Adrian Ilinca

List of Publications by Year
in descending order

104 papers	4,904 citations	236833 25 h-index	95218 68 g-index
104 all docs	104 docs citations	104 times ranked	4974 citing authors

#	Article	IF	Citations
1	Energy storage systems—Characteristics and comparisons. Renewable and Sustainable Energy Reviews, 2008, 12, 1221-1250.	8.2	1,777
2	Anti-icing and de-icing techniques for wind turbines: Critical review. Cold Regions Science and Technology, 2011, 65, 88-96.	1.6	637
3	Review of performance optimization techniques applied to wind turbines. Applied Energy, 2015, 142, 361-388.	5.1	270
4	Wind turbine performance under icing conditions. Wind Energy, 2008, 11, 319-333.	1.9	184
5	Ice protection systems for wind turbines in cold climate: characteristics, comparisons and analysis. Renewable and Sustainable Energy Reviews, 2016, 65, 662-675.	8.2	150
6	Wind potential assessment of Quebec Province. Renewable Energy, 2003, 28, 1881-1897.	4.3	130
7	Heat and mass transfer during ice accretion on aircraft wings with an improved roughness model. International Journal of Thermal Sciences, 2006, 45, 595-606.	2.6	106
8	Issues concerning roughness on wind turbine blades. Renewable and Sustainable Energy Reviews, 2013, 23, 514-525.	8.2	104
9	Study and design of a hybrid wind—diesel-compressed air energy storage system for remote areas. Applied Energy, 2010, 87, 1749-1762.	5.1	98
10	Integration of Wind Energy into Electricity Systems: Technical Challenges and Actual Solutions. Energy Procedia, 2011, 6, 815-824.	1.8	89
11	Aerodynamic performance analysis of slotted airfoils for application to wind turbine blades. Journal of Wind Engineering and Industrial Aerodynamics, 2016, 151, 79-99.	1.7	78
12	Optimization of diesel engine performances for a hybrid wind—diesel system with compressed air energy storage. Energy, 2011, 36, 3079-3091.	4.5	75
13	The utility of energy storage to improve the economics of wind—diesel power plants in Canada. Renewable Energy, 2008, 33, 1544-1557.	4.3	68
14	A review of Industry 4.0 characteristics and challenges, with potential improvements using blockchain technology. Computers and Industrial Engineering, 2021, 162, 107746.	3.4	66
15	Prediction of ice accretion and anti-icing heating power on wind turbine blades using standard commercial software. Energy, 2016, 114, 1041-1052.	4.5	56
16	A Constraint-Handling Technique for Genetic Algorithms using a Violation Factor. Journal of Computer Science, 2016, 12, 350-362.	0.5	45
17	New Roughness Computation Method and Geometric Accretion Model for Airfoil Icing. Journal of Aircraft, 2004, 41, 119-127.	1.7	39
18	Numerical Study of Flow Around Iced Wind Turbine Airfoil. Engineering Applications of Computational Fluid Mechanics, 2012, 6, 39-45.	1.5	36

