

Techno-economic valuation and optimization of integrated conversion system

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Photovoltaics literature survey (No. 90). Progress in Photovoltaics: Research and Applications, 2011, 19, 996-998.	4.4	0
2	A New Type of Movable Wind-Solar Mutually Complementary Electricity-Generating System. Advanced Materials Research, 0, 512-515, 225-229.	0.3	0
3	Feasibility study of hybrid Diesel-PV power plants in the southern of Algeria: Case study on AFRA power plant. International Journal of Electrical Power and Energy Systems, 2012, 43, 546-553.	3.3	47
5	Renewable energy based power generation for stand-alone applications: A review. , 2013, , .		19
6	Optimal design of hybrid renewable energy systems (HRES) using hydrogen storage technology for data center applications. Renewable Energy, 2013, 52, 79-87.	4.3	59
7	Evaluation of optimal photovoltaic hybrid systems for remote villages in Far North Cameroon. Renewable Energy, 2013, 51, 482-488.	4.3	19
8	Impact of load expansion to the renewable energy system performance. , 2013, , .		0
9	Multi objective design of stand-alone PV/wind energy system by using hybrid GA and PSO. , 2014, , .		6
10	HOMER analysis for integrating wind energy into the grid in southern of Algeria. , 2014, , .		2
11	Techno-economic optimization of hybrid photovoltaic/wind/diesel/battery generation in a stand-alone power system. Solar Energy, 2014, 103, 171-182.	2.9	249
12	Techno-economic optimization of hybrid power system using genetic algorithm. International Journal of Energy Research, 2014, 38, 1608-1623.	2.2	45
13	Guide blades™ feasibility evaluation and its contribution to performance of a micro-wind turbine resembling lotus in shape. Energy and Buildings, 2014, 82, 709-718.	3.1	2
14	Contribution to the optimization of the electrical energy production from a Hybrid Renewable Energy system. , 2014, , .		14
15	A mathematical technique for hybrid power system design with energy loss considerations. Energy Conversion and Management, 2014, 82, 301-307.	4.4	34
16	Case analysis of utilizing alternative energy sources and technologies for the single family detached house. Solar Energy, 2014, 105, 243-263.	2.9	23
17	Technical and economic design of photovoltaic and battery energy storage system. Energy Conversion and Management, 2014, 86, 81-92.	4.4	227
18	Optimization of micro-grid system using MOPSO. Renewable Energy, 2014, 71, 295-306.	4.3	323
19	Techno-economic analysis and performance assessment of standalone photovoltaic/wind/hybrid power system in Lakshadweep islands of India. Journal of Renewable and Sustainable Energy, 2015, 7, .	0.8	25

#	ARTICLE	IF	CITATIONS
20	A Review of Hybrid Solar PV and Wind Energy System. Smart Science, 2015, 3, 127-138.	1.9	131
21	Grid-independent renewable energy solutions for residential use: The case of an off-grid house in wellington, New Zealand. , 2015, , .		7
22	Power management of a photovoltaic/battery pumping system in agricultural experiment station. Solar Energy, 2015, 112, 319-338.	2.9	77
23	A multi-objective approach to integrate solar and wind energy sources with electrical distribution network. Solar Energy, 2015, 112, 397-410.	2.9	28
24	Performance improvement mechanisms of P3HT:PCBM inverted polymer solar cells using extra PCBM and extra P3HT interfacial layers. Organic Electronics, 2015, 21, 126-131.	1.4	26
25	Development and analysis of a solar and wind energy based multigeneration system. Solar Energy, 2015, 122, 1279-1295.	2.9	97
26	Economic and environmental bi-objective design of an off-grid photovoltaicâ€“batteryâ€“diesel generator hybrid energy system. Energy Conversion and Management, 2015, 106, 1024-1038.	4.4	74
27	Optimal mix of solar and wind distributed generations considering performance improvement of electrical distribution network. Renewable Energy, 2015, 75, 173-186.	4.3	179
28	Feasibility study of a hybrid plants (photovoltaicâ€“LPG generator) system for rural electrification. Renewable Energy and Environmental Sustainability, 2016, 1, 15.	0.7	0
