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Energy storage systems Characteristics and comparisons

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1574	Development of NiMH-based Fuel Cell/Battery (FCB) system: Characterization of Ni(OH)2/MnO2 positive electrode for FCB. 2009 , 194, 1150-1155		20
1573	EQCM study of electrodeposited PbO2: Investigation of the gel formation and discharge mechanisms. 2009 , 54, 7382-7388		28
1572	Optimum autonomous photovoltaic solution for the Greek islands on the basis of energy pay-back analysis. 2009 , 17, 1311-1323		27
1571	Hybrid electrodes composed of electroactive polymer and metal hexacyanoferrates in aprotic electrolytes. 2009 , 194, 112-117		26
1570	Overview of current and future energy storage technologies for electric power applications. <i>Renewable and Sustainable Energy Reviews</i> , 2009 , 13, 1513-1522	16.2	882
1569	Parking the power: Strategies and physical limitations for bulk energy storage in supplyDemand matching on a grid whose input power is provided by intermittent sources. <i>Renewable and Sustainable Energy Reviews</i> , 2009 , 13, 1934-1945	16.2	144
1568	A review on long-term sorption solar energy storage. <i>Renewable and Sustainable Energy Reviews</i> , 2009 , 13, 2385-2396	16.2	422

1567	Generation management using batteries in wind farms: Economical and technical analysis for Spain. 2009 , 37, 126-139	78
1566	Wind energy (30%) in the Spanish power mix: Technically feasible and economically reasonable. 2009 , 37, 3221-3226	18
1565	Recent advances in rechargeable battery materials: a chemist's perspective. 2009 , 38, 2565-75	1068
1564	Considerations to electromechanical flywheel design to enhance rural energisation in Sub-Saharan Africa. 2009 ,	
1563	Control methodology of distributed generation in interconnected grids. 2009 ,	
1562	Optimal design of DC electrified railway stationary storage system. 2009 ,	18
1561	Power generation/energy storage by a fuel cell/battery system: Regeneration of the MnO ₂ positive electrode with gaseous oxygen. 2010 , 55, 8771-8778	9
1560	Energy storage in the UK electrical network: Estimation of the scale and review of technology options. 2010 , 38, 4099-4106	42
1559	Energy storage for mitigating the variability of renewable electricity sources: An updated review. 2010 , 14, 302-314	651
1558	Study and design of a hybrid wind/diesel-compressed air energy storage system for remote areas. 2010 , 87, 1749-1762	87
1557	A thermal energy storage process for large scale electric applications. 2010 , 30, 425-432	128
1556	Renewable power for China: Past, present, and future. 2010 , 4, 287-294	32
1555	Optimal Energy Storage Sizing and Control for Wind Power Applications. 2010 ,	139
1554	Autonomous dual-mode CAES systems for maximum wind energy contribution in remote island networks. 2010 , 51, 2150-2161	37
1553	Wind Energy Applications. 2010 , 449-504	
1552	Distributed photovoltaic generation and energy storage systems: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2010 , 14, 506-511	16.2 161
1551	Electricity storage for grid-connected household dwellings with PV panels. 2010 , 84, 1284-1293	91
1550	Battery energy storage systems: Assessment for small-scale renewable energy integration. 2010 , 42, 2124-2130	187

1549	Properties and uses of storage for enhancing the grid penetration of very large photovoltaic systems. 2010 , 38, 5208-5222	34
1548	Optimal energy storage size of thermal/wind power system using tabu search optimizer. 2010 ,	2
1547	Bibliography of FACTS: 2008 part III IEEE working group report. 2010 ,	1
1546	Integration of energy storage in distribution grids. 2010 ,	17
1545	Solar energy supply and storage for the legacy and nonlegacy worlds. 2010 , 110, 6474-502	2343
1544	Lithium Air Batteries Using SWNT/CNF Buckypapers as Air Electrodes. 2010 , 157, A953	190
1543	Advanced Active Power Conditioner to improve power quality in microgrids. 2010 ,	7
1542	A sample application of supercapacitor storage systems for suburban transit. 2010 ,	7
1541	Review of battery storage optimisation in Distributed Generation. 2010 ,	4
1540	Comparative analysis of energy storage technologies to compensate wind power short-term fluctuations. 2010 ,	10
1539	Overview of energy storage technologies for renewable energy systems. 2010 , 29-80	10
1538	Impacts of energy storage in distributed Power Generation: A review. 2010 ,	13
1537	Improvement of demand response using mixed pumped storage hydro plant. 2011 ,	0
1536	Three-level Neutral Point Clamped Inverter Interface for flow battery/supercapacitor Energy Storage System used for microgrids. 2011 ,	7
1535	Study on the transient characteristics of distribution network with diverse distributed generators. 2011 ,	1
1534	Battery storage and testing protocols for CHP systems. 2011 ,	1
1533	Control of power converters for microgrids. 2011 , 30, 300-309	14
1532	Combustion. 2011 ,	

1531	Introduction of PV Energy Into an Existing HEP. 2011 , 26, 717-727		13
1530	Battery technologies for large-scale stationary energy storage. 2011 , 2, 503-27		296
1529	Clean energy new deal for a sustainable world: from non-CO2 generating energy sources to greener electrochemical storage devices. 2011 , 4, 2003		506
1528	Control of Flywheel Energy Storage Systems for wind farm power fluctuation mitigation. 2011 ,		5
1527	Flywheel energy storage system based on boost DC-AC converter. 2011 ,		1
1526	Modeling and characterization of energy storage devices. 2011 ,		11
1525	Load flow calculations in distribution systems with distributed resources. A review. 2011 ,		32
1524	Operating Policy and Optimal Sizing of a High Penetration RES-BESS System for Small Isolated Grids. 2011 , 26, 744-756		114
1523	A novel model to determine optimizing power and capacity for energy storage systems on competitive electricity markets. 2011 ,		3
1522	Optimal design of stationary supercapacitors storage devices for light electrical transportation systems. 2011 , 13, 689		9
1521	. 2011 ,		
1520	Comparison of Lithium-Ion Battery Cathode Materials and the Internal Stress Development. 2011 ,		1
1519	On the planning and analysis of Integrated Community Energy Systems: A review and survey of available tools. <i>Renewable and Sustainable Energy Reviews</i> , 2011 , 15, 4836-4854	16.2	163
1518	Aluminum as energy carrier: Feasibility analysis and current technologies overview. <i>Renewable and Sustainable Energy Reviews</i> , 2011 , 15, 4611-4623	16.2	155
1517	What is vital (and not vital) to advance economically-competitive biofuels production. 2011 , 46, 2091-2110		89
1516	Power management of double-fed induction generator-based wind power system with integrated smart energy storage having superconducting magnetic energy storage/fuel-cell/electrolyser. 2011 , 5, 407		18
1515	On the Determination of Battery Energy Storage Capacity and Short-Term Power Dispatch of a Wind Farm. 2011 , 2, 148-158		141
1514	Thermal performance of latent heat storage for free cooling of buildings in a dry and hot climate: An experimental study. 2011 , 43, 2621-2630		66

1513	Flywheel rotor manufacture for rural energy storage in sub-Saharan Africa. 2011 , 36, 6138-6145	21
1512	A concept for storing utility-scale electrical energy in the form of latent heat. 2011 , 36, 6098-6109	23
1511	Technology mix alternatives with high shares of wind power and photovoltaics—base study for Spain. 2011 , 39, 8070-8077	20
1510	Concept of Cold Energy Storage for Superconducting Flywheel Energy Storage System. 2011 , 21, 2221-2224	38
1509	Hybrid RES-HEP Systems Development. 2011 , 25, 2219-2239	6
1508	Energy geo-storage—analysis and geomechanical implications. 2011 , 15, 655-667	18
1507	Superstrong ultralong carbon nanotubes for mechanical energy storage. 2011 , 23, 3387-91	148
1506	Economic feasibility and optimisation of an energy storage system for Portland Wind Farm (Victoria, Australia). 2011 , 88, 2755-2763	67
1505	Optimization of diesel engine performances for a hybrid wind—diesel system with compressed air energy storage. 2011 , 36, 3079-3091	66
1504	Practical operation strategies for pumped hydroelectric energy storage (PHES) utilising electricity price arbitrage. 2011 , 39, 4189-4196	170
1503	Simulation studies on ECS application in a clean power distribution system. 2011 , 33, 43-54	5
1502	Optimal economic exploitation of hydrogen based grid-friendly zero energy buildings. 2011 , 36, 197-205	18
1501	Exploitation of temporary water flow by hybrid PV-hydroelectric plant. 2011 , 36, 2268-2277	17
1500	Research directions in energy-sustainable cyber—physical systems. 2011 , 1, 57-74	45
1499	Optimal Energy Commitments with Storage and Intermittent Supply. 2011 , 59, 1347-1360	108
1498	Combustion Science and Technology. 2011 , 1	1
1497	Performance evaluation of a hybrid wind-diesel-compressed air energy storage system. 2011 ,	5
1496	Transmission Design for a Wind Powered Compressed Air Generation System. 2011 , 86, 293-296	1

1495	An Overview of Lithium-Ion Battery Cathode Materials. 2011 , 1363, 1	1
1494	. 2011 ,	0
1493	LIQHYSMESBize, loss and cost considerations for the SMESB conceptual analysis. 2011 , 24, 105008	16
1492	Energy Storage and Waste Heat Recovery: A Synergistic Effect Benefiting Renewable Energy. 2011 ,	
1491	Frequency control using Vanadium redox flow batteries on wind farms. 2011 ,	11
1490	South African renewable energy hybrid power system storage needs, challenges and opportunities. 2011 ,	7
1489	Mode changing stability of wind turbine in an integrated wind turbine and rechargeable battery system. 2011 ,	1
1488	Stochastic MPC for real-time market-based optimal power dispatch. 2011 ,	33
1487	New Progress of Study in Energy Storage Area of Volcanic Rocks. 2012 , 616-618, 100-103	
1486	New Renewable Energy Sources for Electric Power Generation in Brazil. 2012 , 7, 390-397	6
1485	Solar Energy Fundamentals. 2012 , 1-23	1
1484	A hybrid electric/hydro storage solution for standalone photovoltaic applications in remote areas. 2012 ,	7
1483	Analysis of the cost of electric energy discharged to the grid by some energy storage systems. 2012	3
1482	Control of a hybrid Energy Storage System using a three level neutral point clamped converter. 2012 ,	5
1481	Very high penetration of renewable energy sources to the European electricity system in the context of model-based analysis of an energy roadmap towards a low carbon EU economy by 2050. 2012 ,	11
1480	Power management strategies and energy storage needs to increase the operability of photovoltaic plants. 2012 , 4, 063101	5
1479	Wave Energy Converter Concepts : Design Challenges and Classification. 2012 , 6, 4-16	99
1478	Assessment and Optimization of Wind Energy Integration Into the Power Systems: Application to the Portuguese System. 2012 , 3, 627-635	20

1477	Wind Power Integration. 2012 , 569-622	1
1476	Storage Options for Photovoltaics. 2012 , 199-212	11
1475	Functionalized graphene for high performance lithium ion capacitors. 2012 , 5, 2328-33	107
1474	Oxygen electrocatalysts for water electrolyzers and reversible fuel cells: status and perspective. 2012 , 5, 9331	415
1473	Lithium liquid battery: harvesting lithium from waste Li-ion batteries and discharging with water. 2012 , 2, 6094	16
1472	Miniaturizing microbial fuel cells for potential portable power sources: promises and challenges. 2012 , 13, 353-381	113
1471	Supercapacitors: An Alternate Technology for Energy Storage. 2012 , 82, 79-90	24
1470	Grid-connected marine current generation system power smoothing control using supercapacitors. 2012 ,	11
1469	Economic impact of medium-scale battery storage systems in presence of flexible electricity tariffs for end-user applications. 2012 ,	12
1468	High-Speed Carbon Fiber Rotor for Superconducting Attitude Control and Energy Storage Flywheel. 2012 ,	3
1467	Towards an objective method to compare energy storage technologies: development and validation of a model to determine the upper boundary of revenue available from electrical price arbitrage. 2012 , 5, 5425-5436	39
1466	Energy storage technologies for smoothing power fluctuations in marine current turbines. 2012 ,	7
1465	Environmental evaluation of typical house situated in the south of Algeria by using photovoltaic system. 2012 ,	1
1464	A new hybrid pneumatic combustion engine to improve fuel consumption of wind/Diesel power system for non-interconnected areas. 2012 , 96, 459-476	14
1463	Effect of surfactant on high capacitance of galvanostatically deposited MnO ₂ . 2012 , 676, 35-39	16
1462	Optimum sizing of stand-alone wind-photovoltaic hybrid systems for representative wind and solar potential cases of the Greek territory. 2012 , 107-108, 169-178	26
1461	Selection of battery technology to support grid-integrated renewable electricity. 2012 , 216, 376-386	116
1460	Energy supply and use in a rural West African village. 2012 , 43, 283-292	62

1459	Flow Batteries for Enhancing Wind Power Integration. 2012 , 27, 1690-1697	56
1458	Electrochemical Energy Storage: Applications, Processes, and Trends. 2012 , 1497-1539	1
1457	Energy storage technologies for grid-connected and off-grid power system applications. 2012 ,	20
1456	Surpassing Photosynthesis: High-Efficiency and Scalable CO ₂ Utilization through Artificial Photosynthesis. 2012 , 275-292	4
1455	Application of electrolyzer to alleviate power fluctuation in a stand alone microgrid based on an optimal fuzzy PID control. 2012 , 43, 969-976	27
1454	Profitability analysis of grid-connected photovoltaic facilities for household electricity self-sufficiency. 2012 , 51, 749-764	73
1453	Optimization and advanced control of thermal energy storage systems. 2012 , 28,	38
1452	Evaluating energy storage technologies for wind power integration. 2012 , 86, 2707-2717	105
1451	Evaluation of energy storage technologies for integration with renewable electricity: Quantifying expert opinions. 2012 , 3, 29-49	87
1450	Fuel cell-powered microfluidic platform for lab-on-a-chip applications. 2012 , 12, 74-9	30
1449	Investigation on the spatiotemporal complementarity of wind energy resources in China. 2012 , 55, 725-734	11
1448	A new multi-hybrid power system for grid-disconnected areas Wind/Diesel/Compressed Air Energy Storage. 2012 ,	
1447	Study on compressed air energy storage coupled with a wind farm. 2012 ,	7
1446	A Transient Vanadium Flow Battery Model Incorporating Vanadium Crossover and Water Transport through the Membrane. 2012 , 159, A1446-A1459	219
1445	Energy Efficiency: Comparison of Different Systems and Technologies. 2012 , 841-907	
1444	Wind power dispatch control with battery energy storage using model predictive control. 2012 ,	8
1443	Optimal Design of an Hybrid Wind-Diesel System with Compressed Air Energy Storage for Canadian Remote Areas. 2012 ,	2
1442	Graphyne and Graphdiyne: Promising Materials for Nanoelectronics and Energy Storage Applications. 2012 , 116, 5951-5956	354

1441	High-potential reversible Li deintercalation in a substituted tetrahydroxy-p-benzoquinone dilithium salt: an experimental and theoretical study. 2012 , 18, 8800-12	60
1440	Synthesis and characterization of novel high-performance composite electrocatalysts for the oxygen evolution in solid polymer electrolyte (SPE) water electrolysis. 2012 , 37, 2985-2992	16
1439	Photo-chargeable and dischargeable TiO ₂ and WO ₃ heterojunction electrodes. 2012 , 115-116, 74-80	59
1438	Heat pumps and energy storage □The challenges of implementation. 2012 , 89, 37-44	71
1437	Tecno-economic assessment of an off-grid PV-powered community kitchen for developing regions. 2012 , 91, 255-262	31
1436	Simulation and analysis of different adiabatic Compressed Air Energy Storage plant configurations. 2012 , 93, 541-548	208
1435	State of the art of thermal storage for demand-side management. 2012 , 93, 371-389	342
1434	Comparison of three topologies and controls of a hybrid energy storage system for microgrids. 2012 , 54, 113-121	110
1433	A sustainability assessment of electric vehicles as a personal mobility system. 2012 , 61, 19-30	178
1432	Pneumatic hybridization of a diesel engine using compressed air storage for wind-diesel energy generation. 2012 , 38, 264-275	20
1431	Thermal energy storage: How previous findings determine current research priorities□ 2012 , 39, 246-257	218
1430	A simulation and optimisation study: Towards a decentralised microgrid, using real world fluctuation data. 2012 , 41, 549-559	56
1429	Appropriate storage for high-penetration grid-connected photovoltaic plants. 2012 , 40, 335-344	31
1428	Decarbonizing the electric sector: Combining renewable and nuclear energy using thermal storage. 2012 , 44, 301-311	57
1427	Two-layer control scheme for a Supercapacitor Energy Storage System coupled to a Doubly Fed Induction Generator. 2012 , 86, 76-83	14
1426	Active power control of a flywheel energy storage system for wind energy applications. 2012 , 6, 9	57
1425	Wind power impacts and electricity storage □A time scale perspective. 2012 , 37, 318-324	112
1424	Peaking strategies for the management of wind-H ₂ energy systems. 2012 , 47, 103-111	11

1423	A review of energy storage technologies for wind power applications. <i>Renewable and Sustainable Energy Reviews</i> , 2012 , 16, 2154-2171	16.2	954
1422	Assessment of utility energy storage options for increased renewable energy penetration. <i>Renewable and Sustainable Energy Reviews</i> , 2012 , 16, 4141-4147	16.2	382
1421	What properties of grid energy storage are most valuable?. 2012 , 206, 436-449		76
1420	Coordinate operation of power sources in a doubly-fed induction generator wind turbine/battery hybrid power system. 2012 , 205, 354-366		42
1419	Constructing the electricity-carbohydrate-hydrogen cycle for a sustainability revolution. 2012 , 30, 301-6		43
1418	. 2012 , 3, 34-40		159
1417	The History, Present State, and Future Prospects of Underground Pumped Hydro for Massive Energy Storage. 2012 , 100, 473-483		60
1416	Room-temperature stationary sodium-ion batteries for large-scale electric energy storage. 2013 , 6, 2338		2419
1415	Smart Grids. 2013 ,		13
1414	Characteristics of electrical energy storage technologies and their applications in buildings. <i>Renewable and Sustainable Energy Reviews</i> , 2013 , 25, 814-830	16.2	139
1413	Graphite oxide/polypyrrole composite electrodes for achieving high energy density supercapacitors. 2013 , 43, 773-782		42
1412	A comparative overview of large-scale battery systems for electricity storage. <i>Renewable and Sustainable Energy Reviews</i> , 2013 , 27, 778-788	16.2	327
1411	Reserving judgement—Perceptions of pumped hydro and utility-scale batteries for electricity storage and reserve generation in New Zealand. 2013 , 57, 249-261		9
1410	Time domain simulation of Li-ion batteries using non-integer order equivalent electrical circuit. 2013 , 18, 1454-1462		16
1409	Restacking-inhibited 3D reduced graphene oxide for high performance supercapacitor electrodes. 2013 , 7, 9366-74		343
1408	Optimal operation in solar trough plants: A case study. 2013 , 95, 106-117		51
1407	Analysis and solution for renewable energy load matching for a single-family house. 2013 , 65, 398-411		39
1406	Enhanced start-up of anaerobic facultatively autotrophic biocathodes in bioelectrochemical systems. 2013 , 168, 478-85		114

1405	Effect of deposition method and the surfactant on high capacitance of electrochemically deposited MnO ₂ on stainless steel substrate. 2013 , 690, 13-18		36
1404	Potential of structural thermal mass for demand-side management in dwellings. 2013 , 64, 187-199		123
1403	Analytic Hierarchy process selection for batteries storage technologies. 2013 ,		3
1402	The developments and challenges of cerium half-cell in zinc/cerium redox flow battery for energy storage. 2013 , 90, 695-704		63
1401	A Precious-Metal-Free Regenerative Fuel Cell for Storing Renewable Electricity. 2013 , 3, 1545-1550		65
1400	Smart Grids. 2013 , 38, 201-226		37
1399	Sustainable urban rail systems: Strategies and technologies for optimal management of regenerative braking energy. 2013 , 75, 374-388		249
1398	Buffering intermittent renewable power with hydroelectric generation: A case study in California. 2013 , 112, 1-11		64
1397	Manganese as a substitute for rhenium in CO ₂ reduction catalysts: the importance of acids. 2013 , 52, 2484-91		319
1396	A review and probabilistic model of lifecycle costs of stationary batteries in multiple applications. <i>Renewable and Sustainable Energy Reviews</i> , 2013 , 25, 240-250	16.2	213
1395	A Combined Fuzzy-AHP and Fuzzy-GRA Methodology for Hydrogen Energy Storage Method Selection in Turkey. 2013 , 6, 3017-3032		69
1394	Economical analysis of an alternative strategy for CO ₂ mitigation based on nuclear power. 2013 , 52, 66-76		7
1393	Wirtschaftliche und energetische Aspekte von Langzeitspeichern. 2013 , 130, 169-176		1
1392	Stromspeicher für die Energiewende – Eine aktorsbasierte Analyse der zusätzlichen Speicherkosten. 2013 , 37, 249-260		9
1391	Development and bottlenecks of renewable electricity generation in China: a critical review. 2013 , 47, 3044-56		35
1390	Nano iron oxide (Fe ₂ O ₃)/carbon black electrodes as electrode material for electrochemical capacitors: Effect of the nanoparticles dispersion quality. 2013 , 139, 12-16		19
1389	Impact of the electricity mix and use profile in the life-cycle assessment of electric vehicles. <i>Renewable and Sustainable Energy Reviews</i> , 2013 , 24, 271-287	16.2	196
1388	Global efficiency of an UPS module integrated with PV, H ₂ , and CAES systems. 2013 ,		2

1387	Hybrid energy storage system with unique power electronic interface for microgrids. 2013,		3
1386	Optimization of compressed air storage's volume for a stand-alone wind-diesel hybrid system. 2013		4
1385	Sunlight-harnessing and storing heterojunction TiO ₂ /Al ₂ O ₃ /WO ₃ electrodes for night-time applications. 2013, 3, 17551		23
1384	Economic study on batteries and CAES for a lebanese hybrid wind/diesel system. 2013,		1
1383	Optimization of a hybrid diesel-wind generation plant with operational options. 2013, 51, 364-372		43
1382	Studies on battery storage requirement of PV Fed wind-driven induction generators. 2013, 67, 34-43		18
1381	RETRACTED: A review of energy storage systems in microgrids with wind turbines. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 18, 316-326	16.2	46
1380	Economic impact of performances degradation on the competitiveness of energy storage technologies [Part 1: Introduction to the simulation-optimization platform ODYSSEY and elements of validation on a PV-hydrogen hybrid system. 2013, 38, 15219-15232		12
1379	Peak and off-peak operations of the air separation unit in oxy-coal combustion power generation systems. 2013, 112, 747-754		56
1378	Status of pumped hydro-storage schemes and its future in India. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 19, 208-213	16.2	47
1377	Thermodynamic analysis of energy storage with a liquid air Rankine cycle. 2013, 52, 130-140		119
1376	The thermodynamic effect of air storage chamber model on Advanced Adiabatic Compressed Air Energy Storage System. 2013, 57, 469-478		88
1375	Modeling of financial incentives for investments in energy storage systems that promote the large-scale integration of wind energy. 2013, 105, 138-154		94
1374	Operational simulation of wind power plants for electrolytic hydrogen production connected to a distributed electricity generation grid. 2013, 53, 249-257		12
1373	Review of storage schemes for wind energy systems. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 21, 237-247	16.2	88
1372	Competitive energy storage in the presence of renewables. 2013, 28, 985-996		34
1371	Review of grid-tie micro-generation systems without energy storage: Towards a new approach to sustainable hybrid energy systems linked to energy efficiency. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 26, 60-95	16.2	55
1370	Morphology-Controlled Promoting Activity of Nanostructured MnO ₂ for Methanol and Ethanol Electrooxidation on Pt/C. 2013, 117, 4888-4900		81

