

#	Authors	Title	paper	note	Time
1	Wim Beyne, Kenny Couvreur, Ilya T'Jollyn, Steven Lecompte and Michel De Paepe	A design model for planar latent thermal energy storage heat exchangers	✓		Dec 18, 11:37
2	Moein Shamoushaki, Lorenzo Talluri, Daniele Fiaschi and Giampaolo Manfrida	Energy, Exergy, Exergoeconomic and multi-objective optimization of an integrated geothermal trigeneration system	✓		Dec 18, 14:52
3	Daniele Fiaschi, Giampaolo Manfrida, Moein Shamoushaki and Lorenzo Talluri	Energy, exergy and exergo-economic assessment of a geothermal power plant with NCGs reinjection	✓		Dec 18, 14:57
4	Daniele Fiaschi, Giampaolo Manfrida, Pietro Ungar and Lorenzo Talluri	Development of an exergo-economic and exergo-environmental tool for power plant assessment: evaluation of a geothermal case study	✓		Dec 18, 15:01
5	Christoph Höges, Valerius Venzik and Dirk Müller	Theoretical Assessment of Binary Mixtures as Working Fluids in Heat Pump Cycles	✓		Dec 18, 16:13
6	Paula Johanna Thimet and Georgios Mavromatidis	Review of model-based transformation scenarios for the Italian electricity system	✓		Dec 18, 21:42
7	Paula Johanna Thimet and Georgios Mavromatidis	Modeling seasonal storage in highly decarbonized national power systems			Dec 18, 21:45
8	José Douglas A. Lira and Waldyr L. R. Gallo	Exergy analysis of an operating biomass thermal power plant	✓		Dec 19, 12:50
9	Christine Gschwendtner and Annegret Stephan	Simulating uncontrolled and controlled electric vehicle charging loads: temporal and spatial flexibility of demand	✓		Dec 19, 22:12
10	Sonja Kallio, Monica Siroux and Stefan-Dominic Voronca	Energy and exergy analysis of a biomass-fuelled micro-CHP unit	✓		Dec 21, 08:06
12	Olivier Dumont and Vincent Lemort	Life cycle analysis of a carnot battery (Pumped thermal energy storage)	✓		Dec 21, 09:27
13	Martin Colla, Julien Blondeau and Hervé Jeanmart	Optimal use of lignocellulosic biomass for the energy transition, including the non-energy demand: the case of the Belgian energy system	✓		Dec 21, 10:28
14	Andreas Kämper, Philipp Geers, Ludger Leenders and Andre Bardow	Adaptive Rolling Horizon for operational optimization of multi-energy systems	✓	✓	Dec 21, 11:47
15	Rafael Nogueira Nakashima and Silvio de Oliveira Junior	Trade-offs between productivity, efficiency and costs of biogas plants for agriculture wastes	✓		Dec 21, 12:02
16	Dörthe Franzisca Hoffrogge, Lukas Schulze Balhorn, Hagen Seele, Andreas Kämper and Niklas von der Aßen	HENDling: Simultaneous Heat-Exchanger-Network Design and Scheduling for Batch Processes	✓		Dec 21, 12:31
17	Xavier Rixhon, Martin Colla, Davide Tonelli, Kevin Verleysen, Gauthier Limpens, Hervé Jeanmart and Francesco Contino	Comprehensive integration of the non-energy demand within a whole-energy system: Towards a defossilisation of the chemical industry in Belgium	✓		Dec 21, 12:37

18	Rodrigo Telini, Daniel Florez-Orrego and Silvio Junior	Exergy, Economic and CO2 emissions assessment of the ammonia production from residual bagasse gasification for decarbonization purposes	✓		Dec 21, 13:32
20	Tianhong Zheng, Ke Qu and John Kaiser Calautit	Evaluating Urban Heat Island mitigation strategies for a Subtropical City Centre (a case study in Osaka, Japan)	✓		Dec 21, 15:22
21	Rafael Castro-Amoedo, Diya Achi and Maréchal François	Towards a sustainable supply chain on plastic waste management: multi-criteria optimization approach	✓		Dec 21, 15:38
22	Christian Vering, Fabian Wüllhorst, Philipp Mehrfeld and Dirk Müller	Towards an Integrated Design of Heat Pump Systems: Application and Assessment of Process Intensification using Two-Stage Optimization	✓		Dec 21, 16:43
23	Xiang Li, Dario Müller, Jonas Schnidrig and François Maréchal	Application of artificial intelligence on uncertainty analysis for long-term energy system planning	✓		Dec 21, 17:31
24	Leandro Augusto Grandin Pereira and Jurandir Itzo Yanagihara	Process synthesis and genetic algorithm-based multi-objective optimization for reduction of topsides dry weight and footprint	✓		Dec 21, 17:50
25	Christian Vering, Fabian Wüllhorst, Julian Mönthenich, Valerius Venzik and Dirk Müller	Maximum Knowledge Gain through Minimum Number of Experiments: Optimal Experimental Design for Model Evaluation of Heat Pump Compressors	✓		Dec 21, 17:53
26	Barbara Mendecka, Giovanni Di Ilio, Vesselin Krassimirov Krastev and Gino Bella	Feasibility of passive solar tracking through the thermal expansion of a PCM medium in a residential TES application: a numerical analysis	✓		Dec 21, 18:55
27	Rafael Barbosa and Jurandir Yanagihara	Performance simulation of an aeroderivative gas turbine operating at a Brazilian FPSO	✓		Dec 21, 19:01
