

A technical review on waste heat recovery from compressed organic Rankine cycle

Renewable and Sustainable Energy Reviews

81, 493-509

DOI: [10.1016/j.rser.2017.08.016](https://doi.org/10.1016/j.rser.2017.08.016)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Energetic and exergetic assessment of a two-stage Organic Rankine Cycle with reactivity controlled compression ignition engine as a low temperature heat source. Energy Conversion and Management, 2018, 166, 215-232.	9.2	24
2	Generic superstructure synthesis of organic Rankine cycles for waste heat recovery in industrial processes. Applied Energy, 2018, 212, 1203-1225.	10.1	77
3	Comparison of organic Rankine cycle concepts for recovering waste heat in a hybrid powertrain on a fast passenger ferry. Energy Conversion and Management, 2018, 163, 371-383.	9.2	17
4	A Review of Working Fluids for Organic Rankine Cycle (ORC) Applications. IOP Conference Series: Materials Science and Engineering, 0, 413, 012019.	0.6	25
5	Exergy evaluation and ORC use as an alternative for efficiency improvement in a CI-engine power plant. Sustainable Energy Technologies and Assessments, 2018, 30, 216-223.	2.7	17
6	Experimental investigation of a CO ₂ -based Transcritical Rankine Cycle (CTRC) for exhaust gas recovery. Energy, 2018, 165, 1149-1159.	8.8	15
7	Waste heat recovery from diesel engines based on Organic Rankine Cycle. Applied Energy, 2018, 231, 138-166.	10.1	267
8	New construction methodology-geothermal cogeneration plant efficiency improvements for environmental and economic sustainability using waste heat recovery system. International Journal of Engineering and Technology(UAE), 2018, 7, 1679.	0.3	0
9	R245fa condensation heat transfer in a phase separation condenser. Experimental Thermal and Fluid Science, 2018, 98, 346-361.	2.7	12
10	Thermo-economic analysis and optimization of combined PERC - ORC - LNG power system for diesel engine waste heat recovery. Energy Conversion and Management, 2018, 173, 613-625.	9.2	64
11	Review of Organic Rankine Cycle experimental data trends. Energy Conversion and Management, 2018, 173, 679-691.	9.2	145
12	Simulation and evaluation of a biomass gasification-based combined cooling, heating, and power system integrated with an organic Rankine cycle. Energy, 2018, 158, 238-255.	8.8	20
13	Multi-function thermal system with natural refrigerant for a wide temperature range. Applied Thermal Engineering, 2019, 162, 114189.	6.0	3
14	A zero-dimensional model for simulation of a Diesel engine and exergoeconomic analysis of waste heat recovery from its exhaust and coolant employing a high-temperature Kalina cycle. Energy Conversion and Management, 2019, 198, 111782.	9.2	50
15	Exergoeconomic analysis of a novel trigeneration system based on organic quadrilateral cycle integrated with cascade absorption-compression system for waste heat recovery. Energy Conversion and Management, 2019, 198, 111818.	9.2	48
16	Simulation study on the flow field of guide vane and impeller of turbo expander. Energy Science and Engineering, 2019, 7, 2306-2320.	4.0	1
17	Experiments and modeling on thermoelectric power generators used for waste heat recovery from hot water pipes. Energy Procedia, 2019, 158, 1052-1058.	1.8	8
18	Dynamic tests of CO ₂ -Based waste heat recovery system with preheating process. Energy, 2019, 171, 270-283.	8.8	10

