Monica Egusquiza Montagut

List of Publications by Year
in descending order

44 papers	655 citations	567144 15 h-index	610775 24 g-index
44 all docs	44 docs citations	44 times ranked	370 citing authors

#	Article	IF	Citations
1	Power Swing Generated in Francis Turbines by Part Load and Overload Instabilities. Energies, 2017, 10, 2124.	1.6	62
2	Accurate Determination of the Frequency Response Function of Submerged and Confined Structures by Using PZT-Patchesâ€. Sensors, 2017, 17, 660.	2.1	40
3	A review of dynamic models and stability analysis for a hydro-turbine governing system. Renewable and Sustainable Energy Reviews, 2021, 144, 110880.	8.2	38
4	Advanced condition monitoring of Pelton turbines. Measurement: Journal of the International Measurement Confederation, 2018, 119, 46-55.	2.5	34
5	Multi-objective optimization of a hydro-wind-photovoltaic power complementary plant with a vibration avoidance strategy. Applied Energy, 2021, 301, 117459.	5.1	34
6	A Review of PZT Patches Applications in Submerged Systems. Sensors, 2018, 18, 2251.	2.1	31
7	Failure investigation of a Kaplan turbine blade. Engineering Failure Analysis, 2019, 97, 690-700.	1.8	29
8	Extension of Operating Range in Pump-Turbines. Influence of Head and Load. Energies, 2017, 10, 2178.	1.6	28
9	Numerical study on the influence of acoustic natural frequencies on the dynamic behaviour of submerged and confined disk-like structures. Journal of Fluids and Structures, 2017, 73, 53-69.	1.5	27
10	Failure investigation of a Pelton turbine runner. Engineering Failure Analysis, 2017, 81, 234-244.	1.8	26
11	Feasibility of Detecting Natural Frequencies of Hydraulic Turbines While in Operation, Using Strain Gauges. Sensors, 2018, 18, 174.	2.1	24
12	On the use of artificial neural networks for condition monitoring of pump-turbines with extended operation. Measurement: Journal of the International Measurement Confederation, 2020, 163, 107952.	2.5	24
13	Transmission of High Frequency Vibrations in Rotating Systems. Application to Cavitation Detection in Hydraulic Turbines. Applied Sciences (Switzerland), 2018, 8, 451.	1.3	21
14	Detection of Hydraulic Phenomena in Francis Turbines with Different Sensors. Sensors, 2019, 19, 4053.	2.1	18
15	Experimental and numerical investigation on the influence of a large crack on the modal behaviour of a Kaplan turbine blade. Engineering Failure Analysis, 2020, 109, 104389.	1.8	18
16	Failure investigation of a solar tracker due to wind-induced torsional galloping. Engineering Failure Analysis, 2022, 135, 106137.	1.8	18
17	Experimental Study of a Vibrating Disk Submerged in a Fluid-Filled Tank and Confined With a Nonrigid Cover. Journal of Vibration and Acoustics, Transactions of the ASME, 2017, 139, .	1.0	15
18	Experimental Measurements of the Natural Frequencies and Mode Shapes of Rotating Disk-Blades-Disk Assemblies from the Stationary Frame. Applied Sciences (Switzerland), 2019, 9, 3864.	1.3	15

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19	Nonlinear modal interaction analysis and vibration characteristics of a francis hydro-turbine generator unit. Renewable Energy, 2021, 168, 854-864.	4.3	15
20	Transposition of the mechanical behavior from model to prototype of Francis turbines. Renewable Energy, 2020, 152, 1011-1023.	4.3	14
21	Transient analysis to air chamber and orifice surge tanks in a hydroelectric generating system during the successive load rejection. Energy Conversion and Management, 2021, 244, 114449.	4.4	14
22	Sensor-Based Optimized Control of the Full Load Instability in Large Hydraulic Turbines. Sensors, 2018, 18, 1038.	2.1	13
23	Numerical Study on the Dynamic Behavior of a Francis Turbine Runner Model with a Crack. Energies, 2018, 11, 1630.	1.6	12
24	Assessment of the Use of Venetian Blinds as Solar Thermal Collectors in Double Skin Facades in Mediterranean Climates. Energies, 2017, 10, 1825.	1.6	11
25	Increasing the operating range and energy production in Francis turbines by an early detection of the overload instability. Measurement: Journal of the International Measurement Confederation, 2021, 181, 109580.	2.5	10
26	On the use of neural networks for dynamic stress prediction in Francis turbines by means of stationary sensors. Renewable Energy, 2021, 170, 652-660.	4.3	9
27	Exploring the Regulation Reliability of a Pumped Storage Power Plant in a Windâ€“Solar Hybrid Power Generation System. Water (Switzerland), 2021, 13, 2548.	1.2	8
28	Dynamic response of Pelton runners: Numerical and experimental analysis in prototypes. Renewable Energy, 2020, 157, 116-129.	4.3	8
29	Influence of the hydrodynamic damping on the dynamic response of Francis turbine runners. Journal of Fluids and Structures, 2019, 90, 71-89.	1.5	7
30	Improved damage detection in Pelton turbines using optimized condition indicators and data-driven techniques. Structural Health Monitoring, 2021, 20, 3239-3251.	4.3	6
31	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
32	Detection of erosive cavitation on hydraulic turbines through demodulation analysis. IOP Conference Series: Earth and Environmental Science, 2019, 240, 062048.	0.2	4
33	On the Use of PZT-Patches as Exciters in Modal Analysis: Application to Submerged Structures. Proceedings (mdpi), 2017, 1, 32.	0.2	3
34	Synchronous condenser operation in Francis turbines: Effects in the runner stress and machine vibration. Renewable Energy, 2020, 146, 890-900.	4.3	3
35	On the use of Vibrational Hill Charts for improved condition monitoring and diagnosis of hydraulic turbines. Structural Health Monitoring, 2022, 21, 2547-2568.	4.3	3
36	Optimized Use of Sensors to Detect Critical Full Load Instability in Large Hydraulic Turbines. Proceedings (mdpi), 2017, 1, 822.	0.2	2

#	Article	IF	Citations
37	Feasibility to Detect Natural Frequencies of Hydraulic Turbines under Operation Using Strain Gauges. Proceedings (mdpi), 2017, 1, 821.	0.2	2
38	The potential for photovoltaic-powered pumped-hydro systems to reduce emissions, costs, and energy insecurity in rural China. Energy Conversion and Management: X, 2021, 11, 100108.	0.9	2
39	Strain prediction in Francis runners by means of stationary sensors. IOP Conference Series: Earth and Environmental Science, 2021, 774, 012084.	0.2	1
40	Characterization of the Effects of Ingested Bodies on the Rotorâ€“Stator Interaction of Hydraulic Turbines. Energies, 2021, 14, 6669.	1.6	1
41	Analysis of the Mode Shapes of Kaplan Runners. Applied Sciences (Switzerland), 2022, 12, 6708.	1.3	1
42	Experimental investigation on the dynamic response of Pelton runners. IOP Conference Series: Earth and Environmental Science, 2019, 240, 022062.	0.2	0
43	Behavior of Francis turbines at part load. Field assessment in prototype: Effects on the hydraulic system. IOP Conference Series: Earth and Environmental Science, 2019, 240, 052029.	0.2	0
44	Selection and Optimization of Sensors for Monitoring of Francis Turbines. IOP Conference Series: Earth and Environmental Science, 2021, 774, 012028.	0.2	0