

Alexandre Presas

List of Publications by Year in descending order

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Version: 2024-02-01

52
papers

849
citations

535685

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591227

27
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53
all docs

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docs citations

53
times ranked

412
citing authors

#	ARTICLE	IF	CITATIONS
1	On the use of Vibrational Hill Charts for improved condition monitoring and diagnosis of hydraulic turbines. <i>Structural Health Monitoring</i> , 2022, 21, 2547-2568.	4.3	3
2	Influence of rotation on the modal characteristics of a bulb turbine unit rotor. <i>Renewable Energy</i> , 2022, 187, 887-895.	4.3	12
3	Failure investigation of a solar tracker due to wind-induced torsional galloping. <i>Engineering Failure Analysis</i> , 2022, 135, 106137.	1.8	18
4	Analysis of the Mode Shapes of Kaplan Runners. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6708.	1.3	1
5	Improved damage detection in Pelton turbines using optimized condition indicators and data-driven techniques. <i>Structural Health Monitoring</i> , 2021, 20, 3239-3251.	4.3	6
6	On the quantification of local power densities in a new vibration bioreactor. <i>PLoS ONE</i> , 2021, 16, e0245768.	1.1	3
7	On the use of neural networks for dynamic stress prediction in Francis turbines by means of stationary sensors. <i>Renewable Energy</i> , 2021, 170, 652-660.	4.3	9
8	Selection and Optimization of Sensors for Monitoring of Francis Turbines. <i>IOP Conference Series: Earth and Environmental Science</i> , 2021, 774, 012028.	0.2	0
9	Strain prediction in Francis runners by means of stationary sensors. <i>IOP Conference Series: Earth and Environmental Science</i> , 2021, 774, 012084.	0.2	1
10	Implant resonance and the mechanostat theory: Applications of therapeutic ultrasound for porous metallic scaffolds. <i>Materials Science and Engineering C</i> , 2021, 125, 112070.	3.8	2
11	Increasing the operating range and energy production in Francis turbines by an early detection of the overload instability. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 181, 109580.	2.5	10
12	Resonance vibration interventions in the femur: Experimental-numerical modelling approaches. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 124, 104850.	1.5	0
13	Synchronous condenser operation in Francis turbines: Effects in the runner stress and machine vibration. <i>Renewable Energy</i> , 2020, 146, 890-900.	4.3	3
14	Operating conditions leading to crack propagation in turbine blades of tidal barrages. Influence of head and operating mode. <i>Engineering Failure Analysis</i> , 2020, 108, 104254.	1.8	6
15	Experimental and numerical investigation on the influence of a large crack on the modal behaviour of a Kaplan turbine blade. <i>Engineering Failure Analysis</i> , 2020, 109, 104389.	1.8	18
16	Transposition of the mechanical behavior from model to prototype of Francis turbines. <i>Renewable Energy</i> , 2020, 152, 1011-1023.	4.3	14
17	Response of Saos-2 osteoblast-like cells to kilohertz-resonance excitation in porous metallic scaffolds. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 106, 103726.	1.5	5
18	On the use of artificial neural networks for condition monitoring of pump-turbines with extended operation. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 163, 107952.	2.5	24