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19	Stakeholders' perspectives on barriers to remote wind–diesel power plants in Canada. Energy Policy, 2008, 36, 1611-1621.	4.2	34
20	Assessment of Turbulence Models for Flow Simulation around a Wind Turbine Airfoil. Modelling and Simulation in Engineering, 2011, 2011, 1-8.	0.4	34
21	Biomass Cogeneration Technologies: A Review. Journal of Sustainable Bioenergy Systems, 2020, 10, 1-15.	0.2	32
22	Comparison and Analysis of Different Energy Storage Techniques Based on their Performance Index. , 2007, , .		31
23	Optimal management of compressed air energy storage in a hybrid wind-pneumatic-diesel system for remote area's power generation. Energy, 2015, 84, 267-278.	4.5	30
24	Study of a Hybrid Wind-Diesel System with Compressed Air Energy Storage. , 2007, , .		27
25	A Selection Process for Genetic Algorithm Using Clustering Analysis. Algorithms, 2017, 10, 123.	1.2	27
26	Review of Vibration Control Methods for Wind Turbines. Energies, 2021, 14, 3058.	1.6	27
27	Assessment of Two-Equation Turbulence Models and Validation of the Performance Characteristics of an Experimental Wind Turbine by CFD. ISRN Mechanical Engineering, 2012, 2012, 1-10.	0.9	25
28	Assessing the potential for a wind power incentive for remote villages in Canada. Energy Policy, 2010, 38, 5504-5511.	4.2	24
29	Institutional factors influencing strategic decision-making in energy policy; a case study of wind energy in France and Quebec (Canada). Renewable and Sustainable Energy Reviews, 2016, 59, 1455-1470.	8.2	24
30	Supply Side Management vs. Demand Side Management of a Residential Microgrid Equipped with an Electric Vehicle in a Dual Tariff Scheme. Energies, 2019, 12, 4351.	1.6	23
31	Potential of a Hybrid Wind-Diesel-Compressed air system for Nordic Remote Canadian Areas. Energy Procedia, 2011, 6, 795-804.	1.8	22
32	Pneumatic hybridization of a diesel engine using compressed air storage for wind-diesel energy generation. Energy, 2012, 38, 264-275.	4.5	22
33	Dynamic modeling of diesel generator based on electrical and mechanical aspects. , 2016, , .		21
34	A Review and Comparison on Recent Optimization Methodologies for Diesel Engines and Diesel Power Generators. Journal of Power and Energy Engineering, 2019, 07, 31-56.	0.3	20
35	Hyperspectral imaging applied for the detection of wind turbine blade damage and icing. Remote Sensing Applications: Society and Environment, 2020, 18, 100291.	0.8	19
36	Review of Wind Turbine Icing Modelling Approaches. Energies, 2021, 14, 5207.	1.6	19

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37	A Review and Economic Analysis of Different Emission Reduction Techniques for Marine Diesel Engines. Open Journal of Marine Science, 2019, 09, 148-171.	0.3	19
38	A new hybrid pneumatic combustion engine to improve fuel consumption of wind–Diesel power system for non-interconnected areas. Applied Energy, 2012, 96, 459-476.	5.1	17
39	Prediction of 2D Airfoil Ice Accretion by Bisection Method and by Rivulets and Beads Modeling. , 2003, , .		16
40	Real-time three-dimensional wind simulation for windmill rig tests. Renewable Energy, 2007, 32, 2268-2290.	4.3	16
41	Effects of Low Charge and Environmental Conditions on Diesel Generators Operation. Eng, 2020, 1, 137-152.	1.2	16
42	Variable Speed Diesel Generators: Performance and Characteristic Comparison. Energies, 2022, 15, 592.	1.6	16
43	Study of the Intelligent Behavior of a Maximum Photovoltaic Energy Tracking Fuzzy Controller. Energies, 2018, 11, 3263.	1.6	14
44	A Review on the Estimation of Power Loss Due to Icing in Wind Turbines. Energies, 2022, 15, 1083.	1.6	14
45	Analysis and Mitigation of Icing Effects on Wind Turbines. , 0, , .		13
46	Wind turbine blade defect detection using hyperspectral imaging. Remote Sensing Applications: Society and Environment, 2021, 22, 100522.	0.8	12
47	Thermodynamic and exergy evaluation of an innovative hydrogen liquefaction structure based on ejector-compression refrigeration unit, cascade multi-component refrigerant system, and Kalina power plant. International Journal of Hydrogen Energy, 2022, 47, 26369-26393.	3.8	12
48	Error estimator and adaptive moving grids for finite volumes schemes. AIAA Journal, 1995, 33, 2058-2065.	1.5	11
49	Fuel consumption evaluation of an optimized new hybrid pneumatic–combustion vehicle engine on several driving cycles. International Journal of Engine Research, 2012, 13, 253-273.	1.4	11
50	OPTIMAL DESIGN FOR A COMPOSITE WIND TURBINE BLADE WITH FATIGUE AND FAILURE CONSTRAINTS. Transactions of the Canadian Society for Mechanical Engineering, 2015, 39, 171-186.	0.3	11
51	Hydro-pneumatic storage for wind-diesel electricity generation in remote sites. Applied Energy, 2018, 231, 1159-1178.	5.1	11
52	Neural Network Optimization Algorithms to Predict Wind Turbine Blade Fatigue Life under Variable Hygrothermal Conditions. Eng, 2021, 2, 278-295.	1.2	11
53	An Efficient Neural Network-Based Method for Diagnosing Faults of PV Array. Sustainability, 2021, 13, 6194.	1.6	10
54	Electrochemical Cells and Storage Technologies to Increase Renewable Energy Share in Cold Climate Conditions—A Critical Assessment. Energies, 2022, 15, 1579.	1.6	10

