Sanjay H Upadhyay

List of Publications by Year
in descending order

59 papers	1,662 citations	516710 16 h-index	289244 40 g-index
60 all docs	60 docs citations	60 times ranked	1448 citing authors

#	Article	IF	Citations
1	A review on signal processing techniques utilized in the fault diagnosis of rolling element bearings. Tribology International, 2016, 96, 289-306.	5.9	484
2	Fault diagnosis of rolling element bearing with intrinsic mode function of acoustic emission data using APF-KNN. Expert Systems With Applications, 2013, 40, 4137-4145.	7.6	269
3	Bearing performance degradation assessment based on a combination of empirical mode decomposition and k-medoids clustering. Mechanical Systems and Signal Processing, 2017, 93, 16-29.	8.0	120
4	Fault diagnosis of rolling element bearing by using multinomial logistic regression and wavelet packet transform. Soft Computing, 2014, 18, 255-266.	3.6	82
5	Effect of interphase on elastic behavior of multiwalled carbon nanotube reinforced composite. Computational Materials Science, 2014, 87, 267-273.	3.0	70
6	The use of MD-CUMSUM and NARX neural network for anticipating the remaining useful life of bearings. Measurement: Journal of the International Measurement Confederation, 2017, 111, 397-410.	5.0	65
7	Analysis of Nonlinear Phenomena in High Speed Ball Bearings due to Radial Clearance and Unbalanced Rotor Effects. JVC/Journal of Vibration and Control, 2010, 16, 65-88.	2.6	60
8	Intelligent bearing performance degradation assessment and remaining useful life prediction based on self-organising map and support vector regression. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2018, 232, 1118-1132.	2.1	50
9	Comparison between Artificial Neural Network and Support Vector Method for a Fault Diagnostics in Rolling Element Bearings. Procedia Engineering, 2016, 144, 390-397.	1.2	44
10	Evaluation of elastic properties of multi walled carbon nanotube reinforced composite. Computational Materials Science, 2014, 81, 332-338.	3.0	43
11	Nonlinear dynamic analysis of high speed bearings due to combined localized defects. JVC/Journal of Vibration and Control, 2014, 20, 2300-2313.	2.6	27
12	Cantilevered single walled boron nitride nanotube based nanomechanical resonators of zigzag and armchair forms. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 50, 73-82.	2.7	20
13	Nonlinear Dynamic Response of Cylindrical Roller Bearingâ€“Rotor System with 9 Degree of Freedom Model Having a Combined Localized Defect at Innerâ€“Outer Races of Bearing. Tribology Transactions, 2017, 60, 284-299.	2.0	20
14	Vibrational characteristics of defective single walled BN nanotube based nanomechanical mass sensors: single atom vacancies and divacancies. Sensors and Actuators A: Physical, 2013, 197, 111-121.	4.1	18
15	Boron nitride nanotube-based biosensor for acetone detection: molecular structural mechanics-based simulation. Molecular Simulation, 2014, 40, 1035-1042.	2.0	18
16	MASS DETECTION USING SINGLE WALLED BORON NITRIDE NANOTUBE AS A NANOMECHANICAL RESONATOR. Nano, 2012, 07, 1250029.	1.0	17
17	Vibration Analysis of Single Walled Boron Nitride Nanotube Based Nanoresonators. Journal of Nanotechnology in Engineering and Medicine, 2012, 3, .	0.8	17
18	Boron nitride nanotubeâ€based biosensing of various bacterium/viruses: continuum modellingâ€based simulation approach. IET Nanobiotechnology, 2014, 8, 143-148.	3.8	15

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19	Study of Effect of Unbalanced Forces for High Speed Rotor. Procedia Engineering, 2013, 64, 593-602.	1.2	14
20	Nonlinear vibration analysis of piezo-actuated flat thin membrane. JVC/Journal of Vibration and Control, 2015, 21, 1162-1170.	2.6	14
21	Single walled boron nitride nanotubeâ€based biosensor: an atomistic finite element modelling approach. IET Nanobiotechnology, 2014, 8, 149-156.	3.8	13
22	Theoretical model to predict the effect of localized defect on dynamic behavior of cylindrical roller bearing at inner race and outer race. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2014, 228, 152-171.	0.8	13
23	AN EFFICIENT FINITE ELEMENT MODEL FOR ANALYSIS OF SINGLE WALLED BORON NITRIDE NANOTUBE-BASED RESONANT NANOMECHANICAL SENSORS. Nano, 2013, 08, 1350011.	1.0	12
24	Finite element analysis of an inflatable torus considering air mass structural element. Advances in Space Research, 2014, 53, 163-173.	2.6	12
25	Vibrational characteristics of defective single walled BN nanotube based nanomechanical mass sensors: Extended defect or dislocation line. Sensors and Actuators A: Physical, 2013, 203, 160-167.	4.1	11
26	Non-linear vibration signature analysis of a high-speed rotating shaft due to ball size variations and varying number of balls. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2009, 223, 83-105.	0.8	10
27	Doubly-Clamped Single Walled Boron Nitride Nanotube Based Nanomechanical Resonators: A Computational Investigation of Their Behavior. Journal of Nanotechnology in Engineering and Medicine, 2012, 3, .	0.8	8
28	Boron Nitride Nanotube-Based Mass Sensing of Zeptogram Scale. Spectroscopy Letters, 2015, 48, 17-21.	1.0	8
29	Geometric design and deployment behavior of origami inspired conical structures. Mechanics Based Design of Structures and Machines, 2023, 51, 113-137.	4.7	8
30	Investigation of wrinkling behaviour in the creased thin-film laminates. International Journal of Mechanics and Materials in Design, 2021, 17, 899-913.	3.0	8
31	Deployable toroidal structures based on modified Kresling pattern. Mechanism and Machine Theory, 2022, 176, 104972.	4.5	8
32	An analytical model (7 D.O.F.) for the prediction of the vibration response of cylindrical roller element bearings due to a combined localized defect. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2015, 229, 383-406.	0.8	7
33	Influence of roller defect and coupled rollerâ€“innerâ€“outer race defects on the performance of cylindrical roller bearing. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2019, 233, 731-746.	0.8	7
34	Vibrational Analysis of Zigzag and Armchair Fixed Free Single Walled Boron Nitride Nanotubes: Atomistic Modeling Approach. Current Nanoscience, 2013, 9, 254-261.	1.2	7
35	Vibration Analysis of an Inflatable Torus Based on Mode Shape. AIAA Journal, 2013, 51, 1526-1532.	2.6	6
36	Nonlinear analysis of cylindrical roller bearing under the influence of defect on individual and coupled innerâ€“outer race. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2019, 233, 404-428.	0.8	6