29	Techno-economic evaluation of different hybrid photovoltaic/diesel pumping systems with water tank storage. , 2016, , .		2
30	Fuzzy Logic Management Supervisor for Wind-Diesel-Battery Hybrid energy System. , 2016, , .		5
31	A novel strategy for determination of optimal sizing of PV-wind hybrid system. , 2016, , .		1
32	On Defining and Assessing of the Energy Balance and Operational Logic Within Hybrid Renewable Energy Systems. Communications in Computer and Information Science, 2016, , 151-160.	0.4	6
33	Comprehensive techno-economic and environmental impact study of a localised photovoltaic power system (PPS) for off-grid communities. Energy Conversion and Management, 2016, 124, 266-279.	4.4	45
34	An open-source optimization tool for solar home systems: A case study in Namibia. Energy Conversion and Management, 2016, 130, 106-118.	4.4	21
35	Improving the reliability of photovoltaic-based hybrid power system with battery storage in low wind locations. Sustainable Energy Technologies and Assessments, 2017, 19, 146-159.	1.7	32
36	Hybrid diesel-wind system with battery storage operating in standalone mode: Control and energy management â€“ Experimental investigation. Energy, 2017, 130, 38-47.	4.5	12
37	Optimal sizing of standalone PV/Wind/Biomass hybrid energy system using GA and PSO optimization technique. Energy Procedia, 2017, 117, 690-698.	1.8	95

#	ARTICLE	IF	CITATIONS
38	Techno-economic design and performance analysis of nanogrid systems for households in energy-poor villages. <i>Sustainable Cities and Society</i> , 2017, 34, 335-357.	5.1	69
39	Optimization of a residential district with special consideration on energy and water reliability. <i>Applied Energy</i> , 2017, 194, 751-764.	5.1	26
40	Supplying the load by the optimization of a stand-alone hybrid power system using firefly algorithm considering reliability indices. , 2017, , .		1
41	Statistical analysis of the electric energy production from photovoltaic conversion using mobile and fixed constructions. <i>E3S Web of Conferences</i> , 2017, 19, 01002.	0.2	13
42	Minimisation of the LCOE for the hybrid power supply system with the lead-acid battery. <i>E3S Web of Conferences</i> , 2017, 19, 01030.	0.2	12
43	Renewable Energy Source based Hybrid Power Generation Scheme for Off-grid Rural Electrification. , 2017, , .		4
44	Sizing methodology for hybrid photovoltaic /wind/ hydrogen/battery integrated to energy management strategy for pumping system. <i>Energy</i> , 2018, 153, 743-762.	4.5	135
45	Performance investigation of an integrated wind energy system for co-generation of power and hydrogen. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 9153-9164.	3.8	100
46	Optimal sizing of PV/wind/diesel hybrid microgrid system using multi-objective self-adaptive differential evolution algorithm. <i>Renewable Energy</i> , 2018, 121, 400-411.	4.3	367
47	Implementation Methodology of Integrated Renewable Energy System Modeling for Off-grid Rural Electrification: A review. , 2018, , .		1
48	Techno-economic scrutiny of HRES through GA and PSO technique. <i>International Journal of Renewable Energy Technology</i> , 2018, 9, 84.	0.2	11
49	Optimal size of renewable hybrid system applying nature-inspired algorithms. , 2018, , .		3
50	Comprehensive Review on Appropriate Sizing and Optimization Technique of Hybrid PV-Wind System. , 2018, , .		9
51	A Hybrid PV-Biomass Generation Based Micro-Grid for the Irrigation System of a Major Land Reclamation Project in Kingdom of Saudi Arabia (KSA) - Case Study of Albaha Area. , 2018, , .		20
52	Optimisation of the Structure of a Wind Farm Kinetic Energy Storage for Improving the Reliability of Electricity Supplies. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1439.	1.3	10
53	A new model for optimization of hybrid microgrids using evolutionary algorithms. <i>IEEE Latin America Transactions</i> , 2018, 16, 799-805.	1.2	6
