Pure and Pseudo-pure Fluid Thermophysical Property Evaluation and the Open-Source Thermophysical Property Library CoolProp

DOI: 10.1021/ie4033999
Industrial & Engineering Chemistry Research, 2014, 53, 2498-2508.

#	Paper	IF	Citations
1178	Thermal Conductivity of Real Substances from Excess Entropy Scaling Using PCP-SAFT.		
1177	Recommended Correlations for the Surface Tension of Several Fluids Included in the REFPROP Program. **2014**, 43, 023104		40
1176	Methods to Increase the Robustness of Finite-Volume Flow Models in Thermodynamic Systems. **2014**, 7, 1621-1640		16
1175	Optimization of Biomass-Fuelled Combined Cooling, Heating and Power (CCHP) Systems Integrated with Subcritical or Transcritical Organic Rankine Cycles (ORCs). **2014**, 16, 2433-2453		22
1174	Transpiration Cooling at Hypersonic Flight - AKTiV on SHEFEX II. **2014**,		7
1173	Pure and Pseudo-pure Fluid Thermophysical Property Evaluation and the Open-Source Thermophysical Property Library CoolProp. *Industrial & Engineering Chemistry Research*, **2014**, 53, 2498-2508	3.9	899
1172	Waste heat recovery technologies for offshore platforms. **2014**, 136, 228-241		72
1171	3D CFD Analysis of a Twin Screw Expander With Different Real Gas Models for R245fa. **2015**,		2
1170	Development of an empirical model of a variable speed vapor injection compressor used in a Modelica-based dynamic model of a residential air source heat pump. **2015**, 90, 012031		
1169	Low-order models of a single-screw expander for organic Rankine cycle applications. **2015**, 90, 012061		4
1168	CO2 Employment as Refrigerant Fluid with a Low Environmental Impact. Experimental Tests on Arugula and Design Criteria for a Test Bench. **2015**, 7, 3734-3752		6
1167	Update on single-screw expander geometry model integrated into an open-source simulation tool. **2015**, 90, 012064		3
1166	Organic Rankine cycle model for well-described and not-so-well-described working fluids. **2015**, 86, 93-104		21
1165	Transpiration-Cooled Hypersonic Flight Experiment: Setup, Flight Measurement, and Reconstruction. **2015**, 52, 674-683		17
1164	Making shipping greener: comparative study between organic fluids and water for Rankine cycle waste heat recovery. **2015**, 14, 70-84		14
1163	Multi-operating-point robust control of a one-stage refrigeration cycle. **2015**,		1
1162	Experimental Characterization of the Thermodynamic Properties of Diesel Fuels Over a Wide Range of Pressures and Temperatures. **2015**, 8, 190-199		16

1161	A generalized moving-boundary algorithm to predict the heat transfer rate of counterflow heat exchangers for any phase configuration. **2015**, 79, 192-201	24
1160	Analysis of hot spots in boilers of organic Rankine cycle units during transient operation. **2015**, 151, 119-131	35
1159	Parametric investigation of working fluids for organic Rankine cycle applications. **2015**, 90, 64-74	25
1158	Methodical thermodynamic analysis and regression models of organic Rankine cycle architectures for waste heat recovery. **2015**, 87, 60-76	50
1157	Performance Evaluation of Air-Based Heat Rejection Systems. **2015**, 8, 714-741	4
1156	A closer study of peak distortions in supercritical fluid chromatography as generated by the injection. **2015**, 1400, 131-9	36
1155	A study of working fluids for heat driven ejector refrigeration using lumped parameter models. **2015**, 58, 154-171	40
1154	Optimization of a vapor compression heat pump for satellite cooling. **2015**, 58, 69-78	8
1153	Analysis of CO2 trapping capacities and long-term migration for geological formations in the Norwegian North Sea using MRST-co2lab. **2015**, 79, 15-26	39
1152	Simulation of a solar assisted combined heat pump Organic rankine cycle system. **2015**, 102, 151-160	20
1151	Normalized performance optimization of supercritical, CO2-based power cycles. **2015**, 82, 108-118	11
1150	New insights in twin screw expander performance for small scale ORC systems from 3D CFD analysis. **2015**, 91, 535-546	51
1149	Surface Tension of RefrigerantsSelection of Data and Recommended Correlations. **2015**, 44, 023104	24
1148	Controllability analysis and robust control of a one-stage refrigeration system. **2015**, 26, 53-62	8
1147	Energy and Exergy Analysis of a Novel Gravity-fed Solid Particle Solar Receiver. **2015**, 69, 812-821	7
1146	Performance evaluation of various cryogenic energy storage systems. **2015**, 90, 1024-1032	50
1145	Multivariable analysis and H control of a one-stage refrigeration cycle. **2015**, 91, 1156-1167	22
1144	Design and experimental analysis of a mini ORC (organic Rankine cycle) power plant based on R245fa working fluid. **2015**, 90, 768-775	68