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37	Chaos and Nonlinear Dynamic Analysis of High-Speed Rolling Element Bearings due to Varying Number of Rolling Elements. International Journal of Nonlinear Sciences and Numerical Simulation, 2009, 10, .	1.0	5
38	Fault diagnosis of high-speed rolling element bearings using wavelet packet transform. International Journal of Signal and Imaging Systems Engineering, 2015, 8, 390.	0.6	5
39	Analysis of alignment effect on carbon nanotube layer in nanocomposites. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 66, 221-227.	2.7	5
40	The novel design concept for the tensioning system of an inflatable planar membrane reflector. Archive of Applied Mechanics, 2021, 91, 1233-1246.	2.2	5
41	Vibration Analysis of High Speed Rolling Element Bearings due to Race Defects. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2011, , 349-359.	0.2	5
42	Continuum Solid Modeling Based Finite Element Method Simulation Approach for Wavy Single Walled Boron Nitride Nanotube Based Resonant Nano Mechanical Sensors. Journal of Computational and Theoretical Nanoscience, 2015, 12, 1841-1846.	0.4	4
43	The application of semi-nonnegative matrix factorization for detection of incipient faults in bearings. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 4543-4555.	2.1	4
44	Advance spectral approach for condition evaluation of rolling element bearings. ISA Transactions, 2020, 103, 366-389.	5.7	4
45	Vibration Signature Analysis of High-Speed Unbalanced Rotors Supported by Rolling-Element Bearings due to Off-Sized Rolling Elements. International Journal of Acoustics and Vibrations, 2009, 14, .	0.3	4
46	Effect of Chirality on Resonant Behavior of Single Walled BN Nanotube Based Nanomechanical Resonator. Current Nanoscience, 2013, 9, 525-531.	1.2	3
47	WRINKLING DYNAMICS OF MEMBRANE BASED ON USER DEFINED WRINKLE PATTERN. International Journal of Computational Materials Science and Engineering, 2012, 01, 1250034.	0.7	1
48	Effect of Localized Defect on the Vibration Behavior of Cylindrical Roller Bearing-Rotor System. Lecture Notes in Mechanical Engineering, 2014, , 297-319.	0.4	1
49	Mechanics of Deformation of Multi Walled Carbon Nanotube Reinforced Composites. Journal of Computational and Theoretical Nanoscience, 2014, 11, 2603-2610.	0.4	1
50	Nonlinear Dynamic Behavior of Balanced Rotor Bearing System Due to Various Localized Defects. Lecture Notes in Mechanical Engineering, 2014, , 345-357.	0.4	1
51	Experimental investigation of cylindrical roller bearing for inner race defect under varying load. IOP Conference Series: Materials Science and Engineering, 0, 1004, 012022.	0.6	1
52	Numerical and experimental study on novel tensioning method for the inflatable paraboloid reflector antenna. Mechanics Based Design of Structures and Machines, 2024, 52, 54-71.	4.7	1
53	Vibration Analysis of an Unbalanced Rotating Shaft Due to Ball Waviness. , 2009, , .		0
54	Dynamic Analysis of Ball Bearings Due to Clearance Effect. , 2009, , .		0

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55	Nonlinear Dynamic Analysis and Experimental Verification of an Unbalanced Rotor Supported by Ball Bearings. , 2011, , .		0
56	Vibration Analysis of Inflatable Parabolic Structure for Space Application. , 2012, , .		0
57	Effect of chirality and point defect on resonant characterization of single-walled boron nitride nanotube-based mass sensor. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2015, 229, 85-95.	0.1	0
58	Nonlinear Dynamic Analysis of High Speed Unbalanced Rotor Supported on Deep Groove Ball Bearings Considering the Preload Effect. Lecture Notes in Mechanical Engineering, 2014, , 481-490.	0.4	0
59	Nanocomposites Based on Multiwalled Carbon Nanotubes With Effective Youngâ€™s Modulus Dependent on Number of Layers. , 2014, , .		0