Tim O'Doherty

List of Publications by Year
in descending order

46 papers	1,712 citations	361413 20 h-index	276875 41 g-index
48 all docs	48 docs citations	48 times ranked	1119 citing authors

#	Article	IF	Citations
1	Vortex breakdown: a review. Progress in Energy and Combustion Science, 2001, 27, 431-481.	31.2	659
2	Phase averaging of the precessing vortex core in a swirl burner under piloted and premixed combustion conditions. Combustion and Flame, 1995, 100, 407-410.	5.2	95
3	The effect of hydrogen containing fuel blends upon flashback in swirl burners. Applied Energy, 2012, 89, 106-110.	10.1	85
4	Non-dimensional scaling of tidal stream turbines. Energy, 2012, 44, 820-829.	8.8	82
5	The effect of tidal flow directionality on tidal turbine performance characteristics. Renewable Energy, 2015, 78, 609-620.	8.9	62
6	Influence of a velocity profile & support structure on tidal stream turbine performance. Renewable Energy, 2013, 52, 23-30.	8.9	61
7	Waveâ€“current interaction effects on tidal stream turbine performance and loading characteristics. International Journal of Marine Energy, 2016, 14, 161-179.	1.8	50
8	Constraints on extractable power from energetic tidal straits. Renewable Energy, 2015, 81, 707-722.	8.9	45
9	Analysis of a Horizontal-Axis Tidal Turbine Performance in the Presence of Regular and Irregular Waves Using Two Control Strategies. Energies, 2019, 12, 367.	3.1	33
10	Phase-averaged velocity in a fluidic precessing jet nozzle and in its near external field. Experimental Thermal and Fluid Science, 2003, 27, 515-524.	2.7	32
11	THE EFFECT OF COMBUSTION INSTABILITY ON THE STRUCTURE OF RECIRCULATION ZONES IN CONFINED SWIRLING FLAMES. Combustion Science and Technology, 2005, 177, 2349-2371.	2.3	32
12	The impact of axial flow misalignment on a tidal turbine. Renewable Energy, 2017, 113, 1333-1344.	8.9	31
13	Energy Yield Assessment from Ocean Currents in the Insular Shelf of Cozumel Island. Journal of Marine Science and Engineering, 2019, 7, 147.	2.6	27
14	CFD modelling of a tidal stream turbine subjected to profiled flow and surface gravity waves. International Journal of Marine Energy, 2016, 15, 156-174.	1.8	26
15	Turbulent flow in a 90Â° pipe junction. Computers and Fluids, 2000, 29, 215-233.	2.5	24
16	Turbulent flow in a 90Â° pipe junction. Computers and Fluids, 2000, 29, 197-213.	2.5	24
17	Evaluation of the swirl characteristics of a tidal stream turbine wake. International Journal of Marine Energy, 2016, 14, 198-214.	1.8	23
18	Analysis of a bayonet tube heat exchanger. Applied Thermal Engineering, 2001, 21, 1-18.	6.0	22

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19	The impact of turbulence and turbine operating condition on the wakes of tidal turbines. Renewable Energy, 2021, 165, 96-116.	8.9	22
20	The effect of initial conditions on the exit flow from a fluidic precessing jet nozzle. Experiments in Fluids, 2004, 36, 70-81.	2.4	20
21	Effect of exhaust confinement and fuel type upon the blowoff limits and fuel switching ability of swirl combustors. Applied Thermal Engineering, 2012, 48, 426-435.	6.0	20
22	Kinetic energy extraction of a tidal stream turbine and its sensitivity to structural stiffness attenuation. Renewable Energy, 2016, 88, 30-39.	8.9	20
23	Validation of Tidal Stream Turbine Wake Predictions and Analysis of Wake Recovery Mechanism. Journal of Marine Science and Engineering, 2019, 7, 362.	2.6	18
24	Thermal distributive blast furnace gas characterisation, a steelworks case study. Applied Thermal Engineering, 2013, 53, 358-365.	6.0	17
25	Optimisation of heat transfer enhancement devices in a bayonet tube heat exchanger. Applied Thermal Engineering, 2001, 21, 19-36.	6.0	16
26	The development, design and characterisation of a scale model Horizontal Axis Tidal Turbine for dynamic load quantification. Renewable Energy, 2020, 156, 913-930.	8.9	16
27	Flume testing of passively adaptive composite tidal turbine blades under combined wave and current loading. Journal of Fluids and Structures, 2020, 93, 102825.	3.4	15
28	Tidal turbine deployment in the Bristol Channel: a case study. Proceedings of Institution of Civil Engineers: Energy, 2010, 163, 93-105.	0.6	14
29	Analysis of the effects of control strategies and wave climates on the loading and performance of a laboratory scale horizontal axis tidal turbine. Ocean Engineering, 2020, 212, 107713.	4.3	14
30	Laminar flame speed and markstein length characterisation of steelworks gas blends. Applied Energy, 2014, 136, 1026-1034.	10.1	13
31	Performance assessment of a tidal turbine using two flow references. Renewable Energy, 2020, 153, 624-633.	8.9	11
32	Sensitivity to change in laminar burning velocity and Markstein length resulting from variable hydrogen fraction in blast furnace gas for changing ambient conditions. International Journal of Hydrogen Energy, 2013, 38, 3459-3470.	7.1	10
33	Validation of the dynamic load characteristics on a Tidal Stream Turbine when subjected to wave and current interaction. Ocean Engineering, 2021, 222, 108360.	4.3	10
34	Numerical study of the effect of tip-speed ratio on hydrokinetic turbine wake recovery. Renewable Energy, 2022, 182, 725-750.	8.9	10
35	Considerations of a horizontal axis tidal turbine. Proceedings of Institution of Civil Engineers: Energy, 2010, 163, 119-130.	0.6	9
36	A detailed study of tidal turbine power production and dynamic loading under grid generated turbulence and turbine wake operation. Renewable Energy, 2021, 169, 1422-1439.	8.9	9

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37	Low-Frequency Combustion Oscillations in a Swirl Burner/Furnace. Journal of Propulsion and Power, 2006, 22, 217-221.	2.2	8
38	A Phenomenological Study of Lab-Scale Tidal Turbine Loading under Combined Irregular Wave and Shear Flow Conditions. Journal of Marine Science and Engineering, 2021, 9, 593.	2.6	7
39	Impacts on Blowoff by a Variety of CRZs Using Various Gases for Gas Turbines. Energy Procedia, 2014, 61, 1606-1609.	1.8	6
40	Laminar Burning Velocity and Markstein Length Characterisation of Compositionally Dynamic Blast Furnace Gas. , 2012, , .		4
41	A waste heat recovery strategy and its deployment: an integrated steelworks case study. Proceedings of Institution of Civil Engineers: Waste and Resource Management, 2021, 174, 3-11.	0.8	4
42	Reprint of â€œEffect of exhaust confinement and fuel type upon the blowoff limits and fuel switching ability of swirl combustorsâ€. Applied Thermal Engineering, 2013, 53, 348-357.	6.0	2
43	Variation in Laminar Burning Velocity and Markstein Length With Water Addition for Industrially Produced Syngases. , 2014, , .		2
44	The Development of Marine Energy Extraction. Journal of Marine Science and Engineering, 2020, 8, 321.	2.6	0
45	An Introduction to Fluid Structural Interaction for Tidal Turbine Design and Optimization. , 2021, , 245-245.		0
46	Optimising the Combustion of Low CalorificValue Gases by Utilising Transient Flow Phenomena in Swirl Burners. Clean Air, 2002, 3, 21-51.	0.0	0