28	Luise Middelhaue, Natalija Ljubic, Julia Granacher, Luc Girardin and François Maréchal	Data reduction for mixed integer linear programming in complex energy systems	✓		Dec 22, 08:25
29	Jera Van Nieuwenhuysse, Arthur De Meulemeester, Michel De Paepe and Steven Lecompte	Heat transfer to supercritical R125 flowing in a horizontal tube	✓		Dec 22, 09:42
30	Julia Granacher, Erina Clare McDonald, Tuong-Van Nguyen and Francois Maréchal	A study on synergies of combined pulp and fuel production	✓		Dec 22, 10:21
31	Andreas Hanel, Antonia Seibold, Sebastian Fendt and Hartmut Spliethoff	Impact of Power-to-X on Energy Systems as a Key Technology to Defossilization	✓		Dec 22, 10:56
32	Sarah Henn, Timo Wenzel, Tanja Osterhage and Dirk Müller	A game theory based optimal operation strategy for neighborhoods	✓		Dec 22, 11:38
33	Jakob Michael Fritz, André Xhonneux and Dirk Müller	Impact of Parametrization of Battery Energy Storages on Multi-Agent Energy Systems with a High Share of Renewable Energy Sources	✓		Dec 22, 12:36
34	Arnat Mahamoudou, Julien Ramousse and Nolwenn Le Pierrès	Thermodynamic Analysis of a Falling Film Evaporator	✓		Dec 22, 12:37

35	Laura Maier, Sarah Henn, Philipp Mehrfeld and Dirk Müller	Approximate Optimal Control for Heat Pumps in Building Energy Systems	✓		Dec 22, 12:58
36	Alexander Holtwerth, André Xhonneux and Dirk Müller	Modelling of energy systems with seasonal storage and system state dependent boundary conditions using time series aggregation and segmentation	✓		Dec 22, 14:11
37	Yolaine Adihou, Malick Kane, Julien Ramousse and Bernard Souyri	An exergy-based methodology to determine thermal network's optimal temperature level	✓		Dec 22, 14:37
38	Jerry Lambert, Sebastian Miehling, Stephan Herrmann and Hartmut Spliethoff	Impact of Different Forecast Horizons in Energy System Simulations	✓		Dec 22, 15:18
39	Ivalin Petkov, Christof Knoeri and Georgios Mavromatidis	Optimal multi-stage planning of decentralized multi-energy systems considering seasonal energy storage	✓		Dec 22, 15:31
41	Mathilde Veyron, Fabrice Renaude, Daniel Mugnier and Marc Clause	Dynamic exergoeconomic analysis of a solar district heating system located in the North West of France	✓		Dec 22, 17:22
43	Limpens Gauthier and Hervé Jeanmart	System LCOE: applying a whole-energy system to estimate the integration costs of photovoltaic	✓		Dec 23, 08:53
45	Paolo Thiran, Aurélia Hernandez, Gauthier Limpens, Matteo Giacomo Prina, Francesco Contino and Hervé Jeanmart	Flexibility options in a multi-regional whole-energy system: the role of energy carriers in the Italian energy transition	✓		Dec 23, 10:21
46	Eng Jet Yeo, David M. Kennedy and Fergal O'Rourke	Tidal current turbine blade optimisation using a coupled Genetic Algorithm and Blade Element Momentum Theory model	✓		Dec 23, 11:36
48	Barbara Kristin Holmsund Jepsen, Tom Walther Haut and Muhyiddine Jradi	Towards energy efficient planning of Danish cities and neighborhoods	✓		Dec 23, 12:04
49	Chee Meng Pang, David M. Kennedy and Fergal O'rourke	An investigation of a hybrid BEM-actuator disk approach in predicting wake development in a RANS-CFD model	✓		Dec 23, 13:06
50	Rodrigo Guedes dos Santos, Pedro Rosseto de Faria, Marcelo Aiolfi Barone, Raphael Amorim Lorenzoni, Dimas José Rúa Orozco and José Joaquim Conceição Soares Santos	ON THE THERMOECONOMIC DIAGNOSIS THROUGH THE LOCALIZED PHYSICAL EXERGY DISAGGREGATION FOR DISSIPATIVE COMPONENT ISOLATION	✓		Dec 23, 13:48
51	Panagiotis Varelas, Francesco Contino and Alessandro Parente	Is COVID-19 pandemic a "Black Swan" event? The impact of the pandemic on the Energy Market.	✓		Dec 23, 14:00
52	Francesco Liberato Cappiello and Tobias Gabriel Erhartb	Dynamic modelling and analysis of novel control strategies for modular cogeneration units operation in hospital facility	✓		Dec 23, 17:18
53	Francesco Calise, Francesco Liberato Cappiello, Massimo Dentice D'accadia and Maria Vicidomini	Dynamic analysis of the heat theft issue on the heat metering systems for residential buildings	✓		Dec 23, 17:22

54	Marcelo Aiolfi Barone, Rodrigo Guedes dos Santos, Pedro Rosseto de Faria, Raphael Amorim Lorenzoni, Atilio Barbosa Lourenço and José Joaquim Conceição Soares Santos	Arbitrariness and Waste Cost Treatment of a Cogeneration System with Intercooler and Supplementary Firing	✓		Dec 23, 22:32
56	Enrico Sciubba	Our exergy footprint, a new thermodynamic measure of the degree of (un)sustainability of a human society	✓		Dec 24, 17:49
57	Andrea Vecchi, Behzad Rismanchi, Pierluigi Mancarella and Adriano Sciacovelli	Daily and seasonal thermal energy storage for enhanced flexible operation of low-temperature heating and cooling network	✓		Dec 26, 04:52
