

# Jorge Alfredo Ardila-Rey

## List of Publications by Year in descending order

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78  
papers

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394421  
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80  
docs citations

80  
times ranked

771  
citing authors

#	ARTICLE	IF	CITATIONS
1	Partial discharge and noise separation by means of spectral-power clustering techniques. IEEE Transactions on Dielectrics and Electrical Insulation, 2013, 20, 1436-1443.	2.9	86
2	Artificial Neural Network Application for Partial Discharge Recognition: Survey and Future Directions. Energies, 2016, 9, 574.	3.1	54
3	Multiple partial discharge source discrimination with multiclass support vector machines. Expert Systems With Applications, 2016, 55, 417-428.	7.6	46
4	On the Use of Monopole Antennas for Determining the Effect of the Enclosure of a Power Transformer Tank in Partial Discharges Electromagnetic Propagation. Sensors, 2016, 16, 148.	3.8	42
5	Separation of sources in radiofrequency measurements of partial discharges using timeâ€“power ratio maps. ISA Transactions, 2015, 58, 389-397.	5.7	40
6	Nuclear Energy Development in Bangladesh: A Study of Opportunities and Challenges. Energies, 2018, 11, 1672.	3.1	35
7	3D characterization of electrical tree structures. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 220-228.	2.9	34
8	Comparison of the Performance of Artificial Neural Networks and Fuzzy Logic for Recognizing Different Partial Discharge Sources. Energies, 2017, 10, 1060.	3.1	32
9	A Comparison of Inductive Sensors in the Characterization of Partial Discharges and Electrical Noise Using the Chromatic Technique. Sensors, 2018, 18, 1021.	3.8	29
10	Effects of Roadside Trees and Road Orientation on Thermal Environment in a Tropical City. Sustainability, 2020, 12, 1053.	3.2	29
11	Inductive Sensor Performance in Partial Discharges and Noise Separation by Means of Spectral Power Ratios. Sensors, 2014, 14, 3408-3427.	3.8	27
12	Application and Suitability of Polymeric Materials as Insulators in Electrical Equipment. Energies, 2021, 14, 2758.	3.1	23
13	Determinant Factors of Electricity Consumption for a Malaysian Household Based on a Field Survey. Sustainability, 2021, 13, 818.	3.2	22
14	Wind Power Potentials in Cameroon and Nigeria: Lessons from South Africa. Energies, 2017, 10, 443.	3.1	21
15	Partial Discharge Spectral Characterization in HF, VHF and UHF Bands Using Particle Swarm Optimization. Sensors, 2018, 18, 746.	3.8	21
16	Separation Techniques of Partial Discharges and Electrical Noise Sources: A Review of Recent Progress. IEEE Access, 2020, 8, 199449-199461.	4.2	21
17	Effects of Urban Morphology on Microclimate Parameters in an Urban University Campus. Sustainability, 2020, 12, 2962.	3.2	21
18	Automatic selection of frequency bands for the power ratios separation technique in partial discharge measurements: part I, fundamentals and noise rejection in simple test objects. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 2284-2291.	2.9	20