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55	Experimental Investigation of Power Requirements for Wind Turbines Electrothermal Anti-icing Systems. , 0, , .		9
56	Software tool to predict the Wind Energy production losses due to icing. , 2011, , .		8
57	Lessons learned in France and Quebec regarding financial and legal mechanisms to develop renewable energy: A hybrid model as an acceptable solution for onshore wind?. Renewable and Sustainable Energy Reviews, 2015, 47, 34-45.	8.2	8
58	Control of small-scale wind/diesel/battery hybrid standalone power generation system based on fixed speed generators for remote areas. , 2016, , .		8
59	Computer Model for a Wind–Diesel Hybrid System with Compressed Air Energy Storage. Energies, 2019, 12, 3542.	1.6	8
60	Parameters Affecting Dust Collector Efficiency for Pneumatic Conveying: A Review. Energies, 2022, 15, 916.	1.6	8
61	Thermo-economic optimization of a new solar-driven system for efficient production of methanol and liquefied natural gas using the liquefaction process of coke oven gas and post-combustion carbon dioxide capture. Energy Conversion and Management, 2022, 264, 115733.	4.4	8
62	Numerical and analytical investigation of temperature distribution in a brake drum with simulated defects. International Journal of Vehicle Design, 2001, 26, 146.	0.1	7
63	Required time response of a variable valve actuator equiping a hybrid pneumatic–combustion engine. International Journal of Engine Research, 2012, 13, 514-528.	1.4	7
64	Control design of new eco-friendly microgrid based on Wind/Diesel/Battery driven variable speed generators. , 2016, , .		7
65	Eco-Friendly Selection of Diesel Generator Based on Genset-Synchro Technology for Off-Grid Remote Area Application in the North of Quebec. Energy and Power Engineering, 2019, 11, 232-247.	0.5	7
66	Energy Recovering Using Regenerative Braking in Diesel–Electric Passenger Trains: Economical and Technical Analysis of Fuel Savings and GHG Emission Reductions. Energies, 2022, 15, 37.	1.6	7
67	3-D Multiple-level simulation of free surface flows. Journal of Hydraulic Research/De Recherches Hydrauliques, 2002, 40, 413-423.	0.7	6
68	Advanced Control of a Compensator Motor Driving a Variable Speed Diesel Generator with Rotating Stator. Energies, 2020, 13, 2224.	1.6	6
69	Optimized Active Control of a Smart Cantilever Beam Using Genetic Algorithm. Designs, 2022, 6, 36.	1.3	6
70	Blockchain-Enabled Energy Demand Side Management Cap and Trade Model. Energies, 2021, 14, 8600.	1.6	6
71	Computer Model for Financial, Environmental and Risk Analysis of a Wind–Diesel Hybrid System with Compressed Air Energy Storage. Energies, 2019, 12, 4054.	1.6	5
72	Conception et validation d'un modèle d'analyse et de suivi pour l'élaboration d'une politique énergétique durable et acceptable : une étude comparative France-Québec sur l'énergie éolienne. VertigO: La Revue Electronique En Sciences De L'environnement, 2015, , .	0.0	5

