

Fakher Chaari

List of Publications by Year in descending order

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Version: 2024-02-01

90
papers

2,015
citations

331538

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42
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114
all docs

114
docs citations

114
times ranked

943
citing authors

#	ARTICLE	IF	CITATIONS
1	Numerical model of a single stage gearbox under variable regime. <i>Mechanics Based Design of Structures and Machines</i> , 2023, 51, 1054-1081.	3.4	12
2	Early Damage Detection in Planetary Gear Transmission in Down-Time Regime. <i>Applied Condition Monitoring</i> , 2022, , 31-37.	0.4	2
3	Effect of Non-linear Suspension on the Recognition of the Road Disturbance. <i>Applied Condition Monitoring</i> , 2022, , 65-74.	0.4	0
4	Dynamic characteristics of a wind turbine gearbox with amplitude modulation and gravity effect: Theoretical and experimental investigation. <i>Mechanism and Machine Theory</i> , 2022, 167, 104468.	2.7	16
5	Special feature on rotating machinery condition monitoring by connecting physics-based and data-driven methods. <i>Measurement Science and Technology</i> , 2022, 33, 010103.	1.4	4
6	Gear mesh stiffness of polymer-metal spur gear system using generalized Maxwell model. <i>Mechanism and Machine Theory</i> , 2022, 175, 104934.	2.7	13
7	Dynamic behavior of the nonlinear planetary gear model in nonstationary conditions. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2021, 235, 4648-4662.	1.1	6
8	Intelligent optimal controller design applied to quarter car model based on non-asymptotic observer for improved vehicle dynamics. <i>Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering</i> , 2021, 235, 929-942.	0.7	7
9	Effects of misfire on the dynamic behavior of gasoline Engine Crankshafts. <i>Engineering Failure Analysis</i> , 2021, 121, 105149.	1.8	15
10	A New Dynamic Model for Worm Drives. <i>Applied Condition Monitoring</i> , 2021, , 235-242.	0.4	1
11	Gearbox Fault Identification Under Non-Gaussian Noise and Time-Varying Operating Conditions. <i>Applied Condition Monitoring</i> , 2021, , 1-9.	0.4	1
12	Digital twin-driven machine learning: ball bearings fault severity classification. <i>Measurement Science and Technology</i> , 2021, 32, 044006.	1.4	37
13	Order-Based Identification of Bearing Defects under Variable Speed Condition. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3962.	1.3	3
14	Tooth defect detection in planetary gears by the current signature analysis: numerical modelling and experimental measurements. <i>Comptes Rendus - Mecanique</i> , 2021, 349, 275-298.	0.3	2
15	Damage detection in wind turbine gearbox using modal strain energy. <i>Engineering Failure Analysis</i> , 2020, 107, 104228.	1.8	14
16	Alternating Frequency Time Domains identification technique: Parameters determination for nonlinear system from measured transmissibility data. <i>European Journal of Mechanics, A/Solids</i> , 2020, 80, 103886.	2.1	2
17	A Simple Condition Monitoring Method for Gearboxes Operating in Impulsive Environments. <i>Sensors</i> , 2020, 20, 2115.	2.1	17
18	Modeling the Transmission Path in a Planetary Gearbox: A Comparison of Two Methods. <i>Lecture Notes in Mechanical Engineering</i> , 2020, , 95-104.	0.3	1

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19	Maintenance 4.0 of Wind Turbine. Lecture Notes in Mechanical Engineering, 2020, , 1-10.	0.3	0
20	Dynamic Behavior of Spur Gearbox with Elastic Coupling in the Presence of Eccentricity Defect Under Acyclism Regime. Applied Condition Monitoring, 2019, , 123-132.	0.4	1
21	Vibration-based diagnostics of epicyclic gearboxes “ From classical to soft-computing methods. Measurement: Journal of the International Measurement Confederation, 2019, 147, 106811.	2.5	23
22	Gear fault diagnosis under non-stationary operating mode based on EMD, TKEO, and Shock Detector. Comptes Rendus - Mecanique, 2019, 347, 663-675.	2.1	18
23	Intelligent PD controller design for active suspension system based on robust model-free control strategy. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 4863-4880.	1.1	31
24	A new modeling of planetary gear set to predict modulation phenomenon. Mechanical Systems and Signal Processing, 2019, 127, 234-261.	4.4	38
25	Influence of the Non-linear Hertzian Stiffness on the Dynamic Behavior of Planetary Gear During Run up Condition. Applied Condition Monitoring, 2019, , 30-38.	0.4	2
26	Passive vibration absorber effect on the machining surface quality of a flexible workpiece. Comptes Rendus - Mecanique, 2019, 347, 903-911.	2.1	4
27	L-Kurtosis and Improved Complete Ensemble EMD in Early Fault Detection Under Variable Load and Speed. Applied Condition Monitoring, 2019, , 3-15.	0.4	4
28	Simulating the dynamic behavior of planetary gearbox based on improved Hanning function. Comptes Rendus - Mecanique, 2019, 347, 49-61.	2.1	12
29	Operational Modal Analysis for a Half Vehicle Model. Applied Condition Monitoring, 2019, , 51-60.	0.4	0
30	Passive vibration suppression using ball impact damper absorber. Applied Acoustics, 2019, 147, 72-76.	1.7	17
31	Effect of elastic coupling on the modal characteristics of spur gearbox system. Applied Acoustics, 2019, 144, 71-84.	1.7	12
32	Effect of load and meshing stiffness variation on modal properties of planetary gear. Applied Acoustics, 2019, 147, 32-43.	1.7	27
33	Road profile identification with an algebraic estimator. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 1139-1155.	1.1	14
34	Road profile estimation using the dynamic responses of the full vehicle model. Applied Acoustics, 2019, 147, 87-99.	1.7	28
35	Dynamic Behavior of Back to Back Planetary Gear in Presence of Pitting Defects. Applied Condition Monitoring, 2019, , 16-22.	0.4	3
36	On-line Adaptive Scaling Parameter in Active Disturbance Rejection Controller. Applied Condition Monitoring, 2019, , 79-86.	0.4	2

