Fredy Ruiz

List of Publications by Year
in descending order

58 papers	**609** citations	567247 **15** h-index	677123 **22** g-index
58 all docs	**58** docs citations	**58** times ranked	**508** citing authors

#	Article	IF	Citations
1	Limiting gaming opportunities on incentive-based demand response programs. Applied Energy, 2018, 225, 668-681.	10.1	48
2	Optimal Strategy to Exploit the Flexibility of an Electric Vehicle Charging Station. Energies, 2019, 12, 3834.	3.1	39
3	Modeling and control of water booster pressure systems as flexible loads for demand response. Applied Energy, 2017, 204, 106-116.	10.1	38
4	Direct Filtering: A New Approach to Optimal Filter Design for Nonlinear Systems. IEEE Transactions on Automatic Control, 2013, 58, 86-99.	5.7	36
5	An optimal control approach to steam distillation of essential oils from aromatic plants. Computers and Chemical Engineering, 2018, 117, 25-31.	3.8	36
6	Direct Identification of Optimal SM-LPV Filters and Application to Vehicle Yaw Rate Estimation. IEEE Transactions on Control Systems Technology, 2011, 19, 5-17.	5.2	33
7	A time-of-use pricing strategy for managing electric vehicle clusters. Sustainable Energy, Grids and Networks, 2021, 25, 100411.	3.9	32
8	Rational consumer decisions in a peak time rebate program. Electric Power Systems Research, 2017, 143, 533-543.	3.6	30
9	A novel incentive-based demand response model for Cournot competition in electricity markets. Energy Systems, 2019, 10, 95-112.	3.0	24
10	Direct data-driven filter design for uncertain LTI systems with bounded noise. Automatica, 2010, 46, 1773-1784.	5.0	22
11	Direct design from data of optimal filters for LPV systems. Systems and Control Letters, 2010, 59, 1-8.	2.3	20
12	pH Measurement IoT System for Precision Agriculture Applications. IEEE Latin America Transactions, 2019, 17, 823-832.	1.6	18
13	A Virtual Sensor for Electric Vehiclesâ€™ State of Charge Estimation. Electronics (Switzerland), 2020, 9, 278.	3.1	17
14	Experimental modeling and aggregation strategy for thermoelectric refrigeration units as flexible loads. Applied Energy, 2020, 272, 115065.	10.1	16
15	Experimental validation of a multiple model predictive control for waste heat recovery organic Rankine cycle systems. Applied Thermal Engineering, 2021, 193, 116993.	6.0	16
16	Production and characterization of a human lysosomal recombinant iduronateâ€2â€sulfatase produced in <i>Pichia pastoris</i>. Biotechnology and Applied Biochemistry, 2018, 65, 655-664.	3.1	15
17	Forecast-Based V2G Aggregation Model for Day-Ahead and Real-Time Operations. , 2020, , .		14
18	Smart Charge of an Electric Vehicles Station: A Model Predictive Control Approach. , 2018, , .		13

