Estimation of global final-stage energy-return-on-inves comparison to renewable energy sources

Nature Energy 4, 612-621 DOI: 10.1038/s41560-019-0425-z

Citation Report

#	Article	IF	CITATIONS
1	Renewables rise above fossil fuels. Nature Energy, 2019, 4, 538-539.	19.8	38
2	An Estimation of Different Minimum Exergy Return Ratios Required for Society. BioPhysical Economics and Resource Quality, 2019, 4, 1.	2.4	7
3	Endangered elements, critical raw materials and conflict minerals. Science Progress, 2019, 102, 304-350.	1.0	28
4	Energy Return on Investment: Setting the Record Straight. Joule, 2019, 3, 1810-1811.	11.7	6
5	Energy Efficiency or Conservation for Mitigating Climate Change?. Energies, 2019, 12, 3543.	1.6	40
6	Dynamic Energy Return on Energy Investment (EROI) and material requirements in scenarios of global transition to renewable energies. Energy Strategy Reviews, 2019, 26, 100399.	3.3	119
7	Energy Accounting for a Renewable Energy Future. Energies, 2019, 12, 4280.	1.6	20
8	Design and Simulation of A Small Wind Turbine Blade with Qblade and Validation with MATLAB. , 2019, , .		9
9	The Changing Meaning of Energy Return on Investment and the Implications for the Prospects of Post-fossil Civilization. One Earth, 2019, 1, 416-422.	3.6	18
10	When is EROI Not EROI?. BioPhysical Economics and Resource Quality, 2019, 4, 1.	2.4	12
11	Economics for the future – Beyond the superorganism. Ecological Economics, 2020, 169, 106520.	2.9	58
12	An insight to the energy policy of GCC countries to meet renewable energy targets of 2030. Energy Policy, 2020, 147, 111864.	4.2	46
13	Highly efficient and robust sulfur-doped nickel-cobalt oxide towards oxygen evolution reaction. Molecular Catalysis, 2020, 496, 111175.	1.0	2
14	Interfacial and molecular interactions between fractions of heavy oil and surfactants in porous media: Comprehensive review. Advances in Colloid and Interface Science, 2020, 283, 102242.	7.0	46
15	An ecological macroeconomics model: The energy transition in the EU. Energy Policy, 2020, 145, 111726.	4.2	34
16	Assessing the technical potential of ASEAN countries to achieve 100% renewable energy supply. Sustainable Energy Technologies and Assessments, 2020, 42, 100878.	1.7	17
17	A Net Energy Analysis of the Global Agriculture, Aquaculture, Fishing and Forestry System. Biophysical Economics and Sustainability, 2020, 5, 1.	0.7	8
18	Evolution of metal organic frameworks as electrocatalysts for water oxidation. Chemical Communications, 2020, 56, 11735-11748.	2.2	35

γατιών Ρερώ

#	Article	IF	CITATIONS
19	Multi-Walled Carbon Nanotubes Supported Pd(II) Complexes: A Supramolecular Approach towards Single-Ion Oxygen Reduction Reaction Catalysts. Energies, 2020, 13, 5539.	1.6	9
20	Feasibility of a 100% Global Renewable Energy System. Energies, 2020, 13, 5543.	1.6	50
21	An Assessment of Civil Nuclear â€~Enabling' and â€~Amelioration' Factors for EROI Analysis. Sustainability, 2020, 12, 8414.	' 1.6	2
22	Rare-Earth Single-Atom La–N Charge-Transfer Bridge on Carbon Nitride for Highly Efficient and Selective Photocatalytic CO ₂ Reduction. ACS Nano, 2020, 14, 15841-15852.	7.3	283
23	Extended-exergy based energy return on investment method and its application to shale gas extraction in China. Journal of Cleaner Production, 2020, 260, 120933.	4.6	16
24	A critical review on progress of the electrode materials of vanadium redox flow battery. International Journal of Energy Research, 2020, 44, 7903-7923.	2.2	99
25	Chrome and cobaltâ€based novel electrolyte systems for redox flow batteries. International Journal of Energy Research, 2020, 44, 8014-8023.	2.2	16
26	Synthesis and coordination properties of a new ligand designed for surface functionalization of carbon substrates. Inorganica Chimica Acta, 2020, 511, 119793.	1.2	6
27	Energy descent as a post-carbon transition scenario: How â€~knowledge humility' reshapes energy futures for post-normal times. Futures, 2020, 122, 102565.	1.4	26
28	Raman spectroscopy of biochar from the pyrolysis of three typical Chinese biomasses: A novel method for rapidly evaluating the biochar property. Energy, 2020, 202, 117644.	4.5	81
29	Nanostructure Design Strategies for Aqueous Zincâ€ion Batteries. ChemElectroChem, 2020, 7, 2957-2978.	1.7	44
30	CO2 effects on catalytic pyrolysis of yard trimming over concrete waste. Chemical Engineering Journal, 2020, 396, 125331.	6.6	15
31	Standard, Point of Use, and Extended Energy Return on Energy Invested (EROI) from Comprehensive Material Requirements of Present Global Wind, Solar, and Hydro Power Technologies. Energies, 2020, 13, 3036.	1.6	40
32	Implications of Trends in Energy Return on Energy Invested (EROI) for Transitioning to Renewable Electricity. Ecological Economics, 2020, 176, 106726.	2.9	29
33	Recent Advances in Metalâ€Organic Frameworks and Their Derived Materials for Electrocatalytic Water Splitting. ChemElectroChem, 2020, 7, 1805-1824.	1.7	47
34	A tale of two utopias: Work in a post-growth world. Ecological Economics, 2020, 173, 106653.	2.9	36
35	Causality between CO2 Emissions and Stock Markets. Energies, 2020, 13, 2893.	1.6	30
36	A solar driven hybrid photovoltaic module/direct contact membrane distillation system for electricity generation and water desalination. Energy Conversion and Management, 2020, 221, 113146.	4.4	38