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73	Performance Optimization of Diesel Generators Using Permanent Magnet Synchronous Generator with Rotating Stator. Energy and Power Engineering, 2019, 11, 259-282.	0.5	5
74	New Integrated Process for the Efficient Production of Methanol, Electrical Power, and Heating. Energies, 2022, 15, 1054.	1.6	5
75	Energy Efficiency and Industry 4.0 in Wood Industry: A Review and Comparison to Other Industries. Energies, 2022, 15, 2384.	1.6	5
76	A multiphase CFX based approach into ice accretion modeling on a cylinder. , 2011, , .		4
77	Aeroelasticity of Wind Turbines Blades Using Numerical Simulation. , 0, , .		4
78	A Modular Simulation Testbed for Energy Management in AC/DC Microgrids. Energies, 2020, 13, 4049.	1.6	4
79	Système hybride éolien-diesel avec stockage d'air comprimé pour l'électrification d'une station de télécommunications isolée. Revue Internationale De Génie électrique, 2009, 12, 701-731.	0.0	4
80	A lagrangean interactive interface to evaluate ice accretion modeling on a cylinder - a test case for icing modeling on wind turbine airfoils. , 2011, , .		3
81	Modelling of aerodynamic flutter on a NACA 4412 airfoil with application to wind turbine blades. International Journal of Simulation and Process Modelling, 2013, 8, 79.	0.1	3
82	Progress in energy generation for Canadian remote sites. AIP Conference Proceedings, 2016, , .	0.3	3
83	Power flow management strategy for renewable hybrid energy system. , 2016, , .		3
84	Study of an optimized wind-diesel hybrid system for canadian remote sites. , 2017, , .		3
85	Supercharging of Diesel Engine with Compressed Air: Experimental Investigation on Greenhouse Gases and Performance for a Hybrid Wind-Diesel System. Smart Grid and Renewable Energy, 2019, 10, 213-236.	0.7	3
86	Grid integrated non-renewable based hybrid systems: Control strategies, optimization, and modeling. , 2022, , 101-135.		3
87	Modeling and simulation of a novel small-scale compressed air hybrid system for stand-alone off-grid applications. , 2013, , .		2
88	Territorial intelligence modelling for energy development (TIMED) - a case study for the Baie-des-Sables (Canada) wind farm. International Journal of Multicriteria Decision Making, 2013, 3, 236.	0.1	2
89	Improving the Energy Efficiency of Cyclone Dust Collectors for Wood Product Factories. Open Journal of Energy Efficiency, 2021, 10, 97-119.	0.6	2
90	REVIEW OF STUDIES ON THE CFD-BEM APPROACH FOR ESTIMATING POWER LOSSES OF ICED-UP WIND TURBINES. International Journal of Advanced Research, 2021, 9, 633-652.	0.0	2

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91	Numerical Modeling of Horizontal Axis Wind Turbine: Aerodynamic Performances Improvement Using an Efficient Passive Flow Control System. Energies, 2022, 15, 4872.	1.6	2
92	Demand-side management. , 2021, , 463-490.		1
93	State of the Art of Telecommunication Systems in Isolated and Constrained Areas. Sensors, 2021, 21, 3073.	2.1	1
94	Development and Validation of a Railway Safety System for Nordic Trains in Isolated Territories of Northern Quebec Based on IEEE 802.15.4 Protocol. Sensors, 2021, 21, 6129.	2.1	1
95	A cuckoo search based neural network to predict fatigue life in rotor blade composites. Journal of Mechanical Engineering and Sciences, 2020, 14, 6430-6442.	0.3	1
96	Modèle d'accrétion de glace sur un objet bidimensionnel fixe appliquable aux pales d'éoliennes. VertigO: La Revue Electronique En Sciences De L'environnement, 2004, , .	0.0	1
97	MCDA: Measuring Robustness as a Tool to Address Strategic Wind Farms Issues. Green Energy and Technology, 2013, , 153-182.	0.4	1
98	Energy Efficiency Improvement of Diesel–Electric Trains Using Solar Energy: A Feasibility Study. Applied Sciences (Switzerland), 2022, 12, 5869.	1.3	1
99	CFD modelling of thermal distribution in industrial server centres for configuration optimisation and energy efficiency. International Journal of Simulation and Process Modelling, 2014, 9, 63.	0.1	0
100	Analysis of a micro-grid behavior by a supervisory control and data acquisition system-experimental validation. , 2016, , .		0
101	Energetic and exergetic evaluation of conventional and sloped solar chimney power plants. , 2016, , .		0
102	Comparative Energetic and Exergetic Analysis of Conventional and Sloped Solar Chimney Power Plants. International Journal of Energy Optimization and Engineering, 2020, 9, 57-73.	0.4	0
103	Experimental analysis of multi-horizontal submerged jets energy dissipater. ISH Journal of Hydraulic Engineering, 0, , 1-11.	1.1	0
104	Wind turbine ice detection using hyperspectral imaging. Remote Sensing Applications: Society and Environment, 2022, 26, 100711.	0.8	0