Janko SlaviÄ•

List of Publications by Year
in descending order

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98 papers	19,565 citations	257101 24 h-index	58464 82 g-index
101 all docs	101 docs citations	101 times ranked	28159 citing authors

#	Article	IF	Citations
1	SciPy 1.0: fundamental algorithms for scientific computing in Python. Nature Methods, 2020, 17, 261-272.	9.0	17,539
2	Frequency-domain methods for a vibration-fatigue-life estimation â€“ Application to real data. International Journal of Fatigue, 2013, 47, 8-17.	2.8	205
3	A review of continuous contact-force models in multibody dynamics. International Journal of Mechanical Sciences, 2018, 145, 171-187.	3.6	141
4	Damping identification using a continuous wavelet transform: application to real data. Journal of Sound and Vibration, 2003, 262, 291-307.	2.1	132
5	The subpixel resolution of optical-flow-based modal analysis. Mechanical Systems and Signal Processing, 2017, 88, 89-99.	4.4	101
6	High frequency modal identification on noisy high-speed camera data. Mechanical Systems and Signal Processing, 2018, 98, 344-351.	4.4	84
7	Non-Gaussianity and non-stationarity in vibration fatigue. International Journal of Fatigue, 2017, 97, 9-19.	2.8	82
8	Multiaxial vibration fatigueâ€”A theoretical and experimental comparison. Mechanical Systems and Signal Processing, 2016, 76-77, 409-423.	4.4	69
9	Dynamic Measurements Using FDM 3D-Printed Embedded Strain Sensors. Sensors, 2019, 19, 2661.	2.1	60
10	Uninterrupted and accelerated vibrational fatigue testing with simultaneous monitoring of the natural frequency and damping. Journal of Sound and Vibration, 2012, 331, 5370-5382.	2.1	59
11	Vibration fatigue using modal decomposition. Mechanical Systems and Signal Processing, 2018, 98, 548-556.	4.4	56
12	Enhancements to the continuous wavelet transform for damping identifications on short signals. Mechanical Systems and Signal Processing, 2004, 18, 1065-1076.	4.4	55
13	A comparison of strain and classic experimental modal analysis. JVC/Journal of Vibration and Control, 2016, 22, 371-381.	1.5	55
14	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.	2.1	43
15	Non-stationarity index in vibration fatigue: Theoretical and experimental research. International Journal of Fatigue, 2017, 104, 221-230.	2.8	42
16	Synchrosqueezed wavelet transform for damping identification. Mechanical Systems and Signal Processing, 2016, 80, 324-334.	4.4	39
17	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.	4.4	36
18	Frequency domain triangulation for full-field 3D operating-deflection-shape identification. Mechanical Systems and Signal Processing, 2019, 133, 106287.	4.4	36

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19	Typical bearing-fault rating using force measurements: application to real data. JVC/Journal of Vibration and Control, 2011, 17, 2164-2174.	1.5	34
20	Damping identification with the Morlet-wave. Mechanical Systems and Signal Processing, 2011, 25, 1632-1645.	4.4	32
21	Still-camera multiview Spectral Optical Flow Imaging for 3D operating-deflection-shape identification. Mechanical Systems and Signal Processing, 2021, 152, 107456.	4.4	28
22	A novel laboratory blanking apparatus for the experimental identification of blanking parameters. Journal of Materials Processing Technology, 2014, 214, 507-513.	3.1	27
23	Design principles for a single-process 3d-printed accelerometer â€“ theory and experiment. Mechanical Systems and Signal Processing, 2021, 152, 107475.	4.4	26
24	Experimental modal analysis on full-field DSLR camera footage using spectral optical flow imaging. Journal of Sound and Vibration, 2018, 434, 213-220.	2.1	25
25	A new approach to roughness-induced vibrations on a slider. Journal of Sound and Vibration, 2007, 306, 732-750.	2.1	24
26	Vibration-fatigue damage accumulation for structural dynamics with non-linearities. International Journal of Mechanical Sciences, 2016, 106, 72-77.	3.6	24
27	Full-field FRF estimation from noisy high-speed-camera data using a dynamic substructuring approach. Mechanical Systems and Signal Processing, 2021, 150, 107263.	4.4	24
28	Process Parameters for FFF 3D-Printed Conductors for Applications in Sensors. Sensors, 2020, 20, 4542.	2.1	23
29	Frequency-based structural modification for the case of base excitation. Journal of Sound and Vibration, 2013, 332, 5029-5039.	2.1	22
30	Frequency Characteristics of Magnetostriction in Electrical Steel Related to the Structural Vibrations. IEEE Transactions on Magnetics, 2012, 48, 4727-4734.	1.2	20
31	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.	1.2	20
32	Vibrational Fatigue and Structural Dynamics for Harmonic and Random Loads. Strojniski Vestnik/Journal of Mechanical Engineering, 2014, 60, 339-348.	0.6	20
33	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.	2.8	19
34	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.	1.5	18
35	A validated model for a pin-slot clearance joint. Nonlinear Dynamics, 2017, 88, 131-143.	2.7	15
36	Vibration fatigue at half-sine impulse excitation in the time and frequency domains. International Journal of Fatigue, 2019, 123, 308-317.	2.8	15

