Mayorkinos Papaelias

List of Publications by Year
in descending order

79 papers	2,621 citations	257101 24 h-index	189595 50 g-index
81 all docs	81 docs citations	81 times ranked	2109 citing authors

#	Article	IF	Citations
1	Condition monitoring of wind turbines: Techniques and methods. Renewable Energy, 2012, 46, 169-178.	4.3	707
2	Wind turbine reliability analysis. Renewable and Sustainable Energy Reviews, 2013, 23, 463-472.	8.2	236
3	A review on non-destructive evaluation of rails: State-of-the-art and future development. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2008, 222, 367-384.	1.3	230
4	Identification of critical components of wind turbines using FTA over the time. Renewable Energy, 2016, 87, 869-883.	4.3	107
5	Inspection and Structural Health Monitoring techniques for Concentrated Solar Power plants. Renewable Energy, 2016, 85, 1178-1191.	4.3	91
6	High-speed inspection of rails using ACFM techniques. NDT and E International, 2009, 42, 328-335.	1.7	85
7	Fault detection and diagnosis within a wind turbine mechanical braking system using condition monitoring. Renewable Energy, 2012, 47, 175-182.	4.3	64
8	Optimal Dynamic Analysis of Electrical/Electronic Components in Wind Turbines. Energies, 2017, 10, 1111.	1.6	58
9	Automated defect classification of Aluminium 5083 TIG welding using HDR camera and neural networks. Journal of Manufacturing Processes, 2019, 45, 603-613.	2.8	54
10	Autonomous underwater vehicles: Instrumentation and measurements. IEEE Instrumentation and Measurement Magazine, 2020, 23, 105-114.	1.2	54
11	Automated defect classification of SS304 TIG welding process using visible spectrum camera and machine learning. NDT and E International, 2019, 107, 102139.	1.7	49
12	Railroad inspection based on ACFM employing a non-uniform B-spline approach. Mechanical Systems and Signal Processing, 2013, 40, 605-617.	4.4	46
13	Onboard detection of railway axle bearing defects using envelope analysis of high frequency acoustic emission signals. Case Studies in Nondestructive Testing and Evaluation, 2016, 6, 8-16.	1.7	46
14	Online condition monitoring of rolling stock wheels and axle bearings. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2016, 230, 709-723.	1.3	38
15	ENDURUNS: An Integrated and Flexible Approach for Seabed Survey Through Autonomous Mobile Vehicles. Journal of Marine Science and Engineering, 2020, 8, 633.	1.2	38
16	Cracks and welds detection approach in solar receiver tubes employing electromagnetic acoustic transducers. Structural Health Monitoring, 2018, 17, 1046-1055.	4.3	36
17	Wet/dry influence on behaviors of closed-cell polymeric cross-linked foams under static, dynamic and impact loads. Construction and Building Materials, 2018, 187, 1092-1102.	3.2	36
18	Wayside detection of faults in railway axle bearings using time spectral kurtosis analysis on high-frequency acoustic emission signals. Advances in Mechanical Engineering, 2016, 8, 168781401667600.	0.8	32