#	Article	IF	CITATIONS
37	Assessing the feasibility of carbon dioxide mitigation options in terms of energy usage. Nature Energy, 2020, 5, 720-728.	19.8	54
38	Structural Change for a Post-Growth Economy: Investigating the Relationship between Embodied Energy Intensity and Labour Productivity. Sustainability, 2020, 12, 962.	1.6	17
39	Engineering surface defects on two-dimensional ultrathin mesoporous anatase TiO ₂ nanosheets for efficient charge separation and exceptional solar-driven photocatalytic hydrogen evolution. Journal of Materials Chemistry C, 2020, 8, 3476-3482.	2.7	34
40	Catalytic Pyrolysis of Polystyrene over Steel Slag under CO2 Environment. Journal of Hazardous Materials, 2020, 395, 122576.	6.5	61
41	Trends in Scientific Literature on Energy Return Ratio of Renewable Energy Sources for Supporting Policymakers. Administrative Sciences, 2020, 10, 21.	1.5	32
42	Combustion performance and emissions from torrefied and water washed biomass using a kg-scale burner. Journal of Hazardous Materials, 2021, 402, 123468.	6.5	14
43	From nonâ€renewable energy to renewable by harvesting salinity gradient power by reverse electrodialysis: A review. International Journal of Energy Research, 2021, 45, 3495-3522.	2.2	42
44	High-performance hybrid supercapacitors based on MOF-derived hollow ternary chalcogenides. Energy Storage Materials, 2021, 35, 750-760.	9.5	101
45	Economical energy resource planning to promote sustainable urban design. Renewable and Sustainable Energy Reviews, 2021, 137, 110619.	8.2	10
46	Building energy democracy to mend ecological and epistemic rifts: An environmental sociological examination of Seoul's One Less Nuclear Power Plant initiative. Energy Research and Social Science, 2021, 72, 101884.	3.0	7
47	Resource use and economic development: an exergy perspective on energy and material flows and stocks from 1900 to 2010. Resources, Conservation and Recycling, 2021, 165, 105226.	5.3	23
48	Material efficiency and climate change mitigation of passenger vehicles. Journal of Industrial Ecology, 2021, 25, 494-510.	2.8	30
49	Aging of mechanically activated wood: Effect on the burning ability. Thermal Science, 2022, 26, 605-612.	0.5	0
50	Systems Ecology and Limits to Growth: History, Models, and Present Status. , 2021, , 943-980.		0
51	Study of dynamic pressure on the packer for deep-water perforation. Open Physics, 2021, 19, 215-223.	0.8	2
52	Ni-MOF-74 derived nickel phosphide and In ₂ O ₃ form S-scheme heterojunction for efficient hydrogen evolution. New Journal of Chemistry, 2021, 45, 16155-16167.	1.4	20
53	Life-cycle greenhouse gas emissions and net energy assessment of large-scale hydrogen production <i>via</i> electrolysis and solar PV. Energy and Environmental Science, 2021, 14, 5113-5131.	15.6	65
54	A Contextual Semi-Assisted Project-Based Learning on Ocean Wave Energy: Pre-service Physics Teachers' Perceptions. Jurnal Pendidikan Fisika, 2021, 9, 1-13.	0.1	1

#	Article	IF	CITATIONS
55	Innovative Enterprise, Industrial Ecosystems and Sustainable Transition: The Case of Transforming DONG Energy to Ãr̃sted. , 2021, , 1-52.		0
56	Estimate of the Societal Energy Return on Investment (EROI). Biophysical Economics and Sustainability, 2021, 6, 1.	0.7	7
57	Structural degradation of tungsten sandwiched in hafnia layers determined by in-situ XRD up to 1520°C. Scientific Reports, 2021, 11, 3330.	1.6	15
58	Ni(OH)2/Ni/g-C3N4 composite: An efficient electrocatalyst for hydrogen evolution. Journal of Fuel Chemistry and Technology, 2021, 49, 198-204.	0.9	10
59	2D Materials Bridging Experiments and Computations for Electro/Photocatalysis. Advanced Energy Materials, 2022, 12, 2003841.	10.2	116
60	Edible Energy Production and Energy Return on Investment—Long-Term Analysis of Global Changes. Energies, 2021, 14, 1011.	1.6	9
61	What is going on with Middle Eastern solar prices, and what does it mean for the rest of us?. Progress in Photovoltaics: Research and Applications, 2021, 29, 638-648.	4.4	17
62	Relationship between energy consumption, economic growth and environmental pollution in China. Environmental Research, 2021, 194, 110718.	3.7	81
64	An Overview on Anodes for Magnesium Batteries: Challenges towards a Promising Storage Solution for Renewables. Nanomaterials, 2021, 11, 810.	1.9	97
65	The case for estimating carbon return on investment (CROI) for CCUS platforms. Applied Energy, 2021, 285, 116394.	5.1	27
66	The Impact of the Geometry of the Effective Propped Volume on the Economic Performance of Shale Gas Well Production. Energies, 2021, 14, 2475.	1.6	1
67	Recent Advances in TiO2-Based Heterojunctions for Photocatalytic CO2 Reduction With Water Oxidation: A Review. Frontiers in Chemistry, 2021, 9, 637501.	1.8	26
68	Technical Challenges and Perspectives for the Commercialization of Solutionâ€Processable Solar Cells. Advanced Materials Technologies, 2021, 6, .	3.0	60
69	Linear, tripodal, macrocyclic: Ligand geometry and ORR activity of supported Pd(II) complexes. Inorganica Chimica Acta, 2021, 518, 120250.	1.2	5
70	Sustainability of the global sand system in the Anthropocene. One Earth, 2021, 4, 639-650.	3.6	81
71	Study on highly efficient highâ€ŧemperature steam harvesting using waste energy. International Journal of Energy Research, 2021, 45, 15409-15423.	2.2	3
72	Image-Based PV Soiling Loss Quantification under Laboratory Conditions. , 2021, , .		1
73	Worker wellbeing and productivity in advanced economies: Re-examining the link. Ecological Economics, 2021, 184, 106989.	2.9	21