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37	Simulating Multibody Dynamics With Rough Contact Surfaces and Run-in Wear. Nonlinear Dynamics, 2006, 45, 353-365.	2.7	14
38	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.	1.1	13
39	Absolute Nodal Coordinates in Digital Image Correlation. Experimental Mechanics, 2013, 53, 807-818.	1.1	13
40	Laser-light speckle formation for deflection-shape identification using digital image correlation. Mechanical Systems and Signal Processing, 2021, 161, 107899.	4.4	13
41	Damping identification based on a high-speed camera. Mechanical Systems and Signal Processing, 2022, 166, 108485.	4.4	13
42	Experimental validation of a complex, large-scale, rigid-body mechanism. Engineering Structures, 2012, 36, 220-227.	2.6	12
43	Damping heat coefficient â€“ Theoretical and experimental research on a vibrating beam. Journal of Sound and Vibration, 2017, 400, 13-21.	2.1	12
44	Experimental identification of the dynamic piezoresistivity of fused-filament-fabricated structures. Additive Manufacturing, 2020, 36, 101493.	1.7	12
45	Development of a liquid-flow pulsator. Flow Measurement and Instrumentation, 2012, 23, 1-8.	1.0	11
46	A thick anisotropic plate element in the framework of an absolute nodal coordinate formulation. Nonlinear Dynamics, 2013, 73, 183-198.	2.7	11
47	Electrical contact resistance and wear of a dynamically excited metalâ€“graphite brush. Advances in Mechanical Engineering, 2017, 9, 168781401769480.	0.8	11
48	Fault Detection of DC Electric Motors Using the Bispectral Analysis. Meccanica, 2006, 41, 283-297.	1.2	10
49	Thermoelasticity-based modal damage identification. International Journal of Fatigue, 2020, 137, 105661.	2.8	10
50	Full-field DIC-based model updating for localized parameter identification. Mechanical Systems and Signal Processing, 2022, 164, 108287.	4.4	10
51	Absolute Nodal Coordinate Formulation in a Pre-Stressed Large-Displacements Dynamical System. Strojniški Vestnik/Journal of Mechanical Engineering, 2017, 63, 417.	0.6	9
52	Singleâ€Process 3Dâ€Printed Triaxial Accelerometer. Advanced Materials Technologies, 2022, 7, .	3.0	9
53	Measuring the dynamic forces to identify the friction of a graphiteâ€“copper contact for variable temperature and current. Wear, 2006, 260, 1136-1144.	1.5	8
54	An interface force measurements-based substructure identification and an analysis of the uncertainty propagation. Mechanical Systems and Signal Processing, 2015, 56-57, 2-14.	4.4	8

