M Talaat

List of Publications by Year
in descending order

50 papers	890 citations	567281 15 h-index	501196 28 g-index
51 all docs	51 docs citations	51 times ranked	721 citing authors

#	Article	IF	Citations
1	Renewable power integration: Experimental and simulation study to investigate the ability of integrating wave, solar and wind energies. Energy, 2019, 170, 668-682.	8.8	116
2	A hybrid model of an artificial neural network with thermodynamic model for system diagnosis of electrical power plant gas turbine. Engineering Applications of Artificial Intelligence, 2018, 68, 222-235.	8.1	78
3	Load forecasting based on grasshopper optimization and a multilayer feed-forward neural network using regressive approach. Energy, 2020, 196, 117087.	8.8	78
4	Hybrid-cloud-based data processing for power system monitoring in smart grids. Sustainable Cities and Society, 2020, 55, 102049.	10.4	76
5	A smart load management system based on the grasshopper optimization algorithm using the under-frequency load shedding approach. Energy, 2020, 190, 116423.	8.8	42
6	Electric field simulation for uniform and FGM cone type spacer with adhering spherical conducting particle in GIS. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 339-351.	2.9	39
7	Integrated MFFNN-MVO approach for PV solar power forecasting considering thermal effects and environmental conditions. International Journal of Electrical Power and Energy Systems, 2022, 135, 107570.	5.5	34
8	Operating reserve investigation for the integration of wave, solar and wind energies. Energy, 2020, 197, 117207.	8.8	33
9	A numerical model of electrical tree growth in solid insulation. IEEE Transactions on Dielectrics and Electrical Insulation, 2009, 16, 1724-1734.	2.9	29
10	Integration of fuel cells into an off-grid hybrid system using wave and solar energy. International Journal of Electrical Power and Energy Systems, 2021, 130, 106939.	5.5	24
11	Developed optimization technique used for the distribution of U-shaped permittivity for cone type spacer in GIS. Electric Power Systems Research, 2018, 163, 754-766.	3.6	22
12	Enhancing the photovoltaic system efficiency using porous metallic media integrated with phase change material. Energy, 2021, 225, 120299.	8.8	22
13	Electrical Characteristics of Nonthermal Gliding Arc Discharge Reactor in Argon and Nitrogen Gases. IEEE Transactions on Plasma Science, 2016, 44, 1155-1159.	1.3	18
14	Moth-Flame Algorithm for Accurate Simulation of a Non-Uniform Electric Field in the Presence of Dielectric Barrier. IEEE Access, 2019, 7, 3836-3847.	4.2	17
15	A new approach for integrating wave energy to the grid by an efficient control system for maximum power based on different optimization techniques. International Journal of Electrical Power and Energy Systems, 2021, 128, 106800.	5.5	16
16	Calculation of electrostatically induced field in humans subjected to high voltage transmission lines. Electric Power Systems Research, 2014, 108, 124-133.	3.6	15
17	ANN for Assessment of Energy Consumption of 4 kW PV Modules over a Year Considering the Impacts of Temperature and Irradiance. Sustainability, 2019, 11, 6802.	3.2	15
18	Advanced automation system for charging electric vehicles based on machine vision and finite element method. IET Electric Power Applications, 2020, 14, 2616-2623.	1.8	15

