George Aggidis

List of Publications by Year
in descending order

70 papers	1,816 citations	257101 24 h-index	276539 41 g-index
70 all docs	70 docs citations	70 times ranked	1502 citing authors

#	Article	IF	Citations
1	Analysis of emerging technologies in the hydropower sector. Renewable and Sustainable Energy Reviews, 2019, 113, 109257.	8.2	177
2	Tidal range energy resource and optimization â€“ Past perspectives and future challenges. Renewable Energy, 2018, 127, 763-778.	4.3	148
3	The costs of small-scale hydro power production: Impact on the development of existing potential. Renewable Energy, 2010, 35, 2632-2638.	4.3	137
4	Tidal range technologies and state of the art in review. Renewable and Sustainable Energy Reviews, 2016, 59, 514-529.	8.2	86
5	Development of multi-oscillating water columns as wave energy converters. Renewable and Sustainable Energy Reviews, 2019, 107, 75-86.	8.2	81
6	Optimizing the shape of a surge-and-pitch wave energy collector using a genetic algorithm. Renewable Energy, 2010, 35, 2767-2775.	4.3	64
7	Developments in the design of the PS Frog Mk 5 wave energy converter. Renewable Energy, 2006, 31, 141-151.	4.3	60
8	State of the art in numerical modelling of Pelton turbines. Renewable and Sustainable Energy Reviews, 2015, 45, 135-144.	8.2	55
9	Over 2000 years in review: Revival of the Archimedes Screw from Pump to Turbine. Renewable and Sustainable Energy Reviews, 2015, 51, 497-505.	8.2	54
10	Tidal range turbines and generation on the Solway Firth. Renewable Energy, 2012, 43, 9-17.	4.3	48
11	Assessing the energy potential of modernizing the European hydropower fleet. Energy Conversion and Management, 2021, 246, 114655.	4.4	48
12	Investigating pipeline and state of the art blood glucose biosensors to formulate next steps. Biosensors and Bioelectronics, 2015, 74, 243-262.	5.3	46
13	Experimental analysis of cavitation in a centrifugal pump using acoustic emission, vibration measurements and flow visualization. European Journal of Mechanics, B/Fluids, 2019, 75, 300-311.	1.2	45
14	Operational optimisation of a tidal barrage across the Mersey estuary using 0-D modelling. Ocean Engineering, 2013, 66, 69-81.	1.9	43
15	A World First: Swansea Bay Tidal lagoon in review. Renewable and Sustainable Energy Reviews, 2016, 56, 916-921.	8.2	43
16	Hydro turbine prototype testing and generation of performance curves: Fully automated approach. Renewable Energy, 2014, 71, 433-441.	4.3	42
17	Time series analysis-based adaptive tuning techniques for a heaving wave energy converter in irregular seas. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2007, 221, 77-90.	0.8	34
18	Parametric optimisation of two Pelton turbine runner designs using CFD. Journal of Hydrodynamics, 2015, 27, 403-412.	1.3	33

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19	A novel surface-cluster approach towards transient modeling of hydro-turbine governing systems in the start-up process. Energy Conversion and Management, 2018, 165, 861-868.	4.4	31
20	Numerical and experimental analysis of the power output of a point absorber wave energy converter in irregular waves. Ocean Engineering, 2016, 111, 483-492.	1.9	30
21	Pelton turbine: Identifying the optimum number of buckets using CFD. Journal of Hydrodynamics, 2016, 28, 75-83.	1.3	29
22	Development of hydro impulse turbines and new opportunities. Renewable and Sustainable Energy Reviews, 2015, 51, 1624-1635.	8.2	28
23	Swansea Bay tidal lagoon annual energy estimation. Ocean Engineering, 2016, 111, 348-357.	1.9	28
24	Numerical simulation of the performance of a centrifugal pump with a semi-open impeller under normal and cavitating conditions. Applied Mathematical Modelling, 2021, 89, 1814-1834.	2.2	28
25	Experimental investigation and performance comparison of a 1 single OWC, array and M-OWC. Renewable Energy, 2021, 168, 365-374.	4.3	23
26	Wave tank experiments on the power capture of a multi-axis wave energy converter. Journal of Marine Science and Technology, 2015, 20, 520-529.	1.3	22
27	Regenerative liquid ring pumps review and advances on design and performance. Applied Energy, 2016, 164, 815-825.	5.1	22
28	Numerical Investigation of the Spear Valve Configuration on the Performance of Pelton and Turgo Turbine Injectors and Runners. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	0.8	21
29	Overview of wave energy converter devices and the development of a new multi-axis laboratory prototype. IFAC-PapersOnLine, 2017, 50, 15651-15656.	0.5	20
30	Optimum mean power output of a point-absorber wave energy converter in irregular waves. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2009, 223, 773-781.	0.8	19
31	Development of the Turgo Impulse turbine: Past and present. Applied Energy, 2016, 166, 1-18.	5.1	17
32	A comparative approach to the economic modelling of a large-scale wave power scheme. European Journal of Operational Research, 2008, 185, 884-898.	3.5	16
33	Nature rules hidden in the biomimetic wave energy converters. Renewable and Sustainable Energy Reviews, 2018, 97, 28-37.	8.2	16
34	Effects of Wood Ash-Based Alkaline Treatment on Nitrogen, Carbon, and Phosphorus Availability in Food Waste and Agro-Industrial Waste Digestates. Waste and Biomass Valorization, 2021, 12, 3355-3370.	1.8	16
35	A Joint Numerical and Experimental Study of a Surging Point Absorbing Wave Energy Converter (WRASPA). , 2009, , .		15
36	Hydrodynamic studies of floating structures: Comparison of wave-structure interaction modelling. Ocean Engineering, 2022, 249, 110878.	1.9	14