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19	A Cost-Effective Methodology for Sizing Solar PV Systems for Existing Irrigation Facilities in Chile. <i>Energies</i> , 2018, 11, 1853.	3.1	20
20	Artificial Generation of Partial Discharge Sources Through an Algorithm Based on Deep Convolutional Generative Adversarial Networks. <i>IEEE Access</i> , 2020, 8, 24561-24575.	4.2	18
21	Partial discharges and noise separation using spectral power ratios and genetic algorithms. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2017, 24, 31-38.	2.9	17
22	Automatic selection of frequency bands for the power ratios separation technique in partial discharge measurements: part II, PD source recognition and applications. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2015, 22, 2293-2301.	2.9	16
23	Behavior of an Inductive Loop Sensor in the Measurement of Partial Discharge Pulses with Variations in Its Separation from the Primary Conductor. <i>Sensors</i> , 2018, 18, 2324.	3.8	15
24	Using Static Concentrator Technology to Achieve Global Energy Goal. <i>Sustainability</i> , 2019, 11, 3056.	3.2	15
25	Current Status and Possible Future Applications of Marine Current Energy Devices in Malaysia: A Review. <i>IEEE Access</i> , 2021, 9, 86869-86888.	4.2	14
26	Partial discharge source recognition by means of clustering of spectral power ratios. <i>Measurement Science and Technology</i> , 2013, 24, 125605.	2.6	13
27	Robust Condition Assessment of Electrical Equipment with One Class Support Vector Machines Based on the Measurement of Partial Discharges. <i>Energies</i> , 2018, 11, 486.	3.1	13
28	A Validation of the Spectral Power Clustering Technique (SPCT) by Using a Rogowski Coil in Partial Discharge Measurements. <i>Sensors</i> , 2015, 15, 25898-25918.	3.8	12
29	An Ensemble-Boosting Algorithm for Classifying Partial Discharge Defects in Electrical Assets. <i>Machines</i> , 2017, 5, 18.	2.2	12
30	Hard X-Ray Emission Detection Using Deep Learning Analysis of the Radiated UHF Electromagnetic Signal From a Plasma Focus Discharge. <i>IEEE Access</i> , 2019, 7, 74899-74908.	4.2	12
31	Performance Evaluation of Unconcentrated Photovoltaic-Thermoelectric Generator Hybrid System under Tropical Climate. <i>Sustainability</i> , 2019, 11, 6192.	3.2	12
32	Development of Hypergraph Based Improved Random Forest Algorithm for Partial Discharge Pattern Classification. <i>IEEE Access</i> , 2021, 9, 96-109.	4.2	11
33	Software simulation and experimental characterisation of a rotationally asymmetrical concentrator under direct and diffuse solar radiation. <i>Energy Conversion and Management</i> , 2016, 122, 223-238.	9.2	10
34	Polymeric Materials for Conversion of Electromagnetic Waves from the Sun to Electric Power. <i>Polymers</i> , 2018, 10, 307.	4.5	9
35	A chromatic technique for structural damage detection under noise effects based on impedance measurements. <i>Measurement Science and Technology</i> , 2019, 30, 075601.	2.6	9
36	Analysis of Partial Discharges in Electrical Tree Growth Under Very Low Frequency (VLF) Excitation Through Pulse Sequence and Nonlinear Time Series Analysis. <i>IEEE Access</i> , 2020, 8, 163673-163684.	4.2	9

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37	Separation of Partial Discharges Sources and Noise Based on the Temporal and Spectral Response of the Signals. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	4.7	9
38	Baseline-Free Damage Imaging Algorithm Using Spatial Frequency Domain Virtual Time Reversal. IEEE Transactions on Industrial Informatics, 2022, 18, 5043-5054.	11.3	9
39	Partial Discharge Location Identification Using Permutation Entropy Based Instantaneous Energy Features. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	4.7	8
40	Electromagnetic Burst Measurement System Based on Low Cost UHF Dipole Antenna. Energies, 2017, 10, 1415.	3.1	7
41	A new technique for separation of partial discharge sources and electromagnetic noise in radiofrequency measurements using energy ratios of different antennas. High Voltage, 2021, 6, 525-530.	4.7	7
42	Photovoltaic Expansion-Limit through a Net Energy Metering Scheme for Selected Malaysian Public Hospitals. Sustainability, 2019, 11, 5131.	3.2	6
43	Partial Discharge Electrical Tree Growth Identification by Means of Waveform Source Separation Techniques. IEEE Access, 2021, 9, 64665-64675.	4.2	6
44	A Comparative Analysis Applied to the Partial Discharges Identification in Dry-Type Transformers by Hall and Acoustic Emission Sensors. Sensors, 2022, 22, 1716.	3.8	6
45	On the Relationship Between the Electromagnetic Burst and Inductive Sensor Measurement of a Pulsed Plasma Accelerator. IEEE Access, 2019, 7, 133043-133057.	4.2	5
46	A Method for Weather Station Selection Based on Wavelet Squared Coherence for Electric Load Forecasting. IEEE Access, 2020, 8, 197431-197438.	4.2	5
47	Lightning Protection Methods for Wind Turbine Blades: An Alternative Approach. Applied Sciences (Switzerland), 2020, 10, 2130.	2.5	5
48	Development and Implementation of an Anthropomorphic Underactuated Prosthesis with Adaptive Grip. Machines, 2021, 9, 209.	2.2	5
49	An Application of Wavelet Analysis to Assess Partial Discharge Evolution by Acoustic Emission Sensor. , 0, , .		5
50	An Evaluation of Meta-Heuristic Approaches for Improve the Separation of Multiple Partial Discharge Sources and Electrical Noise. , 2017, , .		4
51	Application of Meta-Heuristic Approaches in the Spectral Power Clustering Technique (SPCT) to Improve the Separation of Partial Discharge and Electrical Noise Sources. IEEE Access, 2019, 7, 110580-110593.	4.2	4
52	Evaluation of Low Cost Piezoelectric Sensors for the Identification of Partial Discharges Evolution. Proceedings (mdpi), 2018, 4, .	0.2	4
53	Inference of X-Ray Emission From a Plasma Focus Discharge: Comparison Between Characteristic Parameters and Neural Network Analyses. IEEE Access, 2020, 8, 79273-79286.	4.2	4
54	Life Cycle Assessment of a Rotationally Asymmetrical Compound Parabolic Concentrator (RACPC). Sustainability, 2020, 12, 4750.	3.2	4