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37	Road profile identification using estimation techniques: comparison between independent component analysis and Kalman filter. Journal of Theoretical and Applied Mechanics, 2019, 57, 397-409.	0.2	7
38	The effect of a cracked tooth on the dynamic response of a simple gearbox with a flexible coupling under acyclism operation. Journal of Theoretical and Applied Mechanics, 2019, 57, 591-603.	0.2	5
39	The Time-Frequency Filtering (TFF) Method Used in Early Detection of Gear Faults in Variable Load and Dimensions Defect. Applied Condition Monitoring, 2019, , 56-67.	0.4	0
40	Transfer Path Analysis of Planetary Gear with Mechanical Power Recirculation. Applied Condition Monitoring, 2019, , 104-115.	0.4	0
41	Experimental Investigation of Normal/Lateral Excitation Direction Influence on the Dynamic Characteristics of Metal Mesh Isolator. Applied Condition Monitoring, 2019, , 227-234.	0.4	1
42	Default Detection in a Back-to-Back Planetary Gearbox Through Current and Vibration Signals. Applied Condition Monitoring, 2019, , 189-197.	0.4	0
43	Effect of Gravity of Carrier on the Dynamic Behavior of Planetary Gears. Lecture Notes in Mechanical Engineering, 2018, , 975-983.	0.3	3
44	New Modeling of Planetary Gear Transmission. Lecture Notes in Mechanical Engineering, 2018, , 1227-1233.	0.3	1
45	Comparison of experimental and operational modal analysis on a back to back planetary gear. Mechanism and Machine Theory, 2018, 124, 226-247.	2.7	33
46	Experimental Investigation on the Influence of Relative Density on the Compressive Behaviour of Metal Mesh Isolator. Lecture Notes in Mechanical Engineering, 2018, , 941-947.	0.3	2
47	Dynamic Behavior of Spur Gearbox with an Elastic Coupling Under Acyclism Regime. Applied Condition Monitoring, 2018, , 319-327.	0.4	1
48	Experimental study of passive vibration suppression using absorber with spherical ball impact damper. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2017, 231, 3193-3201.	1.1	2
49	Angular-based modeling of induction motors for monitoring. Journal of Sound and Vibration, 2017, 395, 371-392.	2.1	11
50	Identification of nonlinear anti-vibration isolator properties. Comptes Rendus - Mecanique, 2017, 345, 386-398.	2.1	3
51	Frequency analysis of a two-stage planetary gearbox using two different methodologies. Comptes Rendus - Mecanique, 2017, 345, 832-843.	2.1	19
52	Modeling of a passive absorber in milling tool machine. Applied Acoustics, 2017, 128, 94-110.	1.7	10
53	Early Detection of Gear Faults in Variable Load and Local Defect Size Using Ensemble Empirical Mode Decomposition (EEMD). Applied Condition Monitoring, 2017, , 13-22.	0.4	5
54	Modal Analysis of Spur Gearbox with an Elastic Coupling. Applied Condition Monitoring, 2017, , 153-163.	0.4	3