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37	Impact of sulphuric, hydrochloric, nitric, and lactic acids in the preparation of a blend of agro-industrial digestate and wood ash to produce a novel fertiliser. Journal of Environmental Chemical Engineering, 2021, 9, 105021.	3.3	12
38	Experimental results from wave tank trials of a multi-axis wave energy converter. Applied Physics Letters, 2013, 103, .	1.5	11
39	State of the art of UV water treatment technologies and hydraulic design optimisation using computational modelling. Journal of Water Process Engineering, 2021, 41, 102099.	2.6	11
40	Kinetic study of the stabilization of an agro-industrial digestate by adding wood fly ash. Chemical Engineering Journal Advances, 2021, 7, 100127.	2.4	11
41	Calculation of the performance of resonant wave energy converters in real seas. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2006, 220, 117-128.	0.3	10
42	An Investigation into Power from Pitch-Surge Point-Absorber Wave Energy Converters. , 2007, , .		10
43	Developments, expectations of wave energy converters and mooring anchors in the UK. Journal of Ocean University of China, 2008, 7, 10-16.	0.6	10
44	A time-varying parameter model of a body oscillating in pitch. Applied Ocean Research, 2006, 28, 359-370.	1.8	9
45	Numerical and experimental study of a point absorbing wave energy converter in regular waves. , 2009, , .		8
46	Flow Modeling in Pelton Turbines by an Accurate Eulerian and a Fast Lagrangian Evaluation Method. International Journal of Rotating Machinery, 2015, 2015, 1-13.	0.8	8
47	Alkaline Wood Ash, Turbulence, and Traps with Excess of Sulfuric Acid Do Not Strip Completely the Ammonia off an Agro-waste Digestate. Edelweiss Chemical Science Journal, 2021, , 19-24.	0.7	8
48	Fastâ€“slow dynamic behaviors of a hydraulic generating system with multi-timescales. JVC/Journal of Vibration and Control, 2019, 25, 2863-2874.	1.5	7
49	Circularity of Bioenergy Residues: Acidification of Anaerobic Digestate Prior to Addition of Wood Ash. Sustainability, 2022, 14, 3127.	1.6	7
50	Strategies for the production of a stable blended fertilizer of anaerobic digestates and wood ashes. Nature-based Solutions, 2022, 2, 100014.	1.6	7
51	Optimum Power Capture of a New Wave Energy Converter in Irregular Waves. , 2009, , .		5
52	Determination of optimum welding parameters for the welding execution of steels used in underwater marine systems (including the submerged parts of Wave Energy Converters). Materials Today: Proceedings, 2019, 18, 455-461.	0.9	5
53	Valorization of agrowaste digestate via addition of wood ash, acidification, and nitrification. Environmental Technology and Innovation, 2022, 28, 102632.	3.0	5
54	Energy source or sink? The role of the uplands in meeting our energy targets. International Journal of Biodiversity Science and Management, 2006, 2, 196-199.	0.7	4

#	Article	IF	Citations
55	Numerical hydrodynamic modelling of a pitching wave energy converter. European Journal of Computational Mechanics, 2015, 24, 129-143.	0.6	4
56	Opportunities for tidal range projects beyond energy generation: Using Mersey barrage as a case study. Frontiers of Architectural Research, 2019, 8, 620-633.	1.3	4
57	A Preliminary Study on Identifying Biomimetic Entities for Generating Novel Wave Energy Converters. Energies, 2022, 15, 2485.	1.6	4
58	Time-Domain Implementation and Analyses of Multi-Motion Modes of Floating Structures. Journal of Marine Science and Engineering, 2022, 10, 662.	1.2	4
59	Control systems for Wraspa. , 2009, , .		3
60	The Economics of Multi-Axis Point Absorber Wave Energy Converters. , 2013, , .		3
61	A Rationalised CFD Design Methodology for Turgo Turbines to Enable Local Manufacture in the Global South. Energies, 2021, 14, 6250.	1.6	2
62	Renewable Energy Resources Impact on Clean Electrical Power by developing the North-West England Hydro Resource Model. , 2007, , .		1
63	Analysis of a pitching-and-surging wave-energy converter that reacts against an internal mass, when operating in regular sinusoidal waves. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2008, 222, 153-161.	0.3	1
64	A preliminary study into optimising the shape of a wave energy collector using a genetic algorithm. , 2009, , .		1
65	Investigating a Power-Obsorber Wave Energy Converter. , 2008, , .		1
66	An inverse approach for airfoil design. WIT Transactions on Engineering Sciences, 2008, , .	0.0	1
67	Ocean energy: the wave of the future. , 2008, , .		0
68	Continuous-Time Feedforward Proportional-Integral-Plus Control. , 2010, , .		0
69	Material aspects of underwater marine systems in Greece. Materials Today: Proceedings, 2019, 10, 419-429.	0.9	0
70	Determination of the corrosion resistance of the welded steels used in underwater marine systems (including the submerged parts of wave energy converters). Materials Today: Proceedings, 2021, 44, 5048-5053.	0.9	0