1369	A review of energy storage technologies for marine current energy systems. <i>Renewable and Sustainable Energy Reviews</i> , 2013 , 18, 390-400	16.2	189
1368	A novel market simulation methodology on hydro storage. 2013 ,		1
1367	Optimizing Synergy of Utility-Scale Wind and Pumped-Hydro Storage. 2013 ,		1
1366	Stability of Wind Turbine Switching Control in an Integrated Wind Turbine and Rechargeable Battery System: A Common Quadratic Lyapunov Function Approach. 2013 , 135,		14
1365	Economic Modeling of Compressed Air Energy Storage. 2013 , 6, 2221-2241		25
1364	Effect of Heat Treatment Technology on Property of Sodium-Sulfur Battery Cathode Carbon Felt. 2013 , 712-715, 337-340		
1363	New Methodology for the Optimization of the Management of Wind Farms, Including Energy Storage. 2013 , 330, 183-187		3
1362	Hollow interference fitted multi-ring composite rotor of the superconducting attitude control and energy storage flywheel. 2013 , 32, 881-897		2
1361	GWh Level Renewable Energy Storage and Supply using Liquid CO ₂ . 2013 , 32, 415-420		2
1360	Seasonal energy storage using bioenergy production from abandoned croplands. 2013 , 8, 035012		14
1359	Application of a grid scale energy storage system to reduce distribution network losses. 2013 ,		13
1358	Potential for rooftop photovoltaics in Tokyo to replace nuclear capacity. 2013 , 8, 014042		13
1357	Power, Control and Optimization. 2013 ,		4
1356	Modeling and simulation of a novel small-scale compressed air hybrid system for stand-alone off-grid applications. 2013 ,		2
1355	A Two-Part Tariff Model for Energy Intermediation. 2013 , 58, 265-281		0
1354	. 2013 ,		4
1353	References. 128-137		
1352	Electrochemical characterization of poly-(3,4 propylene-dioxythiophene) pseudo-capacitor. 2013 , 421, 012007		1

1351	Dynamic Energy Storage Management for Dependable Renewable Electricity Generation. 2013,	2
1350	Compressed Air Energy Storage System Control and Performance Assessment Using Energy Harvested Index. 2014, 3, 1-21	10
1349	REVISIÓN DE LAS CARACTERÍSTICAS DE SISTEMAS DE ALMACENAMIENTO DE ENERGÍA PARA APLICACIONES EN MICRO REDES. 2014, 25, 175-188	2
1348	Auto-reinforce Magnetic Flywheel as Recent Advancement of Automobile Flywheel. 2014, 13, 02011	
1347	Control strategy to alleviate PV power output fluctuations through a superconducting coil. 2014,	1
1346	Relationship between energy storage devices and wind farm sizes. 2014,	1
1345	An Improved Genetic Algorithm for Optimal Stationary Energy Storage System Locating and Sizing. 2014, 7, 6434-6458	30
1344	Global Multivariable Control of Permanent Magnet Synchronous Motor for Mechanical Elastic Energy Storage System under Multiclass Nonharmonic External Disturbances. 2014, 2014, 1-9	2
1343	A Novel Hybrid-Fuel Storage System of Compressed Air Energy for China. 2014, 7, 4988-5010	4
1342	Advancing Toward Sustainability Goals at the University of California, Irvine. 2014,	2
1341	A Power Recovery Type Pressure Reducer in the High Pressure Pneumatic System. 2014,	1
1340	Operating Conditions and System Considerations for a Reversible Solid Oxide Cell System for Electrical Energy Storage. 2014,	
1339	Numerical analysis on the closed tank of energy storage system during discharge using CFD. 2014,	
1338	Economic analysis of using above ground gas storage devices for compressed air energy storage system. 2014, 23, 535-543	16
1337	Surface Reconstruction and Reactivity of Platinum-Iron Oxide Nanoparticles. 2014, 118, 28861-28867	5
1336	A hybrid method for maximum power tracking of a small scale CAES system. 2014,	0
1335	Storage and demand-side options for integrating wind power. 2014, 3, 93-109	26
1334	Demand response through grid connected south, east, west PV with energy storage. 2014,	2

1333	Storage technologies for wind power in the Columbia River Gorge. 2014 , 33, 1-15		15
1332	The changing role of hydropower: from cheap local energy supply to strategic regional resource. 2014 , 30, 121-134		1
1331	Outer-rotor ac homopolar motors for flywheel energy storage. 2014 ,		13
1330	Flow past an accumulator unit of an underwater energy storage system: Three touching balloons in a floral configuration. 2014 , 13, 467-476		2
1329	Design of distributed energy systems: Role and requirements of modeling and simulation. 2014 ,		2
1328	Virtual prototype modeling and performance analysis of the air-powered engine. 2014 , 228, 2642-2651		9
1327	Mathematical Modeling of a Small Scale Compressed Air Energy Storage System. 2014 , 477-486		
1326	Performance Prediction of Inertial Auto-Reinforce Magnetic Flywheel Energy Storage Device Using Finite Element Magnetic Modeling. 2014 , 663, 169-174		
1325	Optimal SOC limit estimation of ESS considering renewable energy sources. 2014 ,		3
1324	Hybrid electric vehicles and their challenges: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 29, 135-150	16.2	364
1323	Energy storage systems sizing study for a high-altitude wind energy application. 2014 , 76, 91-103		39
1322	Coordinated control for large-scale EV charging facilities and energy storage devices participating in frequency regulation. 2014 , 123, 253-262		102
1321	Managing Wind Variability with Pumped Hydro Storage and Gas Turbines. 2014 , 45, 22-31		7
1320	Iron redox battery as electrical energy storage system in the Spanish energetic framework. 2014 , 61, 421-428		6
1319	A hybrid simulated annealing approach to handle energy resource management considering an intensive use of electric vehicles. 2014 , 67, 81-96		40
1318	Design and thermodynamic analysis of a hybrid energy storage system based on A-CAES (adiabatic compressed air energy storage) and FESS (flywheel energy storage system) for wind power application. 2014 , 70, 674-684		99
1317	Underwater compressed air energy storage improved through Vortex Hydro Energy. 2014 , 7, 1-5		13
1316	Ionic liquid based electrolytes for sodium-ion batteries: Na ⁺ solvation and ionic conductivity. 2014 , 245, 630-636		209

1315	Review of characterization methods for supercapacitor modelling. 2014 , 246, 596-608	183
1314	Intrinsically conducting polymers in electrochemical energy technology: Trends and progress. 2014 , 122, 93-107	110
1313	Operational limits of a three level neutral point clamped converter used for controlling a hybrid energy storage system. 2014 , 79, 97-103	8
1312	A systematic multi-step screening of numerous salt hydrates for low temperature thermochemical energy storage. 2014 , 124, 1-16	187
1311	Modified graphite and graphene electrodes for high-performance lithium ion hybrid capacitors. 2014 , 3, 1	26
1310	The role of hydrogen in achieving the decarbonization targets for the UK domestic sector. 2014 , 39, 4158-4169	27
1309	Water storage as energy storage in green power system. 2014 , 5, 75-83	8
1308	Electro-thermal modelling of a supercapacitor and experimental validation. 2014 , 259, 154-165	38
1307	Optimal sizing and control strategy of isolated grid with wind power and energy storage system. 2014 , 80, 407-415	90
1306	One-Dimensional Nanomaterials for Energy Applications. 2014 , 75-120	5
1305	Improving grid integration of wind turbines by using secondary batteries. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 34, 194-207	16.2 28
1304	A new generation of small hydro and pumped-hydro power plants: Advances and future challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 31, 746-761	16.2 141
1303	Energy storage systems for renewable energy power sector integration and mitigation of intermittency. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 35, 499-514	16.2 291
1302	Unit Commitment With Ideal and Generic Energy Storage Units. 2014 , 29, 2974-2984	123
1301	Economic viability of energy storage systems based on price arbitrage potential in real-time U.S. electricity markets. 2014 , 114, 512-519	208
1300	The future of hydropower in Europe: Interconnecting climate, markets and policies. 2014 , 37, 172-181	66
1299	Review of concepts for a demand-driven biogas supply for flexible power generation. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 29, 383-393	16.2 148
1298	Energy storage: Applications and challenges. 2014 , 120, 59-80	519

1297	Optimization methods applied for WindPSP operation and scheduling under deregulated market: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 30, 682-700	16.2	23
1296	Modeling of PV generation, battery and hydrogen storage to investigate the benefits of energy storage for single dwelling. 2014 , 10, 1-10		54
1295	Battery capacity determination with respect to optimized energy dispatch schedule in grid-connected photovoltaic (PV) systems. 2014 , 65, 665-674		74
1294	Techno-economic and social analysis of energy storage for commercial buildings. 2014 , 78, 125-136		45
1293	Continuous baseload renewable power using chemical refrigeration cycles. 2014 , 71, 591-601		1
1292	Cooperative operation of chemical-free energy storage system with solar photovoltaic for resilient power distribution in buildings [A case study. 2014 ,		2
1291	Energy Storage. 2014 , 21-56		2
1290	Synchronization of isolated microgrids with a communication infrastructure using energy storage systems. 2014 , 63, 71-82		18
1289	Robust HLoad Frequency Control of future power grid with energy storage considering parametric uncertainty and time delay. 2014 ,		0
1288	Economic Comparison of Deloaded-Wind and Wind-Battery Systems. 2014 ,		0
1287	A Novel Market Simulation Methodology on Hydro Storage. 2014 , 5, 1119-1128		15
1286	Graphene-supported iron-based nanoparticles encapsulated in nitrogen-doped carbon as a synergistic catalyst for hydrogen evolution and oxygen reduction reactions. 2014 , 176, 135-51		48
1285	A small-scale CAES (compressed air energy storage) system for stand-alone renewable energy power plant for a radio base station: A sizing-design methodology. 2014 , 78, 313-322		75
1284	Electrical Energy Storage Systems: Technologies' State-of-the-Art, Techno-economic Benefits and Applications Analysis. 2014 ,		34
1283	Parameters affecting scalable underwater compressed air energy storage. 2014 , 134, 239-247		48
1282	Reprint of [The future of hydropower in Europe: Interconnecting climate, markets and policies] 2014 , 43, 5-14		22
1281	Review of energy storage technologies for sustainable power networks. 2014 , 8, 74-91		347
1280	The influence of gas-solid reaction kinetics in models of thermochemical heat storage under monotonic and cyclic loading. 2014 , 136, 289-302		23

1279	Energy storage systems supporting increased penetration of renewables in islanded systems. 2014 , 75, 265-280	139
1278	Wind-powered ammonia fuel production for remote islands: A case study. 2014 , 72, 51-61	95
1277	An international review of the implications of regulatory and electricity market structures on the emergence of grid scale electricity storage. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 38, 489-508 ^{16.2}	57
1276	Stability Issues of S _Z + Z _S Type Cascade System in Hybrid Energy Storage System (HESS). 2014 , 29, 5846-5859	84
1275	An energy management approach for renewable energy integration with power generation and water desalination. 2014 , 72, 377-385	61
1274	Electrochemical stability of La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ infiltrated YSZ oxygen electrode for reversible solid oxide fuel cells. 2014 , 39, 14071-14078	53
1273	Energy management strategy based on short-term generation scheduling for a renewable microgrid using a hydrogen storage system. 2014 , 87, 820-831	151
1272	Distributed energy storage in Australia: Quantifying potential benefits, exposing institutional challenges. 2014 , 3, 16-29	37
1271	Influence of the energy management on the sizing of Electrical Energy Storage Systems in an aircraft. 2014 , 270, 391-402	23
1270	CaO-Based Energy and CO ₂ Storage System for the Flexibilization of an IGCC Plant with Carbon Capture. 2014 , 53, 12032-12043	9
1269	Aqueous rechargeable Li and Na ion batteries. 2014 , 114, 11788-827	929
1268	Developments and perspectives of oxide-based catalysts for the oxygen evolution reaction. 2014 , 4, 3800-3821	778
1267	Joint Optimization of Hybrid Energy Storage and Generation Capacity With Renewable Energy. 2014 , 5, 1566-1574	124
1266	Towards an Indicator Based Framework Analysing the Suitability of Existing Dams for Energy Storage. 2014 , 28, 1613-1630	3
1265	Modelling of Effect of Non-Uniform Current Density on the Performance of Soluble Lead Redox Flow Batteries. 2014 , 161, A1602-A1610	13
1264	Hydrogenation of nanostructured semiconductors for energy conversion and storage. 2014 , 59, 2144-2161	14
1263	Advances in Production Management Systems. Innovative and Knowledge-Based Production Management in a Global-Local World. 2014 ,	0
1262	Combined steric and electronic effects of positional substitution on dimethyl-bipyridine rhenium(I)tricarbonyl electrocatalysts for the reduction of CO ₂ . 2014 , 422, 109-113	29

1261	Control of a Vanadium Redox Battery and supercapacitor using a Three-Level Neutral Point Clamped converter. 2014 , 248, 1170-1176		11
1260	Toward quantitative analysis of water-energy-urban-climate nexus for urban adaptation planning. 2014 , 5, 22-28		22
1259	A hybrid approach for the efficient synthesis of renewable energy systems. 2014 , 135, 625-633		42
1258	Thermodynamic analysis of a hybrid thermal-compressed air energy storage system for the integration of wind power. 2014 , 66, 519-527		65
1257	Optimal grid design and logistic planning for wind and biomass based renewable electricity supply chains under uncertainties. 2014 , 70, 514-528		29
1256	Dynamic heat transfer model for temperature drop analysis and heat exchange system design of the air-powered engine system. 2014 , 68, 877-885		26
1255	Experimental testing procedures and dynamic model validation for vanadium redox flow battery storage system. 2014 , 254, 277-286		16
1254	Performance of a standalone wind-hydrogen power system for regions with seasonal wind profile: A case study in Khaf region. 2014 , 7, 265-278		9
1253	Cryogenic energy storage characteristics of a packed bed at different pressures. 2014 , 63, 439-446		28
1252	Comparison of the performance of compressed-air and hydrogen energy storage systems: Karpathos island case study. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 29, 865-882	16.2	62
1251	Renewable hydrogen generation from a dual-circuit redox flow battery. 2014 , 7, 2350-2358		76
1250	Technologies for extending zinc-air battery cycle life: A review. 2014 , 128, 315-324		311
1249	A review on structure model and energy system design of lithium-ion battery in renewable energy vehicle. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 37, 627-633	16.2	70
1248	Free-standing and binder-free sodium-ion electrodes based on carbon-nanotube decorated Li ₄ Ti ₅ O ₁₂ nanoparticles embedded in carbon nanofibers. 2014 , 4, 25220		24
1247	Sustainable energy systems in an imaginary island. <i>Renewable and Sustainable Energy Reviews</i> , 2014 , 37, 229-242	16.2	15
1246	Dynamic Behavior of a Sensible-heat based Thermal Energy Storage. 2014 , 49, 830-839		6
1245	Sustainability index approach as a selection criteria for energy storage system of an intermittent renewable energy source. 2014 , 136, 909-920		56
1244	Numerical Simulation of Single- and Dual-media Thermocline Tanks for Energy Storage in Concentrating Solar Power Plants. 2014 , 49, 916-926		13

1243	Active Displacement Control of Active Magnetic Bearing System. 2014 , 22, 32-37	
1242	Active surface area approximation in a lead-acid cell for optimal performance in renewable energy systems. 2014 , 47, 9450-9455	
1241	Energy and Thermodynamical Study of a Small Innovative Compressed Air Energy Storage System (micro-CAES). 2015 , 82, 645-651	21
1240	Electrolytic Hydrogen Production From Renewable Source, Storage and Reconversion in Fuel Cells: The System of the Mediterranean University of Reggio Calabria. 2015 , 78, 818-823	7
1239	Micro-Macro Analysis and Phenomenological Modelling of Salt Viscous Damage and Application to Salt Caverns. 2015 , 48, 2567-2580	11
1238	SCADA Simulation of a Distributed Generation System with Storage Technologies. 2015 , 19, 665-672	5
1237	Optimal selection of energy storage systems. 2015 ,	
1236	Overview of Small Scale Electric Energy Storage Systems suitable for dedicated coupling with Renewable Micro Sources. 2015 ,	
1235	Using stormwater detention tanks as storage system for sustainable energy management in a smart city framework. 2015 ,	
1234	Power Applications. 2015 , 603-722	
1233	The urban harvest approach as framework and planning tool for improved water and resource cycles. 2015 , 72, 998-1006	11
1232	Parameter optimization and sizing of flywheel energy storage system. 2015 ,	1
1231	Unity power factor control strategy of electrically excited synchronous motor fed by high power back-to-back converter. 2015 ,	1
1230	Overview of energy storage in renewable energy systems. 2015 ,	4
1229	Development of Active Organic and Polymeric Materials for Batteries and Solar Cells: Introduction to Essential Characterization Techniques. 2015 , 5, 1500858	13
1228	Energy Storage (SMES and Flywheels). 2015 , 1-14	
1227	Optimal Energy Management, Location and Size for Stationary Energy Storage System in a Metro Line Based on Genetic Algorithm. 2015 , 8, 11618-11640	45
1226	Multifunctional Carbon Nanostructures for Advanced Energy Storage Applications. 2015 , 5, 755-777	60

1225	Fabrication and characterization of polyaniline-graphene nanoplatelets composite electrode materials for hybrid supercapacitor applications. 2015,	
1224	Li-ion battery shut-off at high temperature caused by polymer phase separation in responsive electrolytes. 2015, 51, 5448-51	39
1223	Solar Electrical Energy Storage. 2015, 7-25	4
1222	Development of energy storage industry in China: A technical and economic point of review. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 49, 805-812	16.2 33
1221	Nanotechnology Advancements on Carbon Nanotube/Polypyrrole Composite Electrodes for Supercapacitors. 2015, 479-510	24
1220	Polymer nanocomposites for energy storage, energy saving, and anticorrosion. 2015, 3, 14929-14941	165
1219	Value propositions of energy storage options for wind power output smoothing. 2015,	0
1218	A review of energy storage and its application in power systems. 2015,	9
1217	Cooperative Dispatch of BESS and Wind Power Generation Considering Carbon Emission Limitation in Australia. 2015, 11, 1313-1323	30
1216	Energy storage for wind power: A comparative analysis considering the type and size of the wind system. 2015,	2
1215	Optimal scheduling of networked energy storages. 2015,	
1214	Control and design of a hybrid energy storage system. 2015,	5
1213	A survey on energy storage technologies in power systems. 2015,	16
1212	Thermodynamic analysis of a liquid air energy storage system. 2015, 93, 1639-1647	140
1211	. 2015,	4
1210	Extension of holonic paradigm to smart grids. 2015, 48, 1099-1104	11
1209	A Sliding Mode Control of a Hybrid Magnetic Bearing for Wayside Flywheel Energy Storage Systems. 2015,	2
1208	Comparative Analysis of Single- and Dual-Media Thermocline Tanks for Thermal Energy Storage in Concentrating Solar Power Plants. 2015, 137,	12

1207	Dimensionless Study on Efficiency and Speed Characteristics of a Compressed Air Engine. 2015 , 137,		12
1206	An Optimal Sizing of Electrical Energy Storage System for an Accurate Energy Management in an Aircraft. 2015 ,		3
1205	Optimum community energy storage system for PV energy time-shift. 2015 , 137, 576-587		121
1204	Flow over submerged energy storage balloons in closely and widely spaced floral configurations. 2015 , 95, 59-77		8
1203	Survey of the transport properties of sodium superionic conductor materials for use in sodium batteries. 2015 , 273, 1056-1064		155
1202	Effects of large-scale power to gas conversion on the power, gas and carbon sectors and their interactions. 2015 , 94, 28-39		129
1201	Commercial and research battery technologies for electrical energy storage applications. 2015 , 48, 84-101		165
1200	Batteries for remote area power (RAP) supply systems. 2015 , 563-586		0
1199	A review of large-scale electrical energy storage. 2015 , 39, 1179-1195		135
1198	Solar Power Shaping: An Analytical Approach. 2015 , 6, 162-170		30
1197	Electrolysis of Carbon Dioxide in a Solid Oxide Electrolyzer with Silver-Gadolinium-Doped Ceria Cathode. 2015 , 162, F397-F402		33
1196	Hydraulic design and optimization of a modular pump-turbine runner. 2015 , 93, 388-398		18
1195	Solar fuels vis-à-vis electricity generation from sunlight: The current state-of-the-art (a review). <i>Renewable and Sustainable Energy Reviews</i> , 2015 , 44, 904-932	16.2	45
1194	Techno-economic analysis of grid-connected battery storage. 2015 , 91, 394-404		103
1193	Graphite nanosheets/nanoporous carbon black/cerium oxide nanoparticles as an electrode material for electrochemical capacitors. 2015 , 200, 117-122		5
1192	Power-to-What? Environmental assessment of energy storage systems. 2015 , 8, 389-400		294
1191	Solvent responsive silica composite nanofiltration membrane with controlled pores and improved ion selectivity for vanadium flow battery application. 2015 , 274, 1126-1134		33
1190	Mitigation of wind power intermittency: Storage technology approach. <i>Renewable and Sustainable Energy Reviews</i> , 2015 , 44, 447-456	16.2	74

1189	. 2015 , 33, 467-481	67
1188	Nanostructured pseudocapacitive materials decorated 3D graphene foam electrodes for next generation supercapacitors. 2015 , 7, 6999-7021	106
1187	Energy evaluation of a solar hydrogen storage facility: Comparison with other electrical energy storage technologies. 2015 , 40, 5518-5525	61
1186	A novel small scale Microbial Fuel Cell design for increased electricity generation and waste water treatment. 2015 , 40, 4263-4268	50
1185	Quasi-oppositional harmony search algorithm and fuzzy logic controller for load frequency stabilisation of an isolated hybrid power system. 2015 , 9, 427-444	36
1184	Study on the temperature compensation technology of air-powered engine. 2015 , 7, 023112	2
1183	A techno-economic assessment of offshore wind coupled to offshore compressed air energy storage. 2015 , 155, 315-322	31
1182	Adiabatic Compressed Air Energy Storage with packed bed thermal energy storage. 2015 , 155, 804-815	151
1181	Analysis of compressed air energy storage for large-scale wind energy in Suez, Egypt. 2015 ,	0
1180	Consumption management in the Nord Pool region: A stability analysis. 2015 , 146, 239-246	2
1179	Cost-efficient demand-pull policies for multi-purpose technologies – The case of stationary electricity storage. 2015 , 155, 334-348	56
1178	Preliminary study of high energy density Zn/Ni flow batteries. 2015 , 294, 574-579	20
1177	Optimization of Block Copolymer Electrolytes for Lithium Metal Batteries. 2015 , 27, 4682-4692	93
1176	Revisiting the Hydrogen Storage Behavior of the Na-O-H System. 2015 , 8, 2191-2203	10
1175	Hybrid Lithium-Sulfur Batteries with a Solid Electrolyte Membrane and Lithium Polysulfide Catholyte. 2015 , 7, 16625-31	95
1174	Modeling and Management of Batteries and Ultracapacitors for Renewable Energy Support in Electric Power Systems – An Overview. 2015 , 43, 1434-1452	32
1173	Dynamic multi-stage dispatch of isolated wind-diesel power systems. 2015 , 103, 605-615	13
1172	A Novel Constant-Pressure Pumped Hydro Combined with Compressed Air Energy Storage System. 2015 , 8, 154-171	30

