Toni Pujol

List of Publications by Year
in descending order

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74	1,389	394421	377865
papers	citations	19 h-index	34 g-index

74	74	74	942
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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, 2023, 13, 269-287.	0.9	6
2	States of maximum entropy production in a one-dimensional vertical model with convective adjustment. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 54, 363.	1.7	13
3	Environmental Assessment of Underdrain Designs for Granular Media Filters in Drip Irrigation Systems. Agriculture (Switzerland), 2022, 12, 810.	3.1	2
4	Effects of Module Spatial Distribution on the Energy Efficiency and Electrical Output of Automotive Thermoelectric Generators. Energies, 2021, 14, 2232.	3.1	6
5	Assessment of Different Pressure Drop-Flow Rate Equations in a Pressurized Porous Media Filter for Irrigation Systems. Water (Switzerland), 2021, 13, 2179.	2.7	6
6	Nox emissions reduction analysis in a diesel Euro VI Heavy Duty vehicle using a thermoelectric generator and an exhaust heater. Fuel, 2021, 301, 121029.	6.4	16
7	Feasibility study on a vehicular thermoelectric generator coupled to an exhaust gas heater to improve aftertreatmentâ€™s efficiency in cold-starts. Applied Thermal Engineering, 2020, 167, 114702.	6.0	41
8	Numerical study of the effects of pod, wand and spike type underdrain systems in pressurised sand filters. Biosystems Engineering, 2020, 200, 338-352.	4.3	6
9	Electrical Generation of a Ground-Level Solar Thermoelectric Generator: Experimental Tests and One-Year Cycle Simulation. Energies, 2020, 13, 3407.	3.1	3
10	Effect of wand-type underdrains on the hydraulic performance of pressurised sand media filters. Biosystems Engineering, 2020, 192, 176-187.	4.3	8
11	Validation of a fuel economy prediction method based on thermoelectric energy recovery for mid-size vehicles. Applied Thermal Engineering, 2019, 153, 768-778.	6.0	15
12	Fuel economy analysis under a WLTP cycle on a mid-size vehicle equipped with a thermoelectric energy recovery system. Energy, 2019, 179, 306-314.	8.8	37
13	Impactful engineering education through sustainable energy collaborations with public and private entities. International Journal of Sustainability in Higher Education, 2019, 20, 393-407.	3.1	3
14	A method to assess the fuel economy of automotive thermoelectric generators. Applied Energy, 2018, 222, 42-58.	10.1	62
15	Effects of Design Parameters on Fuel Economy and Output Power in an Automotive Thermoelectric Generator. Energies, 2018, 11, 3274.	3.1	21
16	Power and Fuel Economy of a Radial Automotive Thermoelectric Generator: Experimental and Numerical Studies. Energies, 2018, 11, 2720.	3.1	11
17	Net Power Coefficient of Vertical and Horizontal Wind Turbines with Crossflow Runners. Energies, 2018, 11, 110.	3.1	12
18	Numerical analysis of the effects of electrical and thermal configurations of thermoelectric modules in large-scale thermoelectric generators. Applied Energy, 2018, 229, 264-280.	10.1	32