58	Atsuhiko Imagawa, Akira Yoshida and Yoshiharu Amano	Deep-Neural-Network-based Process Data Simulation Model for Production Well of a Geothermal Power Plant	✓		Dec 26, 06:44
61	Shaojun Huang, Yuming Zhao, Weihan Bao and Christian Veje	Model Predictive Climate Control of a building based on linear programming	✓		Dec 26, 13:49
62	Alfonso Biondi	A contribution to the search for a Thermodynamics-based sustainability indicator: Extended Exergy Analysis of the Italian System (1990-2012) and Comparison with other indicators.	✓		Dec 27, 14:00
63	Jonas Parker, Robin Fisher, Elisa Guelpa, Vittorio Verda and Adriano Sciacovelli	Dynamic Performance Analysis of a Thermochemical Resorption System for Low-grade Heat Storage and Cogeneration of Power and Cold	✓		Dec 27, 21:15
64	Martina Leveni, Barbara Mendecka and Raffaello Cozzolino	Exergoeconomic analysis of Goswami cycle to exploit medium temperature heat from a geothermal site	✓		Dec 28, 11:27
65	Alessandro J. T. B. de Lima and Waldyr L. R. Gallo	Thermodynamic analysis of the fuel spray evaporation process for wet ethanol during the compression stroke of a direct-injection spark-ignition engine	✓		Dec 28, 12:39
66	Phillip Stoffel, Alexander Kümpel and Dirk Müller	Optimizing Operation of Geothermal Fields using Nonlinear Model Predictive Control and Moving Horizon Estimation	✓		Dec 28, 15:24
69	Sofia Pavanello, Francesco Baldi, Biagio Di Pietra and Francesco Melino	Optimal design of pathways towards the decarbonization of small islands: The case of Lampedusa	✓		Dec 29, 15:11
71	Karolina Zaik and Sebastian Werle	Characteristic of the installation for the production of hydrogen powered by renewable photovoltaic energy	✓		Dec 29, 17:42
72	Ke Qu, Tianhong Zheng, Auwal Muktar Dodo, John Calautit, Saffa Riffat, Xiangjie Chen and Yuhao Wang	An inclusive decision-making approach for selection of comprehensive energy-retrofit combinations in a typical Italian 1960s' multi-family house	✓		Dec 29, 18:57
73	Laura Maier, Thomas Schreiber, Alexander Kümpel, Philipp Mehrfeld and Dirk Müller	Integration of Advanced Control Methods into Mode-Based Control Logics of Building Energy Systems	✓		Dec 29, 19:05
74	Antonio Valero and César Torres	Thermoeconomics as a cost accounting methodology for Spiral Economy and Industrial Symbiosis	✓		Dec 30, 08:29

75	Francesco Calise, Francesco Liberato Cappiello, Massimo Dentice D'accadia and Maria Vicidomini	Thermo- economic analysis of energy saving measures for hospital facilities equipped with trigeneration plants	✓		Dec 30, 13:47
76	Josefine Koksharov, Hannah Teles de Oliveira, Frank Dammel and Peter Stephan	Evaluation of different pumped thermal energy storage systems	✓		Dec 30, 14:07
77	Mosè Rossi, Luca Cioccolanti, Gabriele Comodi, Matteo Lorenzetti, Danilo Salvi and Alessia Arteconi	Thermal Energy Storage (TES) to increase flexibility of cogeneration units in District Heating (DH) networks	✓		Dec 30, 19:28
78	Chiara Magni, Alessia Arteconi and Sylvain Quoilin	Assessing the Contribution of District Heating to the Flexibility of the Italian Power System in High Renewables Penetration Scenarios	✓		Dec 31, 11:07
80	Diederik Coppitters, Kevin Verleysen, Ward De Paepe and Francesco Contino	The hidden potential of hydrogen-fueled heavy-duty transport: Robust design optimization of a solar-powered hydrogen refueling station under techno-economic uncertainty	✓		Dec 31, 14:45
84	Daniel Florez-Orrego, Cyro Albuquerque, Julio A.M. Silva, Ronaldo Freire and Silvio Oliveira Junior	Offshore utility systems for FPSOs: techno-economic, environmental assessment and trade-offs between gas price, carbon taxation and opportunity cost	✓		Dec 31, 17:41
87	Dominik Hering, Michael R. Faller, André Xhonneux and Dirk Müller	Operational optimization of a 4th generation district heating network using mixed integer quadratically constrained programming	✓		Jan 02, 10:20
88	Christopher Schiffelechner, Christoph Wieland and Hartmut Spliethoff	Thermodynamic and Economic Optimization of CO ₂ Plume Geothermal Systems for Combined Heat and Power Production	✓		Jan 02, 21:10
89	Ali Akbar Eftekhari	A thermodynamic and technical feasibility study of the subsurface storage of energy in the North Sea abandoned reservoirs	✓		Jan 02, 22:56
90	Antonio Valero, Bárbara Palacino, Sonia Ascaso, Sergio Atarés and Alicia Valero	Pristinia: A tool for the assessment exergy assessment of topsoil fertility	✓		Jan 03, 10:25
94	Alessio Pappa, Laurent Bricteux and Ward De Paepe	Can flashback be avoided with EGR and/or humidification in an original micro Gas Turbine combustor? --- preliminary study using 1D predeterminations and 3D LES			Jan 04, 07:36
95	Zlatina Dimitrova and Giovanni Juin Gauthier	Navigation and localization of a mobile robot for the charging of electric vehicles	✓		Jan 04, 11:11