1171	Electrification of roads: Opportunities and challenges. 2015 , 150, 109-119	73
1170	Experimental results of the hydrogen production control of a hydrogen energy buffer. 2015 , 40, 5013-5024	8
1169	Impacts of electricity mix, charging profile, and driving behavior on the emissions performance of battery electric vehicles: A Belgian case study. 2015 , 148, 496-505	109
1168	Optimal management of compressed air energy storage in a hybrid wind-pneumatic-diesel system for remote area's power generation. 2015 , 84, 267-278	27
1167	100 kJ/50 kW HTS SMES for Micro-Grid. 2015 , 25, 1-6	25
1166	Novel hydrogen production and power generation system using metal hydride. 2015 , 40, 6197-6206	20
1165	Spectroelectrochemical investigation of redox states in a polypyrrole/lignin composite electrode material. 2015 , 3, 12927-12937	63
1164	Digester Gas Upgrading to Synthetic Natural Gas in Solid Oxide Electrolysis Cells. 2015 , 29, 1641-1652	9
1163	A process integration approach for design of hybrid power systems with energy storage. 2015 , 17, 2055-2072	27
1162	Reliability evaluation of a standalone wind-photovoltaic/battery energy system based on realistic model of battery. 2015 , 7, 013107	10
1161	Effect of calcination temperature and molar ratio of tin and manganese on capacitance of Ti/SnO ₂ BbMn/PbO ₂ electrode during phenol electro-oxidation. 2015 , 747, 45-52	13
1160	Oxidation and reduction kinetics of iron and iron based alloys used as storage materials in high temperature battery. 2015 , 32, 81-91	8
1159	Locational effects of variability of injected power on total cost. 2015 ,	1
1158	Rechargeable lithium batteries for energy storage in smart grids. 2015 , 319-351	8
1157	A review on recent developments of anion exchange membranes for fuel cells and redox flow batteries. 2015 , 5, 37206-37230	151
1156	. 2015 , 3, 1392-1407	7
1155	Radiation-Grafted Polymer Electrolyte Membranes for Water Electrolysis Cells: Evaluation of Key Membrane Properties. 2015 , 7, 22203-12	41
1154	Mitigating power oscillations in wind power plants using ESS. 2015 ,	3

1153	Use of energy storage systems in low voltage networks with high photovoltaic system penetration. 2015,	2
1152	Flow Batteries: Current Status and Trends. 2015, 115, 11533-58	695
1151	Investigation of Usage of Compressed Air Energy Storage for Power Generation System Improving - Application in a Microgrid Integrating Wind Energy. 2015, 73, 305-316	28
1150	A method for Design to range Energy storage systems in catenary free operations of light railway vehicles. 2015,	2
1149	Design of a control limiter to improve the dynamic response of energy storage systems. 2015,	7
1148	Possible role of power-to-gas in future energy systems. 2015,	18
1147	Effect of activated carbon surface functional groups on nano-lead electrodeposition and hydrogen evolution and its applications in lead-carbon batteries. 2015, 186, 654-663	50
1146	Concentrating Solar Power. 2015, 115, 12797-838	298
1145	Supercapacitor-based DC-DC converter technique for DC-microgrids with UPS capability. 2015,	5
1144	A new coal gas utilization mode in China's steel industry and its effect on power grid balancing and emission reduction. 2015, 154, 644-650	15
1143	Thermal time shifting. 2015,	34
1142	Three control options for integrating wind power system using Hybrid Energy Storage System. 2015,	1
1141	Nitrogen-enriched porous carbon nanorods templated by cellulose nanocrystals as high performance supercapacitor electrodes. 2015, 3, 23768-23777	71
1140	Operational management of renewable energy systems with storage using an optimisation-based simulation methodology. 2015, 9, 263-278	4
1139	Tunable thermal conduction character of graphite-nanosheets-enhanced composite phase change materials via cooling rate control. 2015, 103, 251-258	24
1138	Mechanisms and Performances of Na _{1.5} Fe _{0.5} Ti _{1.5} (PO ₄) ₃ /C Composite as Electrode Material for Na-Ion Batteries. 2015, 119, 25220-25234	24
1137	Synthesis and hydrogen gas storage properties of metal complexes including dicarboxylic acid derivatives. 2015, 438, 1-4	2
1136	Simulation of a Distributed Generation System. 2015,	

1135	Can the Degree of Crystallinity of Ball Milled Mg ₂ Ni Intermetallic Compound Decide its Electrochemical Characteristics?. 2015 , 33, 137-149	
1134	Operations scheduling under electricity time-varying prices. 2015 , 53, 7136-7157	30
1133	Oxygen Evolution Catalyzed by Nickel-Iron Oxide Nanocrystals with a Nonequilibrium Phase. 2015 , 7, 19755-63	41
1132	Overview of insular power systems under increasing penetration of renewable energy sources: Opportunities and challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2015 , 52, 333-346	16.2 75
1131	A zinc/iron redox-flow battery under \$100 per kW h of system capital cost. 2015 , 8, 2941-2945	130
1130	Effect of Microstructure and Morphology of Electrospun Ultra-Small Carbon Nanofibers on Anode Performances for Lithium Ion Batteries. 2015 , 162, A1085-A1093	28
1129	The Role of Storage in Emerging Country Scenarios. 2015 , 73, 112-123	2
1128	Optimal generic energy storage system offering in day-ahead electricity markets. 2015 ,	4
1127	Kinetics of CO ₂ methanation over Ru/Al ₂ O ₃ and implications for renewable energy storage applications. 2015 , 12, 27-33	88
1126	Financial Storage Rights. 2015 , 30, 997-1005	40
1125	The effect of graphene on the performance of an electrochemical flow capacitor. 2015 , 3, 2717-2725	23
1124	Deduplication-Based Energy Efficient Storage System in Cloud Environment. 2015 , 58, 1373-1383	20
1123	Complementary characterization methods for Lithium-ion Polymer secondary battery modeling. 2015 , 67, 168-178	10
1122	Novel electrical energy storage system based on reversible solid oxide cells: System design and operating conditions. 2015 , 276, 133-144	69
1121	Day-Ahead and Real-Time Markets Simulation Methodology on Hydro Storage. 2015 , 201-227	1
1120	Energy Storage for Mitigating the Variability of Renewable Electricity Sources. 2015 , 1-33	8
1119	Dynamic evaluation of two configurations for a hybrid DFIG-based wind turbine integrating battery energy storage system. 2015 , 18, 1561-1577	6
1118	Dynamic model of a storage system with real-time simulation for power system reliability. 2015 , 25, 3109-3121	3

1117	Prospects, challenges, and latest developments in lithium-ion batteries. 2015 , 39, 303-316		34
1116	Electrical energy storage systems: A comparative life cycle cost analysis. <i>Renewable and Sustainable Energy Reviews</i> , 2015 , 42, 569-596	16.2	927
1115	Capacity allocation of a hybrid energy storage system for power system peak shaving at high wind power penetration level. 2015 , 75, 541-549		68
1114	The Ragone plots guided sizing of hybrid storage system for taming the wind power. 2015 , 65, 246-253		18
1113	Graphene models and nano-scale characterization technologies for fuel cell vehicle electrodes. <i>Renewable and Sustainable Energy Reviews</i> , 2015 , 42, 66-77	16.2	19
1112	Overview of current development in electrical energy storage technologies and the application potential in power system operation. 2015 , 137, 511-536		1921
1111	. 2016 ,		30
1110	The Review of Energy Storage Technologies Selection. 2016 , 05,		4
1109	A Novel Pumped Hydro Combined with Compressed Air Energy. 2016 , 155-166		0
1108	Energy storage for offshore wind farms. 2016 , 459-493		1
1107	Vanadium: A Transition Metal for Sustainable Energy Storing in Redox Flow Batteries. 2016 ,		1
1106	Optimized Dispatch Schedule for Autonomous Grids in Isolated Islands. 2016 , 42, 07001		1
1105	Thermal Energy Storage for Building Load Management: Application to Electrically Heated Floor. 2016 , 6, 194		12
1104	Optimal Allocation of Thermal-Electric Decoupling Systems Based on the National Economy by an Improved Conjugate Gradient Method. 2016 , 9, 17		9
1103	Energy Management of an Off-Grid Hybrid Power Plant with Multiple Energy Storage Systems. 2016 , 9, 661		27
1102	A Critical Study of Stationary Energy Storage Policies in Australia in an International Context: The Role of Hydrogen and Battery Technologies. 2016 , 9, 674		28
1101	References. 2016 , 267-284		
1100	Optimisation of Expansion Ratio of an Advanced Compressed Air Engine Kit. 2016 ,		2

1099	Energy storage technologies and real life applications [A state of the art review. 2016 , 179, 350-377	801
1098	Efficient energy storage method by multistage pump of the energy storage system using CFD. 2016 , 40, 685-691	4
1097	Comparison of dynamic models of battery energy storage for frequency regulation in power system. 2016 ,	11
1096	Comparative analysis of storage systems in a microgrid with MTDC based DFIG connection. 2016 ,	
1095	Review of Energy Storage Systems in electric grid and their potential in distribution networks. 2016 ,	11
1094	Performance and Reliability Assessment of NMC Lithium Ion Batteries for Stationary Application. 2016 ,	1
1093	Numerical Comparison and Sizing of Sensible and Latent Thermal Energy Storage for Compressed Air Energy Storage Systems. 2016 ,	
1092	Sizing of lead acid storage system in an energy buffer connected to a wind farm. 2016 ,	
1091	Stochastic day-ahead generation scheduling with pumped-storage stations and wind power integrated. 2016 ,	2
1090	Solar fuel production by using PV/PEC junctions based on earth-abundant materials. 2016 ,	1
1089	Unit commitment problem solution in the presence of solar and wind power integration by an improved priority list method. 2016 ,	0
1088	Non-precious Metal Oxide and Metal-free Catalysts for Energy Storage and Conversion. 2016 , 243-320	
1087	A comparative research of two adiabatic compressed air energy storage systems. 2016 , 108, 566-578	87
1086	Experimental study of compressed air energy storage system with thermal energy storage. 2016 , 103, 182-191	95
1085	A European Perspective: Potential of Grid and Storage for Balancing Renewable Power Systems. 2016 , 4, 114-122	24
1084	Effects of wind intermittence and fluctuation on reverse osmosis desalination process and solution strategies. 2016 , 395, 17-27	39
1083	. 2016 , 1-1	34
1082	RES diffusion and R&D investments in the flexibilisation of the European electricity networks. <i>Renewable and Sustainable Energy Reviews</i> , 2016 , 55, 1069-1082	16.2 8

1081	Optimum battery energy storage system using PSO considering dynamic demand response for microgrids. 2016 , 83, 58-66	80
1080	Fabrication of ultra-high energy and power asymmetric supercapacitors based on hybrid 2D MoS ₂ /graphene oxide composite electrodes: a binder-free approach. 2016 , 6, 43261-43271	30
1079	Solar Power Generation System with Low Temperature Heat Storage. 2016 , 22, 848-853	0
1078	Modeling Investigation of the Local Electrochemistry in Lithium-O ₂ Batteries: A Kinetic Monte Carlo Approach. 2016 , 163, A329-A337	21
1077	Poly(boron-dipyrromethene) A Redox-Active Polymer Class for Polymer Redox-Flow Batteries. 2016 , 28, 3401-3405	92
1076	A developed control strategy for mitigating wind power generation transients using superconducting magnetic energy storage with reactive power support. 2016 , 83, 485-494	43
1075	Analysis of electrical energy storage technologies for future electric grids. 2016 ,	4
1074	Numerical analysis of latent heat thermal energy storage using encapsulated phase change material for solar thermal power plant. 2016 , 95, 323-336	68
1073	Life cycle assessment (LCA) and life cycle cost (LCC) analysis model for a stand-alone hybrid renewable energy system. 2016 , 95, 337-355	86
1072	Value of corrective network security for distributed energy storage applications. 2016 , 10, 1758-1767	4
1071	Optimum community energy storage system for demand load shifting. 2016 , 174, 130-143	75
1070	Power management of a hybrid renewable system for artificial islands: A case study. 2016 , 106, 774-789	65
1069	Performance evaluation of a stand-alone solar dish Stirling system for power generation suitable for off-grid rural electrification. 2016 , 129, 140-156	41
1068	Integration of energy storage in a wind-diesel hybrid system: Techno economical & operational advantages. 2016 ,	1
1067	Comparison of electricity storage options using levelized cost of storage (LCOS) method. 2016 , 183, 1594-1606	180
1066	Overview of energy storage in renewable energy systems. 2016 , 41, 20914-20927	302
1065	Modelling and simulation of phase change material latent heat storages applied to a solar-powered Organic Rankine Cycle. 2016 , 179, 378-388	57
1064	Review of residential PV-storage architectures. 2016 ,	9

1063	Smart grid communication technologies- overview, research challenges and opportunities. 2016,		30
1062	Massive energy storage systems enable secure electricity supply from renewables. 2016, 4, 659-667		6
1061	Allocation of demand response resources: toward an effective contribution to power system voltage stability. 2016, 10, 4169-4177		22
1060	A three-phase full soft-switching current-fed naturally clamped DC-DC converter for high-power energy storage applications. 2016,		
1059	An Acid-Base Electrochemical Flow Battery as energy storage system. 2016, 41, 17801-17806		13
1058	Energy storage systems and power system stability. 2016,		3
1057	Energy storage in the energy transition context: A technology review. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 65, 800-822	16.2	295
1056	Hierarchical copper/nickel-based manganese dioxide core-shell nanostructure for supercapacitor electrodes. 2016, 212, 671-677		27
1055	Harnessing and storing visible light using a heterojunction of WO ₃ and CdS for sunlight-free catalysis. 2016, 15, 1006-11		10
1054	Emergence of hybrid energy storage systems in renewable energy and transport applications [A review. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 65, 11-23	16.2	199
1053	Components design and daily operation optimization of a hybrid system with energy storages. 2016, 117, 569-577		37
1052	Tracking the morphology evolution of nano-lead electrodeposits on the internal surface of porous carbon and its influence on lead-carbon batteries. 2016, 222, 376-384		22
1051	High rechargeable sodium metal-conducting polymer batteries. 2016, 335, 131-137		16
1050	Recent Trends and Perspectives in Electrochemical Water Splitting with an Emphasis on Sulfide, Selenide, and Phosphide Catalysts of Fe, Co, and Ni: A Review. 2016, 6, 8069-8097		1378
1049	Nb ₂ O ₅ quantum dots embedded in MOF derived nitrogen-doped porous carbon for advanced hybrid supercapacitor applications. 2016, 4, 17838-17847		83
1048	Charging a renewable future: The impact of electric vehicle charging intelligence on energy storage requirements to meet renewable portfolio standards. 2016, 336, 63-74		56
1047	Evaluating battery energy storage systems: An analysis of their adoption with photovoltaic plants in Italy. 2016,		0
1046	State-of-Art of Thermochemical Heat Storage Systems. 2016, 15-58		3

1045	Exergy analysis of an adiabatic compressed air energy storage system using a cascade of phase change materials. 2016 , 106, 528-534	63
1044	The concentration gradient flow battery as electricity storage system: Technology potential and energy dissipation. 2016 , 325, 129-139	54
1043	Past, Present, and Future Challenges of the Marine Vessel's Electrical Power System. 2016 , 2, 522-537	99
1042	Energy Storage Technologies for Solar Photovoltaic Systems. 2016 , 231-251	1
1041	A Si/C nanocomposite anode by ball milling for highly reversible sodium storage. 2016 , 70, 8-12	57
1040	Nanostructured catalysts for electrochemical water splitting: current state and prospects. 2016 , 4, 11973-12009	90
1039	Sustainability of vanadium redox-flow batteries: Benchmarking electrolyte synthesis procedures. 2016 , 41, 16477-16488	29
1038	Scheduling when Reservoirs are Batteries for Wind- and Solar-power. 2016 , 87, 173-180	5
1037	Torque-assisting Compressed Air Energy Storage hydraulic wind drivetrains. 2016 ,	
1036	Advances in Solar Photovoltaic Power Plants. 2016 ,	14
1035	A critical review of electric vehicle charging using solar photovoltaic. 2016 , 40, 439-461	51
1034	Thermal time shifting. 2016 , 43, 439-449	1
1033	Impact of power-to-gas storage on the integration of photovoltaic electricity into the grid. 2016 , 31, 9-15	1
1032	Review: Uninterruptible Power Supply (UPS) system. <i>Renewable and Sustainable Energy Reviews</i> , 2016 , 58, 1395-1410	16.2 63
1031	Operation, sizing, and economic evaluation of storage for solar and wind power plants. <i>Renewable and Sustainable Energy Reviews</i> , 2016 , 59, 1117-1129	16.2 65
1030	Multi-wall carbon nanotube-embedded lithium cobalt phosphate composites with reduced resistance for high-voltage lithium-ion batteries. 2016 , 12, 147-155	12
1029	Empowering the electric grid: Can SMES coupled to wind turbines improve grid stability?. 2016 , 89, 224-230	6
1028	On the Benefits of a Symmetric Redox Flow Battery. 2016 , 163, A338-A344	108

1027	Twelve Principles for Green Energy Storage in Grid Applications. 2016 , 50, 1046-55	55
1026	Leaving the grid—The effect of combining home energy storage with renewable energy generation. <i>Renewable and Sustainable Energy Reviews</i> , 2016 , 60, 1213-1224	16.2 35
1025	A formal discussion of the Sarewitz-Nelson rules. 2016 , 25, 714-730	5
1024	A hybrid CSP/PV system for improving the dispatchability of solar power plants. 2016 , 114, 312-323	53
1023	Sub-micrometer Novolac-Derived Carbon Beads for High Performance Supercapacitors and Redox Electrolyte Energy Storage. 2016 , 8, 9104-15	43
1022	Polypyrrole-promoted superior cyclability and rate capability of $\text{Na}_x\text{Fe}[\text{Fe}(\text{CN})_6]$ cathodes for sodium-ion batteries. 2016 , 4, 6036-6041	72
1021	Energy storage systems in modern grids—Matrix of technologies and applications. 2016 , 6, 248-259	174
1020	Nano iron pyrite (FeS_2) exhibits bi-functional electrode character. 2016 , 6, 16859-16867	27
1019	Identifying Material and Device Targets for a Flare Gas Recovery System Utilizing Electrochemical Conversion of Methane to Methanol. 2016 , 4, 1736-1745	15
1018	An optimization framework for the integrated planning of generation and transmission expansion in interconnected power systems. 2016 , 170, 1-21	70
1017	Short-term bulk energy storage system scheduling for load leveling in unit commitment: modeling, optimization, and sensitivity analysis. 2016 , 7, 360-72	35
1016	Comparison of two energy storage options for optimum balancing of wind farm power outputs. 2016 , 10, 832-839	23
1015	The influence of $\text{Co}_3\text{V}_2\text{O}_8$ morphology on the oxygen evolution reaction activity and stability. 2016 , 63, 44-47	30
1014	An Organic Electroactive Material for Flow Batteries. 2016 , 190, 737-743	49
1013	Environmental impacts of balancing offshore wind power with compressed air energy storage (CAES). 2016 , 95, 91-98	52
1012	The role of electrical energy storage in sub-Saharan Africa. 2016 , 8, 287-299	9
1011	Experimental assessment of hydrogen systems and vanadium-redox-flow-batteries for increasing the self-consumption of photovoltaic energy in buildings. 2016 , 41, 740-751	20
1010	Effect of tariffs on the performance and economic benefits of PV-coupled battery systems. 2016 , 164, 175-187	84

1009	Generalized Model of VSC-Based Energy Storage Systems for Transient Stability Analysis. 2016 , 31, 3369-3380	103
1008	Optimizing an off-grid electrical system in Brochet, Manitoba, Canada. <i>Renewable and Sustainable Energy Reviews</i> , 2016 , 53, 709-719	16.2 29
1007	Flexibility requirements of renewable energy based electricity systems ^{1b} review of research results and methodologies. <i>Renewable and Sustainable Energy Reviews</i> , 2016 , 53, 10-22	16.2 223
1006	Maximum Power Point Tracking of a Small-Scale Compressed Air Energy Storage System. 2016 , 63, 985-994	6
1005	Can the degree of crystallinity of ball-milled Mg ₂ Ni intermetallic compound decide its electrochemical characteristics?. 2016 , 34, 134-142	4
1004	Price and capacity competition in balancing markets with energy storage. 2017 , 8, 169-197	10
1003	Pumped storage power stations in China: The past, the present, and the future. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 71, 720-731	16.2 41
1002	Conceptual design of ammonia-based energy storage system: System design and time-invariant performance. 2017 , 63, 1620-1637	53
1001	. 2017 , 3, 22-35	40
1000	The crossover behavior of bromine species in the metal-free flow battery. 2017 , 47, 261-272	12
999	A Fast, Memory-Efficient Discrete-Time Realization Algorithm for Reduced-Order Li-Ion Battery Models. 2017 , 14,	6
998	Homogeneous/Inhomogeneous-Structured Dielectrics and their Energy-Storage Performances. 2017 , 29, 1601727	615
997	Solar energy conversion, storage, and release using an integrated solar-driven redox flow battery. 2017 , 5, 5362-5372	36
996	How to improve peak time coverage through a smart-controlled MCHP unit combined with thermal and electric storage systems. 2017 , 139, 78-90	8
995	Price impact assessment for large-scale merchant energy storage facilities. 2017 , 125, 27-43	16
994	Assessment of sensible heat storage and fuel utilization efficiency enhancement in rubber sheet drying. 2017 , 10, 67-74	6
993	Phase-change heat storage installation in combined heat and power plants for integration of renewable energy sources into power system. 2017 , 124, 640-651	36
992	Feasibility Study of an Energy Storage System for Distributed Generation System in Islanding Mode. 2017 , 139,	16

