Janko SlaviÄ•

List of Publications by Year
in descending order

Version: 2024-02-01

98 papers	19,565 citations	257450 24 h-index	58581 82 g-index
101 all docs	101 docs citations	101 times ranked	28159 citing authors

#	Article	IF	Citations
1	Full-Field 3D Mode Shape Measurement Using the Multiview Spectral Optical Flow Imaging Method. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 9-12.	0.5	0
2	Full-field DIC-based model updating for localized parameter identification. Mechanical Systems and Signal Processing, 2022, 164, 108287.	8.0	10
3	Damping identification based on a high-speed camera. Mechanical Systems and Signal Processing, 2022, 166, 108485.	8.0	13
4	Single-process fused filament fabrication 3D-printed high-sensitivity dynamic piezoelectric sensor. Additive Manufacturing, 2022, 49, 102482.	3.0	7
5	Singleâ€Process 3Dâ€Printed Triaxial Accelerometer. Advanced Materials Technologies, 2022, 7, .	5.8	9
6	Vibration fatigue for nonstationary and non-Gaussian excitation. , 2021, , 183-192.		0
7	Full-field FRF estimation from noisy high-speed-camera data using a dynamic substructuring approach. Mechanical Systems and Signal Processing, 2021, 150, 107263.	8.0	24
8	Still-camera multiview Spectral Optical Flow Imaging for 3D operating-deflection-shape identification. Mechanical Systems and Signal Processing, 2021, 152, 107456.	8.0	28
9	Design principles for a single-process 3d-printed accelerometer â€“ theory and experiment. Mechanical Systems and Signal Processing, 2021, 152, 107475.	8.0	26
10	Structural dynamics. , 2021, , 3-49.		1
11	Uniaxial vibration fatigue. , 2021, , 99-113.		0
12	Vibration fatigue analysis using modal decomposition. , 2021, , 127-134.		0
13	Identification of nonstationary and non-Gaussian excitation. , 2021, , 135-138.		0
14	Harmonic accelerated vibration-fatigue testing. , 2021, , 141-154.		0
15	Frequency domain methods for fatigue life estimation. , 2021, , 163-171.		0
16	Multiaxial vibration fatigue. , 2021, , 173-182.		0
17	An Overview of Fatigue Testing Systems for Metals under Uniaxial and Multiaxial Random Loadings. Metals, 2021, 11, 447.	2.3	4
18	Short-time fatigue-life estimation for non-stationary processes considering structural dynamics. International Journal of Fatigue, 2021, 147, 106178.	5.7	6

#	ARTICLE	IF	CITATIONS
19	Single-process 3D-printed structures with vibration durability self-awareness. Additive Manufacturing, 2021, 47, 102303.	3.0	5
20	Laser-light speckle formation for deflection-shape identification using digital image correlation. Mechanical Systems and Signal Processing, 2021, 161, 107899.	8.0	13
21	Non-stationarity and non-Gaussianity in Vibration Fatigue. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 73-76.	0.5	0
22	Experimental identification of the dynamic piezoresistivity of fused-filament-fabricated structures. Additive Manufacturing, 2020, 36, 101493.	3.0	12
23	Process Parameters for FFF 3D-Printed Conductors for Applications in Sensors. Sensors, 2020, 20, 4542.	3.8	23
24	Strain proportional damping in Bernoulli-Euler beam theory. Mechanical Systems and Signal Processing, 2020, 145, 106907.	8.0	5
25	SciPy 1.0: fundamental algorithms for scientific computing in Python. Nature Methods, 2020, 17, 261-272.	19.0	17,539
26	Thermoelasticity-based modal damage identification. International Journal of Fatigue, 2020, 137, 105661.	5.7	10
27	Frequency-Domain Triangulation of Spatial Harmonic Motion for Single-Camera Operating Deflection Shape Measurement. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 27-30.	0.5	0
28	Frequency domain triangulation for full-field 3D operating-deflection-shape identification. Mechanical Systems and Signal Processing, 2019, 133, 106287.	8.0	36
29	Dynamic Measurements Using FDM 3D-Printed Embedded Strain Sensors. Sensors, 2019, 19, 2661.	3.8	60
30	Single High-Speed Camera Based 3D Deflection Reconstruction in Frequency Domain. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 15-17.	0.5	1
31	Vibration fatigue at half-sine impulse excitation in the time and frequency domains. International Journal of Fatigue, 2019, 123, 308-317.	5.7	15
32	Piezoresistive dynamic simulations of FDM 3D-Printed embedded strain sensors: a new modal approach. Procedia Structural Integrity, 2019, 24, 390-397.	0.8	7
33	Harmonic Equivalence of the Impulse Loads in Vibration Fatigue. Strojniški Vestnik/Journal of Mechanical Engineering, 2019, 65, 631-640.	1.1	5
34	Relating Vibration and Thermal Losses Using the Damping Heat Coefficient. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 89-91.	0.5	1
35	Full-Field Modal Analysis Using a DSLR Camera. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 27-30.	0.5	0
36	Structure-borne Noise at PWM Excitation using an Extended Field Reconstruction Method and Modal Decomposition. Strojniški Vestnik/Journal of Mechanical Engineering, 2019, 65, 471-481.	1.1	1

