Review of: "Increasing Renewables and Building Retrofit in a Coal-Based Cogeneration District Heating System"

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Potential competing interests: No potential competing interests to declare.

1. Consider connecting the state of the art to your paper's goals in the introduction. Follow the literature review with a clear and concise analysis of the state of the art, revealing identified knowledge gaps and linking them to your paper's objectives. Justify the novelty and relevance of your paper goals.
2. Provide a comprehensive discussion of the industrial aspects of your research results to enhance understanding.
3. Deepen conclusions by focusing on the significance of findings in the sector context. Emphasize the interrelationship between the obtained results and the journal scope. Address barriers, real-world consequences, and practical ways to change or improve the observed situation.
4. Some discussions are necessary for the introduction to provide the readers with a big picture. The manuscript should refer to the following papers:

* Energy and exergy analyses of a regenerative Brayton cycle utilizing monochlorobiphenyl wastes as an alternative fuel

*Enhancing energy efficiency and sustainability in ejector expansion transcritical CO2 and lithium bromide water vapour absorption refrigeration systems

*An innovative approach for utilizing waste heat of a triple-pressure cogeneration combined cycle power plant by employing the TRR method and conducting a thermodynamic analysis

*A computationally efficient heuristic approach for solving a new sophisticated arrangement of cogeneration combined heat and power

*Machine Learning Approach to Predict Building Thermal Load Considering Feature Variable Dimensions: An Office Building Case

*Design and performance evaluation of a novel system integrating a water-based carbon capture with adiabatic compressed air energy storage

*Multi-criteria Decision Making Methods—A Review and Case Study

*Energy and exergy assessment and a competitive study of a two-stage ORC for recovering SFGC waste heat and LNG cold energy

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*Multi-objective evolutionary optimization and thermodynamics performance assessment of a novel time-dependent solar Li-Br absorption refrigeration cycle

*Numerical simulation and experimental analysis of ice crystal growth and freezing-centrifugal desalination for seawater with different compositions

*Introducing and assessment of a new wind and solar-based diversified energy production system integrating single-effect absorption refrigeration, ORC, and SRC cycles

*Investigating the performance parameters and flow field of a centrifugal compressor based on the splitter blade leading edge’s location effect

*Energy and exergy analysis of two modified adiabatic compressed air energy storage (A-CAES) systems for cogeneration of power and cooling on the base of a volatile fluid

*Energy-Exergy Efficiencies Analyses of a Waste-to-Power Generation System Combined with an Ammonia-Water Dilution Rankine
* A comprehensive design, optimization, and development methodology of a wasted heat recovery boiler using serrated fins and extensive surface in a bulky
* Multi-Objective Evolutionary Optimization & 4E analysis of a bulky combined cycle power plant by CO2/ CO/ NOx reduction and cost controlling targets
* Investigation of the combined Rankine-absorption power and refrigeration cycles using parametric analysis and a genetic algorithm.
* Energy-exergy analysis of compressor pressure ratio effects on the thermodynamic performance of an ammonia water combined cycle.
* Evaluating the effect of ammonia-water dilution pressure and its density on the thermodynamic performance of combined cycles by the energy-exergy analysis approach.
* A study on an absorption refrigeration cycle by the exergy analysis approach
* A Study on an Absorption Refrigeration Cycle by the Exergy Analysis Approach. In IOP Conference Series: Earth and Environmental Science (Vol. 182, No. 1, p. 012021). IOP Publishing.
* Exergy analysis of a multi-mixture working fluid absorption refrigeration cycle,
* Improving Centrifugal Compressor Performance by Optimizing the Design of Impellers Using a Genetic Algorithm and Computational Fluid Dynamics Methods.
* The Flow Simulation and Model Analysis of Efficiency and Pressure Ratio Behaviors in the GT4086 Turbocharger Compressor
* A Study on an Absorption Refrigeration Cycle by the Exergy Analysis Approach. In IOP Conference Series: Earth and Environmental Science
* An Investigation on the Flow Behavior in the Airfoil of a Flapping Wing

* Experimental studies on the ultra-precision finishing of cylindrical surfaces using the magnetorheological finishing process.
* Detect Tool Breakage by Using a Combination Neural Decision System & Anfis Tool Wear Predictor.

5. Correct numerous minor English writing mistakes in the manuscript for improved clarity.

6. While the work is well-written with clear graphs, consider deepening the discussion for a more thorough analysis.

7. Improve the Abstract for better clarity and effectiveness.

8. Readers may benefit from the incorporation of detailed mathematical modeling into the proposed framework, as suggested from their perspective.

9. After including more detailed modeling and validation, it is advisable to enhance the conclusion based on findings and potential impacts.

10. Conduct a comparative analysis of your results with those of other researchers to provide a broader perspective.

11. Consider the following items for improving the conclusion section: restate the research topic, summarize main points, emphasize significance or results, avoid redundant information, mention the model's name and its advantages/disadvantages, acknowledge study limitations, and provide recommendations for future researchers.