#	Article	IF	Citations
19	Flexural cracking-induced acoustic emission peak frequency shift in railway prestressed concrete sleepers. Engineering Structures, 2019, 178, 493-505.	2.6	32
20	Structural health monitoring of grouted connections for offshore wind turbines by means of acoustic emission: An experimental study. Renewable Energy, 2020, 147, 130-140.	4.3	32
21	A heuristic method for detecting and locating faults employing electromagnetic acoustic transducers. Eksploatacja I Niezawodnosc, 2017, 19, 493-500.	1.1	29
22	Acoustic emission study of fatigue crack propagation in extruded AZ31 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 270-278.	2.6	28
23	An experimental study on the applicability of acoustic emission for wind turbine gearbox health diagnosis. Journal of Low Frequency Noise Vibration and Active Control, 2016, 35, 64-76.	1.3	28
24	Perspectives on railway axle bearing condition monitoring. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2020, 234, 17-31.	1.3	27
25	Structural Health Monitoring Using Fibre Optic Acoustic Emission Sensors. Sensors, 2020, 20, 6369.	2.1	24
26	Measurement of phase transformation in steels using electromagnetic sensors. Ironmaking and Steelmaking, 2002, 29, 469-476.	1.1	23
27	The Effect of Unsupported Sleepers/Bearers on Dynamic Phenomena of a Railway Turnout System under Impact Loads. Applied Sciences (Switzerland), 2020, 10, 2320.	1.3	19
28	Autonomous Underwater Vehicles and Field of View in Underwater Operations. Journal of Marine Science and Engineering, 2021, 9, 277.	1.2	19
29	Measurement and modeling of the electromagnetic response to phase transformation in steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 965-972.	1.1	18
30	Damage Detection in Fiber-Reinforced Foamed Urethane Composite Railway Bearers Using Acoustic Emissions. Infrastructures, 2020, 5, 50.	1.4	18
31	New Insights from Multibody Dynamic Analyses of a Turnout System under Impact Loads. Applied Sciences (Switzerland), 2019, 9, 4080.	1.3	17
32	Detection and evaluation of rail surface defects using alternating current field measurement techniques. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2012, 226, 530-541.	1.3	16
33	Quantitative monitoring of brittle fatigue crack growth in railway steel using acoustic emission. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 1211-1224.	1.3	16
34	Calculus of the defect severity with EMATs by analysing the attenuation curves of the guided waves. Smart Structures and Systems, 2017, 19, 195-202.	1.9	16
35	Generalized Transmissibility Damage Indicator With Application to Wind Turbine Component Condition Monitoring. IEEE Transactions on Industrial Electronics, 2016, 63, 6347-6359.	5.2	15
36	Methods to Monitor and Evaluate the Deterioration of Track and Its Components in a Railway In-Service: A Systemic Review. Frontiers in Built Environment, 2020, 6, .	1.2	15

#	ARTICLE	IF	CITATIONS
37	Effect of microstructural variations on smart inductive sensor measurements of phase transformation in steel. Scripta Materialia, 2004, 51, 379-383.	2.6	13
38	High-speed inspection of rolling contact fatigue in rails using ACFM sensors. Insight: Non-Destructive Testing and Condition Monitoring, 2009, 51, 366-369.	0.3	13
39	Use of UIoT for Offshore Surveys Through Autonomous Vehicles. Polish Maritime Research, 2021, 28, 175-189.	0.6	13
40	Detection and quantification of rail contact fatigue cracks in rails using ACFM technology. Insight: Non-Destructive Testing and Condition Monitoring, 2008, 50, 364-368.	0.3	11
41	Arbitrary Crack Depth Profiling Through ACFM Data Using Type-2 Fuzzy Logic and PSO Algorithm. IEEE Transactions on Magnetics, 2019, 55, 1-10.	1.2	10
42	Utilisation of Ensemble Empirical Mode Decomposition in Conjunction with Cyclostationary Technique for Wind Turbine Gearbox Fault Detection. Applied Sciences (Switzerland), 2020, 10, 3334.	1.3	10
43	Ultrasonic detection of surface-breaking railhead defects. Insight: Non-Destructive Testing and Condition Monitoring, 2008, 50, 369-373.	0.3	9
44	ULTRASONIC DETECTION OF SURFACE-BREAKING RAILHEAD DEFECTS. AIP Conference Proceedings, 2008, , .	0.3	9
45	Development of autonomous ACFM rail inspection techniques. Insight: Non-Destructive Testing and Condition Monitoring, 2011, 53, 85-89.	0.3	9
46	Further developments in high-speed detection of rail rolling contact fatigue using ACFM techniques. Insight: Non-Destructive Testing and Condition Monitoring, 2010, 52, 358-360.	0.3	8
47	Techno-Economical Advances for Maintenance Management of Concentrated Solar Power Plants. Advances in Intelligent Systems and Computing, 2017, , 967-979.	0.5	8
48	Design by analysis of deep-sea type III pressure vessel. International Journal of Hydrogen Energy, 2021, 46, 10468-10477.	3.8	8
49	A damage mechanics approach for lifetime estimation of wind turbine gearbox materials. International Journal of Fatigue, 2020, 137, 105671.	2.8	8
50	Crossing Phenomena in Overhead Line Equipment (OHLE) Structure in 3D Space Considering Soil-Structure Interaction. IOP Conference Series: Materials Science and Engineering, 2017, 245, 032047.	0.3	7
51	Evaluation of damage mechanics of industrial wind turbine gearboxes. Insight: Non-Destructive Testing and Condition Monitoring, 2017, 59, 410-414.	0.3	7
52	Optimal Management of Marine Inspection with Autonomous Underwater Vehicles. Advances in Intelligent Systems and Computing, 2020, , 760-771.	0.5	6
53	Numerical evaluation of type I pressure vessels for ultra-deep ocean trench exploration. Results in Engineering, 2021, 11, 100267.	2.2	5
54	Life Cycle Assessment in Autonomous Marine Vehicles. Lecture Notes on Data Engineering and Communications Technologies, 2021, , 222-233.	0.5	5