#	Article	IF	Citations
74	Aqueous pretreatment of triticale straw for integrated production of hemicellulosic methane and cellulosic butanol. Renewable Energy, 2021, 171, 971-980.	4.3	7
75	Modelling energy transition risk: The impact of declining energy return on investment (EROI). Ecological Economics, 2021, 185, 107023.	2.9	18
76	Quantitative Assessment of Rock-Coal Powder Mixtures by Terahertz Time Domain Spectroscopy. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 742-746.	1.2	4
78	Investigation of graphene dispersion on thermoelectric, magnetic, and mechanical properties of p-type Bi0.5Sb1.5Te3 alloys. Materials Chemistry and Physics, 2021, 266, 124512.	2.0	5
80	Selection of Sodium Salt Electrolyte Compatible with Na _{0.67} Ni _{0.15} Fe _{0.2} Mn _{0.65} O ₂ Cathode for Sodiumâ€kon Batteries. Energy Technology, 2021, 9, 2100190.	1.8	10
81	Diatomite-based magnesium sulfate composites for thermochemical energy storage: Preparation and performance investigation. Solar Energy, 2021, 224, 907-915.	2.9	18
82	Surface defects induced charge imbalance for boosting charge separation and solar-driven photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2021, 596, 12-21.	5.0	19
83	Fossil Energy in the Framework of Sustainable Development: Analysis of Prospects and Development of Forecast Scenarios. Energies, 2021, 14, 5268.	1.6	52
84	Assessing Global Long-Term EROI of Gas: A Net-Energy Perspective on the Energy Transition. Energies, 2021, 14, 5112.	1.6	15
85	Energy Consumption and Spatial Assessment of Renewable Energy Penetration and Building Energy Efficiency in Malaysia: A Review. Sustainability, 2021, 13, 9244.	1.6	29
86	The global politics of the renewable energy transition and the non-substitutability hypothesis: towards a †̃great transformation'?. Review of International Political Economy, 2022, 29, 1766-1781.	3.2	2
87	Ultrafine Fe-modulated Ni nanoparticles embedded within nitrogen-doped carbon from Zr-MOFs-confined conversion for efficient oxygen evolution reaction. Frontiers of Chemical Science and Engineering, 0, , 1.	2.3	0
88	Zeoliteâ€Tailored Active Site Proximity for the Efficient Production of Pentanoic Biofuels. Angewandte Chemie - International Edition, 2021, 60, 23713-23721.	7.2	43
89	Zeoliteâ€Tailored Active Site Proximity for the Efficient Production of Pentanoic Biofuels. Angewandte Chemie, 2021, 133, 23906-23914.	1.6	10
90	Couple of Nonpolarized/Polarized Electrodes Building a New Universal Electrochemical Energy Storage System with an Impressive Energy Density. ACS Applied Materials & Interfaces, 2021, 13, 45375-45384.	4.0	23
91	Nanolayers of carbon protected copper oxide nanocomposite for high performance energy storage and non-enzymatic glucose sensor. Journal of Alloys and Compounds, 2021, 875, 160063.	2.8	15
92	A subnational carbon curse? Fossil fuel richness and carbon intensity among US states. The Extractive Industries and Society, 2021, 8, 100859.	0.7	8
93	Thermochemical conversion of agroforestry biomass and solid waste using decentralized and mobile systems for renewable energy and products. Renewable and Sustainable Energy Reviews, 2021, 149, 111372.	8.2	38