991	System design and economic performance of gravity energy storage. 2017 , 156, 317-326		38
990	Energy Storage Systems in Solar-Wind Hybrid Renewable Systems. 2017 , 189-222		3
989	Comparative study on air distribution system for piston-type compressed air engine. 2017 , 9, 168781401769763		3
988	Renewable energy: Present research and future scope of Artificial Intelligence. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 77, 297-317	16.2	122
987	Evaluation of Electrical Energy Storage (EES) technologies for renewable energy: A case from the US Pacific Northwest. 2017 , 11, 25-54		41
986	Technical and economic analysis on grid-connected wind farm based on hybrid energy storage system and distributed generators. 2017 ,		
985	WS2 nanosheets decorated by Ag nanoparticles with different content and uniform distribution for enhanced electrochemical properties. 2017 , 19, 1		7
984	Simulating Gas Storage in Salt Caverns. 2017 , 45-62		1
983	Energy conservation in industrial pneumatics: A state model for predicting energetic savings using a novel pneumatic strain energy accumulator. 2017 , 198, 239-249		16
982	Exploring the use of deep level gold mines in South Africa for underground pumped hydroelectric energy storage schemes. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 78, 668-682	16.2	37
981	Parameters driving environmental performance of energy storage systems across grid applications. 2017 , 12, 11-28		21
980	A novel scaling factor based fuzzy logic controller for frequency control of an isolated hybrid power system. 2017 , 130, 339-350		36
979	Boosting Photoelectrochemical Water Splitting by TENG-Charged Li-Ion Battery. 2017 , 7, 1700124		24
978	Imidazolium-based Mono and Dicationic Ionic Liquid Sodium Polymer Gel Electrolytes. 2017 , 241, 517-525		25
977	Computational Geotechnics. 2017 ,		1
976	Review of energy storage systems for electric vehicle applications: Issues and challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 69, 771-789	16.2	430
975	Prospects of recently developed membraneless cell designs for redox flow batteries. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 70, 506-518	16.2	35
974	Energy conversion technologies towards self-powered electrochemical energy storage systems: the state of the art and perspectives. 2017 , 5, 1873-1894		88

973	Nanocrystalline SnS coated onto reduced graphene oxide: demonstrating the feasibility of a non-graphitic anode with sulfide chemistry for potassium-ion batteries. 2017 , 53, 8272-8275	164
972	Technical and economic analysis of energy storage systems in smart grids. 2017 ,	0
971	A strategy for the photovoltaic-powered pumped storage hydroelectricity. 2017 , 28, 544-563	4
970	An overview of energy storage and its importance in Indian renewable energy sector. 2017 , 13, 10-23	61
969	Principles of sustainability and physics as a basis for the low-carbon energy transition. 2017 , 23, 287-297	8
968	Introduction. 2017 , 1-5	
967	Earth-abundant amorphous catalysts for electrolysis of water. 2017 , 38, 991-1005	37
966	Lowering the cost of large-scale energy storage: High temperature adiabatic compressed air energy storage. 2017 , 6, 126-133	14
965	Multi-criteria algorithm-based methodology used to select suitable domes for compressed air energy storage. 2017 , 41, 2108-2120	10
964	High temperature-stability of (Pb _{0.9} La _{0.1})(Zr _{0.65} Ti _{0.35})O ₃ ceramic for energy-storage applications at finite electric field strength. 2017 , 137, 114-118	22
963	Suitability and characteristics of rocks for sensible heat storage in CSP plants. 2017 , 169, 245-257	74
962	Supervisory LMI-Based State-Feedback Control for Current Source Power Conditioning of SMES. 2017 ,	8
961	Simplified model of a dual-media molten-salt thermocline tank with a multiple layer wall. 2017 , 151, 146-161	18
960	Large heat pumps in Swedish district heating systems. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 79, 1275-1284	16.2 100
959	An interdisciplinary review of energy storage for communities: Challenges and perspectives. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 79, 730-749	16.2 144
958	Challenges and trends of energy storage expansion planning for flexibility provision in low-carbon power systems – a review. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 80, 603-619	16.2 65
957	Highly Active and Stable Iridium Pyrochlores for Oxygen Evolution Reaction. 2017 , 29, 5182-5191	120
956	An integrated techno-economic and life cycle environmental assessment of power-to-gas systems. 2017 , 193, 440-454	161

955	Numerical simulation of bromine crossover behavior in flow battery. 2017 ,		2
954	California's renewable generation and pumped hydro storage's profitability. 2017 , 30, 15-22		3
953	Nano-sized Mo- and Nb-doped TiO as anode materials for high energy and high power hybrid Li-ion capacitors. 2017 , 28, 195403		25
952	Engineering radical polymer electrodes for electrochemical energy storage. 2017 , 352, 226-244		58
951	Bio-inspired CO reduction by a rhenium tricarbonyl bipyridine-based catalyst appended to amino acids and peptidic platforms: incorporating proton relays and hydrogen-bonding functional groups. 2017 , 198, 279-300		40
950	A Unified Approach to the Sizing and Control of Energy Storage Systems. 2017 , 45, 693-704		4
949	New Trends in Energy Production and Utilization. 2017 , 107, 7-14		32
948	Study of the Basque-Cantabrian basin as a suitable region for the implementation of an energy storage system based on compressed air energy storage (CAES). 2017 , 76, 1		4
947	Considerations on the need for electricity storage requirements: Power versus energy. 2017 , 143, 137-149		23
946	Sustainability assessment of large-scale storage technologies for surplus electricity using group multi-criteria decision analysis. 2017 , 19, 689-703		24
945	Thermodynamic analysis of a novel energy storage system based on compressed CO ₂ fluid. 2017 , 41, 1487-1503		30
944	Dual-encapsulation of octadecanol in thermal/electric conductor for enhanced thermoconductivity and efficient energy storage. 2017 , 1, 1430-1434		3
943	Coordinated Active Power Dispatch for a Microgrid via Distributed Lambda Iteration. 2017 , 7, 250-261		25
942	Conceptualizing sustainable development of conventional power systems in developing countries □ A contribution towards low carbon future. 2017 , 126, 112-123		13
941	Impact of operation strategies of large scale battery systems on distribution grid planning in Germany. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 74, 1042-1063	16.2	44
940	In-situ growth of cobalt oxide nanoflakes from cobalt nanosheet on nickel foam for battery-type supercapacitors with high specific capacity. 2017 , 785, 103-108		26
939	Integrated photovoltaic-grid dc fast charging system for electric vehicle: A review of the architecture and control. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 69, 1243-1257	16.2	78
938	Implicit numerical integration and consistent linearization of inelastic constitutive models of rock salt. 2017 , 182, 87-103		17

937	Design and performance evaluation of a novel 1 kW-class hydrogen production/power generation system. 2017 , 194, 296-303		6
936	Improvement of safety, longevity and performance of lead acid battery in off-grid PV systems. 2017 , 42, 3466-3478		19
935	Long-term sizing of lead-acid batteries in order to reduce technical losses on distribution networks: A distributed generation approach. 2017 , 144, 163-174		12
934	Battery charge equalization controller in electric vehicle applications: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 75, 1363-1385	16.2	101
933	Graphene-encapsulated materials: Synthesis, applications and trends. 2017 , 86, 1-24		60
932	Maximizing DISCO profit in active distribution networks by optimal planning of energy storage systems and distributed generators. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 71, 365-372	16.2	50
931	Energy storage through intercalation reactions: electrodes for rechargeable batteries. 2017 , 4, 26-53		74
930	Earth Abundant Fe/Mn-Based Layered Oxide Interconnected Nanowires for Advanced K-Ion Full Batteries. 2017 , 17, 544-550		297
929	Wind generation's effect on the ex post variable profit of compressed air energy storage: Evidence from Texas. 2017 , 9, 25-39		8
928	The electric vehicle: a review. 2017 , 9, 49		19
927	Overview of technical specifications for grid-connected photovoltaic systems. 2017 , 152, 312-327		47
926	Internal short circuit mitigation of high-voltage lithium-ion batteries with functional current collectors. 2017 , 7, 45662-45667		9
925	Theoretical and experimental study of Reversible Solid Oxide Cell (r-SOC) systems for energy storage. 2017 , 141, 202-214		44
924	High capacity potassium-ion battery anodes based on black phosphorus. 2017 , 5, 23506-23512		191
923	Exergy storage of compressed air in cavern and cavern volume estimation of the large-scale compressed air energy storage system. 2017 , 208, 745-757		53
922	Deriving Operating Rules of Pumped Water Storage Using Multiobjective Optimization: Case Study of the Han to Wei Interbasin Water Transfer Project, China. 2017 , 143, 05017012		33
921	Electrochemical performance of silicon nanostructures in low-temperature ionic liquids for microelectronic applications. 2017 , 5, 22708-22716		12
920	CO ₂ Storage Simulation in an Autoclave using Samples from an Early Triassic Sandstone Reservoir. 2017 , 114, 5299-5310		

919	Biosupercapacitors. 2017 , 5, 226-233	34
918	Ambient-Temperature Energy Storage with Polyvalent Metal-Sulfur Chemistry. 2017 , 1, 1700217	31
917	Integration of a mechanical energy storage system in a road pavement energy harvesting hydraulic device with mechanical actuation. 2017 , 9, 044701	3
916	Pumped hydroelectric storage utilization assessment: Forerunner of renewable energy integration or Trojan horse?. 2017 , 140, 318-329	35
915	Green Applications of Carbon Nanostructures produced by Plasma Techniques. 2017 , 2, 2647-2659	3
914	Design and Simulation of Rate-based CO ₂ Capture Processes Using Carbonic Anhydrase (CA) Applied to Biogas. 2017 , 114, 1434-1443	4
913	Structure and properties of clay ceramics for thermal energy storage. 2017 , 100, 4748-4759	6
912	Role of pump hydro in electric power systems. 2017 , 813, 012002	7
911	A pyrene-modified cobalt salophen complex immobilized on multiwalled carbon nanotubes acting as a precursor for efficient electrocatalytic water oxidation. 2017 , 46, 13020-13026	28
910	Trading on local energy markets: A comparison of market designs and bidding strategies. 2017 ,	59
909	The role of energy storage in local energy markets. 2017 ,	9
908	Lifetime maximization of lead-acid batteries in small scale UPS and distributed generation systems. 2017 ,	12
907	From solar to hydrogen: Preliminary experimental investigation on a small scale facility. 2017 , 42, 20979-209938	
906	Controlled electricity distribution network black start with energy storage system support. 2017 ,	3
905	Performance and cost evaluation of an innovative Pumped Thermal Electricity Storage power system. 2017 , 138, 419-436	71
904	Process Design Study of Reversible Solid Oxide Cell (r-SOC) System for Coupling Energy Storage and Hydrogen Economy Supply Chain. 2017 , 78, 2925-2932	2
903	A review of the impacts and mitigation strategies of high PV penetration in low voltage networks. 2017 ,	10
902	Role of Protons in Electrochemical Ammonia Synthesis Using Solid-State Electrolytes. 2017 , 5, 7972-7978	12

901	Techniques for Mitigating Impacts of High-Penetration Photovoltaics. 2017 , 227-272	
900	Preparation and Properties of NrGO-CNT Composite for Lithium-Ion Capacitors. 2017 , 164, A3657-A3665	9
899	A profitability investigation into the collaborative operation of wind and underwater compressed air energy storage units in the spot market. 2017 , 141, 1779-1794	35
898	A bimetallic carbide derived from a MOF precursor for increasing electrocatalytic oxygen evolution activity. 2017 , 53, 13027-13030	46
897	Cost optimization of a hybrid energy storage system using GAMS. 2017 ,	4
896	Graphene-Roll-Wrapped Prussian Blue Nanospheres as a High-Performance Binder-Free Cathode for Sodium-Ion Batteries. 2017 , 9, 25317-25322	50
895	Investigation of a Small-Scale Compressed Air Energy Storage Pile as a Foundation System. 2017 ,	1
894	Core/Shell Structure Nano-Iron/Iron Carbide Electrodes for Rechargeable Alkaline Iron Batteries. 2017 , 164, A1665-A1672	19
893	Thermodynamic analysis of a novel pumped thermal energy storage system utilizing ambient thermal energy and LNG cold energy. 2017 , 148, 1248-1264	26
892	Techno-economics and environmental analysis of energy storage for a student residence under a South African time-of-use tariff rate. 2017 , 135, 413-429	10
891	A design methodology of stand-alone photovoltaic power systems for rural electrification. 2017 , 148, 1127-1141	24
890	Theme evolution analysis of electrochemical energy storage research based on CitNetExplorer. 2017 , 110, 113-139	11
889	Increasing fossil power plant flexibility by integrating molten-salt thermal storage. 2017 , 118, 876-883	33
888	Longitudinal assessment of hydropeaking impacts on various scales for an improved process understanding and the design of mitigation measures. 2017 , 575, 1503-1514	35
887	Optimization of Electrical Energy Storage System Sizing for an Accurate Energy Management in an Aircraft. 2017 , 66, 5572-5583	24
886	Integration of a LOHC storage into a heat-controlled CHP system. 2017 , 118, 1123-1130	14
885	Dynamic simulation of Adiabatic Compressed Air Energy Storage (A-CAES) plant with integrated thermal storage [Link between components performance and plant performance. 2017 , 185, 16-28	133
884	Calculation of levelized costs of electricity for various electrical energy storage systems. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 67, 908-920	16.2 94

883	An Integrated Energy Storage System Based on Hydrogen Storage. 2017 , 771-801		1
882	Design and test of a new droop control algorithm for a SMES/battery hybrid energy storage system. 2017 , 118, 1110-1122		78
881	The environmental impact of Li-Ion batteries and the role of key parameters A review. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 67, 491-506	16.2	334
880	Electrocatalysts for the generation of hydrogen, oxygen and synthesis gas. 2017 , 58, 1-35		311
879	Energy Efficiency: Comparison of Different Systems and Technologies. 2017 , 1309-1384		1
878	Exploring emerging battery technology for grid-connected energy storage with Constructive Technology Assessment. 2017 , 115, 99-110		14
877	Overview on recent developments in energy storage: Mechanical, electrochemical and hydrogen technologies. 2017 , 132, 372-387		264
876	Recent approaches of unit commitment in the presence of intermittent renewable energy resources: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 70, 215-223	16.2	108
875	Stand-alone island daily power management using a tidal turbine farm and an ocean compressed air energy storage system. 2017 , 103, 286-294		21
874	Review of Flywheel Energy Storage Systems structures and applications in power systems and microgrids. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 69, 9-18	16.2	168
873	Structure models and nano energy system design for proton exchange membrane fuel cells in electric energy vehicles. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 67, 160-172	16.2	35
872	Improved lithium adsorption in boron- and nitrogen-substituted graphene derivatives. 2017 , 52, 815-831		16
871	Practical battery size optimization of a PV system by considering individual customer damage function. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 67, 36-50	16.2	19
870	Modeling, Simulation, and Comparison of Control Techniques for Energy Storage Systems. 2017 , 32, 2445-2454		40
869	Review on autonomous charger for EV and HEV. 2017 ,		5
868	Comparative Assessment of Different Types of Ocean Compressed Air Energy Storage Systems Based on Exergy Analysis. 2017 ,		1
867	Energy Storage and Power Electronics Technologies: A Strong Combination to Empower the Transformation to the Smart Grid. 2017 , 105, 2191-2219		74
866	Research on the function orientation of pumped-storage plant in China. 2017 , 52, 012043		

865	System interconnection as a path to bottom up electrification. 2017,	2
864	Performance and degradation of an SOEC stack with different cell components. 2017, 258, 1254-1261	33
863	Energy storage for renewable energy integration: the case of Madeira Island, Portugal. 2017, 136, 251-257	15
862	Nonlinear Control of a Fully-Fed Variable Speed Pumped Storage Plant. 2017, 50, 3250-3255	3
861	Housing estate energy storage feasibility for a 2050 scenario. 2017,	5
860	Line loss reduction and voltage profile improvement in radial distribution networks using battery energy storage system. 2017,	5
859	Improved control strategy of energy storage system considering train operation states. 2017,	3
858	An overview of energy storage devices for distribution network. 2017,	3
857	Fabrication of a biomass stove and conversion of electricity from waste heat using TEG. 2017,	1
856	Optimal scheduling of energy storage system using NLP approach. 2017,	2
855	Towards electric vehicles integration to distributed energy resources of prosumer. 2017,	
854	Energy storage for frequency control in microgrids. 2017,	
853	. 2017,	1
852	Industry relevant RIE texturing for mc-Si diamond wire or Direct Wafer product: optimized reflectivity, uniformity, and throughput. 2017,	2
851	Intelligent Energy Management for Environmental Monitoring Systems. 2017, 67-94	8
850	Supercapacitor State Based Control and Optimization for Multiple Energy Storage Devices Considering Current Balance in Urban Rail Transit. 2017, 10, 520	11
849	Hybrid Hydrogen and Mechanical Distributed Energy Storage. 2017, 10, 2035	13
848	Performance Study of Salt Cavern Air Storage Based Non-Supplementary Fired Compressed Air Energy Storage System. 2017, 248, 012007	1

847	Solar fuel production by using PV/PEC junctions based on earth-abundant materials. 2017 ,		
846	A systems engineering framework for application-dependent identification and design of electrochemical energy conversion systems. 2017 , 2587-2592		1
845	A Cost Optimized Fully Sustainable Power System for Southeast Asia and the Pacific Rim. 2017 , 10, 583		39
844	Synthesis and application of NiMnO ₃ -rGO nanocomposites as electrode materials for hybrid energy storage devices. 2018 , 460, 74-83		16
843	Optimal selection of air expansion machine in Compressed Air Energy Storage: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2018 , 87, 77-95	16.2	59
842	Direct Nitradated Graphite Felt as an Electrode Material for the Vanadium Redox Flow Battery. 2018 , 39, 281-286		1
841	Laser Sintering of Printed Anodes for Al-Air Batteries. 2018 , 165, A584-A592		31
840	The role of electricity storage and hydrogen technologies in enabling global low-carbon energy transitions. 2018 , 216, 649-661		88
839	Comparison of single-ion-conductor block-copolymer electrolytes with Polystyrene-TFSI and Polymethacrylate-TFSI structural blocks. 2018 , 269, 250-261		36
838	A Hybrid Electric and Thermal Solar Receiver. 2018 , 2, 962-975		54
837	Improving the Back Surface Field on an Amorphous Silicon Carbide Thin-Film Photocathode for Solar Water Splitting. 2018 , 11, 1797-1804		5
836	Electrochemistry-Mechanics Coupling in Intercalation Electrodes. 2018 , 165, A1064-A1083		19
835	A Review on Recent Developments and Prospects for the Oxygen Reduction Reaction on Hollow Pt-alloy Nanoparticles. 2018 , 19, 1552-1567		48
834	Battery energy storage system size determination in renewable energy systems: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2018 , 91, 109-125	16.2	298
833	Electricity storage needs for the energy transition: An EROI based analysis illustrated by the case of Belgium. 2018 , 152, 960-973		21
832	Critical Review Experimental Diagnostics and Material Characterization Techniques Used on Redox Flow Batteries. 2018 , 165, A970-A1010		49
831	Heat pump placement, connection and operational modes in European district heating. 2018 , 166, 122-144		88
830	Grid-Connected PV Systems. 2018 , 121-186		

829	Optimal design of hybrid energy systems incorporating stochastic renewable resources fluctuations. 2018 , 15, 379-399	16
828	Pumped Thermal Electricity Storage: A technology overview. 2018 , 6, 301-315	87
827	Stability Improvement of DC Power Systems in an All-Electric Ship Using Hybrid SMES/Battery. 2018 , 28, 1-6	38
826	A NLP approach to optimally size an energy storage system for proper utilization of renewable energy sources. 2018 , 125, 483-491	8
825	Improving battery lifetime and reducing life cycle cost of a PV/battery system using supercapacitor for remote agricultural farm power application. 2018 , 10, 013503	13
824	A Self-Powered Portable Power Bank Based on a Hybridized Nanogenerator. 2018 , 3, 1700209	14
823	Energy Perspective 2030 for Ukraine in the Context of the EU Integration. 2018 , 113-129	4
822	Energy storage key performance indicators for building application. 2018 , 40, 54-65	30
821	Sizing of hybrid energy storage system for a PV based microgrid through design space approach. 2018 , 212, 640-653	106
820	Advances in Distribution System Analysis with Distributed Resources: Survey with a Case Study. 2018 , 15, 86-100	10
819	Dual Anion Interconversion Reversible Insertion in a Bipyridinium Diamide Triad as the Negative Electrode for Aqueous Batteries. 2018 , 8, 1701988	33
818	A new nano lead-doped mesoporous carbon composite as negative electrode additives for ultralong-cyclability lead-carbon batteries. 2018 , 337, 201-209	26
817	Heat transfer fluid and material selection for an innovative Pumped Thermal Electricity Storage system. 2018 , 147, 155-168	34
816	On the effects of storage facilities on optimal zonal pricing in electricity markets. 2018 , 113, 778-794	12
815	Hydrothermal synthesis and pseudocapacitive properties of morphology-tuned nickel sulfide (NiS) nanostructures. 2018 , 42, 2733-2742	29
814	Environmental impact, life cycle analysis and battery performance of upcycled carbon anodes. 2018 , 5, 1237-1250	8
813	Energy storage and transmission expansion planning: substitutes or complements?. 2018 , 12, 1738-1746	18
812	Synergistic catalytic effect of SrTiO ₃ and Ni on the hydrogen storage properties of MgH ₂ . 2018 , 43, 6244-6255	62

811	Smart design and construction of nanoflake-like MnO ₂ /SiO ₂ hierarchical microcapsules containing phase change material for in-situ thermal management of supercapacitors. 2018 , 164, 311-328	43
810	TECHNOLOGY ROADMAPPING. 2018 , i-783	2
809	Modeling of Lithium-Ion Battery Degradation for Cell Life Assessment. 2018 , 9, 1131-1140	293
808	A Game Theory-Based Coordination and Optimization Control Methodology for a Wind Power-Generation Hybrid Energy Storage System. 2018 , 20, 86-103	9
807	A review of renewable energy development in Africa: A focus in South Africa, Egypt and Nigeria. <i>Renewable and Sustainable Energy Reviews</i> , 2018 , 81, 2502-2518	16.2 123
806	Energy and Cost Analysis of a New Packed Bed Pumped Thermal Electricity Storage Unit. 2018 , 140,	26
805	Storage sizing for grid connected hybrid wind and storage power plants taking into account forecast errors autocorrelation. 2018 , 117, 380-392	15
804	Scalable Coordinated Control of Energy Storage Systems for Enhancing Power System Angle Stability. 2018 , 9, 763-770	14
803	Technical performance analysis and economic evaluation of a compressed air energy storage system integrated with an organic Rankine cycle. 2018 , 211, 318-330	29
802	Techno-economic analysis of a power to biogas system operated based on fluctuating electricity price. 2018 , 117, 166-174	19
801	Integration of a SMES Battery-Based Hybrid Energy Storage System into Microgrids. 2018 , 31, 1449-1457	15
800	Energy Management and Optimization Methods for Grid Energy Storage Systems. 2018 , 6, 13231-13260	140
799	Lead batteries for utility energy storage: A review. 2018 , 15, 145-157	391
798	An active nanoporous Ni(Fe) OER electrocatalyst via selective dissolution of Cd in alkaline media. 2018 , 225, 1-7	74
797	Cost metrics of electrical energy storage technologies in potential power system operations. 2018 , 25, 43-59	55
796	Value of demand flexibility on spot and reserve electricity markets in future power system with increased shares of variable renewable energy. 2018 , 144, 207-217	28
795	Restacking-inhibited nitrogen-incorporated mesoporous reduced graphene oxides for high energy supercapacitors. 2018 , 44, 3195-3200	12
794	Modeling Magnetohydrodynamic Energy Generation and Storage in Planetary Entry System Conceptual Design. 2018 , 55, 356-364	0