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55	Effects of variable loading conditions on the dynamic behaviour of planetary gear with power recirculation. Measurement: Journal of the International Measurement Confederation, 2016, 94, 306-315.	2.5	43
56	Detection of gear faults in variable rotating speed using variational mode decomposition (VMD). Mechanics and Industry, 2016, 17, 207.	0.5	31
57	Analysis of a Planetary Gearbox Under Non-stationary Operating Conditions: Numerical and Experimental Results. Applied Condition Monitoring, 2016, , 351-362.	0.4	4
58	Electrical Modeling for Faults Detection Based on Motor Current Signal Analysis and Angular Approach. Applied Condition Monitoring, 2016, , 15-25.	0.4	5
59	Dynamic analysis of gearbox behaviour in milling process: Non-stationary operations. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 3372-3388.	1.1	5
60	Dynamic Behaviour of Back to Back Planetary Gear in Run Up and Run Down Transient Regimes. Journal of Mechanics, 2015, 31, 481-491.	0.7	22
61	Load Sharing Behavior in Planetary Gear Set. Applied Condition Monitoring, 2015, , 459-468.	0.4	4
62	Performance of a Non Linear Dynamic Vibration Absorbers. Journal of Mechanics, 2015, 31, 345-353.	0.7	11
63	ASYMPTOTIC NUMERICAL METHOD FOR THE DYNAMIC STUDY OF NONLINEAR VIBRATION ABSORBERS. International Journal of Applied Mechanics, 2014, 06, 1450053.	1.3	4
64	Modeling of Gear Transmissions Dynamics in Non-stationary Conditions. Lecture Notes in Mechanical Engineering, 2014, , 109-124.	0.3	2
65	Modal Analysis of Helical Planetary Gear Train Coupled to Bevel Gear. Lecture Notes in Mechanical Engineering, 2014, , 149-158.	0.3	1
66	Real time algorithm implemented in Altera's FPGA for a newly designed mobile robot. Multidiscipline Modeling in Materials and Structures, 2014, 10, 75-93.	0.6	4
67	An Experimental Investigation of the Dynamic Behavior of Planetary Gear Set. Lecture Notes in Mechanical Engineering, 2013, , 199-206.	0.3	2
68	Analysis of planetary gear transmission in non-stationary operations. Frontiers of Mechanical Engineering, 2013, 8, 88-94.	2.5	45
69	Influence of the Acyclism on the Dynamics of a Spur Gear System. , 2012, , 125-132.		1
70	Eccentricity Incidence on the Nonlinear Behavior of a Helical Gear. , 2012, , 175-182.		0
71	Nonlinear modeling and simulation of spur gear with defected bearings. Multidiscipline Modeling in Materials and Structures, 2012, 8, 197-212.	0.6	3
72	Gearbox Vibration Signal Amplitude and Frequency Modulation. Shock and Vibration, 2012, 19, 635-652.	0.3	75

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73	Influence of the non-linear Hertzian stiffness on the dynamics of a spur gear system under transient regime and tooth defects. <i>International Journal of Vehicle Noise and Vibration</i> , 2011, 7, 149.	0.0	12
74	Study of a spur gear dynamic behavior in transient regime. <i>Mechanical Systems and Signal Processing</i> , 2011, 25, 3089-3101.	4.4	120
75	Modelling of gearbox dynamics under time-varying nonstationary load for distributed fault detection and diagnosis. <i>European Journal of Mechanics, A/Solids</i> , 2010, 29, 637-646.	2.1	125
76	Dynamic behaviour modelling of a flexible gear system by the elastic foundation theory in presence of defects. <i>European Journal of Mechanics, A/Solids</i> , 2010, 29, 887-896.	2.1	26
77	Analytical modelling of spur gear tooth crack and influence on gearmesh stiffness. <i>European Journal of Mechanics, A/Solids</i> , 2009, 28, 461-468.	2.1	338
78	Implementation of applications on a newly designed robot prototype: “Autonomous navigation and parallel parking”. , 2009, , .		2
79	Effect of spalling or tooth breakage on gearmesh stiffness and dynamic response of a one-stage spur gear transmission. <i>European Journal of Mechanics, A/Solids</i> , 2008, 27, 691-705.	2.1	282
80	An acousticâ€“structural interaction modelling for the evaluation of a gearbox-radiated noise. <i>International Journal of Mechanical Sciences</i> , 2008, 50, 569-577.	3.6	46
81	Obstacle avoidance of a mobile robot using a hierarchical control. , 2008, , .		3
82	Analytical Investigation on the Effect of Gear Teeth Faults on the Dynamic Response of a Planetary Gear Set. <i>Noise and Vibration Worldwide</i> , 2006, 37, 9-17.	0.4	25
83	Influence of manufacturing errors on the dynamic behavior of planetary gears. <i>International Journal of Advanced Manufacturing Technology</i> , 2006, 27, 738-746.	1.5	116
84	Numerical and experimental analysis of a gear system with teeth defects. <i>International Journal of Advanced Manufacturing Technology</i> , 2005, 25, 542-550.	1.5	71
85	Simulation numÃ©rique du comportement dynamique d'une transmission par engrenages en prÃ©sence de dÃ©fauts de dentures. <i>Mecanique Et Industries</i> , 2005, 6, 625-633.	0.2	17
86	Dynamic response simulation of planetary gears by the iterative spectral method. <i>International Journal of Simulation Modelling</i> , 2005, 4, 35-45.	0.6	9
87	Effect of Load Shape in Cyclic Load Variation on Dynamic Behavior of Spur Gear System. <i>Key Engineering Materials</i> , 0, 518, 119-126.	0.4	9
88	Modal analysis of back-to-back planetary gear: experiments and correlation against lumped-parameter model. <i>Journal of Theoretical and Applied Mechanics</i> , 0, , 125.	0.2	20
89	Modal analysis of gearbox transmission system in Bucket wheel excavator. <i>Journal of Theoretical and Applied Mechanics</i> , 0, , 253.	0.2	9
90	Porous material effect on gearbox vibration and acoustic behavior. <i>Journal of Theoretical and Applied Mechanics</i> , 0, , 1381.	0.2	2