#	Article	IF	CITATIONS
94	Hybrid generation of renewables increases the energy system's robustness in a changing climate. Journal of Cleaner Production, 2021, 324, 129205.	4.6	26
95	Dynamic linking of upstream energy and freight demands for bio and fossil energy pathways in the Global Change Analysis Model. Applied Energy, 2021, 302, 117580.	5.1	5
96	A dual-interfacial system with well-defined spatially separated redox-sites for boosting photocatalytic overall H2S splitting. Chemical Engineering Journal, 2021, 423, 130201.	6.6	8
97	Developing a water chemistry model in the CO2-mixed salts-H2O system to predict the corrosion of carbon steel in supercritical CO2-containing formation water. Corrosion Science, 2021, 192, 109806.	3.0	6
98	Peak oil and the low-carbon energy transition: A net-energy perspective. Applied Energy, 2021, 304, 117843.	5.1	61
99	Review of integration of small modular reactors in renewable energy microgrids. Renewable and Sustainable Energy Reviews, 2021, 152, 111638.	8.2	41
100	A zinc ion hybrid capacitor based on sharpened pencil-like hierarchically porous carbon derived from metal–organic framework. Chemical Engineering Journal, 2022, 428, 131071.	6.6	30
101	Thermo-photo coupled catalytic CO2 reforming of methane: A review. Chemical Engineering Journal, 2022, 428, 131222.	6.6	24
102	TriMOF synergized on the surface of activated carbon produced from pineapple leaves for the environmental pollutant reduction and oxygen evolution process. Chemosphere, 2022, 286, 131893.	4.2	19
103	Performance and energetic modeling of hybrid PV systems coupled with battery energy storage. , 2021, , 195-238.		7
104	Capacity expansion of power plants using dynamic energy analysis. Clean Technologies and Environmental Policy, 2021, 23, 669-683.	2.1	5
105	Elements of Holistic Sustainability Assessments for Energy Systems. Green Energy and Technology, 2021, , 71-106.	0.4	0
106	Heterogeneous or homogeneous? A modified decision-making approach in renewable energy investment projects. AIMS Energy, 2021, 9, 558-580.	1.1	12
107	The Uses of Renewable Energy in Buildings. Impact of Meat Consumption on Health and Environmental Sustainability, 2021, , 257-274.	0.4	0
108	Providing decent living with minimum energy: A global scenario. Global Environmental Change, 2020, 65, 102168.	3.6	217
109	COVID-19 and economic recovery in compliance with climate targets. Global Sustainability, 2020, 3, .	1.6	8
110	Controlled Synthesis of V-Doped Heterogeneous Ni ₃ S ₂ /NiS Nanorod Arrays as Efficient Hydrogen Evolution Electrocatalysts. Langmuir, 2021, 37, 357-365.	1.6	10
111	Decreased resilience in power grids under dynamically induced vulnerabilities. New Journal of Physics, 2020, 22, 103033.	1.2	7

ARTICLE IF CITATIONS # Recognition of coal from other minerals in powder form using terahertz spectroscopy. Optics 1.7 6 112 Express, 2020, 28, 30943. Numerical Investigation of Downhole Perforation Pressure for a Deepwater Well. Energies, 2019, 12, 1.6 3795. Accessibility and Sustainability of Hybrid Energy Systems for a Cement Factory in Oman. Sustainability, 114 1.6 13 2021, 13, 93. Hydrogen Production Technologies: From Fossil Fuels toward Renewable Sources. A Mini Review. 286 Energy & amp; Fuels, 2021, 35, 16403-16415. Capitalismo fÃ3sil en el siglo XXI: mecanismos econÃ3micos, energéticos, militares y elitistas para 116 0.0 2 desencadenar el colapso planetario. Estudios Latinoamericanos, 2019, , 73-102. Solar, wind and logistic substitution in global energy supply to 2050 – Barriers and implications. Renewable and Sustainable Energy Reviews, 2022, 153, 111720. 8.2 66 Optical and electrochemical properties of spinel cubic nanostructured thin film Co3O4 prepared by 118 1.3 6 spray pyrolysis. Physica B: Condensed Matter, 2022, 625, 413464. Electricity-Driven Microbial Factory for Value-Added Resources Recovery from Waste Streams., 2020, , 119-138. 120 Storage with Fossil Fuels. Lecture Notes in Energy, 2020, , 29-40. 0.2 0 Systems Ecology and Limits to Growth: History, Models, and Present Status. , 2020, , 1-38. Transitioning to Intermittent Energy: The Critical Digital Transformation of the Decade. SSRN 123 0.4 1 Electronic Journal, 0, , . Electrooxidation of Hydrazine Utilizing High-Entropy Alloys: Assisting the Oxygen Evolution Reaction at the Thermodynamic Voltage. ACS Catalysis, 2021, 11, 14000-14007. 124 5.5 Insights into the improved cycle and rate performance by ex-situ F and in-situ Mg dual doping of 125 9.5 43 layered oxide cathodes for sodium-ion batteries. Energy Storage Materials, 2022, 45, 1153-1164. Targeted design of advanced electrocatalysts by machine learning. Chinese Journal of Catalysis, 2022, 6.9 63 43, 11-32. Electric fuel conversion with hydrogen production by multiphase plasma at ambient pressure. 127 6.6 6 Chemical Engineering Journal, 2022, 433, 133660. Hollow tubular Co9S8 grown on In2O3 to form S-scheme heterojunction for efficient and stable 24 hydrogen evolution. International Journal of Hydrogen Energy, 2022, 47, 1669-1682. A Comprehensive Net Energy Analysis and Outlook of Energy System in China. Biophysical Economics 129 0.7 0 and Sustainability, 2021, 6, 1. Can the 1.5 â, f warming target be met in a global transition to 100% renewable energy? AIMS Energy, 2021, 1.1 9, 1170-1191.