96	Zlatina Dimitrova and Wissam Bou Nader	Fuel cells as auxiliary power unit for range extender electric vehicles	✓		Jan 04, 12:40
97	Jaume Fitó, Neha Dimri and Julien Ramousse	Effects of the sizing scale on the thermoeconomic and environmental performances of heat production systems for a mixed district in France	✓		Jan 04, 14:00
98	Timotheé Gronier, Erwin Franquet and Stéphane Gibout	Techno-economical analysis of the mixing of combined heat and power with demand-side management in a local network	✓		Jan 04, 14:36

99	Timothé Gronier, Jaime Fitó, Erwin Franquet, Stéphane Gibout and Julien Ramousse	Optimised design of the extension of a district heating network considering demand-side management	✓		Jan 04, 14:47
100	Ke Qu, Yuhao Wang, Auwal Mukar Dodo, Xiangjie Chen and Saffa Riffat	A data-driven based validation and calibration approach to building energy simulation model for accurate pre-retrofit design predictions	✓		Jan 04, 15:30
101	Sacha Hodencq, Jaime Fitó, François Debray, Benjamin Vincent, Julien Ramousse, Benoit Delinchant and Frédéric Wurtz	Flexible waste heat management and recovery for an electro-intensive industrial process through energy/exergy criteria	✓		Jan 04, 17:21
102	Jarosław Jaworski, Jacek Leyko, Grzegorz Mitukiewicz, Jean Bouriot, Willy Pain and Wissam Bou Nader	Study and Test of a Post Combustion Chamber for a Recuperative Reheat Stirling Machine	✓		Jan 04, 20:58
103	Luccas Barbosa Carneiro, Alex Álisson Bandeira Santos and Antônio Gabriel Souza Almeida	Energetic and exergetic analysis of solar cooling technology in a low capacity absorption chiller	✓		Jan 04, 22:45
105	Thibaut Wissocq, Solène Le Bourdieu and Assaad Zoughaib	Mass and heat valorization networks design for eco-industrial parks in non-cooperative schemes.	✓		Jan 05, 10:29
106	Joseph Al Khoury, Wissam Bou Nader and Clément Dumand	Design and Simulation of Turbogenerators for Series Hybrid Electric Vehicles	✓		Jan 05, 16:27
108	Marco Navia, Renan Orellana LaFuente, Sergio Luis Balderrama and Sylvain Quoilin	Energy transition planning in developing countries: The case of Bolivian interconnected power system	✓		Jan 05, 23:57
109	Flavia Barbosa, Senhorinha Teixeira and José Carlos Teixeira	Experimental analysis of the flow dynamics of multiple jets impinging a non-flat plate	✓		Jan 06, 07:44
110	Willem Faes, Jarissa Maselyne, Michel De Paepe and Steven Lecompte	Modelling the energetic performance of a pig stable	✓		Jan 06, 08:00
111	Gabriele Humbert, Yulong Ding and Adriano Sciacovelli	Performance maximization of closed-system thermochemical energy storage through reactor design and dynamic operating condition formulation	✓		Jan 06, 08:52
112	Jonas Schnidrig, Tuong-Van Nguyen, Xiang Li and François Maréchal	A modelling framework for assessing the impact of green mobility technologies on energy systems	✓		Jan 06, 08:53
113	Tuong-Van Nguyen, Jonas Schnidrig and Francois Marechal	An analysis of the impacts of green mobility strategies and technologies on different European energy systems	✓		Jan 06, 09:04
114	Matthias Finkenrath, Till Faber, Fabian Behrens and Stefan Leiprecht	Holistic modelling and optimisation of thermal load forecasting, heat generation and plant dispatch for a district heating network	✓		Jan 06, 13:27
115	Eva Joskin, Matija Pavičević, Chiara Magni and Sylvain Quoilin	Assessment of the Contribution of Power-To-Hydrogen to the Flexibility of the Future European Energy System	✓		Jan 06, 15:41

117	Raphael Paul and Karl Heinz Hoffmann	Piston path optimization of Stirling engines	✓		Jan 07, 09:06
118	Alejandro Soto, Sergio Balderrama, Evelyn Cardozo, Miguel Fernandez, Jaime Zambrana and Sylvain Quoilin	Exploring the tradeoff between Installed capacity and unserved energy in rural electrification	✓		Jan 07, 13:46
119	Thibaut Résimont, Eva Joskin, Olivier Thomé and Pierre Dewallef	Tool for the Optimization of the Sizing and the Outline of District Heating Networks using a Geographic Information System: Application to a Real Case Study	✓		Jan 07, 14:01
124	Umara Khan, Ron Zevenhoven, Lydia Stougie and Tor-Martin Tveit	Prediction of Stirling-cycle-based heat pump performance and environmental footprint using exergy analysis and LCA	✓		Jan 08, 08:43
125	Enrico Sciubba and Noemi de Martino	CFD-aided design of a liquid-to-liquid supercompact disc-shaped heat exchanger: comparison of Fractal, Constructal and EGM configurations	✓		Jan 08, 09:06
126	Arif Karabuga, Zafer Utlu and Melik Ziya Yakut	Thermodynamic analysis of hydrogen production system based on solar energy	✓		Jan 08, 09:24
127	Robin Tassenoy, Kenny Couvreur, Steven Lecompte and Michel De Paepe	Potential of Carnot batteries for load shifting of solar PV-production	✓		Jan 08, 10:21