1143	Surface Tension of Alcohols. Data Selection and Recommended Correlations. **2015**, 44, 033104	21
1142	Energy integration study on a hybrid electric vehicle energy system, using process integration techniques. **2015**, 91, 834-847	12
1141	Simulation of muon radiography for monitoring CO 2 stored in a geological reservoir. **2015**, 42, 644-654	18
1140	Design and multi-objective optimization of organic Rankine turbine. **2015**, 40, 15343-15351	13
1139	Computational tool for simulation of power and refrigeration cycles. **2016**, 138, 012017	2
1138	Combined Turbine and Cycle Optimization for Organic Rankine Cycle Power Systems Part A: Turbine Model. **2016**, 9, 313	16
1137	Real-Time Optimization of Organic Rankine Cycle Systems by Extremum-Seeking Control. **2016**, 9, 334	18
1136	Modelling the Influence of Climate on the Performance of the Organic Rankine Cycle for Industrial Waste Heat Recovery. **2016**, 9, 335	1
1135	Comparison of Moving Boundary and Finite-Volume Heat Exchanger Models in the Modelica Language. **2016**, 9, 339	25
1134	Development and a Validation of a Charge Sensitive Organic Rankine Cycle (ORC) Simulation Tool. **2016**, 9, 389	22
1133	Helmholtz Energy Transformations of Common Cubic Equations of State for Use with Pure Fluids and Mixtures. **2016**, 121, 238-263	26
1132	Recommended Correlations for the Surface Tension of Aliphatic, Carboxylic, and Polyfunctional Organic Acids. **2016**, 45, 033105	9
1131	Properties of Dialkylcarbonate + 1-Alkanol Mixtures at the Vacuum Interface. **2016**, 120, 29126-29134	3
1130	Equation of State for the Lennard-Jones Fluid. **2016**, 45, 023101	97
1129	Heat transfer fluids for parabolic trough solar collectors - a comparative study. **2016**,	10
1128	Improvement of the Energy System of a Nepali Village Through Innovative Exploitation of Local Resources. **2016**, 101, 790-797	4
1127	Fluid Selection and Plant Configuration of an ORC-biomass fed System Generating Heat and/or Power. **2016**, 101, 822-829	13
1126	High-Pressure Real-Gas Jet and Throttle Flow as a Simplified Gas Injector Model Using a Discontinuous Galerkin Method. **2016**, 289-300	1