#	ARTICLE	IF	CITATIONS
19	Experimental Study of a 1-kW Organic Rankine Cycle Using R245fa Working Fluid and a Scroll Expander: A Case Study. IEEE Access, 2019, 7, 154515-154523.	4.2	5
20	Integrated design of working fluid and organic Rankine cycle utilizing transient exhaust gases of heavy-duty vehicles. Applied Energy, 2019, 255, 113207.	10.1	27
21	Determination of the ORC-RO system optimum parameters based on 4E analysis; Water-Energy-Environment nexus. Energy Conversion and Management, 2019, 183, 772-790.	9.2	56
22	Parametric analysis and optimization of transcritical-subcritical dual-loop organic Rankine cycle using zeotropic mixtures for engine waste heat recovery. Energy Conversion and Management, 2019, 195, 770-787.	9.2	35
23	Automotive exhaust thermoelectric generators: Current status, challenges and future prospects. Energy Conversion and Management, 2019, 195, 1138-1173.	9.2	172
24	Energy generation and storage by salinity gradient power: A model-based assessment. Journal of Energy Storage, 2019, 24, 100755.	8.1	22
25	Exergy Analysis and Performance Improvement of a Subcritical/Supercritical Organic Rankine Cycle (ORC) for Exhaust Gas Waste Heat Recovery in a Biogas Fuelled Combined Heat and Power (CHP) Engine Through the Use of Regeneration. Energies, 2019, 12, 575.	3.1	44
26	A comprehensive review of organic rankine cycle waste heat recovery systems in heavy-duty diesel engine applications. Renewable and Sustainable Energy Reviews, 2019, 107, 145-170.	16.4	137
27	Thermo-economic study of waste heat recovery from condensing steam for hydrogen production by PEM electrolysis. Energy Conversion and Management, 2019, 185, 21-34.	9.2	30
28	Basic circuit design of high step-up ratio DC-DC converter. , 2019, , .		0
29	Design and test of a novel wheat drying oven based on the real-time utilization of diesel engine waste heat. Cogent Engineering, 2019, 6, .	2.2	1
30	A numerical analysis for the design of a climatic chamber. AIP Conference Proceedings, 2019, , .	0.4	3
31	Optimization Potentials for the Waste Heat Recovery of a Gas-Steam Combined Cycle Power Plant Based on Absorption Heat Pump. Journal of Thermal Science, 2019, 28, 283-293.	1.9	14
32	Multiple parametric analysis, optimization and efficiency prediction of transcritical organic Rankine cycle using trans-1,3,3,3-tetrafluoropropene (R1234ze(E)) for low grade waste heat recovery. Energy Conversion and Management, 2019, 180, 44-59.	9.2	41
33	Low-temperature Rankine cycle to increase waste heat recovery from the internal combustion engine cooling system. Energy Conversion and Management, 2019, 182, 451-460.	9.2	20
34	An iterative code to investigate heat pump performance improvement by exhaust gases heat recovery. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2019, 41, 2207-2218.	2.3	5
35	Waste heat recovery and water-saving modification for a water-cooled gas-steam combined cycle cogeneration system with absorption heat pump. Energy Conversion and Management, 2019, 180, 1129-1138.	9.2	29
36	Effect of static magnetic field on mold corrosion of printed circuit boards. Bioelectrochemistry, 2020, 131, 107394.	4.6	9