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19	Coordination of specialised energy aggregators for balancing service provision. Sustainable Energy, Grids and Networks, 2022, 32, 100817.	3.9	13
20	SMGO: A set membership approach to data-driven global optimization. Automatica, 2021, 133, 109890.	5.0	12
21	Linear virtual sensors for vertical dynamics of vehicles with controlled suspensions. , 2007, , .		11
22	Optimal Operation Strategy for Electric Vehicles Charging Stations with Renewable Energy Integration. IFAC-PapersOnLine, 2020, 53, 12739-12744.	0.9	9
23	Understanding Model Predictive Control for Electric Vehicle Charging Dispatch. , 2018, , .		8
24	Characterization of electric faults in photovoltaic array systems. DYNA (Colombia), 2019, 86, 54-63.	0.4	8
25	Towards a comprehensive framework for V2G optimal operation in presence of uncertainty. Sustainable Energy, Grids and Networks, 2022, 31, 100740.	3.9	7
26	Real-time attitude estimation based on Gradient Descent algorithm. , 2012, , .		6
27	Modelo de predicciÃ³n de demanda de energÃa elÃ©ctrica mediante tÃ©cnicas Set-Membership. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2019, 16, 467.	1.0	6
28	Electric Vehicle Fleets as Balancing Instrument in Micro-Grids. Energies, 2021, 14, 7616.	3.1	6
29	Nonlinear model predictive control for a Ball&amp;Beam. , 2012, , .		5
30	Demand response: Understanding the rational behavior of consumers in a Peak Time Rebate Program. , 2015, , .		5
31	Gain-Scheduled Oxygen Concentration Control System for a Bioreactor. IEEE Latin America Transactions, 2018, 16, 2689-2697.	1.6	5
32	Optimal Portfolio Selection Methodology for a Demand Response Aggregator. Energies, 2021, 14, 7923.	3.1	5
33	Multivariable estimation of a web winding system. , 2011, , .		4
34	Nonlinear identification and control of Organic Rankine Cycle systems using sparse polynomial models. , 2016, , .		4
35	Energy price forecasting for optimal managing of electric vehicle fleet. IET Electrical Systems in Transportation, 2020, 10, 401-408.	2.4	4
36	Programmable current converter synthesis for the evaluation of UV radiation of excimer lamps. , 2010, , .		3

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37	Set membership identification of an excimer lamp for fast simulation. Control Engineering Practice, 2013, 21, 96-104.	5.5	3
38	Low-Voltage Cascade Multilevel Inverter with GaN Devices for Energy Storage System. , 2019, , .		2
39	Coordination of Aggregators for Flexibility Provision: A Conceptual Framework. , 2021, , .		2
40	A Youlaâ€"Kucera formulation of the controller design from data problem. Journal of Process Control, 2022, 109, 93-103.	3.3	2
41	A methodology for LPV control of web winding systems. , 2011, , .		1
42	A set membership approach to oxygen transport modeling with unmodeled dynamics. , 2015, , .		1
43	Non linear control of a robotic arm for pipeline reparation. IEEE Latin America Transactions, 2016, 14, 4681-4687.	1.6	1
44	Self-balancing control strategy for a battery based H-bridge multilevel inverter. , 2017, , .		1
45	Design of an optimal control to reduce CO_2 emissions in an engine. , 2017, , .		1
46	Analysis of water booster pressure systems as dispatchable loads in smart-grids. , 2017, , .		1
47	Price Based Optimization for Electrical Vehicle Charging Scheduling. , 2019, , .		1
48	Characterization and Flexibility of a ThermoElectric Refrigeration Unit. , 2019, , .		1
49	A current controller for a grid-tied, cascade multilevel inverter. , 2019, , .		1
50	Limited-complexity controller tuning: A set membership data-driven approach. European Journal of Control, 2021, 58, 82-89.	2.6	1
51	Classification of Electric Faults in Photovoltaic Systems Based on Voltage-Power Curves. IEEE Latin America Transactions, 2021, 19, 2071-2078.	1.6	1
52	Stackelberg Population Dynamics: A Predictive-Sensitivity Approach. Games, 2021, 12, 88.	0.6	1
53	Fast estimation of acoustic parameters in presence of audience. , 2010, , .		0
54	Uncertainty model analysis for MISO systems Set-Membership identification. , 2011, , .		0

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55	Vehicle stability control using direct virtual sensors. Vehicle System Dynamics, 2012, 50, 597-618.	3.7	0
56	MPC Weighted sum approach applied to torque tracking and CO<inf>2</inf> emission reduction on engines. , 2017, , .		0
57	A contract for demand response based on probability of call. , 2018, , .		0
58	A Youla-Kucera Parametrization for Data-Driven Controllers Tuning. IFAC-PapersOnLine, 2020, 53, 3989-3994.	0.9	0