#	Article	IF	Citations
37	Experimental research on structure-borne noise at pulse-width-modulation excitation. Applied Acoustics, 2018, 137, 33-39.	3.3	7
38	High frequency modal identification on noisy high-speed camera data. Mechanical Systems and Signal Processing, 2018, 98, 344-351.	8.0	84
39	Vibration fatigue using modal decomposition. Mechanical Systems and Signal Processing, 2018, 98, 548-556.	8.0	56
40	Measuring full-field displacement spectral components using photographs taken with a DSLR camera via an analogue Fourier integral. Mechanical Systems and Signal Processing, 2018, 100, 17-27.	8.0	36
41	The relevance of non-stationarities and non-Gaussianities in vibration fatigue. MATEC Web of Conferences, 2018, 165, 10011.	0.2	6
42	A review of continuous contact-force models in multibody dynamics. International Journal of Mechanical Sciences, 2018, 145, 171-187.	6.7	141
43	Experimental modal analysis on full-field DSLR camera footage using spectral optical flow imaging. Journal of Sound and Vibration, 2018, 434, 213-220.	3.9	25
44	Wear Rate vs Dynamic and Material Properties at Elevated Temperatures for a Copper-Graphite Brush. Strojniski Vestnik/Journal of Mechanical Engineering, 2018, 64, .	1.1	1
45	Damping heat coefficient â€“ Theoretical and experimental research on a vibrating beam. Journal of Sound and Vibration, 2017, 400, 13-21.	3.9	12
46	Frequency Based Spatial Damping Identificationâ€”Theoretical and Experimental Comparison. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 23-29.	0.5	2
47	Electrical contact resistance and wear of a dynamically excited metalâ€“graphite brush. Advances in Mechanical Engineering, 2017, 9, 168781401769480.	1.6	11
48	A validated model for a pin-slot clearance joint. Nonlinear Dynamics, 2017, 88, 131-143.	5.2	15
49	The subpixel resolution of optical-flow-based modal analysis. Mechanical Systems and Signal Processing, 2017, 88, 89-99.	8.0	101
50	The effort of the dynamic simulation on the fatigue damage evaluation of flexible mechanical systems loaded by non-Gaussian and non stationary loads. International Journal of Fatigue, 2017, 103, 60-72.	5.7	19
51	Non-Gaussianity and non-stationarity in vibration fatigue. International Journal of Fatigue, 2017, 97, 9-19.	5.7	82
52	Non-stationarity index in vibration fatigue: Theoretical and experimental research. International Journal of Fatigue, 2017, 104, 221-230.	5.7	42
53	The importance of harmonic versus random excitation for a human finger. International Journal of Mechanical Sciences, 2017, 131-132, 507-515.	6.7	2
54	Design of damping layout using spatial-damping identification methods. International Journal of Mechanical Sciences, 2017, 127, 41-46.	6.7	4

#	Article	IF	Citations
55	A Sequential Approach to the Biodynamic Modeling of a Human Finger. Shock and Vibration, 2017, 2017, 1-12.	0.6	7
56	Absolute Nodal Coordinate Formulation in a Pre-Stressed Large-Displacements Dynamical System. Strojniski Vestnik/Journal of Mechanical Engineering, 2017, 63, 417.	1.1	9
57	High-Noise High-Speed Footage Data in Experimental Modal Analysis. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 23-25.	0.5	0
58	A comparison of strain and classic experimental modal analysis. JVC/Journal of Vibration and Control, 2016, 22, 371-381.	2.6	55
59	Synchrosqueezed wavelet transform for damping identification. Mechanical Systems and Signal Processing, 2016, 80, 324-334.	8.0	39
60	Spatial damping identification in the frequency domainâ€"A theoretical and experimental comparison. Journal of Sound and Vibration, 2016, 376, 182-193.	3.9	6
61	Multiaxial vibration fatigueâ€"A theoretical and experimental comparison. Mechanical Systems and Signal Processing, 2016, 76-77, 409-423.	8.0	69
62	Vibration-fatigue damage accumulation for structural dynamics with non-linearities. International Journal of Mechanical Sciences, 2016, 106, 72-77.	6.7	24
63	Assessment of the Fatigue Parameters from Random Vibration Testing: Application to a Rivet Joint. Strojniski Vestnik/Journal of Mechanical Engineering, 2016, 62, 471-482.	1.1	4
64	Fatigue Damage for Sweep-Sine and Random Accelerated Vibration Testing. Advances in Mechanical Engineering, 2015, 7, 340545.	1.6	6
65	An interface force measurements-based substructure identification and an analysis of the uncertainty propagation. Mechanical Systems and Signal Processing, 2015, 56-57, 2-14.	8.0	8
66	Identification of Out-of-Plane Material Characteristics through Sheet-Metal Blanking. Strojniski Vestnik/Journal of Mechanical Engineering, 2015, 61, 217-226.	1.1	3
67	Multiaxial Fatigue Criteria for Random Stress Response â€“ Theoretical and Experimental Comparison. Procedia Engineering, 2015, 101, 459-466.	1.2	1
68	Accelerated Fatigue and Modal Parameter Identification of Lightweight Structures. SAE International Journal of Materials and Manufacturing, 2014, 8, 1-11.	0.3	1
69	Tuned-Sinusoidal Method for the Operational Modal Analysis of Small and Light Structures. Strojniski Vestnik/Journal of Mechanical Engineering, 2014, 60, 187-194.	1.1	1
70	Vibrational Fatigue and Structural Dynamics for Harmonic and Random Loads. Strojniski Vestnik/Journal of Mechanical Engineering, 2014, 60, 339-348.	1.1	20
71	Minimization of the positional errors for an accurate determination of the kinematic parameters of a rigid-body system with miniature inertial sensors. Mechanism and Machine Theory, 2014, 81, 193-208.	4.5	5
72	Operational mode-shape normalisation with a structural modification for small and light structures. Mechanical Systems and Signal Processing, 2014, 42, 1-13.	8.0	6