128	Gesa Backofen, Johannes Haimerl, Annelies Vandersickel, Stephan Gleis and Hartmut Spliethoff	Thermochemical Energy Storage for Increasing the Flexibility of an Industrial Combined Heat and Power Plant	✓		Jan 08, 11:43
129	Alexander Kümpel, Laura Kuper, Phillip Stoffel and Dirk Müller	Long-term operational optimization of a building energy system coupled to a geothermal field	✓		Jan 08, 12:46
130	Larissa Kühn, Laura Maier, Philipp Mehrfeld and Dirk Müller	Exploiting the potential of electric vehicle charging combined with a stationary battery within non-residential buildings using hierarchical MPC	✓		Jan 08, 13:17
131	Kenny Couvreur, Robin Tassenoy, Xander van Heule, Michel De Paepe and Steven Lecompte	Thermodynamic analysis of an organic Rankine cycle with a variable volume ratio expander for integration in a Carnot battery	✓		Jan 08, 14:40
132	Paulina Wienchol, Agnieszka Korus, Andrzej Szlęk and Mario Ditaranto	Thermogravimetric analysis of thermal degradation of municipal solid waste (MSW) in N ₂ , CO ₂ and O ₂ /CO ₂ atmospheres	✓		Jan 08, 16:00
134	Eden Mamut	THERMODYNAMIC MODELING AND OPTIMIZATION OF A SOLAR-THERMAL / PELLET BOILER DISTRICT HEATING PLANT INTEGRATING NANOTECHNOLOGIES	✓		Jan 08, 17:13
139	Davide Pivetta, Chiara Dall'Armi and Rodolfo Taccani	Strategies for the decarbonization of an industrial area: the case of the port of Trieste	✓		Jan 10, 21:58
141	Ricardo Magdalena and Alicia Valero	Extraction energy as a function of ore grade decline: the case of coltan	✓		Jan 11, 08:20

142	Ricardo Magdalena, Alicia Valero, Antonio Valero and José Luís Palacios	Behavior of the specific mining energy with ore grade decline: the case of nickel, cobalt and PGMs	✓		Jan 11, 08:28
145	Mariusz Wądrzyk, Łukasz Korzeniowski, Marek Plata, Rafał Janus, Marek Lewandowski and Przemysław Maziarka	Valorization of blackcurrant pomace through thermochemical liquefaction in mixed solvents	✓		Jan 11, 11:46
147	Gerardo Vargas-Landin, Abel Hernandez-Guerrero, J. Luis Luviano-Ortiz and Yanan Camaraza-Medina	Using liquid metals for high energy dissipation	✓		Jan 11, 15:40
148	Katarina Simic, Jonas Houf, Wim Beyne, Jan Desmet and Michel De Paepe	Experimental evaluation of a commercially available PEM fuel cell for residential buildings application	✓		Jan 11, 20:37
149	Bartosz Stanek and Łukasz Bartela	Numerical and experimental study on 10 kWe metal-halide solar simulator for parabolic-trough collector testing	✓		Jan 11, 22:37
150	Alessandro Colangelo, Elisa Guelpa, Andrea Lanzini and Vittorio Verda	Multi-scale modeling of a shell-and-tube Latent Heat Thermal Storage unit for building-level dynamic simulation	✓		Jan 12, 15:29
151	Daria Katla, Michał Jurczyk and Anna Skorek-Osikowska	Thermodynamic analysis of the integrated Power to SNG system using heat from process gas and methanation reactor cooling to produce steam for solid oxide electrolyzer	✓		Jan 12, 15:31
154	Like Zhong, Erren Yao, Hansen Zou and Guang Xi	Conceptual design of a novel hybrid system integrating thermochemical compressed air energy storage and solid oxide fuel cell-gas turbine	✓		Jan 13, 09:28
155	Nikolaos Detsios, Leda Maragoudaki, Konstantinos Atsonios, Ville Nikkanen, Raul Piñero, Jose M ^a Sanz Martín, Karel De Winter, Elodie Vlaeminck, Panagiotis Grammelis and Nikolaos Orfanoudakis	Aviation and maritime biofuels production via a combined thermochemical/biochemical pathway: A conceptual design and process simulation study	✓		Jan 13, 10:36
156	Fabrizio Martini, Matteo Ossidi, Marcello Salvio and Claudia Toro	Analysis of The Energy Consumption Structure and Evaluation of Energy Performance Indicators of The Italian Ceramic Industry	✓		Jan 13, 10:50
157	Judit García Ferrero, Rosa Pilar Merchán Corral, María Jesús Santos Sánchez, Alejandro Medina Domínguez, Antonio González Sánchez and Antonio Calvo Hernández	Hybrid Brayton thermosolar plants at different latitudes and different power scales	✓		Jan 13, 11:05

158	George Kosmadakis and Panagiotis Neofytou	Waste heat recovery with high-temperature heat pumps for steam generation: performance and cost effects	✓		Jan 13, 13:01
159	Marika Pilou, George Kosmadakis, George Meramveliotakis and Achileas Krikas	Renewable Energy Based Systems with Heat Pumps for Supplying Heating and Cooling in Residential Buildings	✓		Jan 13, 14:29
162	João Pedro Silva, Ana Cristina Ferreira, Senhorinha Teixeira, José Carlos Teixeira and Bernhard Peters	Decentralized Forest Biomass Residues Thermal Power Plant Potential: An Economic and Environmental Perspective	✓		Jan 13, 17:32