#	ARTICLE	IF	CITATIONS
37	Experimental characterization of thermal-hydraulic performance of a microchannel heat exchanger for waste heat recovery. <i>Energy Conversion and Management</i> , 2020, 204, 112309.	9.2	25
38	A review of waste heat recovery from the marine engine with highly efficient bottoming power cycles. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 120, 109611.	16.4	81
39	Design and construction of an integrated tetrafluoroethane (R134a) refrigerator-waste heat recovery dryer for fabric drying in tropical regions. <i>Heliyon</i> , 2020, 6, e04838.	3.2	4
40	Performance analysis and optimization of engine waste heat recovery with an improved transcritical-subcritical parallel organic Rankine cycle based on zeotropic mixtures. <i>Applied Thermal Engineering</i> , 2020, 181, 115991.	6.0	18
41	Exergoeconomic analysis and optimization of a hybrid Kalina and humidification-dehumidification system for waste heat recovery of low-temperature Diesel engine. <i>Desalination</i> , 2020, 496, 114725.	8.2	28
42	A multipurpose desalination, cooling, and air-conditioning system powered by waste heat recovery from diesel exhaust fumes and cooling water. <i>Case Studies in Thermal Engineering</i> , 2020, 21, 100702.	5.7	25
43	Energy saving research of natural gas liquefaction plant based on waste heat utilization of gas turbine exhaust. <i>Energy Conversion and Management</i> , 2020, 225, 113468.	9.2	11
44	Prediction and optimization of isentropic efficiency of vortex pump under full operating conditions in Organic Rankine Cycle waste heat recovery system based on deep learning and intelligent algorithm. <i>Sustainable Energy Technologies and Assessments</i> , 2020, 42, 100898.	2.7	13
45	Control of superheat of organic Rankine cycle under transient heat source based on deep reinforcement learning. <i>Applied Energy</i> , 2020, 278, 115637.	10.1	31
46	Waste Heat to Power: Technologies, Current Applications, and Future Potential. <i>Energy Technology</i> , 2020, 8, 2000413.	3.8	38
47	Experimental research on scroll expanders operating in parallel in an organic Rankine cycle system with a biomass boiler. <i>Energy Conversion and Management</i> , 2020, 224, 113390.	9.2	15
48	Thermodynamics investigation on one novel combined cycle based on the electrodynamic generator. <i>Energy</i> , 2020, 198, 117277.	8.8	0
49	Application of machine learning into organic Rankine cycle for prediction and optimization of thermal and exergy efficiency. <i>Energy Conversion and Management</i> , 2020, 210, 112700.	9.2	47
50	Computational and experimental investigation on effective utilization of waste heat from diesel engine exhaust using a fin protracted heat exchanger. <i>Energy</i> , 2020, 200, 117489.	8.8	28
51	Waste heat recovery from exhaust gas of an engine by using a phase change material. <i>Materials Today: Proceedings</i> , 2020, 28, 2101-2107.	1.8	21
52	Thermodynamic analysis and multi-objective optimization of a transcritical CO ₂ waste heat recovery system for cruise ship application. <i>Energy Conversion and Management</i> , 2021, 227, 113612.	9.2	32
53	Development of a novel cogeneration system by combining organic Rankine cycle and heat pump cycle for waste heat recovery. <i>Energy</i> , 2021, 217, 119445.	8.8	13
54	A novel design method of organic Rankine cycle system harvesting waste heat of heavy-duty trucks based on off-design performance. <i>Energy Science and Engineering</i> , 2021, 9, 172-188.	4.0	7

