

# Antonio Fernandez-Cardador

## List of Publications by Year in descending order

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47  
papers

1,423  
citations

430874

18  
h-index

361022

35  
g-index

47  
all docs

47  
docs citations

47  
times ranked

727  
citing authors

#	ARTICLE	IF	CITATIONS
1	Eco-Driving in Railway Lines Considering the Uncertainty Associated with Climatological Conditions. Sustainability, 2022, 14, 8645.	3.2	6
2	A multi-objective algorithm for train driving energy reduction with multiple time targets. Engineering Optimization, 2021, 53, 719-734.	2.6	14
3	Determining the optimum installation of energy storage systems in railway electrical infrastructures by means of swarm and evolutionary optimization algorithms. International Journal of Electrical Power and Energy Systems, 2021, 124, 106295.	5.5	18
4	Optimal Location and Sizing of Energy Storage Systems in DC-Electrified Railway Lines Using a Coral Reefs Optimization Algorithm with Substrate Layers. Energies, 2021, 14, 4753.	3.1	4
5	Multi-stage optimization of the installation of Energy Storage Systems in railway electrical infrastructures with nature-inspired optimization algorithms. Engineering Applications of Artificial Intelligence, 2021, 104, 104370.	8.1	5
6	Simulation-based assessment of the installation of a Reversible Substation in a railway line, including a realistic model of large traffic perturbations. International Journal of Electrical Power and Energy Systems, 2020, 115, 105476.	5.5	6
7	An Eco-Driving Algorithm for Interoperable Automatic Train Operation. Applied Sciences (Switzerland), 2020, 10, 7705.	2.5	11
8	Sensitivities and uncertainties of eco-driving algorithm estimating train power consumption. , 2020, , .		0
9	Assessment of the Worthwhileness of Efficient Driving in Railway Systems with High-Receptivity Power Supplies. Energies, 2020, 13, 1836.	3.1	7
10	Energy Efficiency and Integration of Urban Electrical Transport Systems: EVs and Metro-Trains of Two Real European Lines. Energies, 2019, 12, 366.	3.1	22
11	Optimizing Mass Transit Systems Electrical Infrastructure by Application of the Particle Swarm Optimization Algorithm. , 2019, , .		1
12	Real time eco-driving of high speed trains by simulation-based dynamic multi-objective optimization. Simulation Modelling Practice and Theory, 2018, 84, 50-68.	3.8	36
13	Improvement of a DC electrical railway simulator using artificial intelligence. , 2018, , .		0
14	Balancing energy consumption and risk of delay in high speed trains: A three-objective real-time eco-driving algorithm with fuzzy parameters. Transportation Research Part C: Emerging Technologies, 2018, 95, 652-678.	7.6	34
15	Evaluation of the impact that the traffic model used in railway electrical simulation has on the assessment of the installation of a Reversible Substation. International Journal of Electrical Power and Energy Systems, 2018, 102, 201-210.	5.5	13
16	Smart traffic-scenario compressor for the efficient electrical simulation of mass transit systems. International Journal of Electrical Power and Energy Systems, 2017, 88, 150-163.	5.5	15
17	Analysis of the demand charge in DC railway systems and reduction of its economic impact with Energy Storage Systems. International Journal of Electrical Power and Energy Systems, 2017, 93, 459-467.	5.5	40
18	Improving the Traffic Model to Be Used in the Optimisation of Mass Transit System Electrical Infrastructure. Energies, 2017, 10, 1134.	3.1	7