793	Performance Analysis and Detailed Experimental Results of the First Liquid Air Energy Storage Plant in the World. 2018 , 140,	10
792	Integration of a mechanical energy-storage unit in a road pavement energy-harvesting device. 2018 , 171, 70-81	0
791	Techno-economic analysis of grid-tied energy storage. 2018 , 15, 231-242	5
790	Optimal Sizing and Selection of Energy Storage System Considering Load Uncertainty. 2018 ,	1
789	CFD Investigation of a High Head Francis Turbine at Speed No-Load Using Advanced URANS Models. 2018 , 8, 2505	7
788	Issues, Challenges and Future Prospects of Electric Vehicles: A Review. 2018 ,	4
787	The Capacity Joint Optimization of Energy Storage and Renewable Generation Based on Simulation. 2018 ,	0
786	Comprehensive Performance Assessment on Various Battery Energy Storage Systems. 2018 , 11, 2841	23
785	Opportunities for Energy Storage in CAISO. 2018 ,	3
784	Comparative analysis of storage techniques for a grid with renewable energy sources. 2018 , 7, 970	7
783	Economic Analysis of Compressed Air Energy Storage System and its Application in Wind Farm. 2018 ,	
782	Integrated Energy Management Framework for Environmentally Sustainable Energy Access. 2018 ,	0
781	Electric Shaft Starting Sequence for Synchronous Generator in Hydroelectric Pumped Storage Station using Smart Exciter. 2018 ,	2
780	Sustainable flight test project tools. 2018 , 4, 178	
779	Comparative analysis of sustainable electric energy generation technologies using a multi-criteria decision methodology. 2018 , 14, 64	1
778	An Exact Feedback Linearization Control of a SMES System to Support Power in Electrical Grids. 2018 ,	
777	Initial Comparison of Lithium Battery and High-Temperature Thermal-Turbine Electricity Storage for 100% Wind and Solar Electricity Supply on Prince Edward Island. 2018 , 11, 3470	3
776	Evaluating frequency regulation operated on two stationary energy systems with batteries from electric vehicles. 2018 , 155, 32-43	8

775	Performance Review on Small-Medium Scales Energy Storage System in term of Investment Aspect. 2018,	
774	. 2018,	4
773	Optimal Design Method of a Hybrid CSP-PV Plant Based on Genetic Algorithm Considering the Operation Strategy. 2018, 2018, 1-15	11
772	References. 2018, 589-600	
771	Influence of the management perspective for choosing the best location for Distributed electric energy storage units. 2018,	
770	A Review of Wind Turbine Deloaded Operation Techniques for Primary Frequency Control in Power System. 2018,	6
769	Solar Power Generation and Energy Storage. 2018, 391-414	2
768	Energy Storage Systems for Shipboard Microgrids A Review. 2018, 11, 3492	57
767	Integration of Seawater Pumped-Storage in the Energy System of the Island of Sã Miguel (Azores). 2018, 10, 3438	10
766	Battery Energy Storage System. 2018,	2
765	Effects of Lake Reservoir Pumped-Storage Operations on Temperature and Water Quality. 2018, 10, 1968	9
764	Control of a SMES for mitigating subsynchronous oscillations in power systems: A PBC-PI approach. 2018, 20, 163-172	12
763	2.11 Superconductors. 2018, 303-328	
762	Microgrid modelling: A comprehensive survey. 2018, 46, 216-250	30
761	Comparison of Supercapacitor and Flywheel Energy Storage Devices Based on Power Converters and Simulink Real-Time. 2018,	1
760	Selecting the Optimal Micro-Grid Planning Program Using a Novel Multi-Criteria Decision Making Model Based on Grey Cumulative Prospect Theory. 2018, 11, 1840	14
759	Mesoporous Reduced Graphene Oxide as a High Capacity Cathode for Aluminum Batteries. 2018, 14, e1803584	39
758	Design Algorithm for Optimum Capacity of ESS Connected With PVs Under the RPS Program. 2018, 6, 45899-45906	13

757	Impact of selected parameters on the performance of compressed natural gas energy storage using cavern gag storage system. 2018,	1
756	Unraveling the Active Site on Metal-Free, Carbon-Based Catalysts for Multifunctional Applications. 2018, 251-283	
755	Sea-Water Desalination for Load Levelling of Gen-Sets in Small Off-Grid Islands. 2018, 11, 2068	8
754	Opportunities for Energy Storage in CAISO: Day-Ahead and Real-Time Market Arbitrage. 2018,	5
753	Optimization of Identification Structure Parameters Based on Recursive Maximum Likelihood Iteration. 2018,	0
752	On the Lie Bracket Approximation Approach to Distributed optimization: Extensions and Limitations. 2018,	3
751	Energy storage systems: An overview of existing technologies and analysis of their applications within the power system of Montenegro. 2018,	
750	High discharge efficiency of (Sr, Pb, Bi) TiO ₃ relaxor ceramics for energy-storage application. 2018, 112, 203903	21
749	Dopamine-conjugated Poly(acrylic acid) Blended with an Electrically Conductive Polyaniline Binder for Silicon Anode. 2018, 39, 873-878	16
748	Effects of water content and diluent pressure on the ignition of aqueous ammonia/ammonium nitrate and urea/ammonium nitrate fuels. 2018, 224, 300-308	3
747	Simplified models of the symmetric single-pass parallel-plate counterflow heat exchanger: a tutorial. 2018, 5, 171617	2
746	Resilient Battery Management For Buildings. 2018, 249-266	2
745	ESTOR: A versatile and wide spectrum database for energy storage technical data. 2018,	
744	Mechanism of Sodium Ion Storage in Na ₇ [H ₂ PV ₁₄ O ₄₂] Anode for Sodium-Ion Batteries. 2018, 5, 1800491	9
743	Recyclable metal fuels for clean and compact zero-carbon power. 2018, 68, 169-196	70
742	High Power Sodium-Ion Batteries and Hybrid Electrochemical Capacitors Using Mo or Nb-Doped Nano-Titania Anodes. 2018, 165, A1662-A1670	16
741	Recent Progress on Laser Manufacturing of Microsize Energy Devices on Flexible Substrates. 2018, 70, 1816-1822	6
740	Enhancing the Performance of Viscous Electrode-Based Flow Batteries Using Lubricant-Impregnated Surfaces. 2018, 1, 3614-3621	4

739	. 2018,	1
738	. 2018,	1
737	Energy and Exergy Analysis of Ocean Compressed Air Energy Storage Concepts. 2018, 2018, 1-14	11
736	Laser sintering of Al nanoparticles for Al-air batteries. 2018, 30, 032605	2
735	Phase Change Materials for Building Applications: A Thorough Review and New Perspectives. 2018, 8, 63	26
734	Impacts of Energy Storage System on Power System Reliability: A Systematic Review. 2018, 11, 1749	37
733	Design and performance analyses of solar arrays towards a metric of energy value. 2018, 2, 2090-2099	3
732	5.4 Energy Reliability and Management. 2018, 134-165	
731	A technological review on electric vehicle DC charging stations using photovoltaic sources. 2018, 353, 012014	15
730	Review of electrical energy storage technologies, materials and systems: challenges and prospects for large-scale grid storage. 2018, 11, 2696-2767	865
729	Mechanical Coating of Zinc Particles with Bi ₂ O ₃ -Li ₂ O-ZnO Glasses as Anode Material for Rechargeable Zinc-Based Batteries. 2018, 4, 12	16
728	Frequency Regulation of a Hybrid WindHydro Power Plant in an Isolated Power System. 2018, 11, 239	32
727	Design and Concept of an Energy System Based on Renewable Sources for Greenhouse Sustainable Agriculture. 2018, 11, 1201	19
726	Passivity-based PI control of a SMES system to support power in electrical grids: A bilinear approach. 2018, 18, 459-466	9
725	Energy storage for electricity generation and related processes: Technologies appraisal and grid scale applications. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 94, 804-821	16.2 178
724	Optimal planning of capacities and distribution of electric heater and heat storage for reduction of wind power curtailment in power systems. 2018, 160, 763-773	14
723	Novel Formulations of Phase Change Materials-Epoxy Composites for Thermal Energy Storage. 2018, 11,	16
722	Wind Power Development and Energy Storage under China's Electricity Market Reform: A Case Study of Fujian Province. 2018, 10, 298	4

721	Development and study of solid polymer electrolytes based on PVdF-HFP/PVAc: Mg (ClO ₄) ₂ for Mg ion batteries. 2018 , 29, 15086-15096	15
720	Process Modeling of an Innovative Power to LNG Demonstration Plant. 2018 , 32, 8868-8879	16
719	Estimating available salt volume for potential CAES development: A case study using the Northwich Halite of the Cheshire Basin. 2018 , 18, 50-61	17
718	An innovative approach for storing low-grade thermal energy using liquid phase thermoreversible reaction. 2018 , 222, 823-829	1
717	Reticulated Carbon Electrodes for Improved Charge Transport in Electrochemical Flow Capacitors. 2018 , 165, A2519-A2527	11
716	Three dimensional modelling of the components in supercapacitors for proper understanding of the contribution of each parameter to the final electrochemical performance. 2018 , 6, 17481-17487	5
715	Energy storage system expansion planning in power systems: a review. 2018 , 12, 1203-1221	30
714	Seasonal thermal energy storage system for cold climate zones: A review of recent developments. <i>Renewable and Sustainable Energy Reviews</i> , 2018 , 97, 38-49	16.2 46
713	Advanced Adiabatic Compressed air Energy Storage Energy in Air. 2018 ,	2
712	Numerical modeling of thermally-induced fractures in a large rock salt mass. 2018 , 10, 844-855	13
711	SMES/battery hybrid energy storage system based on bidirectional Z-source inverter for electric vehicles. 2018 , 8, 215-220	22
710	Feasibility Analysis and Performance Evaluation of a Novel Power-Split Flywheel Hybrid Vehicle. 2018 , 11, 1744	1
709	Enhancement of renewable energy penetration through energy storage technologies in a CHP-based energy system for Chongming, China. 2018 , 162, 988-1002	19
708	Dream team or strange bedfellows? Complementarities and differences between incumbent energy companies and institutional investors in Swiss hydropower. 2018 , 121, 476-487	10
707	Theoretical Performance Limits of an Isobaric Hybrid Compressed Air Energy Storage System. 2018 , 140,	6
706	Review of Energy Storage System Technologies in Microgrid Applications: Issues and Challenges. 2018 , 6, 35143-35164	209
705	An optimal energy management system for a commercial building with renewable energy generation under real-time electricity prices. 2018 , 41, 392-404	50
704	Experimental investigation on n̄ctadecane/polystyrene/expanded graphite composites as form̄table thermal energy storage materials. 2018 , 157, 625-632	42

703	Economic evaluation of installation of standalone wind farm and wind + CAES system for the new regulating tariffs for renewables in Egypt. 2018 , 7, 311-325	13
702	Eigen analysis of windHydro joint frequency regulation in an isolated power system. 2018 , 103, 511-524	19
701	A comprehensive review on coupling different types of electrolyzer to renewable energy sources. 2018 , 158, 632-655	102
700	4.14 Electromechanical Energy Conversion. 2018 , 598-635	5
699	Optimal stochastic scheduling of cryogenic energy storage with wind power in the presence of a demand response program. 2019 , 130, 268-280	41
698	Effectively enhance high voltage stability of LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode material with excellent energy density via La ₂ O ₃ surface modified. 2019 , 25, 2007-2016	4
697	Efficient energy storage technologies for photovoltaic systems. 2019 , 192, 144-168	55
696	How business model innovation affects firm performance in the energy storage market. 2019 , 131, 120-127	23
695	Economic Analysis of HRES Systems with Energy Storage During Grid Interruptions and Curtailment in Tamil Nadu, India: A Hybrid RBFNOEHO Technique. 2019 , 12, 3047	0
694	A review of compressed-air energy storage. 2019 , 11, 042702	23
693	Sizing and Operation of an Isolated Microgrid with Building Thermal Dynamics and Cold Storage. 2019 ,	1
692	Particle Swarm Optimization-based CNN-LSTM Networks for Forecasting Energy Consumption. 2019 ,	17
691	Architectural design and promises of carbon materials for energy conversion and storage: in laboratory and industry. 2019 , 25-61	3
690	Integrated Thermal Electricity Storage System: Energetic and cost performance. 2019 , 197, 111833	9
689	Immobilization of Co, Mn, Ni and Fe oxide co-catalysts on TiO ₂ for photocatalytic water splitting reactions. 2019 , 7, 18568-18579	45
688	Renewable energy powered membrane technology: A review of the reliability of photovoltaic-powered membrane system components for brackish water desalination. 2019 , 253, 113524	34
687	Macroscopic modelling of the discharge behaviour of sodium air flow battery. 2019 , 25, 100827	4
686	Performance of chitosan derived activated carbon in supercapacitor. 2019 , 10, 025003	2

685	Literature Survey. 2019 , 11-26		1
684	Exergoeconomic optimization of an adiabatic cryogenics-based energy storage system. 2019 , 183, 812-824		22
683	Novel complex B-site lead oxide antiferroelectric system developed by compositional design for dielectric energy storage. 2019 , 39, 4785-4793		29
682	Effect of Bismuth Sulfate Coated on Acidified CNT on Performance of Vanadium Redox Flow Battery. 2019 , 166, A2602-A2609		8
681	Investigation of the influence of heat source orientation on the transient flow behavior during PCM melting using particle image velocimetry. 2019 , 25, 100825		12
680	Allocation of Ontario's Surplus Electricity to Different Power-to-Gas Applications. 2019 , 12, 2675		4
679	Electrical Energy Storage Technologies and the Application Potential in Power System Operation: A Mini Review. 2019 ,		1
678	Reversible solid oxide systems for energy and chemical applications [Review & perspectives. 2019 , 24, 100782		39
677	Automated electrical demand peak leveling in a manufacturing facility with short term energy storage for smart grid participation. 2019 , 52, 100-109		8
676	GRID ENERGY STORAGE SYSTEMS. 2019 , 495-583		1
675	Integrated multi-criteria decision making methodology for pumped hydro-energy storage plant site selection from a sustainable development perspective with an application. <i>Renewable and Sustainable Energy Reviews</i> , 2019 , 112, 930-947	16.2	33
674	Recycling of Lithium Iron Phosphate Batteries: Future Prospects and Research Needs. 2019 , 959, 49-68		4
673	A generalized approach for selecting solar energy system configurations for a wide range of applications. 2019 , 6, 1		3
672	Advanced Materials for Zinc-Based Flow Battery: Development and Challenge. 2019 , 31, e1902025		77
671	Enhancement of the melting process in the thermal energy storage system by using novel geometry. 2019 , 76, 1006-1022		5
670	Core-shell structure LiNi _{1/3} Mn _{1/3} Co _{1/3} O ₂ @ ultrathin γ -MnO ₂ nanoflakes cathode material with high electrochemical performance for lithium-ion batteries. 2019 , 25, 5249-5258		3
669	Ex-Ante Prediction of Disruptive Innovation: The Case of Battery Technologies. 2019 , 11, 5229		4
668	Self-assembled microspheres composed of porous ZnO/CoO nanosheets for aqueous hybrid supercapacitors. 2019 , 52, 505501		9

667	A review of contextual frameworks relevant to energy storage on the South African grid. 2019,	0
666	Compressed air energy storage in aquifers: basic principles, considerable factors, and improvement approaches. 2019,	3
665	The effects of differential diffusion in counter-flow premixed flames with dilution and hydrogen enrichment. 2019, 209, 337-352	5
664	Vanadium redox flow batteries: A comprehensive review. 2019, 25, 100844	176
663	Experimental demonstration of the thermodynamic advantage of modular heat storage system for a variable-temperature input. 2019, 13, 100399	1
662	Simulation of large-scale energy storage to improve high-voltage DC stability. 2019, 107, 02008	2
661	Sizing and Operation of an Isolated Microgrid with Cold Storage. 2019,	1
660	Analysis of the Liquid Natural Gas Energy Storage basing on the mathematical model. 2019, 159, 231-236	8
659	Stability analysis of the underground infrastructure for pumped storage hydropower plants in closed coal mines. 2019, 94, 103117	17
658	Lead air battery: Prototype design and mathematical modelling. 2019, 26, 100832	3
657	Matching intermittency and electricity storage characteristics through time scale analysis: an energy return on investment comparison. 2019, 12, 693-705	13
656	Process design, operation and economic evaluation of compressed air energy storage (CAES) for wind power through modelling and simulation. 2019, 136, 923-936	32
655	Phase evolution in calcium molybdate nanoparticles as a function of synthesis temperature and its electrochemical effect on energy storage. 2019, 1, 565-580	24
654	A Review of Energy Storage System Legislation in the US and the European Union. 2019, 6, 22-28	2
653	The effect of supercapacitors in a tidal current conversion system using a torque pulsation mitigation strategy. 2019, 21, 445-459	5
652	Operational Design and Control for Smart Medium-Voltage Direct Current Microgrids. 2019, 59-84	
651	Flexible solid-state supercapacitor based on reduced graphene oxide-enhanced electrode materials. 2019, 802, 355-363	8
650	Evaluating the carbon inventory, carbon fluxes and carbon cycles for a long-term sustainable world. 2019, 21, 3994-4013	23

- 649 Vanadium-based polyoxometalate as electron/ion sponge for lithium-ion storage. **2019**, 435, 226702 17
- 648 Optimal Decision Guidance for the Electricity Supply Chain Integration With Renewable Energy: Aligning Smart Cities Research With Sustainable Development Goals. **2019**, 7, 74996-75006 22
- 647 Experimental adjustment and validation of a generalized solar-assisted cogeneration system model. **2019**, 43, 5319-5332
- 646 Nickel-cobalt phosphate/graphene foam as enhanced electrode for hybrid supercapacitor. **2019**, 174, 106953 46
- 645 Economic Evaluation and Risk Analysis of Gravity Energy Storage. **2019**, 51-74 3
- 644 Predicting residential energy consumption using CNN-LSTM neural networks. **2019**, 182, 72-81 343
- 643 Techno-economic analysis of metal hydride-based energy storage system in microgrid. **2019**, 1, e62 9
- 642 Preface. **2019**, xi-xiv
- 641 Need for Energy Storage. **2019**, 3-30
- 640 Technical and Economic Aspects. **2019**, 31-48
- 639 Energy Storage Technologies. **2019**, 49-92
- 638 Power System Model. **2019**, 95-144
- 637 Voltage-Sourced Converter Model. **2019**, 145-172
- 636 Energy Storage System Models. **2019**, 173-212
- 635 Comparison of Dynamic Models. **2019**, 215-226
- 634 Control Techniques. **2019**, 227-268
- 633 Stability Analysis. **2019**, 269-296
- 632 Numerical Integration. **2019**, 299-306

631 Park Transform. **2019**, 307-312

630 Frequency Signals. **2019**, 313-320

629 Data. **2019**, 321-338

628 Irish Transmission System. **2019**, 339-340

627 Index. **2019**, 361-368

626 Hydrogen sulfide splitting using solar energy and hematite photo-anodes. **2019**, 317, 384-397 2

625 Thermodynamic and exergy analysis of a combined pumped hydro and compressed air energy storage system. **2019**, 48, 101527 35

624 Low-Cost Rapid Template-Free Synthesis of Nanoscale Zinc Spinel for Energy Storage and Electrocatalytic Applications. **2019**, 2, 3211-3219 10

623 Integrated design method for superconducting magnetic energy storage considering the high frequency pulse width modulation pulse voltage on magnet. **2019**, 248, 1-17 20

622 Modeling and simulation of batteries and development of an energy storage system based in Riyadh, Saudi Arabia. **2019**, 1, e54 5

621 Oxygen Evolution Reaction Activity in IrO₂/SrIrO₃ Catalysts: Correlations between Structural Parameters and the Catalytic Activity. **2019**, 10, 1516-1522 16

620 Review of energy storage and transportation of energy. **2019**, 1, e49 91

619 . **2019**, 9

618 Quantifying the revenue gain of operating a cascade hydropower plant system as a pumped-storage hydropower system. **2019**, 139, 739-752 13

617 Anomaly detection based on random matrix theory for industrial power systems. **2019**, 95, 67-74 16

616 Electrospun nanostructures for conversion type cathode (S, Se) based lithium and sodium batteries. **2019**, 7, 11613-11650 41

615 Storage and Demand-Side Options for Integrating Wind Power. **2019**, 303-320

614 Development of a new trigenerational integrated system for dimethyl-ether, electricity and fresh water production. **2019**, 185, 850-865 9

613	The effect of energy R&D expenditures on CO emission reduction: estimation of the STIRPAT model for OECD countries. 2019 , 26, 14328-14338	84
612	Eco-Sim: A Parametric Tool to Evaluate the Environmental and Economic Feasibility of Decentralized Energy Systems. 2019 , 12, 776	12
611	Progress in renewable power exploitation: reversible solid oxide cells-flywheel hybrid storage systems to enhance flexibility in micro-grids management. 2019 , 23, 202-219	23
610	Energy from closed mines: Underground energy storage and geothermal applications. <i>Renewable and Sustainable Energy Reviews</i> , 2019 , 108, 498-512	16.2 70
609	A unique phase change redox cycle using CuO/Cu ₂ O for utility-scale energy storage. 2019 , 188, 366-380	8
608	Assessing the economic viability of energy storage systems in the Chilean electricity system: An empirical analysis from arbitrage revenue perspectives. 2019 , 11, 015901	5
607	Morphology-Controlled Metal Sulfides and Phosphides for Electrochemical Water Splitting. 2019 , 31, e1806682	304
606	Active and reactive power conditioning using SMES devices with PMW-CSC: A feedback nonlinear control approach. 2019 , 10, 369-378	6
605	Improving the profitability of anaerobic digestion: is the public support framework compatible with participation in the day-ahead electricity market?. 2019 , 139, 560-572	2
604	Sizing and applications of battery energy storage technologies in smart grid system: A review. 2019 , 11, 014105	40
603	Thermodynamic analysis of cavern and throttle valve in large-scale compressed air energy storage system. 2019 , 183, 721-731	15
602	Exergy-Based and Economic Evaluation of Liquefaction Processes for Cryogenics Energy Storage. 2019 , 12, 493	33
601	Box-Based Temporal Decomposition of Multi-Period Economic Dispatch for Two-Stage Robust Unit Commitment. 2019 , 34, 3109-3118	10
600	Research on Modeling and Hierarchical Scheduling of a Generalized Multi-Source Energy Storage System in an Integrated Energy Distribution System. 2019 , 12, 246	2
599	Integration of renewable energies in the electricity grid from energy storage plants in disused mining structures. 2019 , 643, 012104	
598	Economic benefit evaluation and incentive strategy research on Wind energy and BESS jointly participating in reducing the forecast deviation penalty. 2019 ,	
597	A novel two-stage model predictive control for wind power smoothing based on HESS. 2019 ,	
596	Convergence Analysis of Capacities for Photovoltaics and Energy Storage System Considering Energy Self-Sufficiency Rates and Load Patterns of Rural Areas. 2019 , 9, 5323	2