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19	Modelling and analysis of longitudinal thermoelectric energy harvesters considering series-parallel interconnection effect. Energy, 2017, 129, 59-69.	8.8	21
20	Transient behavior under a normalized driving cycle of an automotive thermoelectric generator. Applied Energy, 2017, 206, 1282-1296.	10.1	56
21	Development of a new underdrain for improving the efficiency of microirrigation sand media filters. Agricultural Water Management, 2017, 179, 296-305.	5.6	22
22	Effects of the underdrain design on the pressure drop in sand filters. Biosystems Engineering, 2016, 150, 1-9.	4.3	12
23	Hydraulic efficiency of horizontal waterwheels: Laboratory data and CFD study for upgrading a western Himalayan watermill. Renewable Energy, 2015, 83, 576-586.	8.9	10
24	Electrically tunable thermal conductivity in thermoelectric materials: Active and passive control. Applied Energy, 2015, 154, 709-717.	10.1	24
25	Pressure drop across sand and recycled glass media used in micro irrigation filters. Biosystems Engineering, 2015, 137, 55-63.	4.3	35
26	Reducing energy requirements for sand filtration in microirrigation: Improving the underdrain and packing. Biosystems Engineering, 2015, 140, 67-78.	4.3	18
27	Experimental study of the channel effect on the flame spread over thin solid fuels. Fire Safety Journal, 2015, 71, 162-173.	3.1	17
28	Learning hydraulic turbomachinery with computational fluid dynamics (CFD) codes. Computer Applications in Engineering Education, 2013, 21, 684-690.	3.4	9
29	An experimental and analytical study to analyze hydraulic behavior of nozzle-type underdrains in porous media filters. Agricultural Water Management, 2013, 126, 64-74.	5.6	17
30	Analytical Model for the Downward Flame Spread over a Thermally Thin Fuel into an Opposed Flow. Combustion Science and Technology, 2013, 185, 794-816.	2.3	2
31	Energy Balance Models of Downward Combustion of Parallel Thin Solid Fuels and Comparison to Experiments. Combustion Science and Technology, 2013, 185, 1820-1837.	2.3	8
32	Flame front speed and onset of instability in the burning of inclined thin solid fuel samples. Physical Review E, 2013, 88, 063019.	2.1	7
33	HYDRODYNAMIC BEHAVIOUR OF THE UNDERDRAINS IN MICROIRRIGATION SAND MEDIA FILTERS USING CFD SOFTWARE. Acta Horticulturae, 2013, , 85-89.	0.2	1
34	Experimental Study of the Effects of Side-Edge Burning in the Downward Flame Spread of Thin Solid Fuels. Combustion Science and Technology, 2012, 184, 489-504.	2.3	25
35	Modelling the Neolithic Transition in the Near East and Europe. American Antiquity, 2012, 77, 203-219.	1.1	46
36	Analytical expressions for the flame front speed in the downward combustion of thin solid fuels and comparison to experiments. Physical Review E, 2011, 84, 026306.	2.1	5

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37	Using Computational Fluid Dynamics to Predict Head Losses in the Auxiliary Elements of a Microirrigation Sand Filter. Transactions of the ASABE, 2011, 54, 1367-1376.	1.1	23
38	Hydraulic power of slow-rotating waterwheels: a novel analytical approximation. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2011, 225, 1495-1506.	2.1	3
39	Bounds for Downward Flame Spread Rate in Solid Fuels and Comparison to Experiments. Combustion Science and Technology, 2011, 183, 1083-1106.	2.3	6
40	Hydraulic performance of an ancient Spanish watermill. Renewable Energy, 2010, 35, 387-396.	8.9	22
41	High hydraulic performance in horizontal waterwheels. Renewable Energy, 2010, 35, 2543-2551.	8.9	11
42	Generalized analytical expressions for the burning velocity in a combustion model with non-constant transport coefficients and several specific heats. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 4959-4972.	2.6	4
43	Evaluation of the front leakage flow in a low-specific-speed centrifugal pump. , 2009, , 273-275.		1
44	Bounds for the speed of combustion flames: The effect of mass diffusion. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 1987-1998.	2.6	6
45	Structural and magnetic properties of a nanocrystalline Fe75Nb10Si5B10 alloy produced by mechanical alloying. Materials Letters, 2008, 62, 1673-1676.	2.6	9
46	Bernoulli correction to viscous losses: Radial flow between two parallel discs. American Journal of Physics, 2008, 76, 730-737.	0.7	12
47	Progress in front propagation research. Reports on Progress in Physics, 2008, 71, 086001.	20.1	53
48	Time-delayed fronts from biased random walks. New Journal of Physics, 2007, 9, 234-234.	2.9	13
49	Consequences of inter-specific competition among multiple adaptive species in Daisyworld. Theoretical and Applied Climatology, 2005, 81, 137-147.	2.8	6
50	Effects of convection on the removal of the multiplicity of stable states in one-dimensional vertical models. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 945-961.	2.7	2
51	Palaeolithic Populations and Waves of Advance. Cambridge Archaeological Journal, 2004, 14, 53-61.	0.9	59
52	Analytical investigation of the atmospheric radiation limits in semigray atmospheres in radiative equilibrium. Tellus, Series A: Dynamic Meteorology and Oceanography, 2003, 55, 328-337.	1.7	12
53	The second law of thermodynamics and the global climate system: A review of the maximum entropy production principle. Reviews of Geophysics, 2003, 41, .	23.0	320
54	Effect of initial conditions on the speed of reaction-diffusion fronts. Physical Review E, 2003, 67, 016213.	2.1	5