#	Article	IF	CITATIONS
131	Alkali and alkaline-earth metal ion–solvent co-intercalation reactions in nonaqueous rechargeable batteries. Chemical Science, 2021, 12, 15206-15218.	3.7	6
132	Global Structural Change and Economic Dynamics Under a Green Growth Strategy: An Energy-Constrained Supermultiplier Approach. SSRN Electronic Journal, 0, , .	0.4	0
133	Bifunctional manganese oxide–silver nanocomposites anchored on graphitic mesoporous carbon to promote oxygen reduction and inhibit cathodic biofilm growth for long-term operation of microbial fuel cells fed with sewage. Sustainable Energy and Fuels, 2022, 6, 430-439.	2.5	6
134	Application and Evaluation of Phase Change Materials for Improving Photovoltaic Power Generation Efficiency and Roof Overheating Reduction. SSRN Electronic Journal, 0, , .	0.4	0
135	Comment on Seibert, M.K.; Rees, W.E. Through the Eye of a Needle: An Eco-Heterodox Perspective on the Renewable Energy Transition. Energies 2021, 14, 4508. Energies, 2022, 15, 964.	1.6	4
136	Can energy descent be justified by critiquing 100% renewable energy scenarios? A reply to Floyd et al Futures, 2022, 137, 102907.	1.4	4
137	Zinc Anode for Mild Aqueous Zinc-Ion Batteries: Challenges, Strategies, and Perspectives. Nano-Micro Letters, 2022, 14, 42.	14.4	207
138	Bank climate actions and their implications for the coal power sector. Energy Strategy Reviews, 2022, 39, 100799.	3.3	5
139	Prussianâ€Blue Analogueâ€Derived Hollow Structured Co ₃ S ₄ /CuS ₂ /NiS ₂ Nanocubes as an Advanced Batteryâ€Type Electrode Material for Highâ€Performance Hybrid Supercapacitors. Small, 2022, 18, e2105185.	5.2	35
140	Lessons from COVID-19 for managing transboundary climate risks and building resilience. Climate Risk Management, 2022, 35, 100395.	1.6	23
141	New insights in establishing the structure-property relations of novel plasmonic nanostructures for clean energy applications. EnergyChem, 2022, 4, 100070.	10.1	13
142	Ice-Assisted Synthesis of Highly Crystallized Prussian Blue Analogues for All-Climate and Long-Calendar-Life Sodium Ion Batteries. Nano Letters, 2022, 22, 1302-1310.	4.5	68
143	Developing a Multi-Regional Physical Supply Use Table framework to improve the accuracy and reliability of energy analysis. Applied Energy, 2022, 310, 118413.	5.1	7
144	Global guidelines and requirements for professional competencies of natural resource extraction engineers: Implications for ESG principles and sustainable development goals. Journal of Cleaner Production, 2022, 338, 130530.	4.6	80
145	Harnessing the Potential of Consumer (Co-)Ownership in Renewables in the Asian Energy Transition: A Comparative Study of Pakistan and India. SSRN Electronic Journal, O, , .	0.4	0
146	Energy Targeting of Pressure-Retarded Osmosis with Non-Zero Driving Force: A Novel Thermodynamically Oriented Method. SSRN Electronic Journal, 0, , .	0.4	0
147	"One-for-Two―Strategy: The Consturction of High Performance Positive and Negative Electrode Materials Via One Co-Based Metal Organic Framework Precursor for Boosted Hybrid Supercapacitor Energy Density. SSRN Electronic Journal, 0, , .	0.4	0
148	If the Cooking Fuel Was Cleaner, Would We Be Happier? Associations between Household Cooking Fuel Choice and Individual Subjective Well-Being in China. Sustainable Development, 2022, 12, 486-503.	0.0	0

#	Article	IF	Citations
149	Economic, environmental and energy analysis of the utilization of renewable energy based on Analytic Hierarchy Process: a case study. International Journal of Low-Carbon Technologies, 2022, 17, 430-435.	1.2	2
150	Solvent-free transformation of levulinic acid into valeric acid and its esters using the nickel phosphine complex and metal triflate co-catalytic system. Green Chemistry, 2022, 24, 3143-3151.	4.6	4
151	Fabricating N, S Coâ€Doped Hierarchical Macroâ€Mesoâ€Micro Carbon Materials as pHâ€Universal ORR Electrocatalysts**. ChemistrySelect, 2022, 7, .	0.7	8
152	Energy Optimization of the Continuous-Time Perfect Control Algorithm. Energies, 2022, 15, 1555.	1.6	3
153	Banana Peel and Conductive Polymers-Based Flexible Supercapacitors for Energy Harvesting and Storage. Energies, 2022, 15, 2471.	1.6	15
154	An alternative platform of solid-state hydrides with polymers as composite/encapsulation for hydrogen storage applications: Effects in intermetallic and complex hydrides. International Journal of Hydrogen Energy, 2023, 48, 21429-21450.	3.8	8
155	A Hierarchical Strategy for Multi-Objective Optimization of Distribution Network Considering DGs and V2G-Enabled EVs Integration. Frontiers in Energy Research, 2022, 10, .	1.2	3
156	Potential Energy, Economic, and Environmental Impacts of Hydro Power Pressure Reduction on the Water-Energy-Food Nexus. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	1.3	10
158	Flow Electrochemistry Enables Microbial Atmospheric CO ₂ Fixation via Coupling with Iodine-Mediated Organic Reactions. ACS Sustainable Chemistry and Engineering, 2022, 10, 541-551.	3.2	7
159	Polyoxometalates Immobilized on Covalent Triazine Framework as Efficient Catalysts for Deep Oxidative Desulfurization. ChemCatChem, 2022, 14, .	1.8	8
160	Co(III) carboxamide complexes as electrocatalysts for water splitting. International Journal of Hydrogen Energy, 2022, 47, 16921-16932.	3.8	2
161	A Comprehensive Societal Energy Return on Investment Study of Portugal Reveals a Low but Stable Value. Energies, 2022, 15, 3549.	1.6	2
162	Investment choices and production dynamics: The role of price expectations, financial deficit, and production constraints. Journal of Economics and Business, 2022, 120, 106067.	1.7	1
163	Synergistic effects between dual-photoelectrodes and bioanode enhance sustainable hydrogen and electricity production from wastewater. Resources, Conservation and Recycling, 2022, 183, 106367.	5.3	6
164	Performance evaluation of an integrated photovoltaic module and cascading thermally regenerative electrochemical devices system. Energy Conversion and Management, 2022, 264, 115737.	4.4	10
165	Ball Milling Solidâ€State Synthesis of Highly Crystalline Prussian Blue Analogue Na _{2â^'<i>x</i>} MnFe(CN) ₆ Cathodes for Allâ€Climate Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	53
166	Ball Milling Solidâ€State Synthesis of Highly Crystalline Prussian Blue Analogue Na _{2â^'<i>x</i>} MnFe(CN) ₆ Cathodes for Allâ€Climate Sodiumâ€Ion Batteries. Angewandte Chemie, 2022, 134, .	1.6	11
167	First-row transition metal-based materials derived from bimetallic metal–organic frameworks as highly efficient electrocatalysts for electrochemical water splitting. Energy and Environmental Science, 2022, 15, 3119-3151.	15.6	125

