2000, 235, 415-434.	3.9	51
4	VIBRATION-BASED DIAGNOSTICS OF FATIGUE DAMAGE OF BEAM-LIKE STRUCTURES. Journal of Sound and Vibration, 2002, 249, 23-40.	3.9	37
5	The mechanisms of energy dissipation in the non-propagating fatigue cracks in metallic materials. Engineering Fracture Mechanics, 2004, 71, 2271-2281.	4.3	32
6	Fatigue damage and failure of steam turbine rotors by torsional vibrations. Strength of Materials, 2010, 42, 108-113.	0.5	23
7	The effect of damping and force application point on the non-linear dynamic behavior of a cracked beam at sub-and superresonance vibrations. Strength of Materials, 2006, 38, 492-497.	0.5	21
8	Application of nonlinear resonances for the diagnostics of closing cracks in rodlike elements. Strength of Materials, 2010, 42, 331-343.	0.5	18
9	Vibrations of a Nonlinear Mechanical System Simulating a Cracked Body. Strength of Materials, 2001, 33, 370-379.	0.5	17
10	Numerical study of vibrations of a nonlinear mechanical system simulating a cracked body. Strength of Materials, 1999, 31, 571-581.	0.5	16
11	Efficiency analysis of vibration based crack diagnostics in rotating shafts. Engineering Fracture Mechanics, 2017, 173, 118-129.	4.3	15
12	Efficiency of the method of spectral vibrodiagnostics for fatigue damage of structural elements. Part 3. Analytical and numerical determination of natural frequencies of longitudinal and bending vibrations of beams with transverse cracks. Solution. Strength of Materials, 1999, 31, 341-350.	0.5	13
13	Efficiency of crack detection based on damping characteristics. Engineering Fracture Mechanics, 2019, 214, 464-473.	4.3	13
14	On determination of vibration characteristics of a beam with a closing crack in bending vibrations. Strength of Materials, 2000, 32, 211-224.	0.5	12
15	On determination of the natural frequency of transverse and longitudinal vibrations of a cracked beam. Part 2. Experimental and calculation results. Strength of Materials, 1999, 31, 253-259.	0.5	9
16	Efficiency of the method of spectral vibrodiagnostics for fatigue damage of structural elements. Part 4. Analysis of distortion of harmonicity of vibration cycle of beams with closing transverse cracks. Strength of Materials, 2000, 32, 1-6.	0.5	9
17	Assessment of fatigue damage in steam turbine shafting due to torsional vibrations. Strength of Materials, 2011, 43, 487-497.	0.5	9
18	Some Aspects of Vibration of an Elastic Body with a "Breathing" Discontinuity of Material. Strength of Materials, 2000, 32, 434-445.	0.5	8

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19	Fatigue damage of steam turbine shaft at asynchronous connections of turbine generator to electrical network. Journal of Physics: Conference Series, 2015, 628, 012001.	0.4	8
20	Experimental studies on high-cycle fatigue and damping properties of R2MA rotor steel in torsion. Strength of Materials, 2011, 43, 455-463.	0.5	7
21	Comparative analysis of nonlinear resonances of a mechanical system with unsymmetrical piecewise characteristic of restoring force. Strength of Materials, 2007, 39, 159-169.	0.5	6
22	On determination of the natural frequency of transverse and longitudinal vibrations of a cracked beam. Part 1. analytical approach. Strength of Materials, 1999, 31, 130-137.	0.5	4
23	On the Efficiency of Using Damping Characteristics of Structural Components for Damage Diagnostics. Strength of Materials, 2002, 34, 560-569.	0.5	4
24	Torsional vibrations in steam turbine shafting in turbogenerator abnormal modes of operation. Strength of Materials, 2012, 44, 177-186.	0.5	4
25	Asynchronous Connection of a Turbine Generator to the Mains as a Factor of Fatigue Damage of Steam Turbine Shafting. Strength of Materials, 2014, 46, 810-819.	0.5	4
26	Damping capacity of rods of materials with different mechanism of energy dissipation in two-frequency flexural vibrations. Strength of Materials, 1983, 15, 1751-1755.	0.5	3
27	A method of experimental investigation of the damping capacity of materials in biharmonic deformation under conditions of the uniform stress state. Strength of Materials, 1986, 18, 1427-1432.	0.5	3
28	Computerized automated system for measuring the vibration-damping characteristics of mechanical systems. Strength of Materials, 1990, 22, 138-140.	0.5	3
29	Experimental and analytical study of the damping capacity of multilayer steels. Strength of Materials, 1995, 27, 516-524.	0.5	3
30	Shape of the mechanical hysteresis loop for metallic materials under harmonic stresses below the endurance limit. Part II. Experimental procedure and results. Strength of Materials, 1997, 29, 298-307.	0.5	3
31	Efficiency of the method of spectral vibrodiagnostics for fatigue damage of structural elements. Part 2. Bending vibrations, analytical solution. Strength of Materials, 1998, 30, 564-574.	0.5	3
32	Vibration Characteristics of Fatigue Damage of Beam-Type Structural Components. Strength of Materials, 2002, 34, 35-48.	0.5	3
33	Diagnostics of closing cracks in rodlike elements at nonlinear resonances by the method of variation of the asymmetry of driving forces. Strength of Materials, 2010, 42, 397-405.	0.5	3
34	Use of the phase shift between longitudinal and transverse strains for determining material damping properties. Communication 1. Strength of Materials, 1994, 26, 739-745.	0.5	2
35	On the Mechanism of Energy Dissipation in a Fatigue Crack. Strength of Materials, 2002, 34, 482-496.	0.5	2
36	A method of examining the damping capacity of elastic elements in biharmonic oscillations. Strength of Materials, 1983, 15, 1181-1184.	0.5	1

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37	Direct experimental evaluation of the effect of static tension on the damping properties of materials during flexural vibrations. Strength of Materials, 1995, 27, 236-243.	0.5	1
38	Damping ability of 45 steel at biharmonic strain. Strength of Materials, 1987, 19, 1098-1101.	0.5	0
39	Analysis of methods of determining the damping capacity of a material under two-frequency loading. Strength of Materials, 1988, 20, 933-940.	0.5	0
40	Effect of the form of the amplitude dependence of the decrement of oscillations on the relationships governing the variation of the damping capacity of materials in biharmonic deformation. Strength of Materials, 1989, 21, 389-394.	0.5	0
41	Determination of the damping ability of material during biharmonic deformation with a nonintegral ratio of frequencies of harmonic components. Strength of Materials, 1989, 21, 496-501.	0.5	0
42	Damping capacity of certain structural materials during longitudinaltorsional vibrations. Strength of Materials, 1989, 21, 818-823.	0.5	0
43	Use of the phase shift between longitudinal and transverse strains for determining material damping properties. Communication 2. Strength of Materials, 1994, 26, 783-786.	0.5	0
44	The damping capacity of a multilayer steel. Strength of Materials, 1994, 26, 527-530.	0.5	0