#	ARTICLE	IF	CITATIONS
19	Dynamic response of Pelton runners: Numerical and experimental analysis in prototypes. <i>Renewable Energy</i> , 2020, 157, 116-129.	4.3	8
20	Detection of erosive cavitation on hydraulic turbines through demodulation analysis. <i>IOP Conference Series: Earth and Environmental Science</i> , 2019, 240, 062048.	0.2	4
21	Detection of Hydraulic Phenomena in Francis Turbines with Different Sensors. <i>Sensors</i> , 2019, 19, 4053.	2.1	18
22	Influence of the hydrodynamic damping on the dynamic response of Francis turbine runners. <i>Journal of Fluids and Structures</i> , 2019, 90, 71-89.	1.5	7
23	Numerical Analysis of the Influence of Design Parameters on the Efficiency of an OWC Axial Impulse Turbine for Wave Energy Conversion. <i>Energies</i> , 2019, 12, 939.	1.6	11
24	Experimental-Numerical Design and Evaluation of a Vibration Bioreactor Using Piezoelectric Patches. <i>Sensors</i> , 2019, 19, 436.	2.1	6
25	Experimental Measurements of the Natural Frequencies and Mode Shapes of Rotating Disk-Blades-Disk Assemblies from the Stationary Frame. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3864.	1.3	15
26	Fatigue life estimation of Francis turbines based on experimental strain measurements: Review of the actual data and future trends. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 102, 96-110.	8.2	42
27	Cavitation Effects on the Structural Resonance of Hydraulic Turbines: Failure Analysis in a Real Francis Turbine Runner. <i>Energies</i> , 2018, 11, 2320.	1.6	13
28	Sensor-Based Optimized Control of the Full Load Instability in Large Hydraulic Turbines. <i>Sensors</i> , 2018, 18, 1038.	2.1	13
29	Transmission of High Frequency Vibrations in Rotating Systems. Application to Cavitation Detection in Hydraulic Turbines. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 451.	1.3	21
30	Feasibility of Detecting Natural Frequencies of Hydraulic Turbines While in Operation, Using Strain Gauges. <i>Sensors</i> , 2018, 18, 174.	2.1	24
31	A Review of PZT Patches Applications in Submerged Systems. <i>Sensors</i> , 2018, 18, 2251.	2.1	31
32	Experimental Study of a Vibrating Disk Submerged in a Fluid-Filled Tank and Confined With a Nonrigid Cover. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2017, 139, .	1.0	15
33	Overview of the experimental tests in prototype. <i>Journal of Physics: Conference Series</i> , 2017, 813, 012037.	0.3	6
34	Failure investigation of a Pelton turbine runner. <i>Engineering Failure Analysis</i> , 2017, 81, 234-244.	1.8	26
35	Detection and analysis of part load and full load instabilities in a real Francis turbine prototype. <i>Journal of Physics: Conference Series</i> , 2017, 813, 012038.	0.3	13
36	Numerical study on the influence of acoustic natural frequencies on the dynamic behaviour of submerged and confined disk-like structures. <i>Journal of Fluids and Structures</i> , 2017, 73, 53-69.	1.5	27

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37	Dynamic response of the MICA runner. Experiment and simulation. Journal of Physics: Conference Series, 2017, 813, 012036.	0.3	3
38	Accurate Determination of the Frequency Response Function of Submerged and Confined Structures by Using PZT-Patches. Sensors, 2017, 17, 660.	2.1	40
39	On the Use of PZT-Patches as Exciters in Modal Analysis: Application to Submerged Structures. Proceedings (mdpi), 2017, 1, 32.	0.2	3
40	Power Swing Generated in Francis Turbines by Part Load and Overload Instabilities. Energies, 2017, 10, 2124.	1.6	62
41	Extension of Operating Range in Pump-Turbines. Influence of Head and Load. Energies, 2017, 10, 2178.	1.6	28
42	On the Capability of Structural-Acoustical Fluid-Structure Interaction Simulations to Predict Natural Frequencies of Rotating Disklike Structures Submerged in a Heavy Fluid. Journal of Vibration and Acoustics, Transactions of the ASME, 2016, 138, .	1.0	14
43	Influence of the boundary conditions on the natural frequencies of a Francis turbine. IOP Conference Series: Earth and Environmental Science, 2016, 49, 072004.	0.2	12
44	Natural frequencies of rotating disk-like structures submerged viewed from the stationary frame. IOP Conference Series: Earth and Environmental Science, 2016, 49, 082023.	0.2	3
45	Dynamic response of a rotating disk submerged and confined. Influence of the axial gap. Journal of Fluids and Structures, 2016, 62, 332-349.	1.5	26
46	On the detection of natural frequencies and mode shapes of submerged rotating disk-like structures from the casing. Mechanical Systems and Signal Processing, 2015, 60-61, 547-570.	4.4	30
47	Condition monitoring of pump-turbines. New challenges. Measurement: Journal of the International Measurement Confederation, 2015, 67, 151-163.	2.5	53
48	Influence of the rotation on the natural frequencies of a submerged-confined disk in water. Journal of Sound and Vibration, 2015, 337, 161-180.	2.1	37
49	Feasibility of Using PZT Actuators to Study the Dynamic Behavior of a Rotating Disk due to Rotor-Stator Interaction. Sensors, 2014, 14, 11919-11942.	2.1	32
50	Experimental study on the added mass and damping of a disk submerged in a partially fluid-filled tank with small radial confinement. Journal of Fluids and Structures, 2014, 50, 1-17.	1.5	52
51	Numerical and experimental analysis of the dynamic response of large submerged trash-racks. Computers and Fluids, 2013, 71, 54-64.	1.3	15
52	Behavior of Francis turbines at part load. Field assessment in prototype: Effects on power swing. IOP Conference Series: Earth and Environmental Science, 0, 240, 062012.	0.2	4