54	Wind turbine power output prediction model design based on artificial neural networks and climatic spatiotemporal data. , 2018, , .		21
55	Solar wind hybrid renewable energy system: current status of research on configurations, control, and sizing methodologies. , 2018, , 219-248.		15

#	ARTICLE	IF	CITATIONS
56	Strategy of management of storage systems integrated with photovoltaic systems for mitigating the impact on LV distribution network. International Journal of Electrical Power and Energy Systems, 2018, 103, 470-482.	3.3	20
57	Optimal design and development of PV-wind-battery based nano-grid system: A field-on-laboratory demonstration. Frontiers in Energy, 2019, 13, 269-283.	1.2	27
58	City-level analysis of subsidy-free solar photovoltaic electricity price, profits and grid parity in China. Nature Energy, 2019, 4, 709-717.	19.8	271
59	Techno-economic analysis of the lithium-ion and lead-acid battery in Photovoltaic pumping system. , 2019, , .		5
60	A reliability-constrained cost-effective model for optimal sizing of an autonomous hybrid solar/wind/diesel/battery energy system by a modified discrete bat search algorithm. Solar Energy, 2019, 189, 344-356.	2.9	47
61	A CRITIC-TOPSIS framework for hybrid renewable energy systems evaluation under techno-economic requirements. Journal of Project Management, 2019, , 109-126.	0.8	23
62	A new techno-economic analysis of fuel cell in Photovoltaic pumping system. , 2019, , .		0
63	Evaluation of Wind Resources Potential and Economic Analysis of Wind Power Generation in South Africa. International Journal of Engineering Research in Africa, 0, 44, 150-181.	0.7	17
64	Reduction of Power Production Costs in a Wind Power Plantâ€“Flywheel Energy Storage System Arrangement. Energies, 2019, 12, 1942.	1.6	13
65	Optimal incorporation of solar and wind DGs along with seasonal loads using teaching-learning based optimization. , 2019, , .		0
66	Optimal size of photovoltaic pumping system using natureâ€“inspired algorithms. International Transactions on Electrical Energy Systems, 2019, 29, e12045.	1.2	19
67	Optimal sizing of an autonomous photovoltaic/wind/battery/diesel generator microgrid using grasshopper optimization algorithm. Solar Energy, 2019, 188, 685-696.	2.9	283
68	Assessment of Decentralized Electricity Production from Hybrid Renewable Energy Sources for Sustainable Energy Development in Nigeria. Open Engineering, 2019, 9, 72-89.	0.7	17
69	Renewable hybrid system size optimization considering various electrochemical energy storage technologies. Energy Conversion and Management, 2019, 193, 162-175.	4.4	111
70	Fuzzy logic-based energy management system of stand-alone renewable energy system for a remote area power system. Australian Journal of Electrical and Electronics Engineering, 2019, 16, 21-32.	0.7	8
71	Optimal Sizing of hybrid grid-connected energy system with demand side scheduling. , 2019, , .		1
72	Design a Control Mechanism for the Power Management of a Standalone Renewable Energy System. , 2019, , .		0
73	Optimal Operation Management in A Micro-Grid System Using Particle Swarm Optimization. Journal of Physics: Conference Series, 2019, 1346, 012003.	0.3	0

#	ARTICLE	IF	CITATIONS
74	Optimal Sizing of Mobile Hybrid Off-Grid Multi-Sources Installation. , 2019, , .		1
75	A combined optimisation and decision-making approach for battery-supported HMGS. Journal of the Operational Research Society, 2020, 71, 762-774.	2.1	23
76	Optimal design of renewable integrated heat and electricity supply systems with genetic algorithm: household application in Iran. International Journal of Environmental Science and Technology, 2020, 17, 2185-2196.	1.8	6
77	A comparative evaluation of OTEC, solar and wind energy based systems for clean hydrogen production. Journal of Cleaner Production, 2020, 246, 118736.	4.6	62
78	Design and optimum energy management of a hybrid renewable energy system based on efficient various hydrogen production. International Journal of Hydrogen Energy, 2020, 45, 30113-30128.	3.8	71