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55	Application of the Gaussian Mixture Model to Classify Stages of Electrical Tree Growth in Epoxy Resin. Sensors, 2021, 21, 2562.	3.8	4
56	Paving towards Strategic Investment Decision: A SWOT Analysis of Renewable Energy in Bangladesh. Sustainability, 2020, 12, 10674.	3.2	4
57	Oscillating Water Column Geometrical Factors and System Performance: A Review. IEEE Access, 2022, 10, 32104-32122.	4.2	4
58	Electrical Tree Growth Under Very Low Frequency (VLF) Voltage Excitation. , 2018, , .		3
59	A New Acoustic-Based Approach for Assessing Induced Adulteration in Bovine Milk. Sensors, 2021, 21, 2101.	3.8	3
60	Partial Discharge Detection of Transformer Bushing Based on Acoustic Emission and Current Analysis. , 2021, , .		3
61	A new monitoring and characterization system of partial discharges based on the analysis of the spectral power. Ingenieria E Investigacion, 2015, 35, 13-20.	0.4	2
62	Annual Prediction Output of an RADTIRC-PV Module. Energies, 2018, 11, 544.	3.1	2
63	Analysis of Piezoelectric Sensors in Adulteration of Bovine Milk Using the Chromatic Technique. Proceedings (mdpi), 2019, 4, 38.	0.2	2
64	Thunderstorm days over Chilean territory based on WWLLN data. , 2019, , .		2
65	Assessment of the RACPC Performance under Diffuse Radiation for Use in BIPV System. Applied Sciences (Switzerland), 2020, 10, 3552.	2.5	2
66	Lightning Activity Over Chilean Territory. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034580.	3.3	2
67	Development of an Electrical Energy Consumption Model for Malaysian Households, Based on Techno-Socioeconomic Determinant Factors. Sustainability, 2021, 13, 13258.	3.2	2
68	Electrical tree growth under harmonic frequencies characterized by partial discharges waveforms. , 2020, , .		2
69	Renewable Energy Performance of the Green Buildings: Key-Enabler on Useful Consumption Yield. IEEE Access, 2020, 8, 95747-95767.	4.2	1
70	Mathematical Modelling of a Static Concentrating Photovoltaic: Simulation and Experimental Validation. Applied Sciences (Switzerland), 2021, 11, 3894.	2.5	1
71	A CFD Analysis for Novel Close-Ended Deflector for Vertical Water Turbines. Sustainability, 2022, 14, 2790.	3.2	1
72	Embodied Energy and Cost Assessments of a Concentrating Photovoltaic Module. Sustainability, 2021, 13, 13916.	3.2	1

#	ARTICLE	IF	CITATIONS
73	Simulating the Annual Energy Yield of a Rotationally Asymmetrical Optical Concentrator. , 2018, , .		0
74	Simulation of Reverse Electrical Trees using Cellular Automata. , 2019, , .		0
75	Static concentrating photovoltaic modelling using MATLAB. Journal of Physics: Conference Series, 2021, 2053, 012003.	0.4	0
76	On the Use of UHF Sensors in the Detection and Characterization of Pulsed Plasma Discharges. Lecture Notes in Electrical Engineering, 2020, , 1367-1376.	0.4	0
77	A Study of Zero Bid Wind Farm for Future Scotlandâ€™s Energy Demandsâ€™A New Approach. Applied Sciences (Switzerland), 2022, 12, 3326.	2.5	0
78	Partial discharges in electrical trees grown at 0.1 (VLF) and 50 Hz analyzed using PRPD and NLTA. , 2021, , .		0