

# Curran Crawford

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

1,919  
citations

257450

24  
h-index

276875

41  
g-index

74  
all docs

74  
docs citations

74  
times ranked

1704  
citing authors

#	ARTICLE	IF	CITATIONS
1	Shared Automated Electric Vehicle Prospects for Low Carbon Road Transportation in British Columbia, Canada. <i>Vehicles</i> , 2022, 4, 102-123.	3.1	2
2	Simulating competition among heavy-duty zero-emissions vehicles under different infrastructure conditions. <i>Transportation Research, Part D: Transport and Environment</i> , 2022, 106, 103254.	6.8	6
3	A review on hydrogen production and utilization: Challenges and opportunities. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 26238-26264.	7.1	401
4	Transition of heavy-duty trucks from diesel to hydrogen fuel cells: Opportunities, challenges, and recommendations. <i>International Journal of Energy Research</i> , 2022, 46, 11718-11729.	4.5	13
5	Surrogate models for the blade element momentum aerodynamic model using non-intrusive polynomial chaos expansions. <i>Wind Energy Science</i> , 2022, 7, 1289-1304.	3.3	4
6	Investigating the loads and performance of a model horizontal axis wind turbine under reproducible IEC extreme operational conditions. <i>Wind Energy Science</i> , 2021, 6, 477-489.	3.3	7
7	Remote community integrated energy system optimization including building enclosure improvements and quantitative energy trilemma metrics. <i>Applied Energy</i> , 2020, 267, 115017.	10.1	29
8	Exploring electricity generation alternatives for Canadian Arctic communities using a multi-objective genetic algorithm approach. <i>Energy Conversion and Management</i> , 2020, 210, 112471.	9.2	29
9	Experimental and numerical simulation of extreme operational conditions for horizontal axis wind turbines based on the IEC standard. <i>Wind Energy Science</i> , 2020, 5, 1755-1770.	3.3	4
10	Electrification of road transportation with utility controlled charging: A case study for British Columbia with a 93% renewable electricity target. <i>Applied Energy</i> , 2019, 253, 113536.	10.1	23
11	Comparing alternative heavy-duty drivetrains based on GHG emissions, ownership and abatement costs: Simulations of freight routes in British Columbia. <i>Transportation Research, Part D: Transport and Environment</i> , 2019, 76, 19-55.	6.8	41
12	A fully coupled frequency domain model for floating offshore wind turbines. <i>Journal of Ocean Engineering and Marine Energy</i> , 2019, 5, 135-158.	1.7	17
13	LiDAR-based characterization of mid-altitude wind conditions for airborne wind energy systems. <i>Wind Energy</i> , 2019, 22, 1101-1120.	4.2	14
14	Modeling the GHG emissions intensity of plug-in electric vehicles using short-term and long-term perspectives. <i>Transportation Research, Part D: Transport and Environment</i> , 2019, 69, 209-223.	6.8	58
15	Electricity system and emission impact of direct and indirect electrification of heavy-duty transportation. <i>Energy</i> , 2019, 172, 740-751.	8.8	33
16	Impact of land requirements on electricity system decarbonisation pathways. <i>Energy Policy</i> , 2019, 129, 193-205.	8.8	40
17	A new Kriging-based Algorithm for solving computationally expensive black-box global optimization problems. <i>Engineering Optimization</i> , 2019, 51, 265-285.	2.6	12
18	Improving mesoscale wind speed forecasts using lidar-based observation nudging for airborne wind energy systems. <i>Wind Energy Science</i> , 2019, 4, 563-580.	3.3	8

#	ARTICLE	IF	CITATIONS
19	Simulating the value of electric-vehicle“grid integration using a behaviourally realistic model. Nature Energy, 2018, 3, 132-139.	39.5	91
20	A Cumulant-Tensor-Based Probabilistic Load Flow Method. IEEE Transactions on Power Systems, 2018, 33, 5648-5656.	6.5	26
21	Coal-to-biomass retrofit in Alberta “value of forest residue bioenergy in the electricity system. Renewable Energy, 2018, 125, 373-383.	8.9	29
22	Examining the role of natural gas and advanced vehicle technologies in mitigating CO2 emissions of heavy-duty trucks: Modeling prototypical British Columbia routes with road grades. Transportation Research, Part D: Transport and Environment, 2018, 62, 186-211.	6.8	27
23	A fast stochastic solution method for the Blade Element Momentum equations for long-term load assessment. Wind Energy, 2018, 21, 115-128.	4.2	7
24	Transactive control of fast-acting demand response based on thermostatic loads in real-time retail electricity markets. Applied Energy, 2018, 210, 1310-1320.	10.1	89
25	Design and Characterization of a Trailer-Based Horizontal-Axis Wind Turbine Test Rig. Journal of Solar Energy Engineering, Transactions of the ASME, 2018, 140, .	1.8	3
26	A multi-objective design optimization approach for floating offshore wind turbine support structures. Journal of Ocean Engineering and Marine Energy, 2017, 3, 69-87.	1.7	59
27	Interconnection-wide hour-ahead scheduling in the presence of intermittent renewables and demand response: A surplus maximizing approach. Applied Energy, 2017, 189, 336-351.	10.1	17
28	ISPH modelling for hydrodynamic applications using a new MPI-based parallel approach. Journal of Ocean Engineering and Marine Energy, 2017, 3, 35-50.	1.7	12
29	A tuned actuator cylinder approach for predicting cross-flow turbine performance with wake interaction and channel blockage effects. International Journal of Marine Energy, 2017, 18, 30-56.	1.8	11
30	Fast Analysis of Unsteady Wing Aerodynamics via Stochastic Models. AIAA Journal, 2017, 55, 719-728.	2.6	4
31	Assessing the impact of an electric bus duty cycle on battery pack life span. , 2017, , .		2
32	Optimal Operation of a Self-regulating Smart Distribution System with Wind Energy Integration and Demand Response. Lecture Notes in Energy, 2017, , 707-734.	0.3	0
33	Tuned actuator disk approach for predicting tidal turbine performance with wake interaction. International Journal of Marine Energy, 2017, 17, 1-20.	1.8	15
34	Coordinated charging of electric vehicles connected to a net-metered PV parking lot. , 2017, , .		14
35	An engineering model for 3-D turbulent wind inflow based on a limited set of random variables. Wind Energy Science, 2017, 2, 507-520.	3.3	2
36	Notice of Removal: A Fuzzy Satisfactory Optimization Method Based on Stress Analysis for a Hybrid Composite Flywheel. , 2017, , .		0