79	Multiobjective Sizing of an Autonomous Hybrid Microgrid Using a Multimodal Delayed PSO Algorithm: A Case Study of a Fishing Village. Computational Intelligence and Neuroscience, 2020, 2020, 1-18.	1.1	15
80	Techno economic performance analysis of hybrid renewable electrification system for remote villages of India. International Transactions on Electrical Energy Systems, 2021, 31, e12515.	1.2	4
81	Optimization and energy management of distributed energy resources for a hybrid residential microgrid. Journal of Energy Storage, 2020, 30, 101556.	3.9	62
82	Techno-economic assessment for energy transition from diesel-based to hybrid energy system-based off-grids in Saudi Arabia. Energy Transitions, 2020, 4, 31-43.	3.6	16
83	Recent Approach Based Social Spider Optimizer for Optimal Sizing of Hybrid PV/Wind/Battery/Diesel Integrated Microgrid in Aljouf Region. IEEE Access, 2020, 8, 57630-57645.	2.6	99
84	Stand-Alone Hybrid Renewable Energy System: Optimization and Sensitivity Analysis. , 2020, , .		3
85	Performance analysis based on probabilistic modelling of Quaid-e-Azam Solar Park (QASP) Pakistan. Energy Strategy Reviews, 2020, 29, 100479.	3.3	15
86	Performance investigation of adding clean hydrogen to natural gas for better sustainability. Journal of Natural Gas Science and Engineering, 2020, 78, 103236.	2.1	22
87	Economic and performance investigation of hybrid PV/wind/battery energy system for isolated Andaman and Nicobar islands, India. International Journal of Ambient Energy, 2021, 42, 46-64.	1.4	10
88	Optimal sizing of autonomous hybrid energy system using supply&demand&Cbased optimization algorithm. International Journal of Energy Research, 2021, 45, 605-625.	2.2	43
89	Design and Implementation of Trainer Kit for Hybrid On-Grid Solar Power Generation System. Journal of Physics: Conference Series, 2021, 1737, 012002.	0.3	4
90	Multi-Objective Optimization of a Hybrid Nanogrid/Microgrid: Application to Desert Camps in Hafr Al-Batin. Energies, 2021, 14, 1245.	1.6	9
91	A literature review and statistical analysis of photovoltaic-wind hybrid renewable system research by considering the most relevant 550 articles: An upgradable matrix literature database. Journal of Cleaner Production, 2021, 295, 126070.	4.6	99

#	ARTICLE	IF	CITATIONS
92	A novel optimization framework for integrated local energy system multi-objective dispatch problem based on dynamic knowledge base. International Journal of Electrical Power and Energy Systems, 2021, 128, 106736.	3.3	3
93	Optimal Sizing of Hybrid Micro Grid System Using PSO Technique for Rural Electrification. , 2021, , .		0
94	Optimal sizing of hybrid photovoltaic/diesel/battery nanogrid using a parallel multiobjective PSO-based approach: Application to desert camping in Hafr Al-Batin city in Saudi Arabia. Energy Reports, 2021, 7, 4360-4375.	2.5	20
95	An overview of optimization techniques used for sizing of hybrid renewable energy systems. Renewable Energy Focus, 2021, 39, 1-26.	2.2	34
96	Performance evaluation of metaheuristic techniques for optimal sizing of a stand-alone hybrid PV/wind/battery system. Applied Energy, 2022, 305, 117823.	5.1	57
97	Wind-Solar Hybrid Power System Configuration Planning Using a Bi-Objective Optimization Model. SSRN Electronic Journal, 0, , .	0.4	0
98	Identification and Analysis of Impact Factors on the Economic Feasibility of Photovoltaic Energy Investments. Sustainability, 2020, 12, 7173.	1.6	21
99	Sensitivity Analysis of a Standalone Photovoltaic System Model Parameters. Journal of Applied Sciences, 2013, 13, 220-231.	0.1	6
100	Methodology to Size an Optimal Standalone Hybrid Solar-Wind-Battery System using Genetic Algorithm. International Journal of Physical Sciences, 2012, 7, .	0.1	6
101	Optimization and Feasibility Analysis of Satellite Earth Station Power System Using Homer. TELKOMNIKA Indonesian Journal of Electrical Engineering, 2012, 10, .	0.1	3