#	Article	IF	CITATIONS
168	Innovative Enterprise, Industrial Ecosystems, and Sustainable Transition: The Case of Transforming DONG Energy to Ãr̃sted. , 2022, , 3633-3684.		0
169	A Flexible Deep Learning Method for Energy Forecasting. Energies, 2022, 15, 3926.	1.6	13
170	Status and Prospects of Dual-Gradient Drilling Technologies in Deep-Water Wells. Frontiers in Energy Research, 0, 10, .	1.2	1
171	Investment and Production Strategies of Renewable Energy Power under the Quota and Green Power Certificate System. Energies, 2022, 15, 4110.	1.6	4
172	Titanate Nanotubes-Based Heterogeneous Catalyst for Efficient Production of Biomass Derived Chemicals. Frontiers in Chemistry, 2022, 10, .	1.8	2
173	"One-for-two―strategy: The construction of high performance positive and negative electrode materials via one Co-based metal organic framework precursor for boosted hybrid supercapacitor energy density. Journal of Power Sources, 2022, 541, 231689.	4.0	16
174	Graphdiyne(Cnh2n-2) Based Nis S-Scheme Heterojunction for Efficient Photocatalytic Hydrogen Production. SSRN Electronic Journal, 0, , .	0.4	0
175	State Regulation of Energy Transition and Economic Development. Energies, 2022, 15, 4304.	1.6	2
176	High Fuel Yields, Solarâ€toâ€Fuel Efficiency, and Excellent Durability Achieved for Confined NiCo Alloy Nanoparticles Using MgO Overlayers for Photothermocatalytic CO ₂ Reduction. Solar Rrl, 0, , .	3.1	4
177	Efficient Power Grid Management Using Sliced-Based Mechanism for Systematic Allocation of Solar Energy Resources: A Conceptual Framework. Frontiers in Energy Research, 0, 10, .	1.2	0
178	Energy Return on Investment of Major Energy Carriers: Review and Harmonization. Sustainability, 2022, 14, 7098.	1.6	17
179	An experimental study on the binary hydrated salt composite zeolite for improving thermochemical energy storage performance. Renewable Energy, 2022, 194, 1163-1173.	4.3	11
180	A hair-trigger self-powered electrochromic window and a rechargeable battery ignoring charging process. Applied Materials Today, 2022, 28, 101543.	2.3	3
181	Unveiling the influential mechanism of O2 on the corrosion of N80 carbon steel under dynamic supercritical CO2 conditions. Corrosion Science, 2022, 205, 110436.	3.0	2
182	Fabricating TiN/CNTs on carbon cloth via CVD-ALD method as free-standing electrodes for zinc ion hybrid capacitors. New Journal of Chemistry, 0, , .	1.4	4
183	Inverse Design of Local Solar Flux Distribution for a Solar Methanol Reforming Reactor Based on Shape Optimization. Frontiers in Energy Research, 0, 10, .	1.2	5
184	The 50th Anniversary of The Limits to Growth: Does It Have Relevance for Today's Energy Issues?. Energies, 2022, 15, 4953.	1.6	9
185	A hybrid GIS-MCDM approach for multi-level risk assessment and corresponding effective criteria in optimal solar power plant. Environmental Science and Pollution Research, 2022, 29, 84661-84674.	2.7	3