#	ARTICLE	IF	CITATIONS
55	An overview on subcritical organic rankine cycle configurations with pure organic fluids. International Journal of Energy Research, 2021, 45, 12536-12563.	4.5	15
56	Challenges and opportunities of Rankine cycle for waste heat recovery from internal combustion engine. Progress in Energy and Combustion Science, 2021, 84, 100906.	31.2	48
57	A Review of Recent Research on the Use of R1234yf as an Environmentally Friendly Fluid in the Organic Rankine Cycle. Sustainability, 2021, 13, 5864.	3.2	14
58	Introducing machine learning and hybrid algorithm for prediction and optimization of multistage centrifugal pump in an ORC system. Energy, 2021, 222, 120007.	8.8	52
59	Application of nanofluids for enhanced waste heat recovery: A review. Nano Energy, 2021, 84, 105871.	16.0	93
60	Thermodynamic assessment and optimization of the influences of the steam-assisted turbocharging and organic Rankine cycle on the overall performance of a diesel engine-based cogeneration integrated with a reverse osmosis desalination unit. Sustainable Energy Technologies and Assessments, 2021, 46, 101175.	2.7	5
61	Off-design model of an ORC system for waste heat recovery of an internal combustion engine. Applied Thermal Engineering, 2021, 195, 117188.	6.0	22
62	Multi-criteria optimization of a biomass gasification-based combined cooling, heating, and power system integrated with an organic Rankine cycle in different climate zones in China. Energy Conversion and Management, 2021, 243, 114364.	9.2	14
63	A novel composition tunable combined cooling and power cycle using CO ₂ -based binary zeotropic mixture. Energy Conversion and Management, 2021, 244, 114419.	9.2	19
64	Ionic thermoelectric materials and devices. Journal of Energy Chemistry, 2021, 61, 88-103.	12.9	61
65	Thermoeconomic analysis of improved exhaust waste heat recovery system for natural gas engine based on Vortex Tube heat booster and supercritical CO ₂ Brayton cycle. Sustainable Energy Technologies and Assessments, 2021, 47, 101355.	2.7	9
66	A comprehensive review of waste heat recovery from a diesel engine using organic rankine cycle. Energy Reports, 2021, 7, 3951-3970.	5.1	45
67	CFD analysis of innovative protracted finned counter flow heat exchanger for diesel engine exhaust waste heat recovery. AIP Conference Proceedings, 2021, , .	0.4	7
68	REVIEW ON POST-TREATMENT EMISSION CONTROL TECHNIQUE BY APPLICATION OF DIESEL OXIDATION CATALYSIS AND DIESEL PARTICULATE FILTRATION. Journal of Thermal Engineering, 2019, 5, 108-118.	1.6	15
69	Dual and Ternary Biofuel Blends for Desalination Process: Emissions and Heat Recovered Assessment. Energies, 2021, 14, 61.	3.1	8
70	Simulation study on exhaust turbine power generation for waste heat recovery from exhaust of a diesel engine. Energy Reports, 2021, 7, 8378-8389.	5.1	5
71	A critical review on waste heat recovery utilization with special focus on Organic Rankine Cycle applications. Cleaner Engineering and Technology, 2021, 5, 100292.	4.0	21
72	Experimental study of the potential for thermal energy recovery with thermoelectric devices in low displacement diesel engines. Heliyon, 2021, 7, e08273.	3.2	3

#	ARTICLE	IF	CITATIONS
73	Modeling and Validation of a Two-Phase Flow Valve for Expanders in Waste Heat Recovery. Journal of Thermal Science and Engineering Applications, 2021, 13, .	1.5	1
74	Proposal and assessment of a novel power and freshwater production system for the heat recovery of diesel engine. Energy, 2022, 240, 122615.	8.8	7
75	Potential of Organic Rankine Cycle for waste heat recovery from piston engine-based power plants in isolated power systems. Applied Thermal Engineering, 2022, 203, 117815.	6.0	3
76	A recent review on waste heat recovery methodologies and applications: Comprehensive review, critical analysis and potential recommendations. Cleaner Engineering and Technology, 2022, 6, 100387.	4.0	33
77	Experimental investigation of thermal potential at diesel engine exhaust and numerical simulation of heat recovery in heat exchangers. Materials Today: Proceedings, 2022, 56, 220-225.	1.8	3
78	Presenting a power and cascade cooling cycle driven using solar energy and natural gas. Renewable Energy, 2022, 186, 802-813.	8.9	11
79	Effect of resistive load characteristics on the performance of Organic Rankine cycle (ORC). Energy, 2022, 246, 123407.	8.8	8
80	A comprehensive review on organic Rankine cycle systems used as waste heat recovery technologies for marine applications. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 4083-4122.	2.3	11
81	Thermoeconomic Optimization Design of the ORC System Installed on a Light-Duty Vehicle for Waste Heat Recovery from Exhaust Heat. Energies, 2022, 15, 4486.	3.1	3
82	Waste heat recovery on ships. , 2022, , 123-195.		0
83	Improving Thermal Efficiency of Internal Combustion Engines: Recent Progress and Remaining Challenges. Energies, 2022, 15, 6222.	3.1	17
84	A conceptual framework for waste heat recovery from compression ignition engines: Technologies, working fluids & heat exchangers. Energy Conversion and Management: X, 2022, 16, 100309.	1.6	8
85	Multi-aspect assessment and multi-objective optimization of sustainable power, heating, and cooling tri-generation system driven by experimentally-produced biodiesels. Energy, 2023, 263, 125887.	8.8	5
86	Deep reinforcement learning-PID based supervisor control method for indirect-contact heat transfer processes in energy systems. Engineering Applications of Artificial Intelligence, 2023, 117, 105551.	8.1	6
87	Low-temperature waste heat recovery from internal combustion engines and power output improvement through dual-expander organic Rankine cycle technology. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 0, , 095440702211441.	1.9	0
88	Biofuel Blends for Desalination Units: Comparison and Assessments. Processes, 2023, 11, 1139.	2.8	0
89	Innovative Technology Strategies for the Sustainable Development of Self-Produced Energy in the Colombian Industry. Sustainability, 2023, 15, 5720.	3.2	1
90	Waste Heat Recovery Techniques. , 2023, , .		0

