Mahmoud A Alahmad

List of Publications by Year
in descending order

83 papers	1,086 citations	759055 12 h-index	552653 26 g-index
83 all docs	83 docs citations	83 times ranked	1143 citing authors

#	Article	IF	Citations
1	Understanding the Correlation of Demographic Features with BEV Uptake at the Local Level in the United States. Sustainability, 2022, 14, 5016.	1.6	1
2	A Framework for Scheduling Household Charging of Electric Vehicles. , 2022, , .		3
3	Framework to Develop Time- and Voltage-Dependent Building Load Profiles Using Polynomial Load Models. IEEE Access, 2021, 9, 128328-128344.	2.6	3
4	A Case Study to Quantify Variability in Building Load Profiles. IEEE Access, 2021, 9, 127799-127813.	2.6	5
5	Analysis of PEV User Charging Behavior at Household Charging Stations, Omaha Case Study. , 2021, , .		2
6	PEVs Idle Time Prediction at Public Charging Stations Using Machine-Learning Methods. , 2021, , .		0
7	Correlation study between features of a geographic location and Electric Vehicle Uptake. , 2021, , .		1
8	A load-disaggregation framework to sense personalized energy-use information in commercial buildings. Energy and Buildings, 2020, 207, 109633.	3.1	9
9	Analysis of Energy Consumption at Public Charging Stations, a Nebraska Case Study. , 2020, , .		8
10	Data-Driven Charging Demand Prediction at Public Charging Stations Using Supervised Machine Learning Regression Methods. Energies, 2020, 13, 4231.	1.6	94
11	Framework for Extracting and Characterizing Load Profile Variability Based on a Comparative Study of Different Wavelet Functions. IEEE Access, 2020, 8, 217483-217498.	2.6	5
12	Energy Optimization Technologies in Smart Homes. , 2020, , .		2
13	Analysis of User Charging Behavior at Public Charging Stations. , 2019, , .		13
14	Novel Frequency Offset Estimation Scheme for Reliable Wireless Communication using Modified K-Means Clustering. , 2019, , .		0
15	Harmonic Elimination Technique in Three-Phase Five-Level Cascade H-Bridge Multilevel Inverters from Three-Phase Perspective. , 2019, , .		0
16	Harvesting from Ambient Energy: Designing Enabling Technologies for Sustainable Buildings. , 2019, , .		3
17	Real-time remote energy consumption location for power management application. Advances in Building Energy Research, 2019, , 1-21.	1.1	3
18	Ruler-Search Technique (RST) Algorithm to Locate Charging Infrastructure on a Particular Interstate or US-Highway. , 2018, , .		5

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19	An Overview of Technologies for Lower Energy Consumption in Smart Buildings. , 2018, , .		4
20	Indices to Determine the Environmental and Economic Impact of Using an Electric Vehicle over Gasoline or Hybrid Vehicles on a Regional Basis. , 2018, , .		7
21	Real Time Power Monitoring Detection Based on Sequence Time Domain Reflectometry Approach. Journal of Computer and Communications, 2018, 06, 92-103.	0.6	10
22	Online scheduling scheme for smart electric vehicle charging infrastructure. , 2017, , .		8
23	Characterization of a search algorithm to determine number of electric vehicle charging stations between two points on an Interstate or US-Highway. , 2017, , .		7
24	Analysis of batteries in the built environment an overview on types and applications. , 2017, , .		14
25	Novel adaptive battery system for integration with multi-level inverters. , 2017, , .		0
26	Determining optimal locations of electrified transportation infrastructure on interstate/ us-highways. , 2017, , .		5
27	Case studies validating algorithm to determine the number of charging station placed in an Interstate and US-Highway. , 2017, , .		5
28	Packet error rate analysis in IoT for industrial air conditioning system. , 2017, , .		6
29	Cognitive Radio for Smart Grid with Security Considerations. Computers, 2016, 5, 7.	2.1	15
30	Overview of ICT in the advancement of electric vehicle penetration: Overview of vehicle grid communication system and charging infrastructure and a case study of economic and environmental benefits of electric vehicles in Nebraska. , 2016, , .		4
31	New six level inverter topology. , 2016, , .		0
32	The IOT mediated built environment: A brief survey. , 2016, , .		14
33	Energy harvesting for wireless sensor networks: applications and challenges in smart grid. International Journal of Sensor Networks, 2016, 21, 226.	0.2	17
34	Modeling and simulation of adaptive batteries storage system. , 2016, , .		1
35	A survey of adaptive systems supporting green energy in the built environment. , 2015, , .		4
36	A Review of Approaches for Sensing, Understanding, and Improving Occupancy-Related Energy-Use Behaviors in Commercial Buildings. Energies, 2015, 8, 10996-11029.	1.6	66