#	Article	IF	CITATIONS
186	Application and evaluation of phase change materials for improving photovoltaic power generation efficiency and roof overheating reduction. Renewable Energy, 2022, 195, 1412-1425.	4.3	7
187	Promising water splitting applications of synergistically assembled robust orthorhombic CoSe2 and 2D Ti3C2Tx MXene hybrid. Catalysis Today, 2023, 424, 113853.	2.2	10
188	Overview of the EROI, a tool to measure energy availability through the energy transition. , 2022, , .		0
189	Sugar taxation for climate and sustainability goals. Nature Sustainability, 2022, 5, 899-905.	11.5	3
190	Rationally Designing Efficient Electrocatalysts for Direct Seawater Splitting: Challenges, Achievements, and Promises. Angewandte Chemie - International Edition, 2022, 61, .	7.2	63
191	Rationally Designing Efficient Electrocatalysts for Direct Seawater Splitting: Challenges, Achievements, and Promises. Angewandte Chemie, 2022, 134, .	1.6	4
192	Hydrogen production through renewable and non-renewable energy processes and their impact on climate change. International Journal of Hydrogen Energy, 2022, 47, 33112-33134.	3.8	172
193	Reviewing the use of zeolites and clay based catalysts for pyrolysis of plastics and oil fractions. Brazilian Journal of Chemical Engineering, 2023, 40, 287-319.	0.7	5
194	Sodium alginate-derived micropore dominated carbon 3D architectures through dual template engineering for high-performance Zn-ion hybrid capacitors. Applied Surface Science, 2022, 604, 154631.	3.1	5
195	A systematic methodology for targeting the thermodynamic limit of pressure-retarded osmosis with non-zero driving force. Journal of Cleaner Production, 2022, 375, 133905.	4.6	0
196	3D-architectured spherical Ce2Mo5O16 by a time-dependent hydrothermal process and their energy storage application. Journal of Alloys and Compounds, 2022, 928, 167215.	2.8	7
197	Deciphering exogenous electric field promoting catalysis from the perspectives of electric energy and electrion transfer: A review. Chemical Engineering Journal, 2023, 452, 139098.	6.6	4
198	On the History and Future of 100% Renewable Energy Systems Research. IEEE Access, 2022, 10, 78176-78218.	2.6	138
199	Improved Li-Ion Cell Construction and Usage Scheme for Achieving Operation Beyond End-of-Life. Journal of the Electrochemical Society, 2022, 169, 090523.	1.3	1
200	Framework for Energy-Averaged Emission Mitigation Technique Adopting Gasoline-Methanol Blend Replacement and Piston Design Exchange. Energies, 2022, 15, 7188.	1.6	1
201	Are renewable energy sources more evenly distributed than fossil fuels?. Renewable Energy, 2022, 200, 379-386.	4.3	39
202	Verification of Solar Energy Measurements by (ERA-5) and Its Impact on Electricity Costs in North Africa. International Journal of Astronomy and Astrophysics, 2022, 12, 301-327.	0.2	1
203	A Review of Oneâ€Dimensional Nanomaterials as Electrode Materials for Oxygen Reduction Reaction Electrocatalysis. ChemElectroChem, 2022, 9, .	1.7	7

#	Article	IF	CITATIONS
204	The Energy Return on Investment of Whole-Energy Systems: Application to Belgium. Biophysical Economics and Sustainability, 2022, 7, .	0.7	4
205	The circular economy and longer product lifetime: Framing the effects on working time and waste. Journal of Cleaner Production, 2022, 380, 134836.	4.6	3
206	Sulfur nano-confinement in hierarchically porous jute derived activated carbon towards high-performance supercapacitor: Experimental and theoretical insights. Journal of Energy Storage, 2022, 56, 105944.	3.9	44
207	Integrating the essence of metal organic framework-derived ZnCoTe–N–C/MoS2 cathode and ZnCo-NPS-N-CNT as anode for high-energy density hybrid supercapacitors. Composites Part B: Engineering, 2022, 247, 110339.	5.9	66
208	Integrated design of solar concentrator and thermochemical reactor guided by optimal solar radiation distribution. Energy, 2023, 263, 125828.	4.5	15
209	Cu ₂ 0/Reduced Graphene Oxide Nanocomposites for Electrocatalytic Overall Water Splitting. ACS Applied Nano Materials, 2022, 5, 17271-17280.	2.4	15
210	Energy requirements and carbon emissions for a low-carbon energy transition. Nature Communications, 2022, 13, .	5.8	56
211	Graphdiyne(CnH2n-2) based NiS S-scheme heterojunction for efficient photocatalytic hydrogen production. Renewable Energy, 2022, 201, 854-863.	4.3	17
212	Metal organic frameworks derived functional materials for energy and environment related sustainable applications. Chemosphere, 2023, 313, 137330.	4.2	6
213	Photovoltaic Power Predictor Module Based onÂHistorical Production andÂWeather Conditions Data. Communications in Computer and Information Science, 2022, , 461-472.	0.4	0
214	Recent advances of cobalt-based nitride catalysts in solar energy conversion. Materials Chemistry Frontiers, 2023, 7, 607-627.	3.2	9
215	Simultaneously enhanced permeability and stability in Al doped Pr0.6Sr0.4FeO3- oxygen transport membrane for CO2 capture. Journal of Membrane Science, 2023, 668, 121278.	4.1	4
216	A facile approach to enhance the hydrogen evolution reaction of electrodeposited MoS ₂ in acidic solutions. New Journal of Chemistry, 2022, 46, 23344-23350.	1.4	1
217	Transient Modeling of a Vanadium Redox Flow Battery and Real-Time Monitoring of Its Capacity and State of Charge. Industrial & Engineering Chemistry Research, 2022, 61, 17557-17571.	1.8	5
218	Assessment of the role of the state in the management of mineral resources. Journal of Mining Institute, 0, Online first, .	0.8	10
219	A review on system and materials for aqueous flexible metalâ \in "air batteries. , 2023, 5, .		8
220	Experimental Kinetic Evaluation of Carbon Dioxide Hydrate-Based Concentration for Grape, Pineapple, and Bitter Melon Juices. ACS Omega, 2022, 7, 44591-44602.	1.6	3
221	Biocompatible ammonium-based ionic liquids/ZIF-8 composites for CO2/CH4 and CO2/N2 separations. Sustainable Materials and Technologies, 2023, 35, e00558.	1.7	4

