

**IEEE Big Data 2023 Sorrento Italy**  
1st INTERNATIONAL WORKSHOP ON  
DATASPACEs FOR DIGITAL TWINS OF  
CITIES CRITICAL INFRASTRUCTURES  
Sorrento

November 22, 2023

Table 1: The list of the extracted articles

#	Title	Key
1	Co-creation of local eco-rehabilitation strategies for energy improvement of historic urban areas	[1]
2	Circular bio-economy via energy transition supported by Fuzzy Cognitive Map modeling towards sustainable low-carbon environment	[2]
3	Artificial intelligence and climate change	[3]
4	Sustainability outcomes of green processes in relation to Industry 4.0 in manufacturing: Systematic review	[4]
5	Municipal transitions: The social, energy, and spatial dynamics of sociotechnical change in South Tyrol, Italy	[5]
6	Transaction cost analysis of digital innovation governance in the UK energy market	[6]
7	Modeling wind power investments, policies and social benefits for deregulated electricity market – A review	[7]
8	Energy models for demand forecasting—A review	[8]
9	A case study of operation optimization on A renewable energy building by E-CPS method: From both sides of supply and demand	[9]
10	Review of applications of fuzzy logic in multi-agent-based control system of AC-DC hybrid microgrid	[10]
11	Multi-agent systems in ICT enabled smart grid: A status update on technology framework and applications	[11]
12	Improving load forecasting process for a power distribution network using hybrid AI and deep learning algorithms	[12]
13	Data-driven understanding of smart service systems through text mining	[13]

Table 1: The list of the extracted articles (continued)

#	Title	Key
14	The application of cyber physical system for thermal power plants: Data-driven modeling	[14]
15	Energy management systems with intelligent anomaly detection and prediction	[15]
16	The research on multi-agent system for microgrid control and optimization	[16]
17	A review on artificial intelligence based load demand forecasting techniques for smart grid and buildings	[17]
18	Optimal bidding strategy of a virtual power plant in day-ahead energy and frequency regulation markets: A deep learning-based approach	[18]
19	Artificial intelligence in sustainable energy industry: Status Quo, challenges and opportunities	[19]
20	Artificial intelligence evolution in smart buildings for energy efficiency	[20]
21	Artificial intelligence for operation and control: The case of microgrids	[21]
22	Learning adaptive fuzzy droop of PV contribution to frequency excursion of hybrid micro-grid during parameters uncertainties	[22]
23	A novel islanding detection technique for a resilient photovoltaic-based distributed power generation system using a tunable-Q wavelet transform and an artificial neural network	[23]
24	A microgrid energy management system based on chance-constrained stochastic optimization and big data analytics	[24]
25	A review of machine learning for new generation smart dispatch in power systems	[25]
26	A review of machine learning approaches to power system security and stability	[26]
27	State of the art in big data applications in microgrid: A review	[27]
28	Exploiting scalable machine-learning distributed frameworks to forecast power consumption of buildings	[28]
29	Forecasting China's renewable energy terminal power consumption based on empirical mode decomposition and an improved extreme learning machine optimized by a bacterial foraging algorithm	[29]
30	Tensor-based big data management scheme for dimensionality reduction problem in smart grid systems: SDN perspective	[30]
31	Dynamic, self-organized clusters as a means to supply and demand matching in large-scale energy systems	[31]
32	Multi-agent systems applied for energy systems integration: State-of-the-art applications and trends in microgrids	[32]
33	Towards next-generation energy planning decision-making: An expert-based framework for intelligent decision support	[33]
34	Big data driven smart energy management: From big data to big insights	[34]
35	IEC 61850 based substation automation system: A survey	[35]

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#	Title	Key
36	A practical distributed finite-time control scheme for power system transient stability	[36]
37	A survey on the detection algorithms for false data injection attacks in smart grids	[37]
38	Cyber Physical Security Analytics for Transactive Energy Systems	[38]
39	Communication-failure-resilient distributed frequency control in smart grids: Part I: Architecture and distributed algorithms	[39]
40	Attributes of big data analytics for data-driven decision making in cyber-physical power systems	[40]
41	Real time security assessment of the power system using a hybrid Support Vector Machine and Multilayer Perceptron Neural Network algorithms	[41]
42	A Tri-modular human-on-the-loop framework for intelligent smart grid cyber-attack visualization	[42]
43	Synthesis of an intelligent rural village microgrid control strategy based on smartgrid multi-agent modelling and transactive energy management principles	[43]
44	Contextual anomaly detection for cyber-physical security in Smart Grids based on an artificial neural network model	[44]
45	Smart agents in industrial cyber-physical systems	[45]
46	Sustainable advanced distribution management system design considering differential pricing schemes and carbon emissions	[46]
47	Neuro-fuzzy-based model predictive energy management for grid connected microgrids	[47]
48	Distributed generation with photovoltaic power prediction in remote microgrid application	[48]
49	Application of multi agent systems in automation of distributed energy management in micro-grid using MACSimJX	[49]
50	Forecasting energy demand, wind generation and carbon dioxide emissions in Ireland using evolutionary neural networks	[50]
51	Future challenges and mitigation methods for high photovoltaic penetration: A survey	[51]
52	Towards an Adaptive Multi-Power-Source Datacenter	[52]
53	Artificial intelligence techniques for stability analysis and control in smart grids: Methodologies, applications, challenges and future directions	[53]
54	Bidirectional control of electric vehicles based on artificial neural network considering owners convenience and microgrid stability	[54]
55	Adapting big data standards, maturity models to smart grid distributed generation: critical review	[55]
56	Multi-agent system for microgrids: design, optimization, and performance	[56]

