

# Juan Ignacio PÃ©rez-DÃ­az

## List of Publications by Year in descending order

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58  
papers

1,514  
citations

489802

18  
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371746

37  
g-index

58  
all docs

58  
docs citations

58  
times ranked

1406  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimization of Hydropower Operation. , 2022, , 84-104.		4
2	Comparison and Influence of Flywheels Energy Storage System Control Schemes in the Frequency Regulation of Isolated Power Systems. IEEE Access, 2022, 10, 37892-37911.	2.6	16
3	Unit commitment in a hybrid diesel/wind/pumpedâ€storage isolated power system considering the net demand intraâ€hourly variability. IET Renewable Power Generation, 2021, 15, 30-42.	1.7	9
4	Alternative operating modes to reduce the load shedding in the power system of El Hierro Island. International Journal of Electrical Power and Energy Systems, 2021, 128, 106755.	3.3	13
5	Mixed integer linear programming formulations for the hydro production function in a unit-based short-term scheduling problem. International Journal of Electrical Power and Energy Systems, 2021, 128, 106747.	3.3	21
6	Simplified Event-Based Load Shedding Scheme for Frequency Stability in an Isolated Power System With High Renewable Penetration. El Hierro: A Case Study. Frontiers in Energy Research, 2021, 9, .	1.2	4
7	Multi-objective optimization of a hydro-wind-photovoltaic power complementary plant with a vibration avoidance strategy. Applied Energy, 2021, 301, 117459.	5.1	34
8	Environmentally Enhanced Turbines for Hydropower Plants: Current Technology and Future Perspective. Frontiers in Energy Research, 2021, 9, .	1.2	7
9	Integration of fast acting energy storage systems in existing pumpedâ€storage power plants to enhance the system's frequency control. Wiley Interdisciplinary Reviews: Energy and Environment, 2020, 9, e367.	1.9	5
10	Fast frequency control ancillary services: An international review. Renewable and Sustainable Energy Reviews, 2020, 120, 109662.	8.2	46
11	Should environmental constraints be considered in linear programming based water value calculators?. International Journal of Electrical Power and Energy Systems, 2020, 117, 105662.	3.3	6
12	Medium-term scheduling of a hydropower plant participating as a price-maker in the automatic frequency restoration reserve market. Electric Power Systems Research, 2020, 185, 106399.	2.1	12
13	Analysis of the Implementation of the Primary and/or Inertial Frequency Control in Variable Speed Wind Turbines in an Isolated Power System with High Renewable Penetration. Case Study: El Hierro Power System. Electronics (Switzerland), 2020, 9, 901.	1.8	14
14	Contribution of nonâ€conventional pumpedâ€storage hydropower plant configurations in an isolated power system with an increasing share of renewable energy. IET Renewable Power Generation, 2020, 14, 658-670.	1.7	15
15	A multicriteria fuzzy approximate reasoning approach for risk assessment of dam safety. Environmental Earth Sciences, 2019, 78, 1.	1.3	18
16	Analysis of emerging technologies in the hydropower sector. Renewable and Sustainable Energy Reviews, 2019, 113, 109257.	8.2	177
17	A twoâ€stage stochastic optimisation model for the water value calculation in a hybrid diesel/wind/pumpedâ€storage power system. IET Renewable Power Generation, 2019, 13, 2156-2165.	1.7	18
18	Economic effects of forecasting inaccuracies in the automatic frequency restoration service for the day-ahead energy and reserve scheduling of pumped storage plants. Electric Power Systems Research, 2019, 174, 105850.	2.1	11

#	ARTICLE	IF	CITATIONS
19	Wave farms grid code compliance in isolated small power systems. IET Renewable Power Generation, 2019, 13, 171-179.	1.7	11
20	Evaluating Approaches for Estimating the Water Value of a Hydropower Plant in the Day-Ahead Electricity Market. , 2019, , 8-15.		0
21	Risk of penstock fatigue in pumped-storage power plants operating with variable speed in pumping mode. Renewable Energy, 2019, 133, 636-646.	4.3	24
22	Assessment of Sustainable Use of a Multipurpose Reservoir through the Multicriteria Approach: the Case of Corumbá IV Reservoir, Brazil. Water Resources Management, 2019, 33, 591-602.	1.9	4
23	Economic viability of pumped-storage power plants participating in the secondary regulation service. Applied Energy, 2018, 216, 224-233.	5.1	39
24	Optimal Welfare Price for a Highway Competing with an Untolled Alternative: Influence of Income Distribution. Journal of Infrastructure Systems, 2018, 24, .	1.0	4
25	Optimal Joint Energy and Secondary Regulation Reserve Hourly Scheduling of Variable Speed Pumped Storage Hydropower Plants. IEEE Transactions on Power Systems, 2018, 33, 103-115.	4.6	69
26	Manual Frequency Restoration Reserve in Spain: Analysis and Forecasting. , 2018, , .		3
27	Fast Frequency Control Services in Europe. , 2018, , .		10
28	Optimal Energy and Reserve Scheduling of Pumped-Storage Power Plants Considering Hydraulic Short-Circuit Operation. IEEE Transactions on Power Systems, 2017, 32, 344-353.	4.6	36
29	Value of perfect information of spot prices in the joint energy and reserve hourly scheduling of pumped storage plants. Electric Power Systems Research, 2017, 148, 303-310.	2.1	11
30	Simulation model of a variable-speed pumped-storage power plant in unstable operating conditions in pumping mode. Journal of Physics: Conference Series, 2017, 813, 012028.	0.3	2
31	Optimal energy and reserve scheduling of pumped-storage power plants considering hydraulic short-circuit operation. , 2017, , .		0
32	Economic impact of forecasting errors in residual reserve curves in the day-ahead scheduling of pumped storage plants. , 2017, , .		2
33	Assessing hydropower operational profitability considering energy and reserve markets. IET Renewable Power Generation, 2017, 11, 1640-1647.	1.7	19
34	Deriving Optimal End of Day Storage for Pumped-Storage Power Plants in the Joint Energy and Reserve Day-Ahead Scheduling. Energies, 2017, 10, 813.	1.6	8
35	Economic Viability of Pumped-Storage Power Plants Equipped with Ternary Units and Considering Hydraulic Short-Circuit Operation. Journal of Physics: Conference Series, 2017, 813, 012013.	0.3	3
36	The Influence of Environmental Constraints on the Water Value. Energies, 2016, 9, 446.	1.6	8