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37	An Adaptive Photovoltaic Topology to Overcome Shading Effect in PV Systems. International Journal of Photoenergy, 2015, 2015, 1-9.	1.4	10
38	Novel multilevel inverter topology design for adaptive dynamic systems. , 2015, , .		4
39	Understanding the factors that affect female enrollment and retention in collegiate STEM programs. , 2015, , .		0
40	Advancing electric vehicle penetration. , 2015, , .		3
41	A novel twelve level inverter topology for adaptive input sources. , 2015, , .		0
42	Resiliency of Smart Power Meters to Common Security Attacks. Procedia Computer Science, 2015, 52, 145-152.	1.2	25
43	Development of Non-Intrusive Occupant Load Monitoring (NIOLM) in Commercial Buildings: Assessing Occupantsâ€™ Energy-Use Behavior at Entry and Departure Events. , 2015, , .		8
44	Challenges in load profile monitoring: Case study. , 2015, , .		1
45	Energy efficient building automation: A survey paper on approaches and technologies for optimized building operation. , 2014, , .		9
46	Energy node locator — A pathway to track energy at the point of use, remotely, in buildings. , 2014, , .		2
47	Electrical Distribution Systems for Commercial Reference Building Models. Journal of Architectural Engineering, 2014, 20, 04013005.	0.8	4
48	On the Discourse of Energy as Material: Future Feedback Technologies and Directions for Experiencing Energy. IEEE Transactions on Industrial Informatics, 2014, 10, 742-751.	7.2	12
49	Information technology and the smart grid - A pathway to conserve energy in buildings. , 2013, , .		2
50	Conserving energy in UAE buildings: Demand side management and methods for experiencing energy. , 2013, , .		0
51	Exploring the factors that motivate female students to enroll and persist in a collegiate STEM degree program. , 2013, , .		10
52	Modeling packet rate covert timing channels. , 2013, , .		5
53	Dynamic reconfigurable multi-cell battery: A novel approach to improve battery performance. , 2012, , .		17
54	Estimation of induction motor equivalent circuit parameters from nameplate data. , 2012, , .		33

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55	Reevaluation of induction motor loss models for conventional and harmonic power flow. , 2012, , .		4
56	An adaptive utility interactive photovoltaic system based on a flexible switch matrix to optimize performance in real-time. Solar Energy, 2012, 86, 951-963.	2.9	85
57	A Comparative Study of Three Feedback Devices for Residential Real-Time Energy Monitoring. IEEE Transactions on Industrial Electronics, 2012, 59, 2002-2013.	5.2	90
58	Addressable and energy management system for the built environment (I). , 2011, , .		3
59	Green and Sustainable Technologies for the Built Environment. , 2011, , .		2
60	An Adaptive photovoltaic-inverter topology. , 2011, , .		3
61	Combinatorics & power consumption. , 2011, , .		0
62	Non-intrusive electrical load monitoring and profiling methods for applications in energy management systems. , 2011, , .		4
63	Economic Input-Output Life Cycle Assessment of Water Reuse Strategies in Residential Buildings. , 2011, , .		3
64	Integrating physical and virtual environments to conserve energy in buildings. Energy and Buildings, 2011, 43, 3710-3717.	3.1	17
65	Optimization of energy storage systems in HEV's. , 2011, , .		0
66	The “BIM's 4D+” dimension: Real time energy monitoring. , 2011, , .		5
67	A novel Photovoltaic/Battery Structure for Solar Electrical Vehicles [PVBS for SEV]. , 2011, , .		2
68	Integrating Sustainable Design into Architectural Engineering Education: UNL-AE Program. Journal of Architectural Engineering, 2011, 17, 75-81.	0.8	6
69	Microwave silicon on insulator-based design of a power management system for Jet Propulsion Laboratory's rechargeable micro-scale batteries. IET Circuits, Devices and Systems, 2010, 4, 261.	0.9	3
70	Learning Applications in the Architectural Engineering Educational Setting. Journal of Architectural Engineering, 2010, 16, 126-135.	0.8	2
71	Modeling Discharge Behavior of Multicell Battery. IEEE Transactions on Energy Conversion, 2010, 25, 1133-1141.	3.7	122
72	Adaptive photovoltaic system. , 2010, , .		29

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73	Real Time Power Monitoring & integration with BIM. , 2010, , .		8
74	An enhanced circuit-based model for single-cell battery. , 2010, , .		59
75	An adaptive reconfigurable dc-dc converter for renewable energy applications. , 2009, , .		0
76	A Battery-Aware Deployment Scheme for Cooperative Wireless Sensor Networks. , 2009, , .		9
77	MOSFET charger controller circuit for on chip power cells in aeronautical applications. , 2009, , .		0
78	Battery switch array system with application for JPL's rechargeable micro-scale batteries. Journal of Power Sources, 2008, 177, 566-578.	4.0	36
79	Evaluation and Analysis of a New Solid-State Rechargeable Microscale Lithium Battery. IEEE Transactions on Industrial Electronics, 2008, 55, 3391-3401.	5.2	31
80	A Novel Design of Adaptive Reconfigurable Multicell Battery for Power-Aware Embedded Networked Sensing Systems. , 2007, , .		49
81	High impedance nano charger for on-chip 50nAH rated microbatteries. , 2006, , .		0
82	High Voltage MOSFET Gate/Bulk Driver Controller for a Microbattery Switch Matrix in a 0.35 Î¼ m Microwave SOI Technology. Analog Integrated Circuits and Signal Processing, 2005, 44, 203-211.	0.9	5
83	Switch array system for thin film lithium microbatteries. Journal of Power Sources, 2004, 136, 401-407.	4.0	20