#	ARTICLE	IF	CITATIONS
91	Comparative Assessment of sCO ₂ Cycles, Optimal ORC, and Thermoelectric Generators for Exhaust Waste Heat Recovery Applications from Heavy-Duty Diesel Engines. <i>Energies</i> , 2023, 16, 4339.	3.1	3
92	Improving the Overall Efficiency of Marine Power Systems through Co-Optimization of Top-Bottom Combined Cycle by Means of Exhaust-Gas Bypass: A Semi Empirical Function Analysis Method. <i>Journal of Marine Science and Engineering</i> , 2023, 11, 1215.	2.6	1
93	Performance Comparison of Diesel and Gasoline Engines Operating Under Indian Emission Standards: Application of Exergy Analysis. <i>Lecture Notes in Mechanical Engineering</i> , 2023, , 417-430.	0.4	0
94	Summary of Turbocharging as a Waste Heat Recovery System for a Variable Altitude Internal Combustion Engine. <i>ACS Omega</i> , 2023, 8, 27932-27952.	3.5	3
95	Thermodynamic and feasibility analysis of using diesel generator exhaust gases for ship main engine preheating at port periods. <i>Applied Thermal Engineering</i> , 2023, 235, 121429.	6.0	0
96	Waste heat recovery assessment of triple heat-exchanger usage for ship main engine pre-heating and fresh water generation systems. <i>Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment</i> , 0, , .	0.5	0
97	Energy Recovery and Energy Harvesting in Electric and Fuel Cell Vehicles, a Review of Recent Advances. <i>IEEE Access</i> , 2023, 11, 83107-83135.	4.2	0
98	A practical approach-based technical review on effective utilization of exhaust waste heat from combustion engines. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2023, 45, 10010-10033.	2.3	1
99	Low-grade heat to hydrogen: Current technologies, challenges and prospective. <i>Renewable and Sustainable Energy Reviews</i> , 2023, 188, 113842.	16.4	1
100	Performance and emission characteristics of diesel engines running on gaseous fuels in dual-fuel mode. <i>International Journal of Hydrogen Energy</i> , 2024, 49, 868-909.	7.1	2
101	Investigations into the performance and emissions of a small-scale CHP system using producer gas obtained from gasification of forest residues. <i>Journal of the Energy Institute</i> , 2023, 110, 101354.	5.3	0
102	A review on the classifications and applications of solar photovoltaic technology. <i>AIMS Energy</i> , 2023, 11, 1102-1130.	1.9	0
104	Process design methodology for rankine cycle based on heat matching. <i>Renewable and Sustainable Energy Reviews</i> , 2024, 193, 114295.	16.4	0
105	Thermo-enviro-economic analysis of different power cycle configurations for green hydrogen production from waste heat. <i>Energy Conversion and Management</i> , 2024, 301, 118072.	9.2	0
106	Development of integrative data intelligence models for thermo-economic performances prediction of hybrid organic rankine plants. <i>Energy</i> , 2024, 292, 130503.	8.8	0
107	Thermodynamic Analysis and Economic Assessment of Organic Rankine Cycle Integrated with Thermoelectric Generator Onboard Container Ship. <i>Processes</i> , 2024, 12, 355.	2.8	0