Emanuele Quaranta

List of Publications by Year in Descending Order

34 papers	472 citations	12 h-index	21 g-index
43 ext. papers	668 ext. citations	4.7 avg, IF	4.94 L-index

#	Paper	IF	Citations
34	The Very Low Head Turbine for hydropower generation in existing hydraulic infrastructures: State of the art and future challenges. *Sustainable Energy Technologies and Assessments*, **2022**, 51, 101924	4.7	1
33	Reinventing the wheel The preservation and potential of traditional water wheels in the terraced irrigated landscapes of the Ricote Valley, southeast Spain. *Agricultural Water Management*, **2022**, 259, 107240	5.9	
32	A hydrological model to estimate pollution from combined sewer overflows at the regional scale: Application to Europe. *Journal of Hydrology: Regional Studies*, **2022**, 41, 101080	3.6	1
31	Optimal design process of crossflow Banki turbines: Literature review and novel expeditious equations. *Ocean Engineering*, **2022**, 257, 111582	3.9	0
30	The state-of-art of design and research for Pelton turbine casing, weight estimation, counterpressure operation and scientific challenges.. *Heliyon*, **2021**, 7, e08527	3.6	2
29	Environmentally Enhanced Turbines for Hydropower Plants: Current Technology and Future Perspective. *Frontiers in Energy Research*, **2021**, 9,	3.8	3
28	Meta-models for rapid appraisal of the benefits of urban greening in the European context. *Journal of Hydrology: Regional Studies*, **2021**, 34, 100772	3.6	3
27	Water, energy and climate benefits of urban greening throughout Europe under different climatic scenarios. *Scientific Reports*, **2021**, 11, 12163	4.9	8
26	Sustainability assessment of hydropower water wheels with downstream migrating fish and blade strike modelling. *Sustainable Energy Technologies and Assessments*, **2021**, 43, 100943	4.7	5
25	The repowering of vertical axis water mills preserving their cultural heritage: techno-economic analysis with water wheels and Turgo turbines. *Journal of Cultural Heritage Management and Sustainable Development*, **2021**, ahead-of-print,	1.3	3
24	Emerging and Innovative Materials for Hydropower Engineering Applications: Turbines, Bearings, Sealing, Dams and Waterways, and Ocean Power. *Engineering*, **2021**,	9.7	6
23	Hydropower and seasonal pumped hydropower storage in the Indus basin:pros and cons. *Journal of Energy Storage*, **2021**, 41, 102916	7.8	7
22	Assessing the energy potential of modernizing the European hydropower fleet. *Energy Conversion and Management*, **2021**, 246, 114655	10.6	17
21	Noise Generation and Acoustic Impact of Free Surface Hydropower Machines: Focus on Water Wheels and Emerging Challenges.. *International Journal of Environmental Research and Public Health*, **2021**, 18,	4.6	1
20	Hydropower Case Study Collection: Innovative Low Head and Ecologically Improved Turbines, Hydropower in Existing Infrastructures, Hydropeaking Reduction, Digitalization and Governing Systems. *Sustainability*, **2020**, 12, 8873	3.6	21
19	Performance Optimization of Overshot Water Wheels at High Rotational Speeds for Hydropower Applications. *Journal of Hydraulic Engineering*, **2020**, 146, 06020011	1.8	4
18	Estimation of the permanent weight load of water wheels for civil engineering and hydropower applications and dataset collection. *Sustainable Energy Technologies and Assessments*, **2020**, 40, 100776	4.7	2

17	The Revival of Old Hydraulic Turbines for Innovative Hydropower Generation: Water Wheels, Archimedes Screws, Deriaz and Girard Turbines **2020**, 5,		2
16	Optimization of undershot water wheels in very low and variable flow rate applications. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2020**, 58, 845-849	1.9	6
15	Experimental Analysis of Effect of Canal Geometry and Water Levels on Rotary Hydrostatic Pressure Machine. *Journal of Hydraulic Engineering*, **2020**, 146, 04019071	1.8	3
14	Effects of bed slope on the flow field of vertical slot fishways. *River Research and Applications*, **2019** , 35, 656	2.3	5
13	Analysis of emerging technologies in the hydropower sector. *Renewable and Sustainable Energy Reviews*, **2019**, 113, 109257	16.2	94
12	Optimal Rotational Speed of Kaplan and Francis Turbines with Focus on Low-Head Hydropower Applications and Dataset Collection. *Journal of Hydraulic Engineering*, **2019**, 145, 04019043	1.8	10
11	Stream water wheels as renewable energy supply in flowing water: Theoretical considerations, performance assessment and design recommendations. *Energy for Sustainable Development*, **2018**, 45, 96-109	5.4	34
10	Sagebien and Zuppinger water wheels for very low head hydropower applications. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2018**, 56, 526-536	1.9	21
9	Gravity water wheels as a micro hydropower energy source: A review based on historic data, design methods, efficiencies and modern optimizations. *Renewable and Sustainable Energy Reviews*, **2018**, 97, 414-427	16.2	51
8	Turbulent flow field comparison and related suitability for fish passage of a standard and a simplified low-gradient vertical slot fishway. *River Research and Applications*, **2017**, 33, 1295-1305	2.3	29
7	Hydraulic Behavior and Performance of Breastshot Water Wheels for Different Numbers of Blades. *Journal of Hydraulic Engineering*, **2017**, 143, 04016072	1.8	14
6	CFD simulations to optimize the blade design of water wheels. *Drinking Water Engineering and Science*, **2017**, 10, 27-32	2	18
5	Optimization of breastshot water wheels performance using different inflow configurations. *Renewable Energy*, **2016**, 97, 243-251	8.1	23
4	Experimental and dimensional analysis of a breastshot water wheel. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2016**, 54, 473-479	1.9	9
3	Performance characteristics, power losses and mechanical power estimation for a breastshot water wheel. *Energy*, **2015**, 87, 315-325	7.9	33
2	Output power and power losses estimation for an overshot water wheel. *Renewable Energy*, **2015**, 83, 979-987	8.1	30
1	Is There a Residual and Hidden Potential for Small and Micro Hydropower in Europe? A Screening-Level Regional Assessment. *Water Resources Management*,1	3.7	3