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37	Value of perfect information of spot prices in the joint energy and reserve hourly scheduling of pumped storage plants. , 2016, , .		5
38	Contribution of a pumped-storage hydropower plant to reduce the scheduling costs of an isolated power system with high wind power penetration. Energy, 2016, 109, 92-104.	4.5	97
39	Approximate formulae for the assessment of the long-term economic impact of environmental constraints on hydropeaking. Energy, 2016, 112, 629-641.	4.5	11
40	Modeling the Real-Time use of Reserves in the Joint Energy and Reserve Hourly Scheduling of a Pumped Storage Plant. Energy Procedia, 2016, 87, 53-60.	1.8	8
41	Influence of the Maximum Flow Ramping Rates on the Water Value. Energy Procedia, 2016, 87, 100-107.	1.8	3
42	Stochastic optimization model for the weekly scheduling of a hydropower system in day-ahead and secondary regulation reserve markets. Electric Power Systems Research, 2016, 130, 67-77.	2.1	46
43	CONTRIBUCIÓN DE UNA CENTRAL REVERSIBLE CON BOMBEO A VELOCIDAD VARIABLE A LA REGULACIÓN FRECUENCIA-POTENCIA DE UN SISTEMA AISLADO. Dyna (Spain), 2016, 91, 140-145.	0.1	0
44	Failures during Load-Frequency Control Maneuvers in an Upgraded Hydropower Plant: Causes, Identification of Causes and Solution Proposals. Energies, 2015, 8, 10584-10604.	1.6	10
45	On the Implementation of Variable Speed in Pump-Turbine Units Providing Primary and Secondary Load-Frequency Control in Generating Mode. Energies, 2015, 8, 13559-13575.	1.6	8
46	Trends and challenges in the operation of pumped-storage hydropower plants. Renewable and Sustainable Energy Reviews, 2015, 44, 767-784.	8.2	212
47	Dynamic response and governor tuning of a long penstock pumped-storage hydropower plant equipped with a pump-turbine and a doubly fed induction generator. Energy Conversion and Management, 2015, 106, 151-164.	4.4	73
48	Stability Analysis of a Run-of-River Diversion Hydropower Plant with Surge Tank and Spillway in the Head Pond. Scientific World Journal, The, 2014, 2014, 1-13.	0.8	10
49	Building resilience to water scarcity in southern Spain: a case study of rice farming in Doñana protected wetlands. Regional Environmental Change, 2014, 14, 1229-1242.	1.4	24
50	Optimal operation of variable speed pumped storage hydropower plants participating in secondary regulation reserve markets. , 2014, , .		25
51	Contribution of a hydraulic short-circuit pumped-storage power plant to the load-frequency regulation of an isolated power system. International Journal of Electrical Power and Energy Systems, 2014, 62, 199-211.	3.3	52
52	Assessment of the economic impact of environmental constraints on annual hydropower plant operation. Energy Policy, 2013, 61, 1332-1343.	4.2	29
53	Contribution of re-regulation reservoirs considering pumping capability to environmentally friendly hydropower operation. Energy, 2012, 48, 144-152.	4.5	27
54	Assessment of the economic impact of environmental constraints on short-term hydropower plant operation. Energy Policy, 2010, 38, 7960-7970.	4.2	49

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55	Short-term operation scheduling of a hydropower plant in the day-ahead electricity market. <i>Electric Power Systems Research</i> , 2010, 80, 1535-1542.	2.1	48
56	Optimal short-term operation schedule of a hydropower plant in a competitive electricity market. <i>Energy Conversion and Management</i> , 2010, 51, 2955-2966.	4.4	67
57	Optimal short-term operation and sizing of pumped-storage power plants in systems with high penetration of wind energy. , 2010, , .		19
58	Neural networks for optimal operation of a run-of-river adjustable speed hydro power plant with axial-flow propeller turbine. , 2008, , .		8