1125	A closer study of methanol adsorption and its impact on solute retentions in supercritical fluid chromatography. **2016**, 1442, 129-39		41
1124	Robust simulation of sharp-interface models for fast estimation of CO2 trapping capacity in large-scale aquifer systems. **2016**, 20, 93-113		40
1123	Physicochemical Insights on Alkylcarbonate-Alkanol Solutions. **2016**, 120, 5015-28		11
1122	A generalized cubic equation of state with application to pure CO2 injection in aquifers. **2016**, 20, 623-635		2
1121	Screening of metal hydride pairs for closed thermal energy storage systems. **2016**, 109, 949-957		17
1120	Comparison of heat transfer models for reciprocating compressor. **2016**, 103, 607-615		29
1119	On identifying steady-state parameters of an experimental mechanical-compression refrigeration plant. **2016**, 109, 318-333		12
1118	Automatic Fitting of Binary Interaction Parameters for Multi-fluid Helmholtz-Energy-Explicit Mixture Models. **2016**, 61, 3752-3760		36
1117	Algebraic Geometric Method for Calculating Phase Equilibria from Fundamental Equations of State. *Industrial & Engineering Chemistry Research*, **2016**, 55, 11363-11370	3.9	
1116	A multivariable optimization of a Brayton power cycle operating with CO2 as working fluid. **2016**, 112, 908-916		9
1115	Characterizing the performance of a single-screw expander in a small-scale organic Rankine cycle for waste heat recovery. **2016**, 181, 155-170		67
1114	Steady-state and dynamic validation of a small-scale waste heat recovery system using the ThermoCycle Modelica library. **2016**, 115, 684-696		27
1113	Assessing the performance of hybrid CSP+PV plants in northern Chile. **2016**, 138, 88-97		52
1112	Modeling and Simulation of a Solar-Thermal System for its Efficient Implementation in Quito (Ecuador). **2016**, 14, 2271-2279		2
1111	Bubble-Point Measurements of -Propane + -Decane Binary Mixtures with Comparisons of Binary Mixture Interaction Parameters for Linear Alkanes. **2016**, 61, 2573-2579		3
1110	Energy Saving Potential of CO2 Transportation Processes in Cold Climate Locations. *Industrial & Engineering Chemistry Research*, **2016**, 55, 11597-11605	3.9	1
1109	Retrofit of low-temperature heat recovery industrial systems using multiobjective exergoeconomic optimization. **2016**, 130, 207-218		3
1108	Can DIPPR Database be Used for an Estimation of the Speed of Sound? A Case Study of Liquid Hydrocarbons. **2016**, 41, 713-719		0

1107	Experimental Development and Computational Optimization of Flat Heat Pipes for CubeSat Applications. **2016**,	
1106	Modelling commercial refrigeration systems coupled with water storage to improve energy efficiency and perform heat recovery. **2016**, 69, 313-323	35
1105	The ORC-PD: A versatile tool for fluid selection and Organic Rankine Cycle unit design. **2016**, 102, 605-620	55
1104	Model Predictive Control of Offshore Power Stations With Waste Heat Recovery. **2016**, 138,	4
1103	Experimental comparison of organic fluids for low temperature ORC (organic Rankine cycle) systems for waste heat recovery applications. **2016**, 97, 460-469	89
1102	Speed and attenuation of acoustic waves in snow: Laboratory experiments and modeling with Biot's theory. **2016**, 125, 1-11	29
1101	Validation of a reduced-order jet model for subsonic and underexpanded hydrogen jets. **2016**, 41, 1348-1358	17
1100	Muon Tomography for Carbon Storage and Monitoring. **2016**, 479-485	2
1099	Thermal behavior of supercritical fluids near the critical point. **2016**, 69, 545-557	10
1098	Variable-speed air-to-air heat pump modelling approaches for building energy simulation and comparison with experimental data. **2016**, 9, 210-225	4
1097	Energy–exergy analysis and economic investigation of a cogeneration and trigeneration ORC–VCC hybrid system utilizing biomass fuel and solar power. **2016**, 107, 103-113	169
1096	Highly selective hydrogenation and hydrogenolysis using a copper-doped porous metal oxide catalyst. **2016**, 18, 150-156	39
1095	Experimental verification of heat transfer coefficient for nucleate boiling at sub-atmospheric pressure and small heat fluxes. **2016**, 52, 205-215	21
1094	Performance of a radial-inflow turbine integrated in an ORC system and designed for a WHR on truck application: An experimental comparison between R245fa and R1233zd. **2017**, 186, 408-422	60
1093	Safety and CO2 emissions: Implications of using organic fluids in a ship's waste heat recovery system. **2017**, 75, 191-203	25
1092	Integrated thermoeconomic optimization of standard and regenerative ORC for different heat source types and capacities. **2017**, 121, 570-598	49
1091	Uncertainty assessment of equations of state with application to an organic Rankine cycle. View all notes. **2017**, 115, 1225-1244	15
1090	Parameter identification of a multi-stage, multi-load-demand experimental refrigeration plant. **2017**, 60, 133-147	6