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#	Title	Key
57	Optimal day-ahead self-scheduling and operation of prosumer micro-grids using hybrid machine learning-based weather and load forecasting	[57]
58	Artificial intelligence for the smart renewable energy sector in Europe—smart energy infrastructures for next-generation smart cities	[58]
59	A qualitative study on the United States internet of energy: A step towards computational sustainability	[59]
60	Agent-based restoration approach for reliability with load balancing on smart grids	[60]
61	NILM techniques for intelligent home energy management and Ambient Assisted Living: A review	[61]
62	Multi-agent systems for resource allocation and scheduling in a smart grid	[62]
63	Demand and energy management in smart grid: Techniques and implementation	[63]
64	Multi-agent systems for reactive power control in smart grids	[64]
65	Swarm intelligence for frequency management in smart grids	[65]
28	A micro-grid distributed intelligent control and management system	[66]
66	Models for the modern power grid	[67]
67	Increasing resiliency against information vulnerability of renewable resources in the operation of smart multi-area microgrid	[68]
68	Using recurrent neural networks for localized weather prediction with the combined use of public airport data and on-site measurements	[69]
69	A distributed average-based enhanced resilient control for sustainable energy DC microgrids	[70]
70	A review of machine learning applications in power system resilience	[71]
71	Improving primary frequency response in networked microgrid operations using multilayer perceptron-driven reinforcement learning	[72]
72	Distributed control of heterogeneous energy storage systems in islanded microgrids: Finite-time approach and cyber-physical implementation	[73]
73	Testing and verification of neural-network-based safety-critical control software: A systematic literature review	[74]
74	Research on key technologies in resilient power grid	[75]
75	The impact of intelligent cyber-physical systems on the decarbonization of energy	[76]
76	Evaluation of sequence-learning models for large-commercial-building load forecasting	[77]
77	A hybrid approach for short-term PV power forecasting in predictive control applications	[78]
78	Optimal sizing of battery energy storage for a grid-connected microgrid subjected to wind uncertainties	[79]
79	Joint manufacturing and onsite microgrid system control using Markov decision process and neural network integrated reinforcement learning	[80]

Table 1: The list of the extracted articles (continued)

#	Title	Key
80	An open source modeling framework for interdependent energy-transportation-communication infrastructure in smart and connected communities	[81]
81	Past infrastructures and future machine intelligence (MI) for biofuel production: A review and MI-based framework	[82]
82	Towards the next generation of smart grids: Semantic and holonic multi-agent management of distributed energy resources	[83]
83	Scalable machine learning-based intrusion detection system for IoT-enabled smart cities	[84]
84	Day-ahead optimization of prosumer considering battery depreciation and weather prediction for renewable energy sources	[85]
85	Multi-agent approach to modeling and simulation of microgrid operation with vehicle-to-grid system	[86]
86	Review of internet of things (IoT) in electric power and energy systems	[87]
87	Computational intelligence in wave energy: Comprehensive review and case study	[88]
88	Adaptive energy consumption optimization using IoT-based wireless sensor networks and structural health monitoring systems	[89]
89	Resilience of Cyber-Physical Systems: Role of AI, Digital Twins, and Edge Computing	[90]
90	Recent advances on data-driven services for smart energy systems optimization and pro-active management	[91]
91	A Cyber-Secure generalized supermodel for wind power forecasting based on deep federated learning and image processing	[92]
92	Artificial intelligence in renewable systems for transformation towards intelligent buildings	[93]
93	A Fairer Renewable Energy Policy for Aged Care Communities: Data Driven Insights across Climate Zones	[94]
94	An Accurate False Data Injection Attack (FDIA) Detection in Renewable-Rich Power Grids	[95]
95	Optimisation of thermal energy storage systems incorporated with phase change materials for sustainable energy supply: A systematic review	[96]
96	On Machine Learning-Based Techniques for Future Sustainable and Resilient Energy Systems	[97]
97	A Novel Decentralized Coordination Control Scheme for the Complex Transactive Energy Prosumers	[98]
98	A Review of Microgrid Energy Management Strategies from the Energy Trilemma Perspective	[99]
99	A Survey on Information Communication Technologies in Modern Demand-Side Management for Smart Grids: Challenges, Solutions, and Opportunities	[100]

Table 1: The list of the extracted articles (continued)

#	Title	Key
100	Artificial intelligence based prognostic maintenance of renewable energy systems: A review of techniques, challenges, and future research directions	[101]
101	Life cycle thinking and machine learning for urban metabolism assessment and prediction	[102]
102	Design and planning of flexible mobile Micro-Grids using Deep Reinforcement Learning	[103]

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