#	ARTICLE	IF	CITATIONS
19	Fuzzy train tracking algorithm for the energy efficient operation of CBTC equipped metro lines. Engineering Applications of Artificial Intelligence, 2016, 53, 19-31.	8.1	32
20	Energy savings in metro-transit systems: A comparison between operational Italian and Spanish lines. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2016, 230, 345-359.	2.0	19
21	Design of Robust and Energy-Efficient ATO Speed Profiles of Metropolitan Lines Considering Train Load Variations and Delays. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 2061-2071.	8.0	87
22	Efficient driving algorithms for non-disturbed and disturbed trains with the CBTC signalling system. , 2015, , .		0
23	Energy efficiency in high speed railway traffic operation: a real-time ecodriving algorithm. , 2015, , .		5
24	Multi objective particle swarm optimization algorithm for the design of efficient ATO speed profiles in metro lines. Engineering Applications of Artificial Intelligence, 2014, 29, 43-53.	8.1	118
25	Assessment of energy-saving techniques in direct-current-electrified mass transit systems. Transportation Research Part C: Emerging Technologies, 2014, 38, 85-100.	7.6	63
26	Real time regulation of efficient driving of high speed trains based on a genetic algorithm and a fuzzy model of manual driving. Engineering Applications of Artificial Intelligence, 2014, 29, 79-92.	8.1	63
27	Optimal design of energy-efficient ATO CBTC driving for metro lines based on NSGA-II with fuzzy parameters. Engineering Applications of Artificial Intelligence, 2014, 36, 164-177.	8.1	74
28	Riding the Rails to DC Power Efficiency: Energy efficiency in dc-electrified metropolitan railways. IEEE Electrification Magazine, 2014, 2, 32-38.	1.8	13
29	A Variable No-Load Voltage Scheme for Improving Energy Efficiency in DC-Electrified Mass Transit Systems. , 2014, , .		5
30	A Monovoltage Equivalent Model of Bi-Voltage Autotransformer-Based Electrical Systems in Railways. IEEE Transactions on Power Delivery, 2012, 27, 699-708.	4.3	19
31	Energy Savings in Metropolitan Railway Substations Through Regenerative Energy Recovery and Optimal Design of ATO Speed Profiles. IEEE Transactions on Automation Science and Engineering, 2012, 9, 496-504.	5.2	161
32	Modeling and optimizing energy-efficient manual driving on high-speed lines. IEEE Transactions on Electrical and Electronic Engineering, 2012, 7, 633-640.	1.4	49
33	Fuzzy optimal schedule of high speed train operation to minimize energy consumption with uncertain delays and driver's behavioral response. Engineering Applications of Artificial Intelligence, 2012, 25, 1548-1557.	8.1	95
34	Optimal underground timetable design based on power flow for maximizing the use of regenerative-braking energy. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2012, 226, 397-408.	2.0	137
35	ATO ecodriving design to minimise energy consumption in Metro de Bilbao. WIT Transactions on the Built Environment, 2012, , .	0.0	2
36	Optimal deployment of energy storage systems in a DC-electrified railway system. , 2012, , .		5

#	ARTICLE	IF	CITATIONS
37	Optimal design of metro automatic train operation speed profiles for reducing energy consumption. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2011, 225, 463-474.	2.0	89
38	Efficient design of Automatic Train Operation speed profiles with on board energy storage devices. , 2010, , .		24
39	A method to optimise train energy consumption combining manual energy efficient driving and scheduling. WIT Transactions on the Built Environment, 2010, , .	0.0	36
40	Computer-aided design of ATO speed commands according to energy consumption criteria. WIT Transactions on the Built Environment, 2008, , .	0.0	17
41	A computer tool for automatic braking distance calculation. , 2008, , .		1
42	An Optimization Procedure to Determine the Topology of AC Railways Power Supply Networks. , 2007, , .		4
43	Statistical dwell time model for metro lines. WIT Transactions on the Built Environment, 2007, , .	0.0	6
44	An optimisation-based traffic regulator for metro lines. WIT Transactions on the Built Environment, 2007, , .	0.0	2
45	Predictive Traffic Regulation for Metro Loop Lines Based on Quadratic Programming. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2006, 220, 79-89.	2.0	58
46	Catenary and autotransformer coupled optimization for 2Ã—25kV systems planning. WIT Transactions on the Built Environment, 2006, , .	0.0	0
47	A mixed AC/DC model for railway power systems. WIT Transactions on the Built Environment, 2006, , .	0.0	0