163	Milagros Cecilia Palacios-Bereche, Reynaldo Palacios-Bereche, Antonio G. Gallego, Carlos Eduardo V. Rossell and Silvia Azucena Nebra	Cooling fermentation in the sugar and ethanol production process using an ejector cooling system: Energy usage and impacts on cogeneration system	✓		Jan 13, 18:08
164	Fernando H. Salina, Milagros Cecilia Palacios-Bereche, Antonio G. Gallego, Reynaldo Palacios-Bereche and Silvia Azucena Nebra	Energy and exergy assessment of fast pyrolysis of sugarcane straw integrated and non-integrated into the conventional ethanol production process	✓		Jan 13, 18:16
165	Valentin Salgado Fuentes, Fabian Bühler and Wiebke Brix Markussen	Use of industrial excess heat to produce district cooling in tropical countries	✓		Jan 13, 20:30
170	Anil Kumar and Anish Modi	Thermodynamic analysis of an ejector-assisted ammonia-water absorption-resorption cycle	✓		Jan 14, 05:14
171	Zafer Utlu, Arif Karabuga and Melik Ziya Yakut	Thermodynamic analysis of power production based on nitrogen liquefaction cold energy using the cryogenic method	✓		Jan 14, 09:02
173	Volodymyr Voloshchuk, Paride Gullo and Eugene Nikiforovich	A new approach for estimation of avoidable exergy destruction: A case study of a heat pump unit	✓		Jan 14, 09:57
174	Shaojun Huang, Yuming Zhao, Chao Yang and Christian Veje	Integrated optimal scheduling of direct current distribution systems and direct current driven HVAC in buildings	✓		Jan 14, 10:37
175	Roberto Capata and Asfaw Beyene	On Board Applications of a Reformed Methanol Fuel Cells Plant	✓		Jan 14, 11:53
178	Manoj Kumar Yadav, Anish Modi and Shireesh B. Kedare	Heat loss analysis in a solar compound parabolic collector with aerogel and polycarbonate cover	✓		Jan 14, 15:37
179	Hannah Krützfeldt, Christian Vering, Philipp Mehrfeld and Dirk Müller	Influence of Cost Functions on Optimal Design of Heat Pump Systems in Mixed-Integer Linear Programming	✓		Jan 14, 15:37
181	Felipe Rivabem Gimenez, Carlos Eduardo Keutenedjian Mady and Izabela Batista Henriques	Assessment of Different More Electric and Hybrid-Electric Configurations for Long-Range Multi-Engine Aircraft	✓		Jan 14, 19:17
182	Volodymyr Voloshchuk, Olga Kordas and Eugene Nikiforovich	Comprehensive Energy and Exergy Analysis of the Ground Source Heat Pump Evaporator	✓		Jan 14, 19:43

186	Steffen Lauterbach, Christian Rust, Jakob Hahn and Werner Jensch	District Energy Systems: First Insights from a High-Efficiency Building Case Study in Germany	✓		Jan 14, 20:16
188	Hamid Rashidi, Aidan Duffy and Wayne Doherty	A General MATLAB Model of Biomass Gasification in a Fluidised Bed Reactor	✓		Jan 14, 20:48
189	Alessandro Mattia, Brian Elmegaard, Riccardo Bergamini, Pernille H. Jørgensen, Stefano Soprani, David Martinez-Maradiaga and Anna Stoppato	Electrification of the heat supply in the brewing industry through heat pumps	✓		Jan 14, 20:56
191	Krzysztof Rogoziński, Grzegorz Nowak, Iwona Nowak and Ryszard Buchalik	Numerical analytical study of heat transfer inside the stack of a thermoacoustic device	✓		Jan 14, 21:57
192	Marina Torelli Reis Martins Pereira and Carlos Eduardo Keutenedjian Mady	Exergy analysis as a tool for the rational use of energy in an average house and everyday personal habits	✓		Jan 14, 23:18
194	Fernando H. Borges Nunes, Nury A. Nieto Garzón and Edson Bazzo	AN EXERGOCOECONOMIC PERFORMANCE INDICATOR FOR EVALUATION OF EXISTING THERMAL POWER PLANTS	✓		Jan 15, 02:20
195	Akira Yoshida, Toranosuke Saito, Takahiro Kashikawa, Koichi Kimura and Yoshiharu Amano	Hierarchical Residential Aggregation Method Incorporating Energy Demand Forecast	✓		Jan 15, 04:29
196	Anwar Hegazy, Alison Subiantoro and Stuart Norris	Performance investigation of a Closed Greenhouse in a Hot Arid Egyptian Climate	✓		Jan 15, 05:20
198	Alberto Benato, Francesco De Vanna, Anna Stoppato and Ennio Gallo	Systematic numerical investigation of a high temperature packed bed for energy storage applications	✓		Jan 15, 07:38
199	Viktor Ljungdahl, Muhyiddine Jradi, Christian Veje and Jonathan Dallaire	Performance evaluation of an active PCM cooling application in Northern European climate	✓		Jan 15, 08:02
200	Francesco Neirotti, Alessandro Colangelo, Vincenzo Gentile, Marco Simonetti, Elisa Guelpa, Vittorio Verda and Andrea Lanzini	Enhancing building RES integration through Solar Cooling and Latent Heat Storage combined operation			Jan 15, 08:22
201	Rossana Boccia, Valentin Salgado Fuentes, Jonas K. Jensen, Per Henrik Pedersen and Wiebke B. Markussen	Dynamic modelling of performance and refrigerant charge distribution of a Heat Recovery Ventilation Heat Pump Water Heater	✓		Jan 15, 10:15
202	Ryszard Buchalik, Grzegorz Nowak and Krzysztof Rogozinski	Modelling the internal combustion engine waste heat recovery using thermoelectric modules	✓		Jan 15, 10:56