#	Article	IF	CITATIONS
222	Bibliometric Analysis of Global Trends around Hydrogen Production Based on the Scopus Database in the Period 2011–2021. Energies, 2023, 16, 87.	1.6	6
223	A Facile Candle-Soot Nanoparticle Decoration Enables Dendrite-Free Zn Anodes for Long-Cycling Aqueous Batteries. ACS Applied Energy Materials, 2023, 6, 1897-1905.	2.5	4
224	Multiâ€Level Modifications Enabling Chemomechanically Stable Niâ€Rich O3â€Layered Cathode toward Wideâ€Temperatureâ€Tolerance Quasiâ€Solidâ€State Naâ€Ion Batteries. Advanced Energy Materials, 2023, 13, .	10.2	11
225	An integrated modeling method for membrane reactors and optimization study of operating conditions. Energy, 2023, 268, 126730.	4.5	13
226	Thermo-regulated thermoplastic sugarcane bagasse-based biocomposite via solvent-free extrusion for energy-saving smart home. Chemical Engineering Journal, 2023, 458, 141437.	6.6	6
227	Evaluating the sustainability of the hydrogen economy using multi-criteria decision-making analysis in Korea. Renewable Energy, 2023, 204, 485-492.	4.3	12
228	Identification of Coal and Gangue via Millimeter Wave Imaging with Corresponding Optical Photo. , 2021, , .		0
229	Core–shell Mo ₂ C@NC/Mo ₂ C hollow microspheres as highly efficient electrocatalysts for the hydrogen evolution reaction. Dalton Transactions, 2023, 52, 6267-6272.	1.6	7
230	Preparation and characterization of Sm3+/Tm3+ co-doped BiVO4 micro-squares and their photocatalytic performance for CO2 reduction. Journal of the Taiwan Institute of Chemical Engineers, 2023, 144, 104737.	2.7	9
231	Theoretical analysis of a solar membrane reactor with enhanced mass transfer by using helical inserts. Energy Conversion and Management, 2023, 283, 116885.	4.4	7
232	N.Georgescu-Roegen's production model for EROI evaluation. Case study: Electrolytic H2 production using solar energy. Energy Conversion and Management, 2023, 283, 116915.	4.4	2
233	Recent progress and challenges of Zn anode modification materials in aqueous Zn-ion batteries. Coordination Chemistry Reviews, 2023, 485, 215142.	9.5	31
234	3D Ti3C2TX@PANI-reduced graphene oxide hydrogel and defective reduced graphene oxide hydrogel as anode and cathode for high-energy asymmetric supercapacitor. Journal of Alloys and Compounds, 2023, 948, 169593.	2.8	3
235	Assessing the economic consequences of an energy transition through a biophysical stock-flow consistent model. Ecological Economics, 2023, 209, 107832.	2.9	8
236	Renewable energy education framework for prospective physics teachers. AIP Conference Proceedings, 2022, , .	0.3	0
237	Overcoming the shock of energy depletion for energy policy? Tracing the missing link between energy development and decarbonization in the USA. Energy Policy, 2023, 174, 113469.	4.2	32
238	Estimating the Disaggregated Standard EROI of Canadian Oil Sands Extracted via Open-pit Mining, 1997–2016. Biophysical Economics and Sustainability, 2023, 8, .	0.7	3
239	Recent progress of dendriteâ€free stable zinc anodes for advanced zincâ€based rechargeable batteries: Fundamentals, challenges, and perspectives. SusMat, 2023, 3, 180-206.	7.8	15

ARTICLE IF CITATIONS # Recent Advances of Transition Metal Basic Salts for Electrocatalytic Oxygen Evolution Reaction and 240 14.4 44 Overall Water Electrolysis. Nano-Micro Letters, 2023, 15, . High fuel production rate and excellent durability for photothermocatalytic CO₂ 241 reduction achieved <i>via</i> the surface plasma effect of NiCu alloy nanoparticles. Catalysis Science 2.1 and Technology, 2023, 13, 2500-2507. Optimal Incorporation of Intermittent Renewable Energy Storage Units and Green Hydrogen 242 1.6 4 Production in the Electrical Sector. Energies, 2023, 16, 2609. 2D MOFs Containing Bis(azabenzimidazole) and Dicarboxylate Moieties for the Efficient Oxygen 243 1.4 Evolution Reaction and CO₂ Sorption. Crystal Growth and Design, 0, , . Development Planning Policies for Renewable Electricity Generation in Competition with Fossil 245 2 Electricity., 2023,,. Highly Crystalline Prussian Blue for Kinetics Enhanced Potassium Storage. Small, 2023, 19, . 5.2 Recent Trends in Sustainable Solar Energy Conversion Technologies: Mechanisms, Prospects, and 247 2.5 11 Challenges. Energy & amp; Fuels, 2023, 37, 6283-6301. The Potential of Artificial Intelligence for Achieving Healthy and Sustainable Societies. Philosophical 250 1.3 Studies Series, 2023, , 65-96. A review: Potential use of biomass as low-cost precursor for composite LiFePO4/C cathode batteries 261 0.3 0 preparation. AIP Conference Proceedings, 2023, , . 1-D arrays of porous Mn_{0.21}Co_{2.79}O₄ nanoneedles with an enhanced electrocatalytic activity toward the oxygen evolution reaction. Dalton Transactions, 2023, 1.6 52, 12185-12193. Artificial intelligence application to the nexus of renewable energy, water, and the environment., 293 0 2024, , 399-422. What to Do About the Detritovores?., 2023, , 39-68. Highly efficient sustainable strategies toward carbon-neutral energy production. Energy and 315 15.6 1 Envirónmental Science, 2024, 17, 1007-1045. Transforming the grid: AI, ML, renewable, storage, EVs, and prosumers. , 2024, , 3-30. Holonic Energy Management Systems: Towards Flexible andÂResilient Smart Grids. Lecture Notes in 340 1.0 0 Computer Science, 2024, , 95-112.