595	CNN-Based Analysis of Crowd Structure using Automatically Annotated Training Data. 2019,	2
594	Design and Realization of Eye Control System for Small Ground Unmanned Platform. 2019,	0
593	Beam-Superposition-Based Multi-beam RSMA for Hybrid mmWave Systems. 2019,	1
592	Design Approach to Dual-Resonant, Very Low-Profile Circular Sector Patch Antennas. 2019,	1
591	Estimating Metric Scale Visual Odometry from Videos using 3D Convolutional Networks. 2019,	0
590	Discussion about the Effect of Permanent Magnet Segmentation on Its Temperature Rising. 2019,	
589	Sinhala Hate Speech Detection in Social Media using Text Mining and Machine learning. 2019,	2
588	IoT Based Agriculture Using AGRIBOT. 2019,	1
587	Automatic Group Level Affect and Cohesion Prediction in Videos. 2019,	7
586	Residential-scale demonstrator for seasonal latent thermal energy storage for heating and cooling application with optimized PV self-consumption. 2019,	1
585	Human posture recognition based on multi-channel SAR at 77GHz. 2019,	
584	A New Structure-Based Coregistration Method for Near-Field Ground-Based MIMO Tomographic SAR. 2019,	1
583	Studying Key Principles for Design and Fabrication of Silicon Photonic-based Beamforming Networks. 2019,	1
582	User-preference-aware Private-preserving Average Consensus. 2019,	
581	IEEE Transactions on Components, Packaging and Manufacturing Technology publication information. 2019, 9, C2-C2	
580	Optimal Sizing and Locations of DG Sources in Distribution Systems: A Review of Different Techniques. 2019,	0
579	Introducing Scalability in LoRa-Based Networks through Multi-Hop Communication Setups. 2019,	5
578	Application of Energy Storage Systems at the Traders Work on the Ukraine Energy Market. 2019,	0

577	Modified Three Phase Multilevel Inverter with Reduced Number of DC Sources and Switches. 2019,	1
576	Program Committee. 2019,	
575	Combining Program Analysis and Statistical Language Model for Code Statement Completion. 2019	4
574	Table of Contents. 2019,	
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572	A prediction method for power transformer state parameters based on feature attention mechanism. 2019,	
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569	Single Image 3D Vehicle Pose Estimation for Augmented Reality. 2019,	1
568	Development and Analysis of a Multi-Node Dynamic Model for the Simulation of Stratified Thermal Energy Storage. 2019, 12, 4275	9
567	. 2019,	0
566	New Silk Way: Effective Management of Container Transportations in the Conditions of Uncertainties. 2019,	1
565	. 2019,	1
564	Active Electronically-Controlled Circulator Based on Mem-OTAs. 2019,	
563	Stability Analysis and Dynamic Quantizer for Controller Encryption. 2019,	6
562	Security enhancement for touch panel based user authentication on smartphones. 2019,	2
561	Dilated-Gated Convolutional Neural Network with A New Loss Function on Sound Event Detection. 2019,	1
560	High frequency wideband permittivity measurements of dielectric liquids using a new stripline structure technique. 2019,	

559	Experiments with mmWave Automotive Radar Test-bed. 2019,	16
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557	. 2019,	1
556	. 2019,	
555	Evaluation of electricity generation subsystem of Power-to-Gas-to-Power unit using gas expander and heat recovery steam generator. 2019, 137, 01017	
554	Research on Credibility of the Dynamic Simulation of Power Grid Frequency Regulation based on the Hybrid System Model. 2019,	
553	A New 2-Scroll Chaos Plant with Multistability and its Circuit Realization. 2019,	
552	Stability Analysis for A Class of Nonlinear Systems via State-dependent Lyapunov Functions. 2019,	
551	PoseFix: Model-Agnostic General Human Pose Refinement Network. 2019,	49
550	Integrated Renewable PV System through Artificial Neural Network Based MPPT and Water Cooling Treatment. 2019,	
549	Profiling Social Media Users, a Content-Based Data Mining Technique for Twitter Users. 2019,	2
548	Extension for Short Wavelength Detection Limit of Filter-Free Fluorescence Sensor by using Indium Tin Oxide Photogate. 2019,	1
547	Composite Fractional Order Sliding Mode Control of Permanent Magnet Synchronous Motor Based on Disturbance Observer. 2019,	1
546	Advanced smart grid power distribution system for More Electric Aircraft application. 2019,	1
545	A New Parallel Detection-Recognition Approach for End-to-End Scene Text Extraction. 2019,	6
544	Preliminary study of the relation between the content of cadmium and the hyperspectral signature of organic cocoa beans. 2019,	0
543	Performance and Loss Analysis of Squirrel Cage Induction Machine Based Flywheel Energy Storage System. 2019, 9, 4537	6
542	The study of Sn-45Bi-2.6Zn alloy before and after thermal aging. 2019,	

541	An Ensemble of Triplet Neural Networks for Differential Diagnostics of Lung Cancer. 2019,	0
540	Scaling up Prediction of Psychosis by Natural Language Processing. 2019,	1
539	Oxide Removal for Low-Temperature Metal Thermo-Compression Wafer Bonding. 2019,	1
538	. 2019,	13
537	. 2019,	
536	Economic benefit evaluation and incentive strategy research on Wind energy and BESS jointly participating in peak shaving auxiliary service market. 2019,	
535	A Low Voltage Ride Enhancement Technique for Wind Energy System. 2019,	
534	Short-term load forecasting of power system based on time convolutional network. 2019,	4
533	5. Ionic liquids at electrified interfaces for advanced energy/charge storage applications. 2019, 101-128	1
532	An effective approach to achieve high energy storage density and efficiency in BNT-based ceramics by doping AgNbO. 2019, 48, 17864-17873	25
531	Synergistic engineering of architecture and composition in NiCoMoO@CoMoO nanobrush arrays towards efficient overall water splitting electrocatalysis. 2019, 11, 22820-22831	19
530	Performance analysis of a small-size CAES system. 2019,	
529	Dynamic Operation of a Storage Power Plant (SPP) with Voltage Angle Control as Ancillary Service. 2019,	2
528	Flywheel vs. Supercapacitor as Wayside Energy Storage for Electric Rail Transit Systems. 2019, 4, 62	8
527	Automatic diagnostic system for second use lithium ion battery for stationary energy storage applications. 2019,	0
526	Hydrogen Energy Storage. 2019,	
525	Circuit for Monitoring and Reestablishment of PEM Fuel Cell Voltage Using Controlled Short Circuits. 2019,	
524	Enhancing the efficiency of thermal hydrolysis process in wastewater treatment plants by the use of steam accumulation. 2019, 16, 3403-3418	10

523	Perovskite lead-free dielectrics for energy storage applications. 2019 , 102, 72-108	558
522	Small-Size Vanadium Redox Flow Batteries: An Environmental Sustainability Analysis via LCA. 2019 , 61-78	1
521	Comparative Review of Energy Storage Systems, Their Roles, and Impacts on Future Power Systems. 2019 , 7, 4555-4585	146
520	Comparative analysis of air and CO ₂ as working fluids for compressed and liquefied gas energy storage technologies. 2019 , 181, 608-620	22
519	Kinetics-Based Computational Catalyst Design Strategy for the Oxygen Evolution Reaction on Transition-Metal Oxide Surfaces. 2019 , 123, 8287-8303	6
518	Performance of a small-scale compressed air storage (CAS). 2019 , 43, 6233-6242	4
517	Recuperation of Regenerative Braking Energy in Electric Rail Transit Systems. 2019 , 20, 2831-2847	70
516	Energy Gap-Modulated Blue Phosphorene as Flexible Anodes for Lithium- and Sodium-Ion Batteries. 2019 , 123, 2808-2819	19
515	Renewable Portfolio Standards and Policy Stringency: An Assessment of Implementation and Outcomes. 2019 , 36, 195-216	8
514	Review on Energy Storage Systems Control Methods in Microgrids. 2019 , 107, 745-757	104
513	Modified PSO algorithm for real-time energy management in grid-connected microgrids. 2019 , 136, 746-757	118
512	Techno-economic analysis of a stand-alone microgrid for a commercial building in eight different climate zones. 2019 , 179, 58-71	28
511	Performance evaluation of aqueous organic redox flow battery using anthraquinone-2,7-disulfonic acid disodium salt and potassium iodide redox couple. 2019 , 358, 1438-1445	45
510	Topological construction of phosphorus and carbon composite and its application in energy storage. 2019 , 20, 343-372	30
509	Optimal sizing of hybrid fuel cell-supercapacitor storage system for off-grid renewable applications. 2019 , 166, 530-540	96
508	Optimising design and power management in energy-efficient marine vessel power systems: a literature review. 2019 , 18, 92-101	23
507	Comprehensive assessment for battery energy storage systems based on fuzzy-MCDM considering risk preferences. 2019 , 168, 450-461	70
506	A modelling and simulation study of soluble lead redox flow battery: Effect of presence of free convection on the battery characteristics. 2019 , 412, 536-544	7

505	Recent developments in phase change materials for energy storage applications: A review. 2019 , 129, 491-523	542
504	Revisiting Electrochemical Techniques to Characterize the Solid-State Diffusion Mechanism in Lithium-Ion Batteries. 2019 , 17,	7
503	Control of Flywheel Energy Storage Systems in the Presence of Uncertainties. 2019 , 10, 36-45	49
502	A Heat Current Model for Heat Transfer/Storage Systems and Its Application in Integrated Analysis and Optimization With Power Systems. 2020 , 11, 175-184	22
501	Thermal energy storage radiatively coupled to a supercritical Rankine cycle for electric grid support. 2020 , 145, 604-621	9
500	Mn promotion of rutile TiO ₂ -RuO ₂ anodes for water oxidation in acidic media. 2020 , 261, 118225	31
499	Ab initio modeling and design of vanadia-based electrode materials for post-lithium batteries. 2020 , 53, 083001	6
498	Hybrid pumped hydro and battery storage for renewable energy based power supply system. 2020 , 257, 114026	64
497	Energy Storage and POPI Networks in Power Processing Systems. 2020 , 35, 1425-1439	
496	A review on non-noble metal based electrocatalysis for the oxygen evolution reaction. 2020 , 13, 4294-4309	75
495	How and where to use super-capacitors effectively, an integration of review of past and new characterization works on super-capacitors. 2020 , 27, 101044	21
494	Ferroferric oxide nanoclusters decorated Ti ₃ C ₂ T _x nanosheets as high performance anode materials for lithium ion batteries. 2020 , 329, 135146	23
493	Energy storage technologies. 2020 , 125-165	8
492	A review of energy storage types, applications and recent developments. 2020 , 27, 101047	361
491	Grid integrated renewable DG systems: A review of power quality challenges and state-of-the-art mitigation techniques. 2020 , 44, 26-69	80
490	Grid Integration Challenges of Wind Energy: A Review. 2020 , 8, 10857-10878	78
489	Battery Technologies for Grid-Level Large-Scale Electrical Energy Storage. 2020 , 26, 92-103	65
488	Corrosion assessment of promising hydrated salts as sorption materials for thermal energy storage systems. 2020 , 150, 428-434	10

487	The curious case of the conflicting roles of hydrogen in global energy scenarios. 2020 , 4, 80-95	37
486	The effect of La-substitution on the energy-storage properties of NBTBT lead-free ceramics. 2020 , 44, 87-94	5
485	Mechanical Energy Storage for Renewable and Sustainable Energy Resources. 2020 ,	6
484	Water transport according to temperature and current in PEM water electrolyzer. 2020 , 45, 56-63	2
483	Postprocessing the outputs of an interacting multiple-model Kalman filter using a Markovian trellis to estimate parameter values of aged Li-ion cells. 2020 , 27, 101043	7
482	Solar and wind power generation systems with pumped hydro storage: Review and future perspectives. 2020 , 148, 176-192	104
481	Rapid and sensitive determination of Pb ²⁺ in water using chromogenic reagent patterned on nail polish modified filter paper. 2020 , 153, 104448	9
480	Developments in calcium/chemical looping and metal oxide redox cycles for high-temperature thermochemical energy storage: A review. 2020 , 199, 106280	61
479	Phenolic resin-based carbon microspheres for potassium ion storage. 2020 , 506, 144805	3
478	Energy storage devices in electrified railway systems: A review. 2020 , 2, 183-201	20
477	Techno-economic assessment of solar energy coupling with large-scale desalination plant: The case of Morocco. 2020 , 494, 114627	17
476	Toward the Origin of Magnetic Field-Dependent Storage Properties: A Case Study on the Supercapacitive Performance of FeCoO Nanofibers. 2020 , 12, 49530-49540	6
475	Feasibility analysis of a heat pump powered by wind turbines and PV- Applications for detached houses in Germany. 2020 , 162, 1104-1112	4
474	Uses, Cost-Benefit Analysis, and Markets of Energy Storage Systems for Electric Grid Applications. 2020 , 32, 101731	16
473	Synthesis of the Se-HPCF composite a liquid-solution route and its stable cycling performance in Li-Se batteries. 2020 , 49, 14536-14542	2
472	Review of energy storage services, applications, limitations, and benefits. 2020 , 6, 288-306	85
471	Autonomous Naval Surface Vehicle for Energy Generation in Open Seas. 2020 ,	1
470	Energy storage traction power supply system and control strategy for an electrified railway. 2020 , 14, 2304-2314	9

469	Design of an Automatic Hybrid Water Heating System. 2020 ,	
468	Corn-based Electrochemical Energy Storage Devices. 2020 , 20, 1163-1180	15
467	Development of copper oxide nanostructures modified indium tin oxide electrode for electrochemical catalytically oxidation of methanol. 2020 , 279, 128498	6
466	Optimal Operation of a Plug-in Hybrid Vehicle with Battery Thermal and Degradation Model. 2020 ,	0
465	Poly(azomethine ether)-derived carbon nanofibers for self-standing and binder-free supercapacitor electrode material applications. 2020 , 31, 2874-2883	5
464	Relative comparison of standalone renewable energy system battery storage requirements for residential, industrial and commercial loads. 2020 , 11, 111	
463	Assessment of energy storage technologies: A review. 2020 , 223, 113295	98
462	Combined cooling, heating, and power generation performance of pumped thermal electricity storage system based on Brayton cycle. 2020 , 278, 115607	17
461	Social acceptability and market of distributed storage systems for energy communities. 2020 ,	1
460	Laser induced graphene with biopolymer electrolyte for supercapacitor applications. 2020 , 48, 365-365	1
459	Numerical investigation of a novel approach to coupling compressed air energy storage in aquifers with geothermal energy. 2020 , 279, 115781	9
458	An "Ether-In-Water" Electrolyte Boosts Stable Interfacial Chemistry for Aqueous Lithium-Ion Batteries. 2020 , 32, e2004017	42
457	Superactive NiFe-LDH/graphene nanocomposites as competent catalysts for water splitting reactions. 2020 , 7, 3805-3836	27
456	How Much Electricity Sharing Will Electric Vehicle Owners Allow from Their Battery? Incorporating Vehicle-to-Grid Technology and Electricity Generation Mix. 2020 , 13, 4248	4
455	Modelling Energy Distribution in Residential Areas: A Case Study Including Energy Storage Systems in Catania, Southern Italy. 2020 , 13, 3715	6
454	Redox Flow Batteries: A Literature Review Oriented to Automatic Control. 2020 , 13, 4514	22
453	Converting closed mines into giant batteries: Effects of cyclic loading on the geomechanical performance of underground compressed air energy storage systems. 2020 , 32, 101882	7
452	Diurnal Pumped-Storage Operation Minimizes Methane Ebullition Fluxes From Hydropower Reservoirs. 2020 , 56, e2020WR027221	3

451	Effectiveness of Energy Storage Application for improving the quality of supply in Low Voltage Networks with Distributed Generation. 2020,	1
450	Analysis and Synthesis of Hybrid Gravitational Generation and Energy Storage Systems Based on the Morphological Approach. 2020,	
449	A Review of Energy Storage Technologies Application Potentials in Renewable Energy Sources Grid Integration. 2020, 12, 10511	38
448	Decarbonization Tradeoffs: A Dynamic General Equilibrium Modeling Analysis for the Chilean Power Sector. 2020, 12, 8248	10
447	A hybrid transmission network in pelagic islands with submarine cables and all-electric vessel based energy transmission routes. 2020, 120, 106005	4
446	Potential and Feasibility Study of Hybrid WindHydroelectric Power System with Water-Pumping Storage: Jordan as a Case Study. 2020, 10, 3332	3
445	A MnVO/graphene nanocomposite as an efficient electrocatalyst for the oxygen evolution reaction. 2020, 12, 16028-16033	8
444	A Chronicle Review of Nonsilicon (Sn, Sb, Ge)-Based Lithium/Sodium-Ion Battery Alloying Anodes. 2020, 4, 2000218	99
443	Transient Simulation of Underground Pumped Storage Hydropower Plants Operating in Pumping Mode. 2020, 13, 1781	6
442	Progress and Prospective of Nitrogen-Based Alternative Fuels. 2020, 120, 5352-5436	70
441	Understanding lay-public perceptions of energy storage technologies: Preliminary results of a questionnaire conducted in Canada. 2020, 6, 249-258	5
440	Performance Analysis and Comparison of Batteries Using Off-grid PV System. 2020, 17, 23-28	1
439	Energy and Economic Costs of Chemical Storage. 2020, 6,	19
438	. 2020, 1-1	34
437	Applications of Tin Sulfide-Based Materials in Lithium-Ion Batteries and Sodium-Ion Batteries. 2020, 30, 2001298	90
436	Development of an efficient and sustainable energy storage system by hybridization of compressed air and biogas technologies (BIO-CAES). 2020, 210, 112695	17
435	. 2020,	2
434	Pseudocapacitive performance of Mn ₃ O ₄ /SnO ₂ hybrid nanoparticles synthesized via ultrasonication approach. 2020, 50, 609-619	4

433	Evaluation on the Autoconfigured Multipulse AC/DC Rectifiers and Their Application in More Electric Aircrafts. 2020 , 6, 1721-1739	16
432	Development of transition metal based electrolyzer for efficient oxygen evolution reaction. 2020 , 12, 024102	7
431	Feasibility evaluation of large-scale underground hydrogen storage in bedded salt rocks of China: A case study in Jiangsu province. 2020 , 198, 117348	58
430	How to Select the Optimal Electrochemical Energy Storage Planning Program? A Hybrid MCDM Method. 2020 , 13, 931	9
429	Review of optimal methods and algorithms for sizing energy storage systems to achieve decarbonization in microgrid applications. <i>Renewable and Sustainable Energy Reviews</i> , 2020 , 131, 110022 ^{16.2}	52
428	The effect of K ₂ SiF ₆ on the MgH ₂ hydrogen storage properties. 2020 , 8, 832-840	44
427	Development of Enhancing Battery Management for Reusing Automotive Lithium-Ion Battery. 2020 , 13, 3306	5
426	Integration of Clean and Sustainable Energy Resources and Storage in Multi-Generation Systems. 2020 ,	0
425	Optimal techno-economic sizing of a multi-generation microgrid system with reduced dependency on grid for critical health-care, educational and industrial facilities. 2020 , 208, 118248	4
424	Frequency response of energy storage systems in grids with high level of wind power penetration □ Gotland case study. 2020 , 14, 1282-1287	0
423	Na ₃ (TiOPO ₄) ₂ F microspheres as a long-life anode for Na-ion batteries. 2020 , 402, 126118	6
422	Assessment of various energy storage methods for implementation in hot and arid climates. 2020 , 2, e191	4
421	Sizing and Operation of an Isolated Microgrid With Building Thermal Dynamics and Cold Storage. 2020 , 56, 5375-5384	3
420	Methane Production at Biocathodes. 2020 , 129-159	0
419	Microscopic investigations on the healing and softening of damaged salt by uniaxial deformation from CT, SEM and NMR: effect of fluids (brine and oil).. 2020 , 10, 2877-2886	17
418	An Optimal Model to Meet the Hourly Peak Demands of a Specific Region With Solar, Wind, and Grid Supplies. 2020 , 8, 13179-13194	3
417	Pipe-Pile-Based Micro-Scale Compressed Air Energy Storage (PPMS-CAES) for Buildings: Experimental Study and Energy Analysis. 2020 ,	
416	An innovative framework for electrical energy storage system selection for remote area electrification with renewable energy system: Case of a remote village in India. 2020 , 12, 024101	12

415	A Novel CDR-Based Low-Cost Time-Interleaved-ADC Timing Calibration. 2020 , 38, 1777-1784	0
414	Transient modeling and simulation of a nonisothermal sodium-sulfur cell. 2020 , 453, 227849	6
413	Emerging topics in energy storage based on a large-scale analysis of academic articles and patents. 2020 , 263, 114625	20
412	Flexible Lead-Free Perovskite Oxide Multilayer Film Capacitor Based on (Na _{0.8} K _{0.2}) _{0.5} Bi _{0.5} TiO ₃ /Ba _{0.5} Sr _{0.5} (Ti _{0.97} Mn _{0.03})O ₃ for High-Performance Dielectric Energy Storage. 2020 , 10, 1904229	38
411	A trans-critical carbon dioxide energy storage system with heat pump to recover stored heat of compression. 2020 , 152, 1099-1108	16
410	Synthesis of Bi ₂ S ₃ /carbon nanocomposites as anode materials for lithium-ion batteries. 2020 , 50, 92-102	18
409	Pump-less, free-convection-driven redox flow batteries: Modelling, simulation, and experimental demonstration for the soluble lead redox flow battery. 2020 , 454, 227918	4
408	Ultrafine FeCoOOH Nanorods Activated with Iron for Exceptional Oxygen Evolution Reaction. 2020 , 36, 2223-2230	11
407	Ellipsoidal Luneburg Lens Binary Array for Wide-Angle Scanning. 2020 , 68, 5702-5707	9
406	Research on energy storage operation modes in a cooling, heating and power system based on advanced adiabatic compressed air energy storage. 2020 , 208, 112573	13
405	Bifunctional Catalysts for Reversible Oxygen Evolution Reaction and Oxygen Reduction Reaction. 2020 , 26, 3906	35
404	Current trends and future perspectives in the recycling of spent lead acid batteries in India. 2020 , 26, 592-602	5
403	Emerging paraffin/carbon-coated nanoscroll composite phase change material for thermal energy storage. 2020 , 152, 579-589	20
402	Introduction. 2020 , 1-34	
401	Electron-pinned defect dipoles in (Li, Al) co-doped ZnO ceramics with colossal dielectric permittivity. 2020 , 8, 4764-4774	17
400	Improved Temperature Resilience and Device Performance of Negative Capacitance Reconfigurable Field Effect Transistors. 2020 , 67, 738-744	3
399	Limitations, challenges, and solution approaches in grid-connected renewable energy systems. 2020 , 44, 4132-4162	37
398	Chance-Constrained Optimization of Energy Storage Capacity for Microgrids. 2020 , 11, 2760-2770	15