203	Ryma Chouder, Pascal Stouffs and Azzedine Benabdesselam	Dynamic Modelling of a Free Liquid Piston Ericsson Engine (FLPEE)	✓		Jan 15, 10:56
204	Jubair Sieed, Ryoichi Komiyama and Yasumasa Fujii	Development of a Dynamic Multi-Sector Energy Economic Model to Analyze the Effects of Indigenous Natural Resources and Imported Fuel on the Economy and Generation Mix of Developing Regions	✓		Jan 15, 11:04
206	Jian Song, Andreas Olympios, Matthias Mersch, Paul Sapin and Christos Markides	Integrated organic Rankine cycle (ORC) and heat pump (HP) systems for domestic heating	✓		Jan 15, 11:28
207	Ettore Fadiga, Nicola Casari, Alessio Suman, Michele Pinelli and Francesco Montomoli	Design considerations and numerical simulations of variable thickness scroll geometries	✓		Jan 15, 11:35
209	Stefano Oliani, Nicola Casari, Michele Pinelli, Alessio Suman and Mauro Carnevale	Numerical study of a centrifugal pump using Harmonic Balance Method in OpenFOAM	✓		Jan 15, 12:12
212	Kalimuthu Selvam, Yosuke Komatsu, Anna Sciazko, Shozo Kaneko and Naoki Shikazono	Efficiency Improvement of a Solid Oxide Fuel Cell System Fueled with Ammonia	✓		Jan 15, 12:52
213	Roberto Pili, Søren Bojer Jørgensen and Fredrik Haglind	Multi-objective optimization of organic Rankine cycle systems considering their dynamic performance	✓		Jan 15, 13:03
214	Ali Akbar Eftekhari and Negar Khoshnevis Gargar	Dynamic modelling and energy analysis of offshore compressed air storage in the North Sea region	✓		Jan 15, 13:21
215	Jimena Incer Valverde, Laura J. Patiño Arévalo, Tatiana Morosuk and Geroge Tsatsaronis	Comparison of three power-to-X storage solutions for the path of decarbonization: Germany as a case study	✓		Jan 15, 13:42
216	Matthäus Irl, Christoph Wieland and Hartmut Spliethoff	Development of an Advanced Monitoring Application for the Power and Efficiency of Air-cooled Geothermal Power Plants	✓		Jan 15, 13:56
217	Mario Petrollese, Mario Cascetta, Giorgio Cau, Vittorio Tola and Daniele Cocco	Integration of pumped thermal energy storage systems based on Brayton cycle with CSP plants	✓		Jan 15, 14:23
218	Ricardo Hartmann and Luis Evelio Garcia-Acevedo	Assessment of exergetic efficiency of cities evaluating effects of municipal solid waste mixing entropy	✓		Jan 15, 15:12
221	Marco Ballarin, Anna Stoppato, Alberto Benato, Pietrogiovanni Cerchier and Graziano Tassinato	Use of ultrasonic technology for the maximization of gas concentration in gas-liquid mixtures	✓		Jan 15, 16:13
222	Nicolas Paulus, Camila Davila and Vincent Lemort	Field-test economic and ecological performance of Proton Exchange Membrane Fuel Cells (PEMFC) used in residential micro-combined heat and power applications (micro-CHP)	✓		Jan 15, 16:16
223	Angelica Liponi, Guido Francesco Frate, Andrea Baccioli, Lorenzo Ferrari and Umberto Desideri	Green hydrogen from wind energy: mitigation of operating point fluctuations	✓		Jan 15, 16:16

227	Francesco Nastro, Marco Sorrentino and Alena Trifirò	DEVELOPMENT OF NEURAL NETWORKS FOR REMOTE MONITORING OF ENERGY CONSUMPTION IN TELECOMMUNICATION SITES	✓		Jan 15, 17:48
230	Vittorio Tola, Francesca Carolina Marcello, Giorgio Cau and Daniele Cocco	Performance evaluation of different Low Temperature A-CAES configurations	✓		Jan 15, 18:21
232	Krzysztof Grzywnowicz, Bartosz Stanek and Łukasz Bartela	Increasing the efficiency of the parabolic trough collector under variable solar irradiance by internal flow turbulization - a numerical study	✓		Jan 15, 18:42
235	Katarina Simic, Klaas Thiers, Hugo Monteyne, Jan Desmet and Michel De Paepe	Numerical assessment of increasing photovoltaic self-sufficiency of a low energy residential building in Belgium by using heat pump and energy storage	✓		Jan 15, 19:21
236	Moein Jahanbani Veshareh and Hamidreza M. Nick	A site assessment tool for H2 storage in depleted hydrocarbon reservoirs	✓		Jan 15, 19:35
237	Roman Gozdur, Bartłomiej Guzowski, Zlatina Dimitrova and Marco Simonetti	3D heat transport system for prismatic battery pack	✓		Jan 15, 19:53
240	José Joaquín Aguilera, Wiebke Meesenburg, Torben Ommen, Jonas Lundsted Poulsen, Kenneth Rugholm Kramer, Wiebke Brix Markussen, Benjamin Zühlsdorf and Brian Elmegaard	Operational challenges in large-scale ammonia heat pump systems	✓		Jan 15, 20:17
242	Bernardo Jose Lujan Esquivia, Esteban Guillermo De Oro Ochoa, Lesme Antonio Corredor Martinez, Omar David Eljaik Gomez and Mauricio Yilmer Carmona García	Energy and Exergy Analysis of an Industrial Gas Turbine-Generator Operating Under Uncertainties in Electrical and Steam Demand Located in Hot and Humid Areas	✓		Jan 15, 21:02
244	Florian Stinner, Martin Wiecek, Marc Baranski, Alexander Kümpel and Dirk Müller	Automatic digital twin generation of building energy systems using piping and instrumentation diagrams	✓		Jan 15, 21:19