#	Article	IF	Citations
19	Short-Term Load Forecasting Using Curve Fitting Prediction Optimized by Genetic Algorithms. International Journal of Energy and Engineering, 2012, 2, 23-28.	2.0	15
20	A numerical model of streamlines in coplanar electrodes induced by non-uniform electric field. Journal of Electrostatics, 2013, 71, 312-318.	1.9	14
21	Electrostatic field calculation in air gaps with a transverse layer of dielectric barrier. Journal of Electrostatics, 2014, 72, 422-427.	1.9	13
22	Assessment of earthing system location for wind turbines using finite element method. Renewable Energy, 2016, 93, 412-423.	8.9	13
23	FPGA control system technology for integrating the PV/wave/FC hybrid system using ANN optimized by MFO techniques. Sustainable Cities and Society, 2022, 80, 103825.	10.4	13
24	Positive streamer in gases: Physical approach from low to high energies. Vacuum, 2018, 156, 469-474.	3.5	11
25	Numerical investigation of the optimal characteristics of a transverse layer of dielectric barrier in a non-uniform electric field. Journal of Physics and Chemistry of Solids, 2018, 121, 27-35.	4.0	11
26	Numerical and simulation model of the streamer inception at atmospheric pressure under the effect of a non-uniform electric field. Vacuum, 2019, 160, 197-204.	3.5	10
27	An economic study concerning the cost reduction of the covered transmission conductors based on different optimization techniques. Results in Engineering, 2021, 11, 100262.	5.1	10
28	A Simulation Model for Electrical Tree in Solid Insulation Using CSM Coupled with GAs. , 2008, , .		9
29	Digital image processing for physical basis analysis of electrical failure forecasting in XLPE power cables based on field simulation using finite-element method. IET Generation, Transmission and Distribution, 2020, 14, 6703-6714.	2.5	9
30	Types of electrical trees in solid insulation under electrical and mechanical energy basis. , 2008, , .		8
31	Use of finite element method for the numerical analysis of eddy current brake. , 2014, , .		8
32	Water trees in polyethylene insulated power cables: Approach to water trees initiation mechanism. Electric Power Systems Research, 2020, 180, 106158.	3.6	8
33	Experimental and Simulation Study of Wireless Power Transfer Using Resonators With Coupled Electric Fields. IEEE Transactions on Plasma Science, 2018, 46, 2480-2487.	1.3	6
34	The Characteristics of Dielectric Barrier Discharge Plasma Under the Effect of Parallel Magnetic Field. IEEE Transactions on Plasma Science, 2020, 48, 1022-1029.	1.3	6
35	Simulation of the electric field and the GPR resulting from vertical-driven rods earthing system in a multi-layers earth structure. Measurement: Journal of the International Measurement Confederation, 2019, 132, 387-401.	5.0	5
36	Influence of transverse electric fields on electrical tree initiation in solid insulation. , 2010, , .		4

#	Article	IF	Citations
37	Investigation of transparent pyramidal covers effect to PV power output using detected wireless sensors incident radiation. Measurement: Journal of the International Measurement Confederation, 2019, 136, 775-785.	5.0	4
38	Studying The Effect of The Dielectric Barrier Discharge Non- thermal Plasma on Colon Cancer Cell line. International Journal of Thin Film Science and Technology, 2021, 10, 161-168.	0.6	4
39	Efficiency of different optimisation approaches for optimal parameters of the CSM for investigating the onset field due to corona point. IET Generation, Transmission and Distribution, 2020, 14, 1751-1761.	2.5	4
40	PV solar power forecasting based on hybrid MFFNN-ALO. , 2022, , .		4
41	Charge simulation modeling for calculation of electrically induced human body currents. , 2010, , .		3
42	Field reduction simulation based on covered conductors design in medium voltage lines. Results in Engineering, 2021, 10, 100217.	5.1	3
43	A numerical model of investigating the electric field in dielectric liquid. , 2010, , .		2
44	Analysis of Air Bubble Deformation Subjected to Uniform Electric Field in Liquid Dielectric. International Journal of Electromagnetics and Applications, 2012, 2, 4-10.	0.1	2
45	Calculation of electric and magnetic induced fields in humans subjected to electric power lines. Journal of Electrostatics, 2014, 72, 387-395.	1.9	1
46	Experimental and Simulation Study Investigating the Effect of a Transparent Pyramidal Cover on PV Cell Performance. Sustainability, 2022, 14, 2599.	3.2	1
47	Streamer in air: Broadening and branching. , 2017, , .		0
48	New approach to breakdown equation in gases based on energy concept from inception stage to arc condition. Vacuum, 2021, 194, 110614.	3.5	0
49	Software for Calculating the Non-Uniform Electric Field Causing Electrical Tree in Underground Cables. International Journal of Electromagnetics and Applications, 2012, 2, 69-72.	0.1	0
50	Effect of electrohydrodynamic stresses in dielectric liquid: simulation study with the aid of single artificial air bubble using level set€volume of fluid method. IET Generation, Transmission and Distribution, 2019, 13, 4694-4701.	2.5	0