397	Degradation Cost Analysis of Li-Ion Batteries in the Capacity Market with Different Degradation Models. 2020 , 9, 90	14
396	Distributed Optimal Observer Design of Networked Systems via Adaptive Critic Design. 2020 , 1-10	1
395	An Energy-Maximising Linear Time Invariant Controller (LiTe-Con) for Wave Energy Devices. 2020 , 11, 2713-2721	12
394	Tactile Perception of Virtual Edges and Gratings Displayed by Friction Modulation via Ultrasonic Actuation. 2020 , 13, 368-379	5
393	Computed tomography analysis on cyclic fatigue and damage properties of rock salt under gas pressure. 2020 , 134, 105523	31
392	An alternative for the anode materials of nickel metal hydride batteries: an AB-type LaGdMgNiCoAl hydrogen storage alloy. 2020 , 49, 6312-6320	6
391	Energy and economic optimization of solar-assisted heat pump systems with storage technologies for heating and cooling in residential buildings. 2020 , 157, 90-99	18
390	A Method for Analyzing the Activity of Cold Wallets and Identifying Abandoned Cryptocurrency Wallets. 2020 ,	1
389	Enhanced electrochemical performance of copper vanadate nanorods as an electrode material for pseudocapacitor application. 2020 , 31, 7012-7021	9
388	The New Structure and Analytical Model of a High-Voltage Interconnection Shielding Structure With High-k Dielectric Pillar. 2020 , 67, 1745-1750	4
387	Dynamic characteristics and operation strategy of the discharge process in compressed air energy storage systems for applications in power systems. 2020 , 44, 6363-6382	6
386	Preparation of CdS Nanoparticles-TiO ₂ Nanorod Heterojunction and Their High-Performance Photocatalytic Activity. 2020 , 10, 441	1
385	Energy storage usages: Engineering reactions, economic-technological values for electric vehicles and technological outlook. 2020 , 30, e12422	8
384	An overview of renewable energy resources and grid integration for commercial building applications. 2020 , 29, 101385	51
383	Life Cycle Assessment of a stand-alone solar-based polygeneration power plant for a commercial building in different climate zones. 2020 , 154, 1132-1143	11
382	Reusing abandoned natural gas storage sites for compressed air energy storage. 2021 , 8, 55-68	1
381	Utilization of energy storage systems in congestion management of transmission networks with incentive-based approach for investors. 2021 , 33, 102034	5
380	Compressed air energy storage systems: Components and operating parameters [A review]. 2021 , 34, 102000	44

379	Decomposition kinetics of Al- and Fe-doped calcium carbonate particles with improved solar absorbance and cycle stability. 2021 , 406, 126282		16
378	Potassium-based electrochemical energy storage devices: Development status and future prospect. 2021 , 34, 85-106		21
377	SiC-based porous ceramic carriers for heat-conductive phase change materials through carbothermal reduction method. 2021 , 18, 91-99		2
376	Critical review of energy storage systems. 2021 , 214, 118987		116
375	Optimization of window design for ventilative cooling with radiant floor cooling systems in the hot and humid climate of Indonesia. 2021 , 188, 107483		7
374	Electrochemical fabrication and supercapacitor performances of metallo phthalocyanine/functionalized-multiwalled carbon nanotube/polyaniline modified hybrid electrode materials. 2021 , 33, 102049		24
373	Power outages, climate events and renewable energy: Reviewing energy storage policy and regulatory options for Australia. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 137, 110617	16.2	11
372	Thermodynamic performance comparison of various energy storage systems from source-to-electricity for renewable energy resources. 2021 , 219, 119626		8
371	Botryoidal Pb/PbO@C nanocomposite derived from eggplant biomass as negative electrode additives for long-cyclability lead-acid batteries. 2021 , 257, 123757		7
370	Influence of water addition on MILD ammonia combustion performances and emissions. 2021 , 38, 5147-5154		21
369	Frequency stable dielectric constant with reduced dielectric loss of one-dimensional ZnO-ZnS heterostructures. 2021 , 13, 15711-15720		2
368	Self-Inertia-Varying Fixed-Speed Flywheel Energy Storage System. 2021 ,		
367	Kinetics of the CO ₂ reduction reaction in aprotic LiCO ₂ batteries: a model study. 2021 , 9, 3290-3296		10
366	Energy storage fundamentals and components. 2021 , 23-39		1
365	Optical properties and carrier dynamics in Co-doped ZnO nanorods. 2021 , 3, 214-222		1
364	The ups and downs of hydropeaking: a Canadian perspective on the need for, and ecological costs of, peaking hydropower production. 1		4
363	Residential Energy Consumption Prediction Using Inter-Household Energy Data and Socioeconomic Information. 2021 ,		3
362	High-performance lead-free bulk ceramics for electrical energy storage applications: design strategies and challenges. 2021 , 9, 18026-18085		44

361	Clean energy transition in Mexico: Policy recommendations for the deployment of energy storage technologies. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 135, 110407	16.2	18
360	Investigation of hybrid energy storage system based on battery and supercapacitor. 2021 ,		
359	The Role of Energy Storage Systems in Microgrids Operation. 2021 , 127-149		
358	On Control of Energy Storage Systems in Microgrids. 2021 , 289-304		0
357	Characteristics of Electrochemical Energy Storage Materials in Light of Advanced Characterization Techniques. 2021 ,		
356	Energy storage. 2021 , 205-219		3
355	Toward a holistic approach for energy efficient buildings. 2021 , 129-193		0
354	Poly(Ether Amide)-Derived, Nitrogen Self-Doped, and Interfused Carbon Nanofibers as Free-Standing Supercapacitor Electrode Materials. 2021 , 4, 1517-1526		6
353	Optimization of Fuzzy Energy-Management System for Grid-Connected Microgrid Using NSGA-II. 2021 , 51, 5375-5386		15
352	Stochastic Optimal Bidding Strategy for Energy and Ancillary Services In Microgrid. 2021 , 1-1		2
351	Bidirectional DCDC converter based multilevel battery storage systems for electric vehicle and large-scale grid applications: A critical review considering different topologies, state-of-charge balancing and future trends. 2021 , 15, 915-938		8
350	The development of techno-economic models for the assessment of utility-scale electro-chemical battery storage systems. 2021 , 283, 116343		11
349	Dynamic optimization of solar-wind hybrid system connected to electrical battery or hydrogen as an energy storage system. 2021 , 45, 10630-10654		5
348	Fe-Cu Alloy-Based Flexible Electrodes from Ethaline Ionic Liquid. 2021 , 50, 3478-3487		0
347	Conventional generation emulation for power grids with a high penetration of wind power. 2021 , 5, 93-103		1
346	Medium-temperature thermochemical energy storage with transition metal ammoniates [A systematic material comparison. 2021 , 285, 116470		7
345	Evaluation of various large-scale energy storage technologies for flexible operation of existing pressurized water reactors. 2021 , 53, 2427-2427		4
344	Epitaxial Stabilization and Oxygen Evolution Reaction Activity of Metastable Columbite Iridium Oxide. 2021 , 4, 3074-3082		2

343	Optimal techno-economic sizing of a solar-biomass-battery hybrid system for off-setting dependency on diesel generators for microgrid facilities. 2021 , 36, 102251	4
342	A pathway towards sustainable development of small capacity horizontal axis wind turbines □ Identification of influencing design parameters & their role on performance analysis. 2021 , 44, 101019	3
341	NiCo Nanoneedles on 3D Carbon Nanotubes/Carbon Foam Electrode as an Efficient Bi-Functional Catalyst for Electro-Oxidation of Water and Methanol. 2021 , 11, 500	1
340	Phase change cooling in data centers: A review. 2021 , 236, 110764	13
339	Design and Construction of an Experimental Test Bench for Storing Kinetic Energy in a Flywheel.	
338	A pulsed discharge system with an intermitting partial charge for improved battery efficiency. 2021 , 36, 102367	
337	Optimized and Coordinated Operation of Mixed-Energy Power Sources in Electricity Market. 2021 ,	
336	A review on solar photovoltaic thermal integrated desalination technologies. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 141, 110787	16.2 35
335	Tuning the microstructure of BaTiO ₃ @FeO core-shell nanoparticles with low temperatures sintering dense nanocrystalline ceramics for high energy storage capability and stability. 2021 , 864, 158644	4
334	An optimization study of solidification procedure in a wavy- wall storage unit considering the impacts of NEPCM and curved fin. 2021 , 124, 105249	14
333	Two-dimensional Conducting Metal-Organic Frameworks Enabled Energy Storage Devices. 2021 , 37, 396-416	21
332	Stress Evaluation of Different Construction of Flywheel Energy Storage Systems using Double U-core Switched Reluctance Machine as its Driver. 2021 ,	1
331	Galvanic Couples in Ionic Liquid-Based Electrolyte Systems for Lithium Metal Batteries □ An Overlooked Cause of Galvanic Corrosion?. 2021 , 11, 2101021	6
330	CNN-Bi-LSTM Based Household Energy Consumption Prediction. 2021 ,	0
329	Biomass Based Materials in Electrochemical Supercapacitor Applications.	
328	Thermo-economic analysis of the pumped thermal energy storage with thermal integration in different application scenarios. 2021 , 236, 114072	8
327	Co _{0.5} TiOPO ₄ @C as new negative electrode for sodium ion batteries: Synthesis, characterization, and elucidation of the electrochemical mechanism using in operando synchrotron diffraction. 2021 , 498, 229924	0
326	An Energy Internet for India: are we ready for a technology leapfrogging?. 2021 , 1, 012001	1

325	2D Vanadium diselenide supported on reduced graphene oxide for water electrolysis: a comprehensive study in alkaline media. 2021 , 4, 1047-1053	2
324	Life-Cycle Economic Evaluation of Batteries for Electochemical Energy Storage Systems. 2021 , 16, 2497	0
323	Prosumer-centric P2P energy market under network constraints with TDFB penalization. 2021 ,	0
322	Activated carbon from agave wastes (agave tequilana) for supercapacitors via potentiostatic floating test. 2021 , 32, 21432-21440	3
321	Evaluating existing water supply reservoirs as small-scale pumped hydroelectric storage options [A case study in Connecticut. 2021 , 226, 120354	5
320	Rapid preparation of nano lead sulfate-lead carbon black composite by microwave method as a negative electrode additive for lead-carbon batteries. 2021 , 384, 138411	3
319	Recent Progress in LDH@Graphene and Analogous Heterostructures for Highly Active and Stable Photocatalytic and Photoelectrochemical Water Splitting. 2021 , 16, 2211-2248	14
318	Quantifying techno-economic indicators' impact on isolated renewable energy systems. 2021 , 24, 102730	1
317	Modeling the Performance of an Integrated Battery and Electrolyzer System. 2021 , 60, 10988-10996	1
316	On the PF6 ⁻ anion intercalation in graphite from sodium salt-based electrolytes containing different mixtures of organic carbonates. 2021 , 384, 138360	2
315	Opportunities and Challenges in Solar Photovoltaic-Based Electric Vehicles Charging Stations: A Step Toward Smart Cities Development. 2022 , 507-516	1
314	A Comparative Study on the Performance of Energy Storage Systems for Hybrid Electric Vehicles. 2022 , 795-803	1
313	Stability analysis of a typical two-well-horizontal saddle-shaped salt cavern. 2021 , 40, 102763	3
312	A review study on the recent advances in developing the heteroatom-doped graphene and porous graphene as superior anode materials for Li-ion batteries. 2021 , 47, 22269-22301	15
311	Review of Energy Storage and Energy Management System Control Strategies in Microgrids. 2021 , 14, 4929	10
310	Advances in Electrochemical Energy Storage Device: Supercapacitor. 2021 , 119-147	0
309	Electro-Chemical Battery Energy Storage Systems - A Comprehensive Overview. 2021 , 229-252	0
308	A Software Tool for the Design and Operational Analysis of Pressure Vessels used in Offshore Hydro-pneumatic Energy Storage. 2021 , 40, 102750	1

307	Life cycle assessment of lithium-ion batteries and vanadium redox flow batteries-based renewable energy storage systems. 2021 , 46, 101286	10
306	Transações peer-to-peer de energia elétrica considerando as restrições da rede de eletricidade. 2021 ,	
305	Integration of energy storage system and renewable energy sources based on artificial intelligence: An overview. 2021 , 40, 102811	22
304	Pressure-Based Energy Storage in Natural Gas Transmission Networks: Proof-of-Concept Analysis. 2022 , 144,	1
303	Renewable Energy Systems with Thermal Energy Storage. 2021 , 521-555	0
302	Cooperative control framework of the wind turbine generators and the compressed air energy storage system for efficient frequency regulation support. 2021 , 130, 106844	6
301	Analysis and feasibility of a compressed air energy storage system (CAES) enriched with ethanol. 2021 , 243, 114371	0
300	Energy Storage Systems for Electric Vehicles. 2021 , 79-104	
299	Thermodynamic optimization with multi objectives and parameters for liquid air energy storage system based on the particle swarm optimization (PSO). 2021 , 41, 102878	5
298	Investigation on the influences of interlayer contents on stability and usability of energy storage caverns in bedded rock salt. 2021 , 231, 120968	13
297	Techno-economic viability of energy storage concepts combined with a residential solar photovoltaic system: A case study from Finland. 2021 , 298, 117199	10
296	Review on Energy Storage Systems in Microgrids. 2021 , 10, 2134	9
295	A systems engineering perspective on electrochemical energy technologies and a framework for application driven choice of technology. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 147, 111165	16.2 4
294	A review on novel activation strategy on carbonaceous materials with special morphology/texture for electrochemical storage. 2021 , 60, 572-590	21
293	Enhanced partial frequency variation starting of hydroelectric pumping units: Model based design and experimental validation. 2021 , 131, 107083	2
292	Batteries, compressed air, flywheels, or pumped hydro? Exploring public attitudes towards grid-scale energy storage technologies in Canada and the United Kingdom. 2021 , 80, 102228	0
291	Experimental testing of a real aggregator system performing rigorous optimal control of electrical and thermal storage. 2021 , 43, 103188	2
290	Unfolding the Vanadium Redox Flow Batteries: An indeep perspective on its components and current operation challenges. 2021 , 43, 103180	2

289	Superconducting Technology Based Fault Ride Through Strategy for PMSG-Based Wind Turbine Generator: A Comprehensive Review. 2021 , 31, 1-6	4
288	Optimal working-parameter analysis of an ejector integrated into the energy-release stage of a thermal-storage compressed air energy storage system under constant-pressure operation: A case study. 2021 , 247, 114715	4
287	Study on Electromagnetic Stress Optimization and its Resistant Structure in Toroidal HTS Magnet Applied in High-Energy Storage Density SMES. 2021 , 31, 1-5	1
286	Lithium bis(trifluoromethanesulfonyl)imide blended in polyurethane acrylate photocurable solid polymer electrolytes for lithium-ion batteries. 2021 , 62, 485-496	4
285	Joint investment of community energy storage systems in distribution networks using modified Nash bargaining theory. 2021 , 301, 117475	2
284	A biogas-solar based hybrid off-grid power plant with multiple storages for United States commercial buildings. 2021 , 179, 705-722	3
283	Biomass-derived bifunctional electrocatalysts for oxygen reduction and evolution reaction: A review. 2022 , 65, 149-172	16
282	A Composite Single Particle Lithium-Ion Battery Model Through System Identification. 2021 , 1-13	1
281	Optimization and Management of Redox Flow Batteries. 2021 ,	
280	Na-iyon Pillerin Anotlarında Karbon Nanoyapıların Kullanımına İlişkin Bir Derleme.	
279	Operational challenges for low and high temperature electrolyzers exploiting curtailed wind energy for hydrogen production. 2021 ,	11
278	Research Progress of Key Materials for Sodium-selenium Batteries. 2021 , 79, 641	
277	Vanadium: A Transition Metal for Sustainable Energy Storing in Redox Flow Batteries. 2021 ,	0
276	Improved energy storage properties of La _{0.33} NbO ₃ modified 0.94Bi _{0.5} Na _{0.5} TiO ₃ -0.06BaTiO ₃ ceramic system. 2021 , 127, 1	1
275	Energy technologies and energy storage systems for sustainable development. 2021 , 231-248	
274	Smart Grid Communication and Networking Technologies: Recent Developments and Future Challenges. 2013 , 199-213	5
273	Pumped Hydro Storage. 2020 , 51-65	1
272	Storage in Hybrid Renewable Energy Systems. 2020 , 139-172	4

271	Liquid Air Energy Storage: Analysis and Prospects. 2020 , 115-130	1
270	Economic Analysis of Chemical Energy Storage Technologies. 2016 , 277-291	5
269	Grid-Connected Renewable Electricity Storage: Batteries vs. Hydrogen. 2013 , 221-225	3
268	Optimal Sizing of Energy Storage Systems for Industrial Production Plants. 2014 , 342-350	1
267	Different Types of Energy Storage Systems: A Literature Survey. 2020 , 515-540	1
266	Advances in seasonal thermal energy storage for solar district heating applications: A critical review on large-scale hot-water tank and pit thermal energy storage systems. 2019 , 239, 296-315	104
265	The development of techno-economic models for large-scale energy storage systems. 2017 , 140, 656-672	46
264	Evaluation of electricity generation subsystem of power-to-gas-to-power unit using gas expander and heat recovery steam generator. 2020 , 212, 118600	3
263	Efficiency analysis of underground pumped storage hydropower plants. 2020 , 28, 101234	26
262	Influence of solar field recirculation on medium-size CSP performance. 2018 , 159, 10-19	1
261	Converter-Interfaced Energy Storage Systems: Context, Modelling and Dynamic Analysis. 2019 ,	4
260	Energy Storage in Distribution System Planning and Operation: Current Status and Outstanding Challenges. 2019 , 42, 10-19	13
259	Adaptive Online Power Management for More Electric Aircraft With Hybrid Energy Storage Systems. 2020 , 6, 1780-1790	15
258	Experimental Analysis of the Co-Electrolysis Operation under Pressurized Conditions with a 10 Layer SOC Stack. 2020 , 167, 024504	5
257	Review Electrochemistry for Sustainable Solar Photovoltaics. 2020 , 9, 125007	1
256	Power supply design for solar powered harvesting-aware sensors. 2012 , 7, 45-54	3
255	Thermal Energy Storage For Gas Turbine Power Augmentation. 2019 , 3, 592-608	1
254	Hydrogen Economy and the Built Environment. 2011 ,	1

253	Smart Grid Communication Technologies. 2016 , 04, 1-8	15
252	A Review and Comparison on Recent Optimization Methodologies for Diesel Engines and Diesel Power Generators. 2019 , 07, 31-56	9
251	Supercharging of Diesel Engine with Compressed Air: Experimental Investigation on Greenhouse Gases and Performance for a Hybrid Wind-Diesel System. 2019 , 10, 213-236	2
250	A proposal of LARG Supply Chain Management Practices and a Performance Measurement System. 2011 , 7-14	14
249	Energy Efficiency: Comparison of Different Systems and Technologies. 2021 , 1-78	
248	Solar Electricity Integration and Storage Technologies. 2021 ,	
247	Redox flow batteries: a new frontier on energy storage. 2021 , 5, 5366-5419	1
246	A multi-criteria model for assessing the use of energy storage in the activities of a distribution system operator. 2021 , 192, 4877-4885	0
245	A Multi-Criteria Decision-Making Approach for Energy Storage Technology Selection Based on Demand. 2021 , 14, 6592	2
244	Bilayer Micro-Mesoporous Membrane Assembly Offering Lower Pressure Drop to Realize High Energy Efficient Vanadium Redox Flow Battery. 2021 , 168, 100542	1
243	A zinc-cobalt/nickel heterostructure synthesized by ultrasonic pulse electrodeposition as a cathode for high performance supercapacitors. 2021 , 902, 115793	1
242	Thermodynamic performance study of a novel cogeneration system combining solid oxide fuel cell, gas turbine, organic Rankine cycle with compressed air energy storage. 2021 , 249, 114837	7
241	Thermal management of a high temperature sodium sulphur battery stack. 2021 , 181, 122025	1
240	Computer Tools for Modelling and Evaluating the Potential of Energy Storage Systems with Reference to the Greek Islands Case. 2013 , 51-68	
239	Energy Storage: Applications and Advantages. 2013 , 77-108	1
238	Study on Regulation and Control of Active Wind Power Fluctuations. 2014 , 13, 2743-2748	
237	Microgrid Concepts and Architecture. 2014 , 1184-1205	
236	Wind Power Generation: Storage Technology Portfolio. 2014 , 2215-2223	

235	Renewable Energy: Energy Storage Systems. 2014 , 1593-1619	
234	Overview of Insular Power Systems: Challenges and Opportunities. 2015 , 1-34	2
233	Une initiative pédagogique autour du kart électrique : le projet collectif intensif. 2016 , 15, 0007	
232	Introduction. 2017 , 1-10	
231	Challenges of Smart Integration Systems: A Review. 2017 , 39-50	
230	An Innovative Architecture for the Distribution Framework of Smart Grid with Renewable Sources and Power Storage. 2017 , 4, 17-24	
229	The Ecological Impediment to Emergence of Robots in Organizations.	
228	A review of tools, models and techniques for long-term assessment of distribution systems using OpenDSS and parallel computing. 2018 , 6, 764-800	0
227	Evaluación de la posibilidad de almacenamiento de energía renovable en el subsuelo de la cuenca Vasco-Cantábrica: estudio geomecánico de la Formación Keuper. 2018 , 74, 078	
226	Uninterrupted Power Supply to Micro-Grid During Islanding. 2019 , 96-126	1
225	An Optimized Fractional Order PID Controller for Integrated Power System. 2020 , 663-672	3
224	Evaluation of Regression Algorithms in Residential Energy Consumption Prediction. 2019 ,	1
223	Design, Development, and Testing of a Low-Concentration Vanadium Redox Flow Battery. 2021 , 18,	1
222	Acid/base flow battery environmental and economic performance based on its potential service to renewables support. 2021 , 129529	1
221	Theoretical study on melting of phase change material by natural convection. 2021 , 28, 101620	0
220	A Highly Reversible Zinc Anode for Rechargeable Aqueous Batteries. 2021 ,	3
219	Optimal Bidding Strategy with Ancillary Services in Hybrid Competitive Markets. 2020 ,	1
218	Network and Storage. 2021 , 27-51	

217	Quantifying energy flexibility of commuter plug-in electric vehicles within a residence office coupling virtual microgrid. Part I: System configuration, quantification framework, and optimization model. 2022 , 254, 111551	1
216	Study on different underwater energy harvester arrays based on flow-induced vibration. 2022 , 167, 108546	6
215	Determining the Type and Size of Energy Storage Systems to Smooth the Power of Renewable Energy Resources. 2020 , 29-59	0
214	Anaerobic Digestion (AD) of Organic Waste Is a Sustainable Waste Management Facility. 2020 , 626-650	1
213	A Further Study on the Cooperative Control of Energy Storage Systems under Unreliable Communication Network. 2020 , 53, 13317-13321	0
212	Development of a Prototype Uninterrupted Electrical Power Supply System using Compressed Air Storage from Renewable Energy Resources. 2020 , 39, 237-246	0
211	Electrical and Energy Systems Integration for Maritime Environment-Friendly Transportation. 2021 , 14, 7240	0
210	Energy Efficiency: Comparison of Different Systems and Technologies. 2021 , 1-65	0
209	Analysis of a Queueing Model for Energy Storage Systems with Self-discharge. 2020 , 5, 1-26	
208	Development of a self-inertia-varying fixed-speed flywheel energy storage system. 2020 ,	1
207	Purification of an iron contaminated vanadium solution through ion exchange resins. 2022 , 176, 107337	4
206	Flexible and self-standing polyimide/lignin-derived carbon nanofibers for high-performance supercapacitor electrode material applications. 2022 , 275, 115530	3
205	Next-generation Li-ion capacitor with high energy and high power by limiting alloying-intercalation process using SnO ₂ @Graphite composite as battery type electrode. 2022 , 230, 109487	4
204	iPlugie: Intelligent electric vehicle charging in buildings with grid-connected intermittent energy resources. 2022 , 115, 102439	0
203	Hybrid power and propulsion systems for ships: Current status and future challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2022 , 156, 111965	16.2 12
202	Forecasting Electricity Load With Hybrid Scalable Model Based on Stacked Non Linear Residual Approach. 2021 , 9,	0
201	Rational Design of Cobalt-Iron Bimetal Layered Hydroxide on Conductive Fabric as a Flexible Battery-Type Electrode for Enhancing the Performance of Hybrid Supercapacitor.	
200	Wind Power Integration?. 2021 ,	