1089	Modelling of organic Rankine cycle power systems in off-design conditions: An experimentally-validated comparative study. **2017**, 123, 710-727	49
1088	Design Sensitivity Analysis of a Plate-Finned Air-Cooled Condenser for Low-Temperature Organic Rankine Cycles. **2017**, 38, 1018-1033	9
1087	Improving the semi-empirical modelling of a single-screw expander for small organic Rankine cycles. **2017**, 193, 356-368	51
1086	Nonadditive three-body potential and third to eighth virial coefficients of carbon dioxide. **2017**, 146, 054302	16
1085	Organic Rankine cycle design and performance comparison based on experimental database. **2017**, 204, 1172-1187	97
1084	Chemometric evaluation of the combined effect of temperature, pressure, and co-solvent fractions on the chiral separation of basic pharmaceuticals using actual vs set operational conditions. **2017**, 1499, 165-173	27
1083	Experimental study on the effect of orientation on flow boiling using R134a in a mini-channel evaporator. **2017**, 121, 963-973	12
1082	Energy Analysis of a Transcritical CO 2 Supermarket Refrigeration System with Heat Recovery. **2017** , 111, 648-657	24
1081	Seasonal storage and alternative carriers: A flexible hydrogen supply chain model. **2017**, 200, 290-302	231
1080	Thermodynamic calculations of a two-phase thermosyphon loop for cold neutron sources. **2017**, 85, 30-43	5
1079	A review of waste heat recovery and Organic Rankine Cycles (ORC) in on-off highway vehicle Heavy Duty Diesel Engine applications. **2017**, 79, 691-708	94
1078	A novel Pumped Thermal Electricity Storage (PTES) system with thermal integration. **2017**, 121, 1051-1058	49
1077	An experimental analysis of flow boiling and pressure drop in a brazed plate heat exchanger for organic Rankine cycle power systems. **2017**, 113, 6-21	17
1076	Thermo-economic optimization of an ORC driven heat pump based on small scale turbomachinery and comparison with absorption heat pumps. **2017**, 81, 96-110	19
1075	Experimental investigation of the machine-free method of temperature separation of air flows based on the energy separation effect in a compressible boundary layer. **2017**, 88, 202-219	19
1074	Analysis of a cross-flow liquid-desiccant falling-film. **2017**, 124, 91-102	9
1073	Integration of Organic Rankine Cycle with Lignite Flue Gas Pre-drying for Waste Heat and Water Recovery from Dryer Exhaust Gas: Thermodynamic and Economic Analysis. **2017**, 105, 1614-1621	8
1072	An air-standard finite-time heat addition Otto engine model. **2017**, 45, 103-119	