#	Article	IF	Citations
73	A novel laboratory blanking apparatus for the experimental identification of blanking parameters. Journal of Materials Processing Technology, 2014, 214, 507-513.	6.3	27
74	A thick anisotropic plate element in the framework of an absolute nodal coordinate formulation. Nonlinear Dynamics, 2013, 73, 183-198.	5.2	11
75	Absolute Nodal Coordinates in Digital Image Correlation. Experimental Mechanics, 2013, 53, 807-818.	2.0	13
76	A Generalized Magnetostrictive-Forces Approach to the Computation of the Magnetostriction-Induced Vibration of Laminated Steel Structures. IEEE Transactions on Magnetics, 2013, 49, 5446-5453.	2.1	20
77	The mass normalization of the displacement and strain mode shapes in a strain experimental modal analysis using the mass-change strategy. Journal of Sound and Vibration, 2013, 332, 6968-6981.	3.9	43
78	Frequency-based structural modification for the case of base excitation. Journal of Sound and Vibration, 2013, 332, 5029-5039.	3.9	22
79	Frequency-domain methods for a vibration-fatigue-life estimation â€“ Application to real data. International Journal of Fatigue, 2013, 47, 8-17.	5.7	205
80	A Multi-Axis Biodynamic Measuring Handle for a Human Hand-Arm System. Strojniski Vestnik/Journal of Mechanical Engineering, 2013, 59, 71-80.	1.1	7
81	The use of strain sensors in an experimental modal analysis of small and light structures with freeâ€“free boundary conditions. JVC/Journal of Vibration and Control, 2013, 19, 1072-1079.	2.6	18
82	Uninterrupted and accelerated vibrational fatigue testing with simultaneous monitoring of the natural frequency and damping. Journal of Sound and Vibration, 2012, 331, 5370-5382.	3.9	59
83	Frequency Characteristics of Magnetostriction in Electrical Steel Related to the Structural Vibrations. IEEE Transactions on Magnetics, 2012, 48, 4727-4734.	2.1	20
84	Development of a liquid-flow pulsator. Flow Measurement and Instrumentation, 2012, 23, 1-8.	2.0	11
85	Experimental validation of a complex, large-scale, rigid-body mechanism. Engineering Structures, 2012, 36, 220-227.	5.3	12
86	Damping identification with the Morlet-wave. Mechanical Systems and Signal Processing, 2011, 25, 1632-1645.	8.0	32
87	Typical bearing-fault rating using force measurements: application to real data. JVC/Journal of Vibration and Control, 2011, 17, 2164-2174.	2.6	34
88	The Development of a Surface Waviness Pattern During Brake-Like Applications. , 2010, , .		0
89	A new approach to roughness-induced vibrations on a slider. Journal of Sound and Vibration, 2007, 306, 732-750.	3.9	24
90	Measuring the dynamic forces to identify the friction of a graphiteâ€“copper contact for variable temperature and current. Wear, 2006, 260, 1136-1144.	3.1	8

#	Article	IF	Citations
91	Simulating Multibody Dynamics With Rough Contact Surfaces and Run-in Wear. Nonlinear Dynamics, 2006, 45, 353-365.	5.2	14
92	Fault Detection of DC Electric Motors Using the Bispectral Analysis. Meccanica, 2006, 41, 283-297.	2.0	10
93	Non-linearity and non-smoothness in multi-body dynamics: Application to woodpecker toy. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2006, 220, 285-296.	2.1	13
94	Enhancements to the continuous wavelet transform for damping identifications on short signals. Mechanical Systems and Signal Processing, 2004, 18, 1065-1076.	8.0	55
95	Damping identification using a continuous wavelet transform: application to real data. Journal of Sound and Vibration, 2003, 262, 291-307.	3.9	132
96	Estimating Vibration-Fatigue-Life on Experimentally Acquired Data. Key Engineering Materials, 0, 569-570, 900-907.	0.4	0
97	Magnetostrictive and Magnetic Sources of Noise in the Electric Motors. , 0, , .		1
98	Piezoresistive 3D Printed (FFF) Accelerometers. , 0, , .		0