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55	A Multi-Axis Biodynamic Measuring Handle for a Human Hand-Arm System. Strojniski Vestnik/Journal of Mechanical Engineering, 2013, 59, 71-80.	0.6	7
56	A Sequential Approach to the Biodynamic Modeling of a Human Finger. Shock and Vibration, 2017, 2017, 1-12.	0.3	7
57	Experimental research on structure-borne noise at pulse-width-modulation excitation. Applied Acoustics, 2018, 137, 33-39.	1.7	7
58	Piezoresistive dynamic simulations of FDM 3D-Printed embedded strain sensors: a new modal approach. Procedia Structural Integrity, 2019, 24, 390-397.	0.3	7
59	Single-process fused filament fabrication 3D-printed high-sensitivity dynamic piezoelectric sensor. Additive Manufacturing, 2022, 49, 102482.	1.7	7
60	Operational mode-shape normalisation with a structural modification for small and light structures. Mechanical Systems and Signal Processing, 2014, 42, 1-13.	4.4	6
61	Fatigue Damage for Sweep-Sine and Random Accelerated Vibration Testing. Advances in Mechanical Engineering, 2015, 7, 340545.	0.8	6
62	Spatial damping identification in the frequency domainâ€"A theoretical and experimental comparison. Journal of Sound and Vibration, 2016, 376, 182-193.	2.1	6
63	The relevance of non-stationarities and non-Gaussianities in vibration fatigue. MATEC Web of Conferences, 2018, 165, 10011.	0.1	6
64	Short-time fatigue-life estimation for non-stationary processes considering structural dynamics. International Journal of Fatigue, 2021, 147, 106178.	2.8	6
65	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.	2.7	5
66	Strain proportional damping in Bernoulli-Euler beam theory. Mechanical Systems and Signal Processing, 2020, 145, 106907.	4.4	5
67	Single-process 3D-printed structures with vibration durability self-awareness. Additive Manufacturing, 2021, 47, 102303.	1.7	5
68	Harmonic Equivalence of the Impulse Loads in Vibration Fatigue. Strojniski Vestnik/Journal of Mechanical Engineering, 2019, 65, 631-640.	0.6	5
69	Design of damping layout using spatial-damping identification methods. International Journal of Mechanical Sciences, 2017, 127, 41-46.	3.6	4
70	An Overview of Fatigue Testing Systems for Metals under Uniaxial and Multiaxial Random Loadings. Metals, 2021, 11, 447.	1.0	4
71	Assessment of the Fatigue Parameters from Random Vibration Testing: Application to a Rivet Joint. Strojniski Vestnik/Journal of Mechanical Engineering, 2016, 62, 471-482.	0.6	4
72	Identification of Out-of-Plane Material Characteristics through Sheet-Metal Blanking. Strojniski Vestnik/Journal of Mechanical Engineering, 2015, 61, 217-226.	0.6	3

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73	Frequency Based Spatial Damping Identificationâ€"Theoretical and Experimental Comparison. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 23-29.	0.3	2
74	The importance of harmonic versus random excitation for a human finger. International Journal of Mechanical Sciences, 2017, 131-132, 507-515.	3.6	2
75	Accelerated Fatigue and Modal Parameter Identification of Lightweight Structures. SAE International Journal of Materials and Manufacturing, 2014, 8, 1-11.	0.3	1
76	Tuned-Sinusoidal Method for the Operational Modal Analysis of Small and Light Structures. Strojniski Vestnik/Journal of Mechanical Engineering, 2014, 60, 187-194.	0.6	1
77	Multiaxial Fatigue Criteria for Random Stress Response â€“ Theoretical and Experimental Comparison. Procedia Engineering, 2015, 101, 459-466.	1.2	1
78	Magnetostrictive and Magnetic Sources of Noise in the Electric Motors. , 0, , .		1
79	Single High-Speed Camera Based 3D Deflection Reconstruction in Frequency Domain. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 15-17.	0.3	1
80	Structural dynamics. , 2021, , 3-49.		1
81	Wear Rate vs Dynamic and Material Properties at Elevated Temperatures for a Copper-Graphite Brush. Strojniski Vestnik/Journal of Mechanical Engineering, 2018, 64, .	0.6	1
82	Relating Vibration and Thermal Losses Using the Damping Heat Coefficient. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 89-91.	0.3	1
83	Structure-borne Noise at PWM Excitation using an Extended Field Reconstruction Method and Modal Decomposition. Strojniski Vestnik/Journal of Mechanical Engineering, 2019, 65, 471-481.	0.6	1
84	The Development of a Surface Waviness Pattern During Brake-Like Applications. , 2010, , .		0
85	Estimating Vibration-Fatigue-Life on Experimentally Acquired Data. Key Engineering Materials, 0, 569-570, 900-907.	0.4	0
86	Non-stationarity and non-Gaussianity in Vibration Fatigue. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 73-76.	0.3	0
87	Vibration fatigue for nonstationary and non-Gaussian excitation. , 2021, , 183-192.		0
88	Uniaxial vibration fatigue. , 2021, , 99-113.		0
89	Vibration fatigue analysis using modal decomposition. , 2021, , 127-134.		0
90	Identification of nonstationary and non-Gaussian excitation. , 2021, , 135-138.		0

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91	Harmonic accelerated vibration-fatigue testing. , 2021, , 141-154.		0
92	Frequency domain methods for fatigue life estimation. , 2021, , 163-171.		0
93	Multiaxial vibration fatigue. , 2021, , 173-182.		0
94	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.	0.3	0
95	Piezoresistive 3D Printed (FFF) Accelerometers. , 0, , .		0
96	High-Noise High-Speed Footage Data in Experimental Modal Analysis. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 23-25.	0.3	0
97	Full-Field Modal Analysis Using a DSLR Camera. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 27-30.	0.3	0
98	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.	0.3	0