1071	High efficiency dual-fuel combustion through thermochemical recovery and diesel reforming. **2017**, 195, 503-522		55
1070	A hybrid modeling approach for steady-state optimal operation of vapor compression refrigeration cycles. **2017**, 120, 74-87		14
1069	Impact of Ambient Temperature on LNG Liquefaction Process Performance: Energy Efficiency and CO2Emissions in Cold Climates. *Industrial & Engineering Chemistry Research*, **2017**, 56, 3388-3398	3.9	15
1068	A hybrid hydrolytic hydrogen storage system based on catalyst-coated hollow glass microspheres. **2017**, 41, 297-314		8
1067	Predicting two-phase flow distribution and stability in systems with many parallel heated channels. **2017**, 107, 557-571		39
1066	Optimizing the performance of small-scale organic Rankine cycle that utilizes a single-screw expander. **2017**, 189, 416-432		45
1065	Simulation of real gas effects in supersonic methane jets using a tabulated equation of state with a discontinuous Galerkin spectral element method. **2017**, 145, 167-179		16
1064	Thermal-hydraulic process for cooling, heating and power production with low-grade heat sources in residential sector. **2017**, 135, 148-159		12
1063	Experimental and Neural Network Modeling of Partial Uptake for a Carbon Dioxide/Methane/Water Ternary Mixture on 13X Zeolite. **2017**, 5, 1373-1391		29
1062	Experimental assessment of the fuel heating and the validity of the assumption of adiabatic flow through the internal orifices of a diesel injector. **2017**, 188, 442-451		10
1061	New radial turbine dynamic modelling in a low-temperature adiabatic compressed air energy storage system discharging process. **2017**, 153, 144-156		25
1060	Premelting, solid-fluid equilibria, and thermodynamic properties in the high density region based on the Lennard-Jones potential. **2017**, 147, 144502		10
1059	Using Sensitivities and Vertical-equilibrium Models for Parameter Estimation of CO2 Injection Models with Application to Sleipner Data. **2017**, 114, 3476-3495		17
1058	Energy benefit assessment of a water loop heat pump system integrated with a CO 2 commercial refrigeration unit. **2017**, 123, 36-45		11
1057	Experimental Investigation with Steady-State Detection in a Micro-ORC Test Bench. **2017**, 126, 469-476		5
1056	Parametric multi-objective optimization of an Organic Rankine Cycle with thermal energy storage for distributed generation. **2017**, 126, 429-436		14
1055	Experimental Performance of a Micro-ORC Energy System for Low Grade Heat Recovery. **2017**, 129, 899-906		17
1054	Response time characterization of Organic Rankine Cycle evaporators for dynamic regime analysis with fluctuating load. **2017**, 129, 427-434		8

1053	Techno-Economic Analysis of ORC in Gas Compression Stations Taking Into Account Actual Operating Conditions. **2017**, 129, 543-550	6
1052	Performance assessment of a standard radial turbine as turbo expander for an adapted solar concentration ORC. **2017**, 129, 1085-1092	1
1051	Converting a commercial scroll compressor into an expander: experimental and analytical performance evaluation. **2017**, 129, 363-370	7
1050	Selection of cooling fluid for an organic Rankine cycle unit recovering heat on a container ship sailing in the Arctic region. **2017**, 141, 975-990	10
1049	Exergy storage of compressed air in cavern and cavern volume estimation of the large-scale compressed air energy storage system. **2017**, 208, 745-757	53
1048	A generalized multifluid optimal pressure for heat exchangers operating with supercritical fluid. **2017**, 72, 345-354	8
1047	Critical phenomena and their effect on thermal energy storage in supercritical fluids. **2017**, 205, 1447-1458	11
1046	Preliminary Design of a Radial Turbine for Methane Expander Rocket-Engine. **2017**, 126, 738-745	3
1045	Design and Off-Design Analysis of an ORC Coupled with a Micro-Gas Turbine. **2017**, 129, 551-558	6
1044	Dynamic Model of Supercritical CO2 Brayton Cycles Driven by Concentrated Solar Power. **2017**,	1
1043	Volume Element Model for Modeling, Simulation, and Optimization of Parabolic Trough Solar Collectors. **2017**,	
1042	Modeling and investigation of a steam-water injector. **2017**, 151, 170-178	9
1041	Experimental study of low pressure pool boiling of water from narrow tunnel surfaces. **2017**, 121, 348-357	12
1040	Thermodynamic potential of Rankine and flash cycles for waste heat recovery in a heavy duty Diesel engine. **2017**, 129, 746-753	10
1039	Adsorbent materials for low-grade waste heat recovery: Application to industrial pasta drying processes. **2017**, 140, 729-745	8
1038	Experimental validation of mathematical model for small air compressor. **2017**, 143, 02133	1
1037	Simulation of LOx/GH2 single coaxial injector at high pressure conditions. **2017**,	2
1036	COMPARISON of SUBCRITICAL INTERFACE APPROXIMATIONS at HIGH TEMPERATURE and PRESSURE CONDITIONS. **2017**,	