245	Vittorio Verda, Elisa Guelpa and Giulia Mancò	Integration of prosumers in high temperature and low temperature district heating networks	✓		Jan 15, 21:20
249	Sebastian Waniczek, Łukasz Bartela, Marcin Lutyński, Sebastian Rulik, Michał Brzuszkiewicz, Konrad Kołodziej, Jakub Ochmann, Grzegorz Smolnik, Michał Jurczyk and Marian Lipka	Design and construction challenges for a hybrid air and thermal energy storage system built in the post-mining shaft	✓		Jan 15, 21:44

253	Dariusz Wawrzyńczak, Marcin Panowski and Izabela Majchrzak-Kucęba	Integration of CO2 adsorption capture unit with flue gas conditioning by absorption chiller	✓		Jan 15, 22:30
254	Sebastian Miebling, Sebastian Fendt and Hartmut Spliethoff	Comparing Efficiencies of Converting Excess Electricity and Biomass to Hydrogen and other Synthetic Fuels	✓		Jan 15, 22:38
255	Rafael Mosquim and Carlos Eduardo Mady	Efficiency trade-offs in the Brazilian passenger vehicle fleet	✓		Jan 15, 22:59
258	Álvaro Adolfo Díaz Pérez, Eduardo Konrad Burin and Edson Bazzo	Part load operation analysis of a biomass steam generator integrated with a concentrated solar power plant	✓		Jan 16, 00:29
259	Lauro Augusto J. Oliveira, Eduardo K. Burin and Edson Bazzo	ENERGY AND EXERGY PERFORMANCE EVALUATION OF A SOLAR-BIOMASS HYBRID COGENERATION CYCLE APPLIED TO THE CORN ETHANOL INDUSTRY	✓		Jan 16, 00:36
260	Javier Urquizo, Carlos Calderon and Philip James	Challenges of working with a large building energy database. Combining datasets from different scales	✓		Jan 16, 03:13
262	Matthias Mersch, Andreas Olympios, Paul Sapin, Niall Mac Dowell and Christos N. Markides	Solar-thermal heating potential in the UK: A techno-economic whole-energy system analysis	✓		Jan 17, 14:20
269	Melchiorre Casisi, Sobhy Khedr and Mauro Reini	The role of the Thermo-economic Environment in the exergy based cost accounting of technological and biological systems	✓		Jan 19, 16:08
271	Asfaw Beyene, Ashenafi Mebrat and Yilma Tadesse	Feasibility of thermally infused water hammer application for hydraulic ram pump	✓		Jan 19, 21:00
272	Camilo Ramirez, Mario Palacio and Mauricio Carmona	Design and thermal evaluation of a double pass solar air heater with PCM	✓		Jan 20, 03:20
273	Giuseppe Edoardo Dino, Valeria Palomba, Marco Calderoni, Adriaan Brebels, Igor Kovacevic, Michael Lauermann, Luis Miguel Blanes and Andrea Frazzica	Mid term performance simulation of a dual source heat pump	✓		Jan 22, 15:23
274	Elias Vieren, Kenny Couvreur, Judith Vander Heyde, Michel De Paepe and Steven Lecompte	Simulation, optimization and design of a heating network at an industrial plant	✓		Jan 29, 12:53
275	Tania Silvestri, Nicolò Cuturi and Enrico Sciubba	CFD-assisted design of an improved hybrid turbocompound system for a light urban vehicle	✓		Feb 02, 21:17
277	Anastasia Ioannou	Effect of temporal resolution on long-term power system planning modelling	✓		Feb 03, 12:20
278	Jorge Torrubia, Antonio Valero and Alicia Valero	Assessment of the thermodynamic rarity of Mobile Phones PCBs	✓		Feb 03, 12:36
279	Daisy Galeana and Asfaw Beyene	Experimental Heat Transfer Study Using Liquid Crystals on a Swirl Cooling Flow Circular Chamber with and without Elbow	✓		Feb 18, 05:47

280	Gennaro Vitiello, Gianluca Carraro, Sergio Rech, Andrea Lazzaretto and Piero Danieli	New incentive systems for renewable penetration considering local climatic characteristics and sources availability: the case of Italy	✓		Feb 19, 10:06
281	Enrico Sciubba	How to Reduce the Design of Disc-Shaped Heat Exchangers to a Zero-Degrees-of-Freedom Task	✓		Mar 02, 15:02
283	Jaroslav Milewski, Arkadiusz Szczesniak, Lukasz Szablowski, Alexander Martinchik, Maciej Siekierski and Konrad Swirski	Possibilities of using molten boron compounds as electrolyte for medium temperature fuel cells	✓		Mar 07, 00:26
286	Marcin Pająk, Shinji Kimijima and Janusz Szmyd	A numerical analysis of the temperature field evolution during an optimization of the catalyst distribution in a steam reforming reactor	✓		Mar 12, 15:26
287	Louis Brouyaux, Pol Olivella-Rosell, Sandro Iacovella and Sylvain Quoilin	Comparative analysis of aggregate battery models to characterize the flexibility of electric water heaters	✓		Mar 12, 17:14
291	Enrico Sciubba	A critical assessment of three possible exergy-based sustainability indicators	✓		Mar 26, 18:43
293	Antoine Verhaeghe, Lionel Dubois, Laurent Bricteux, Diane Thomas and Ward De Paepe	Absorption-based carbon capture energy penalty reduction for micro gas turbine application: pre-assessment of the impact of appropriate amine solvent and process selection (final version)	✓		Jun 11, 09:47