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55	The speed of reactionÂdiffusion wavefronts in nonsteady media. Journal of Physics A, 2003, 36, 3983-3993.	1.6	4
56	Eddy Heat Diffusivity at Maximum Dissipation in a Radiative-convective One-dimensional Climate Model. Journal of the Meteorological Society of Japan, 2003, 81, 305-315.	1.8	13
57	Dispersal probability distributions and the wave-front speed problem. Physical Review E, 2002, 65, 041109.	2.1	24
58	The effect of atmospheric absorption of sunlight on the runaway greenhouse point. Journal of Geophysical Research, 2002, 107, ACL 5-1-ACL 5-7.	3.3	6
59	The Consequence of Maximum Thermodynamic Efficiency in Daisyworld. Journal of Theoretical Biology, 2002, 217, 53-60.	1.7	29
60	States of maximum entropy production in a one-dimensional vertical model with convective adjustment. Tellus, Series A: Dynamic Meteorology and Oceanography, 2002, 54, 363-369.	1.7	19
61	Effects of the non-gray absorption in a simple radiative equilibrium model. Planetary and Space Science, 2002, 50, 1049-1054.	1.7	3
62	Runaway Greenhouse Effect in a Semigray Radiativeâ€“Convective Model. Journals of the Atmospheric Sciences, 2002, 59, 2801-2810.	1.7	15
63	Extremal climatic states simulated by a 2-dimensional model. Part I: Sensitivity of the model and present state. Tellus, Series A: Dynamic Meteorology and Oceanography, 2000, 52, 422-439.	1.7	5
64	Extremal climatic states simulated by a 2-dimensional model. Part II: Different climatic scenarios. Tellus, Series A: Dynamic Meteorology and Oceanography, 2000, 52, 440-454.	1.7	2
65	Extremal climatic states simulated by a 2-dimensional model Part II: Different climatic scenarios. Tellus, Series A: Dynamic Meteorology and Oceanography, 2000, 52, 440-454.	1.7	4
66	Extremal climatic states simulated by a 2-dimensional model Part I: Sensitivity of the model and present state. Tellus, Series A: Dynamic Meteorology and Oceanography, 2000, 52, 422-439.	1.7	9
67	Several-temperature systems: extended irreversible thermodynamics and thermal wavefront propagation. Journal of Physics A, 2000, 33, 6953-6973.	1.6	14
68	Extended thermodynamics of heat transport and energy equilibration in radiative systems. Journal of Physics A, 1999, 32, 3095-3104.	1.6	3
69	Extremal principle of entropy production in the climate system. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 79-90.	2.7	16
70	Second differential of the entropy as a criterion for the stability in lowâ€dimensional climate models. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 91-106.	2.7	10
71	Greenhouse gases and climatic states of minimum entropy production. Journal of Geophysical Research, 1999, 104, 24257-24263.	3.3	5
72	Periodic Solutions in Low-Dimensional Climatic Models. Journal of Climate, 1999, 12, 325-333.	3.2	1

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73	Extremal principle of entropy production in the climate system. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 79-90.	2.7	1
74	Entropy Production In Thermodynamic Climate Models. Journal of Non-Equilibrium Thermodynamics, 1998, 23, .	4.2	4