102	Energy Management Strategies for Hybrid PV/Diesel Energy Systems: Simulation and Experimental Validation. International Journal of Energy and Power Engineering, 2016, 5, 6.	0.3	2
103	Application of the Concept of Terminal Value in the Analysis of Projects Based on Renewable Energy. Journal of Power and Energy Engineering, 2018, 06, 16-37.	0.3	0
104	Wind and solar energy technologies of hydrogen production â€“ a review of issues. Polityka Energetyczna, 2019, 22, 5-20.	0.5	1
105	Integrated long-term planning of conventional and renewable energy sources in Iran's off-grid networks. Renewable Energy, 2022, 182, 134-162.	4.3	9
106	Novel power management strategy for a solar biomass off-grid power system. , 2022, , 183-213.		0
108	Đ•Đ°Đ³⁄₄Đ¹⁄₂Đ³⁄₄Đ¹⁄₄Ñ–Ñ‡Đ¹⁄₂Đ° ĐµÑ,ĐµĐ°Ñ,Đ,Đ²Đ¹⁄₂Ñ–ÑÑ,ÑCE ÑĐ³⁄₄Đ¹⁄₂ÑÑ‡Đ¹⁄₂Đ³⁄₄Ñ– ĐµĐ»ĐµĐ°Ñ,Ñ€Đ³⁄₄ÑÑ,Đ°Đ¹⁄₂Ñ‡Ñb–Ñ– Đ²Ñ		
110	Design, modeling and optimization of a renewable-based system for power generation and hydrogen production. International Journal of Hydrogen Energy, 2022, 47, 14225-14242.	3.8	46
111	Realization of the optimal sizing of local hybrid photovoltaic and wind energy systems with load scheduling capacity. International Journal of Energy Research, 0, , .	2.2	2

#	ARTICLE	IF	CITATIONS
112	Multiobjective Optimization of a Hybrid PV/Wind/Battery/Diesel Generator System Integrated in Microgrid: A Case Study in Djelfa, Algeria. <i>Energies</i> , 2022, 15, 3579.	1.6	21
113	Design optimization of a stand-alone green energy system of university campus based on Jaya-Harmony Search and Ant Colony Optimization algorithms approaches. <i>Energy</i> , 2022, 253, 124089.	4.5	59
114	Optimal Sizing of Hybrid PV/Wind/Battery/Diesel Microgrid System Using A Multi-objective Grasshopper optimization Algorithm: A Case Study in Djelfa City Algeria. , 2022, , .		2
115	An Energy Dispatch Mechanism Based on Double Auction with Multiple Rounds for a Microgrid. , 2021, , .		0
116	Optimization sizing of an autonomous photovoltaic-battery microgrid system. <i>Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering</i> , 2023, 237, 638-652.	0.7	2
117	A Case Study in the Identification of Best Combination of Energy Resources for Hybrid Power Generation in Rural Communities through Techno-Economic Assessment. <i>International Journal of Ambient Energy</i> , 0, , 1-27.	1.4	1
118	Design optimization and optimal power management of standalone solar-hydrogen system using a new metaheuristic algorithm. <i>Journal of Energy Storage</i> , 2022, 55, 105521.	3.9	9
119	Optimization of DC, AC, and Hybrid AC/DC Microgrid-Based IoT Systems: A Review. <i>Energies</i> , 2022, 15, 6813.	1.6	15
120	Optimum Size of Hybrid Renewable Energy System to Supply the Electrical Loads of the Northeastern Sector in the Kingdom of Saudi Arabia. <i>Sustainability</i> , 2022, 14, 13274.	1.6	6
121	A novel multi-objective evolutionary algorithm for hybrid renewable energy system design. <i>Swarm and Evolutionary Computation</i> , 2022, 75, 101186.	4.5	7
122	A combined multi-objective intelligent optimization approach considering techno-economic and reliability factors for hybrid-renewable microgrid systems. <i>Journal of Cleaner Production</i> , 2023, 383, 135249.	4.6	20
123	Optimization of Hybrid PV/Wind/Battery/DC Microgrid Using MOALO: A Case Study in Djelfa, Algeria. , 2022, , .		0
124	Forecasting Hydrogen Production from Wind Energy in a Suburban Environment Using Machine Learning. <i>Energies</i> , 2022, 15, 8901.	1.6	16
125	Energy Management and Optimization of a Hybrid Energy System by Particle Swarm Optimizing Algorithm-Genetic Algorithm and Gray Wolf Optimizing Algorithm Technique: A case study for Yalova University. <i>Karadeniz Fen Bilimleri Dergisi</i> , 2022, 12, 853-879.	0.1	3
126	Optimal Sizing for Renewable Hybrid Energy Systems: A Review With Some Applications. , 2022, , .		1
127	Modeling and optimal design of a grid-independent solutions based on solar-hydrogen storage feeding green building by optimization algorithm. <i>Journal of Energy Storage</i> , 2023, 62, 106844.	3.9	7