#	Article	IF	Citations
55	Evaluation of the effect of speed and defect size on high-frequency acoustic emission and vibration condition monitoring of railway axle bearings. Insight: Non-Destructive Testing and Condition Monitoring, 2017, 59, 184-188.	0.3	5
56	Improving the reliability of industrial multi-MW wind turbines. Insight: Non-Destructive Testing and Condition Monitoring, 2017, 59, 189-195.	0.3	5
57	Advances in Machine Condition Monitoring and Fault Diagnosis. Electronics (Switzerland), 2022, 11, 1563.	1.8	5
58	Concentrated Solar Power: Present and Future. , 2018, , 51-61.		4
59	Parameters and Boundary Conditions in Modelling the Track Deterioration in a Railway System. IOP Conference Series: Materials Science and Engineering, 2019, 603, 032084.	0.3	4
60	Artificial Intelligence in Marine Science and Engineering. Journal of Marine Science and Engineering, 2022, 10, 711.	1.2	4
61	A B-spline approach to alternating current field measurement for railroad inspection. , 2008, , .		3
62	Hybrid Approach to Predict the Track Deterioration in a Railway in-Service: A Conceptual Design. IOP Conference Series: Materials Science and Engineering, 2019, 603, 032083.	0.3	3
63	Wind turbine gearboxes: Failures, surface treatments and condition monitoring. , 2020, , 69-90.		3
64	Train-track interactions over vulnerable railway turnout systems exposed to flooding conditions. Engineering Failure Analysis, 2021, 127, 105459.	1.8	3
65	Modelling of the effect of microstructural variation on inductive sensor measurements of phase transformation in steel. Journal of Physics: Conference Series, 2005, 15, 131-136.	0.3	2
66	Methods and Tools for the Operational Reliability Optimisation of Large-Scale Industrial Wind Turbines. Advances in Intelligent Systems and Computing, 2015, , 1175-1188.	0.5	2
67	A Life-Cycle Cost Analysis of Railway Turnouts Exposed to Climate Uncertainties. IOP Conference Series: Materials Science and Engineering, 2019, 471, 062026.	0.3	2
68	Contact Conditions over Turnout Crossing Noses. IOP Conference Series: Materials Science and Engineering, 2019, 471, 062027.	0.3	2
69	Remotely operated vehicle applications. , 2020, , 119-132.		2
70	Life Cycle Assessment of an Autonomous Underwater Vehicle. Lecture Notes on Data Engineering and Communications Technologies, 2021, , 577-587.	0.5	2
71	Acoustic Emission Monitoring of Brittle Fatigue Crack Growth in Railway Steel. Springer Proceedings in Physics, 2017, , 371-382.	0.1	2
72	Vulnerability of Railway Switches and Crossings Exposed to Flooding Conditions. Lecture Notes in Civil Engineering, 2022, , 337-348.	0.3	2

#	Article	IF	Citations
73	Introductory Chapter: An Overview to Maintenance Management. , 0, , .		1
74	Damage monitoring of surface treated steel under severe rolling contact loading conditions. Tribology International, 2020, 146, 106257.	3.0	1
75	Condition monitoring of hydraulic power units in industrial wind turbines. International Journal of Condition Monitoring, 2013, 3, 47-52.	0.1	0
76	Introductory Chapter: Introduction to Dependability Engineering. , 0, , .		0
77	Addressing Future Rail Network Performance Challenges Through Effective Structural Health Monitoring. , 2018, , .		0
78	An overview of wind turbine maintenance management. , 2020, , 31-47.		0
79	Optimisation of operational reliability of large-scale industrial wind turbines. , 2015, , 931-935.		0