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37	A stochastic aerodynamic model for stationary blades in unsteady 3D wind fields. Journal of Physics: Conference Series, 2016, 753, 082009.	0.4	3
38	Development of an Analytical Unsteady Model for Wind Turbine Aerodynamic Response to Linear Pitch Changes. Journal of Solar Energy Engineering, Transactions of the ASME, 2016, 138, .	1.8	1
39	Integration of price-driven demand response using plug-in electric vehicles in smart grids. , 2016, , .		4
40	ISPH modelling of an oscillating wave surge converter using an OpenMP-based parallel approach. Journal of Ocean Engineering and Marine Energy, 2016, 2, 301-312.	1.7	21
41	Addressing key challenges in transportation mode electrification. , 2016, , .		2
42	Minimizing errors in interpolated discrete stochastic wind fields. Journal of Wind Engineering and Industrial Aerodynamics, 2016, 152, 15-22.	3.9	4
43	Adapted two-equation turbulence closures for actuator disk RANS simulations of wind & tidal turbine wakes. Renewable Energy, 2016, 92, 273-292.	8.9	58
44	Renewable resources portfolio optimization in the presence of demand response. Applied Energy, 2016, 162, 139-148.	10.1	88
45	Agent-Based Simulation for Interconnection-Scale Renewable Integration and Demand Response Studies. Engineering, 2015, 1, 422-435.	6.7	8
46	Performance Modeling and Benchmark Analysis of an Advanced 4WD Series-Parallel PHEV Using Dynamic Programming. , 2015, , .		1
47	Wind energy in the city: An interurban comparison of social acceptance of wind energy projects. Energy Research and Social Science, 2015, 8, 66-77.	6.4	28
48	Embedded feature-selection support vector machine for driving pattern recognition. Journal of the Franklin Institute, 2015, 352, 669-685.	3.4	60
49	Evaluating the importance of mooring line model fidelity in floating offshore wind turbine simulations. Wind Energy, 2014, 17, 1835-1853.	4.2	78
50	Robust and Reliability-Based Design Optimization Framework for Wing Design. AIAA Journal, 2014, 52, 711-724.	2.6	40
51	Hydrodynamics-based floating wind turbine support platform optimization: A basis function approach. Renewable Energy, 2014, 66, 559-569.	8.9	27
52	Mesh and load distribution requirements for actuator line CFD simulations. Wind Energy, 2013, 16, 1183-1196.	4.2	49
53	Integrating renewable energy using a smart distribution system: Potential of self-regulating demand response. Renewable Energy, 2013, 52, 46-56.	8.9	35
54	Evolving offshore wind: A genetic algorithm-based support structure optimization framework for floating wind turbines. , 2013, , .		16

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55	Robust and Reliability Based Design Optimization Framework for Wing Design. , 2012, , .		20
56	Wind integration in self-regulating electric load distributions. Energy Systems, 2012, 3, 341-377.	3.0	24
57	A test bed for self-regulating distribution systems: Modeling integrated renewable energy and demand response in the GridLAB-D/MATLAB environment. , 2012, , .		23
58	Active power regulation of wind power systems through demand response. Science China Technological Sciences, 2012, 55, 1667-1676.	4.0	26
59	Energy efficient communication networks design for demand response in smart grid. , 2011, , .		32
60	Comfort-Constrained Distributed Heat Pump Management. Energy Procedia, 2011, 12, 849-855.	1.8	49
61	The importance of mooring line model fidelity in floating wind turbine simulations. , 2011, , .		4
62	Comparison of Surrogate Models in a Multidisciplinary Optimization Framework for Wing Design. AIAA Journal, 2010, 48, 995-1006.	2.6	59
63	Advancement of a Robust and Reliability-Based Design Optimization Framework for Wing Design. , 2010, , .		6