199	Potential greenhouse gas risk led by renewable energy crowding out nuclear power.. 2022 , 25, 103741	2
198	Simulation and Experimental Analysis of a Mechanical Flux Modulated Permanent Magnet Homopolar Inductor Machine. 2022 , 1-1	0
197	Design of a System Coupling Liquid Air Energy Storage System with Thermal Power Unit. 2022 , 2152, 012058	
196	Numerical study on the impacts of layered heterogeneity on the underground process in compressed air energy storage in aquifers. 2022 , 46, 103837	1
195	Artificial intelligence and numerical models in hybrid renewable energy systems with fuel cells: Advances and prospects. 2022 , 253, 115154	9
194	Critical review on structural architecture, energy control strategies and development process towards optimal energy management in hybrid vehicles. <i>Renewable and Sustainable Energy Reviews</i> , 2022 , 157, 112038	16.2 5
193	Design of High Voltage Battery Topology Based on Experience with Integrated BMS Modules. 2020 ,	
192	Economic dispatch in DC Microgrids considering different battery technologies: A Benchmark Study. 2020 ,	1
191	An Advanced Traction Power Supply System in Electrified Railway. 2020 ,	
190	Scalable Fabrication of Quantum-Sized CoS 1.97 Nanoparticles Anchoring on Biomass Carbon Aerogel for Energy Storage Application.	
189	Variable Speed Diesel Generators: Performance and Characteristic Comparison. 2022 , 15, 592	5
188	Recent advances of energy storage technologies for grid: A comprehensive review.	2
187	A Comparative Study on the Performance of Energy Storage Systems for Hybrid Electric Vehicles. 2022 , 1433-1442	
186	Comparative Analysis on Various Types of Energy Storage Devices for Wind Power Generation. 2022 , 2161, 012066	
185	Method to Determine the Bifunctional Index for the Oxygen Electrocatalysis from Theory.	4
184	Hybrid Carbon Nanofibers Derived from MXene Nanosheets and Aromatic Poly(ether amide) for Self-Standing Electrochemical Energy Storage Materials. 2100877	2
183	A novel pumped hydro combined with compressed air energy storage system. 2022 , 179-190	
182	Pumped thermal energy storage. 2022 , 487-502	

181	Nanoarchitected MnO ₂ Confined to Mesoporous Carbon Microspheres as Bifunctional Electrodes for High-Performance Supercapacitors and Lithium-Ion Capacitors. 2022 , 61, 1748-1760	1
180	Solar Selective Absorber for Emerging Sustainable Applications. 2100195	3
179	Flywheel Energy Storage System in Italian Regional Transport Railways: A Case Study. 2022 , 15, 1096	2
178	Connecting battery technologies for electric vehicles from battery materials to management.. 2022 , 25, 103744	6
177	Segmenting household electricity customers with quantitative and qualitative approaches. <i>Renewable and Sustainable Energy Reviews</i> , 2022 , 157, 112014	16.2 0
176	Fatigue Strength Analysis of a Prototype Francis Turbine in a Multilevel Lifetime Assessment Procedure Part I: Background, Theory and Assessment Procedure Development. 2022 , 15, 1148	
175	Risk-adjusted preferences of utility companies and institutional investors for battery storage and green hydrogen investment. 2022 , 163, 112821	
174	Economics of Energy Arbitrage Considering Wind Power and Energy Storage Using Machine Learning in Electricity Market.	
173	Doping of Carbon Nanostructures for Energy Application. 2022 , 83-109	
172	Arbitraging Variable Efficiency Energy Storage using Analytical Stochastic Dynamic Programming. 2022 , 1-1	0
171	Challenges and doubts of electrochemical energy conversion and storage. 2022 , 76, 43-54	
170	Operational Flexibility with Statistical and Deep Learning Model for Electricity Load Forecasting. 2022 , 219-239	
169	Electrochemical Cells and Storage Technologies to Increase Renewable Energy Share in Cold Climate ConditionsA Critical Assessment. 2022 , 15, 1579	1
168	Surface oxidation of cobalt carbonate and oxide nanowires by electrocatalytic oxygen evolution reaction in alkaline solution. 2022 , 9, 034001	1
167	Ionogels as Polymer Electrolytes for LithiumMetal Batteries: Comparison of Poly(ethylene glycol) Diacrylate and an Imidazolium-Based Ionic Liquid Crosslinker. 2022 , 4, 2794-2805	1
166	Economic Evaluation of Implementation of Power-to-Gas: Application to the Case of Spain. 2022 , 15, 2523	
165	A comprehensive review on batteries and supercapacitors: Development and challenges since their inception.	2
164	Will vanadium-based electrode materials become the future choice for metal-ion batteries?. 2022 ,	0

163	Batteryless Bluetooth Low Energy Prototype With Energy-Aware Bidirectional Communication Powered by Ambient Light. 2022 , 22, 6685-6697	0
162	Liquid air as an emerging energy vector towards carbon neutrality: A multi-scale systems perspective. <i>Renewable and Sustainable Energy Reviews</i> , 2022 , 159, 112201	16.2 2
161	Thermo-economic assessment of a thermally integrated pumped thermal energy storage (TI-PTES) system combined with an absorption refrigeration cycle driven by low-grade heat source. 2022 , 51, 104486	0
160	The Development of Energy Storage in China: Policy Evolution and Public Attitude. 2021 , 9,	0
159	Emplacement of the Photovoltaic Water Pumping System in Remote Areas by a Multi-Criteria Decision-Making Method: A Case Study. 2021 , 9,	
158	A Hybrid Novel Fuzzy MCDM Method for Comprehensive Performance Evaluation of Pumped Storage Power Station in China. 2022 , 10, 71	0
157	Phase Change Energy Storage Elastic Fiber: A Simple Route to Personal Thermal Management.. 2021 , 14,	1
156	Modeling of Energy Consumption and Reduction of Pollutant Emissions in a Walking Beam Furnace Using the Expert Method Case Study. 2021 , 14, 8099	5
155	Recent Progress and Future Prospects on All-Organic Polymer Dielectrics for Energy Storage Capacitors.. 2021 ,	36
154	PV-Supercapacitor Cascaded Topology for Primary Frequency Responses and Dynamic Inertia Emulation. 2021 , 14, 8347	0
153	Various methodologies to improve the energy efficiency of a compressed air energy storage system.	0
152	Electro-Oxidation of Metal Oxide-Fabricated Graphitic Carbon Nitride for Hydrogen Production via Water Splitting. 2022 , 12, 548	1
151	A machine learning-based decision support framework for energy storage selection. 2022 ,	0
150	Comprehensive energy, exergy, and economic analysis of the scenario of supplementing pumped thermal energy storage (PTES) with a concentrated photovoltaic thermal system. 2022 , 260, 115592	0
149	Image_1.PDF. 2020 ,	
148	Progress in Superconducting Materials for Powerful Energy Storage Systems. 2022 , 301-338	
147	Electrical Energy Storage Devices for Active Buildings. 2022 , 51-69	1
146	Separators for lithium-sulfur batteries. 2022 , 121-156	1

145	Evaluation of Energy Storage Systems for Sustainable Development of Renewable Energy Systems - A Comprehensive Review.	1
144	Adsorption of Linear Alcohols in Amorphous Activated Carbons: Implications for Energy Storage Applications.	1
143	Notable catalytic activity of CuO nanoparticles derived from metal-organic frameworks for improving the hydrogen sorption properties of MgH ₂ .	0
142	Valve Regulated Lead Acid Battery Evaluation under Peak Shaving and Frequency Regulation Duty Cycles. 2022 , 15, 3389	1
141	Promoting Oxygen Evolution Reaction Induced by Synergetic Geometric and Electronic Effects of IrCo Thin-Film Electrocatalysts. 6334-6344	1
140	Effect of modeled time horizon on quantifying the need for long-duration storage. 2022 , 317, 119022	0
139	Chemical effect of water addition on the ammonia combustion reaction. 2022 , 32, 101318	0
138	Application of energy storage in integrated energy systems [A solution to fluctuation and uncertainty of renewable energy. 2022 , 52, 104812	2
137	Polyoxometalate-based electrolyte materials in redox flow batteries: Current trends and emerging opportunities. 2022 , 100094	0
136	Energy Storage Technologies; Recent Advances, Challenges, and Prospectives. 2022 , 125-150	0
135	Relevance of Optimized Low-Scale Green H ₂ Systems in a French Context: Two Case Studies. 2022 , 15, 3731	0
134	Sizing of hybrid energy storage through analysis of load profile characteristics: A household case study. 2022 , 52, 104768	3
133	Energy Efficiency: Comparison of Different Systems and Technologies. 2022 , 381-456	
132	The Versatility of the Dynamic Hydrogen Bubble Template Derived Copper Foam on the Emerging Energy Applications: Progress and Future Prospects.	1
131	Energy Storage Benefits Assessment Using Multiple-Choice Criteria: The Case of Drini River Cascade, Albania. 2022 , 15, 4032	2
130	Impact of renewable generation unit on stability of power systems. 2022 , 47, 19947-19954	0
129	AGC Based Market Modeling of Deregulated Power System Employing Electric Vehicles and Battery Energy Storage System. 2022 , 458-468	
128	In-Situ Construction of Fluorinated Solid-Electrolyte Interphase for Highly Reversible Zinc Anodes.	

127	Graphene/polymer composite application on supercapacitors. 2022 , 583-610	
126	Thermodynamic analysis of a novel adiabatic compressed air energy storage system with water cycle. 2022 , 36, 3153-3164	0
125	Scalable fabrication of quantum-sized CoS _{1.97} nanoparticles anchoring on biomass carbon aerogel for energy storage application. 2022 , 165858	2
124	Elastic energy storage technology using spiral spring devices and its applications: A review. 2022 ,	0
123	A Happy Get-Together [Probing Electrochemical Interfaces by Non-Linear Vibrational Spectroscopy.	
122	Na 1.51 Fe[Fe(CN) ₆] 0.87 · 1.83H ₂ O Hollow Nanospheres via Non-Aqueous Ball-Milling Route to Achieve High Initial Coulombic Efficiency and High Rate Capability in Sodium-Ion Batteries. 2200404	2
121	Elucidating the performance variations and critical issues of Zn electrodes in different types of aqueous electrolytes for Zn-based rechargeable batteries. 2022 , 425, 140702	0
120	The role of energy storage technologies for sustainability in developing countries. 2022 , 347-376	
119	Grid-Connected Energy Storage Systems: State-of-the-Art and Emerging Technologies. 2022 , 1-24	4
118	Optimal Sizing of Grid-Scaled Battery with Consideration of Battery Installation and System Power-Generation Costs. 2022 , 15, 4742	1
117	Plug-in hybrid electric vehicles are better than battery electric vehicles to reduce CO ₂ emissions until 2030.	0
116	Latest Energy Storage Trends in Multi-Energy Standalone Electric Vehicle Charging Stations: A Comprehensive Study. 2022 , 15, 4727	4
115	Utilisation of corn starch in production of Eco friendly polymer electrolytes for proton battery applications. 2022 ,	0
114	Enhanced energy storage properties and excellent fatigue resistance of Pb-free Bi _{0.47} Na _{0.37} K _{0.09} Ba _{0.06} Nb _{0.024} Ti _{0.97-x} (Ta _{0.24} Sn _{0.7}) _x O ₃ relaxor ceramics. 2022 , 166324	1
113	A State of the Art Review on Sensible and Latent Heat Thermal Energy Storage Processes in Porous Media: Mesoscopic Simulation. 2022 , 12, 6995	1
112	Multidimensional design of a cathode electrode composed of a nickel cobalt carbonate hydroxide and nitrogen-doped pyridine toward high-performance supercapacitors. 2022 , 54, 105271	1
111	Sustainable small-scale hydropower solutions in Central Asian countries for local and cross-border energy/water supply. <i>Renewable and Sustainable Energy Reviews</i> , 2022 , 167, 112726	16.2 0
110	A Review of Shore Infrastructures for Electric Ferries. 2022 ,	

109	Role of Materials for Energy Storage in Renewable Systems: A Quick Review. 2022 ,	
108	A Review of the Linear Generator Type of Wave Energy Converters[Power Take-Off Systems. 2022 , 14, 9936	0
107	Tuning the Electronic Structure of Cobalt Selenide on Copper Foam by Introducing a Ni Buffer Layer for Highly Efficient Electrochemical Water Splitting. 2022 , 61, 13218-13225	2
106	A comprehensive state-of-the-art review of electrochemical battery storage systems for power grids.	1
105	In-Situ Construction of Fluorinated Solid-Electrolyte Interphase for Highly Reversible Zinc Anodes. 2022 ,	3
104	Thermodynamic analysis and evaluation of a novel composition adjustable Carnot battery under variable operating scenarios. 2022 , 269, 116117	0
103	Forecasting solar-to-hydrogen and solar-to-methane energy conversion efficiency using Si and IMM PV-modules: A case-study in Japan. 2022 , 546, 231991	
102	Experimental investigation during the melting process of a vertical and horizontal tube-in-shell Latent Heat Energy Storage System. 2022 , 55, 105401	0
101	Levelized Full System Costs of Electricity. 2022 , 259, 124905	0
100	Performance study of large capacity industrial lead-carbon battery for energy storage. 2022 , 55, 105398	
99	Improvement of energy storage properties of NaNbO ₃ -based ceramics through the cooperation of relaxation and oxygen vacancy defects. 2022 ,	0
98	A review of micro hydro systems in urban areas: Opportunities and challenges. 2022 , 169, 112866	1
97	Effects of micro-alloying with lead for battery grid material. 2022 , 55, 105569	0
96	Formation of NiO Thin-Film via Picosecond Laser Pulses for Energy Storage Electrode Fabrication. 2022 ,	0
95	Chitin as a Universal and Sustainable Electrode Binder for Electrochemical Capacitors.	0
94	Evaluating the Use of a Net-Metering Mechanism in Microgrids to Reduce Power Generation Costs with a Swarm-Intelligent Algorithm.	0
93	A Simplified Thermal Model to Predict Temperature Profile and Heat Generation of Cylindrical Lithium-Ion Cells. 2022 , 11-23	0
92	Iron(III) Chloro Complexation at the Air/Aqueous FeCl ₃ Interface via Second Harmonic Generation Spectroscopy. 2022 , 126, 15386-15396	1

91	Optimal Bidding Strategy of a Pumped Hydro Energy Storage Integrated Nuclear Power Plant considering Possible Outage. 2022 , 2022, 1-11	0
90	A Review of Control Techniques and Energy Storage for Inverter-Based Dynamic Voltage Restorer in Grid-Integrated Renewable Sources. 2022 , 2022, 1-43	0
89	Modeling Methodology of Flywheel Energy Storage System for Microgrid Applications. 2023 , 191-204	0
88	Optimal Materials Handling Equipment and Defective Product Reduction Skills in Enhance Overall Production Efficiency. 2022 , 12, 215824402211287	0
87	A Prototype of High-Performance Two-Electron Non-aqueous Organic Redox Flow Battery Operated at -40 °C.	0
86	Synthesis of Anion Exchange Membranes Containing PVDF/PES and Either PEI or Fumion [®] . 2022 , 12, 959	0
85	The Load Shifting Potential of Domestic Refrigerators in Smart Grids: A Comprehensive Review. 2022 , 15, 7666	1
84	An overview of underground energy-related product storage and sequestration. 2023 , 528,	1
83	Assessment of Battery Energy Storage Systems Using the Intuitionistic Fuzzy Removal Effects of Criteria and the Measurement of Alternatives and Ranking Based on Compromise Solution Method. 2022 , 15, 7782	0
82	Halogen Hybrid Flow Batteries Advances for Stationary Chemical Power Sources Technologies. 2022 , 15, 7397	0
81	Understanding Aqueous Organic Redox Flow Batteries: A Guided Experimental Tour from Components Characterization to Final Assembly. 2022 , 8, 193	0
80	Electrospun Nanofiber Electrodes for Lithium-Ion Batteries. 2200740	1
79	Improved Electrochemical Performance from Nano-Cobalt Oxide: Bifunctional Application in Energy Generation and Storage. 2022 , 5, 12907-12915	0
78	Layered Double Hydroxides for Photo(electro)catalytic Applications: A Mini Review. 2022 , 12, 3525	0
77	A systematic review of optimal planning and deployment of distributed generation and energy storage systems in power networks. 2022 , 56, 105937	2
76	Chitin as a universal and sustainable electrode binder for electrochemical capacitors. 2023 , 553, 232300	1
75	MoAg nanocomposite catalysts for the oxygen evolution reaction. 2023 , 172, 111041	0
74	Synergistic effect of p-type and n-type dopants in semiconductors for efficient electrocatalytic water splitting.	0

- 73 Novel compositions and architectures of organic-inorganic layered composites with ultrahigh energy storage density and excellent thermal stability. **2022**, 101408 ○
- 72 A Review on Energy Storage Systems in Electric Vehicle Charging Station. **2023**, 813-829 ○
- 71 Reinforced via the insulative boric oxide in the BaTiO₃ amorphous thin film with high energy storage capability and stability. **2022**, ○
- 70 Comparative analysis of system performance of thermally integrated pumped thermal energy storage systems based on organic flash cycle and organic Rankine cycle. **2022**, 273, 116416 ○
- 69 Selection and Dimensioning of Energy Storage Systems for Standalone Communities: A Review. **2022**, 15, 8631 ○
- 68 Establishment of performance metrics for batteries in large-scale energy storage systems from perspective of technique, economics, environment and safety. ○
- 67 An inverse-problem approach to simulating smart control of domestic electric hot water cylinders using electricity demand time-series data.. **2023**, 278, 112644 1
- 66 Potential and economic viability of green hydrogen production from seawater electrolysis using renewable energy in remote Japanese islands. **2023**, 202, 1436-1447 1
- 65 Thermo-economic analysis of the integrated system of thermal power plant and liquid air energy storage. **2023**, 57, 106233 ○
- 64 A novel semi-analytical monitoring model for multi-horizontal well system in large-scale underground natural gas storage: Methodology and case study. **2023**, 334, 126807 1
- 63 Predicting Household Electric Power Consumption Using Multi-step Time Series with Convolutional LSTM. **2023**, 31, 100360 ○
- 62 Evaluating the use of a Net-Metering mechanism in microgrids to reduce power generation costs with a swarm-intelligent algorithm. **2023**, 266, 126317 ○
- 61 Battery energy storage systems in power systems: A survey. **2022**, ○
- 60 Transient Modeling of a Vanadium Redox Flow Battery and Real-Time Monitoring of Its Capacity and State of Charge. **2022**, 61, 17557-17571 ○
- 59 Optimal Planning of Battery Energy Storage Systems by Considering Battery Degradation due to Ambient Temperature: A Review, Challenges, and New Perspective. **2022**, 8, 290 1
- 58 Comparative Analysis of Energy Storage Methods for Energy Systems and Complexes. **2022**, 15, 9541 1
- 57 Heat storage material: a hope in solar thermal. ○
- 56 Efficiency Analysis of an Arrayed Liquid Piston Isothermal Air Compression System for Compressed Air Energy Storage. ○

55	Small-Scale Hybrid and Polygeneration Renewable Energy Systems: Energy Generation and Storage Technologies, Applications, and Analysis Methodology. 2022 , 15, 9152	0
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44	Comprehensive Review of Compressed Air Energy Storage (CAES) Technologies. 2023 , 3, 104-126	0
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- 37 Assessing the energy storage potential of electric hot water cylinders with stochastic model-based control. 1-17 ○
- 36 The Lithium-Ion Battery Recycling Process from a Circular Economy Perspective: A Review and Future Directions. **2023**, 16, 3228 ○
- 35 Investigation of the compressed air energy storage (CAES) system utilizing systems-theoretic process analysis (STPA) towards safe and sustainable energy supply. **2023**, 206, 1075-1085 ○
- 34 Governing failure mechanisms of simplified three-way dendritic branch under compressive load. **2023**, 180, 104620 ○
- 33 THESEUS: A techno-economic design, integration and downselection framework for energy storage. **2023**, 284, 116976 ○
- 32 Roles of molecular structure of carbon-based materials in energy storage. **2023**, 22, 100375 ○
- 31 Control and estimation techniques applied to smart microgrids: A review. **2023**, 179, 113251 ○
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- 24 Aerodynamic performance and flow characteristics of a compressed air energy storage axial turbine with nozzle governing. **2023**, 63, 106967 ○
- 23 Defect Engineered Dendritic Fibrous Nanosilica as Prospective Alloy Anode for the Fabrication of High-Energy Li-Ion Capacitors with Ultralong Durability. **2023**, 5, 715-721 ○
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- 20 Modeling and optimization of a hybrid renewable energy system integrated with gas turbine and energy storage. **2023**, 279, 116763 1

- 19 Unraveling the effect of excessive Al on the growth of high-quality YbAl₃ film. **2023**, 32, 101008 ○
- 18 Recent Achievements on the Liquid Electrolytes for Fast-Charging Lithium Metal Batteries. 2201397 ○
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- 14 Electrical properties of flexible ceramics. **2023**, 75-127 ○
- 13 Coalescing of Lanthanum Oxide and PPy @Graphitic Carbon Nitride to Achieve Ultrahigh Energy Density Electrode Material for Supercapacitors Applications. **2023**, 169738 ○
- 12 Electrospun Flexible Nanofibres for Batteries: Design and Application. **2023**, 6, ○
- 11 PV-Supercapacitor Tri-port Converter for Frequency Response Services. **2022**, ○
- 10 Bacterial Nanocellulose from Komagataeibacter Medellinensis in Fique Juice for Activated Carbons Production and Its Application for Supercapacitor Electrodes. **2023**, 15, 1760 ○
- 9 Pumped thermal energy storage. **2023**, 435-468 ○
- 8 Application of the Calcium Looping Process for Thermochemical Storage of Variable Energy. **2023**, 16, 3299 ○
- 7 Flowers Like β -MoO₃/CNTs/PANI Nanocomposites as Anode Materials for High-Performance Lithium Storage. **2023**, 28, 3319 ○
- 6 Deep Learning-based Predictive Modeling of Building Energy Usage. **2023**, ○
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- 3 Understanding technological innovation and evolution of energy storage in China: Spatial differentiation of innovations in lithium-ion battery industry. **2023**, 66, 107307 ○
- 2 Maximizing uninterrupted solar electricity in spectral-splitting photovoltaic-thermal systems integrated with CO₂ battery. **2023**, 66, 107402 ○

- 1 Floating Photovoltaic Systems Coupled with Pumped Hydroplants under Day-Ahead Electricity Market Conditions: Parametric Analysis. **2023**, 12, 2250

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