1035	Performance and cost evaluation of an innovative Pumped Thermal Electricity Storage power system. **2017**, 138, 419-436	71
1034	Calculating thermophysical fluid properties during geothermal energy production with NESS and Reaktoro. **2017**, 70, 146-154	9
1033	Bedrock-Hosted Diffusive Hot Storage for Large-Scale Thermo-Electric Energy Storage by Thermal Doublet. **2017**, 191, 1135-1143	0
1032	Energy efficient design and control of cleanroom environment control systems in subtropical regions □A comparative analysis and on-site validation. **2017**, 204, 582-595	24
1031	Modeling the dynamic and thermodynamic operation of Stirling engines by means of an equivalent electrical circuit. **2017**, 150, 295-303	14
1030	Experimental Development and Computational Optimization of Flat Heat Pipes for CubeSat Applications. **2017**, 139,	6
1029	Functional Dependence of Thermodynamic and Thermokinetic Parameters of Refrigerants Used in Mine Air Refrigerators. Part 1 □Refrigerant R407C. **2017**, 62, 55-72	1
1028	Modeling, Simulation and Optimization of Complex Processes HPSC 2015. **2017**,	
1027	Non-symmetric approach to single-screw expander and compressor modeling. **2017**, 232, 012076	2
1026	Study of cycle-to-cycle dynamic characteristics of adiabatic Compressed Air Energy Storage using packed bed Thermal Energy Storage. **2017**, 141, 2120-2134	27
1025	Design and validation of a Cooking Stoves Thermal Performance Simulator (Cook-STePS) to simulate water heating procedures in selected conditions. **2017**, 141, 1384-1392	4
1024	Comparison of control approaches for variable speed air source heat pumps considering time variable electricity prices and PV. **2017**, 204, 93-105	48
1023	Mechanism and Prediction of Gas Permeation through Sub-Nanometer Graphene Pores: Comparison of Theory and Simulation. **2017**, 11, 7974-7987	78
1022	Numerical Investigation of the Flow Structure of Underexpanded Jets in Quiescent Air using Real-Gas Thermodynamics. **2017**,	6
1021	Calculation of critical points from Helmholtz-energy-explicit mixture models. **2017**, 433, 159-173	17
1020	The numerical model for direct evaporative cooler. **2017**, 113, 8-19	44
1019	On the difficulty of globally optimally controlling refrigeration systems. **2017**, 111, 1143-1157	20
1018	Performance investigation of reciprocating pump running with organic fluid for organic Rankine cycle. **2017**, 113, 962-969	37

1017	The development of a computational platform to design and simulate on-board hydrogen storage systems. **2017**, 42, 2187-2200	
1016	Technoeconomic Analysis and Comparison of a Solar-Based Biomass ORC-VCC System and a PV Heat Pump for Domestic Trigeneration. **2017**, 143, 04016048	20
1015	Reducing energy requirement for drying of beet-pulp: Simulation of energy integration between superheated steam and air drying systems. **2017**, 35, 838-848	8
1014	Ignition and flame characteristics of cryogenic hydrogen releases. **2017**, 42, 775-785	14
1013	Expansion of organic Rankine cycle working fluid in a cylinder of a low-speed two-stroke ship engine. **2017**, 119, 1212-1220	10
1012	Thermodynamic comparison of ejector cooling cycles. Ejector characterisation by means of entrainment ratio and compression efficiency. **2017**, 74, 371-384	22
1011	Developing a performance evaluation model of Organic Rankine Cycle for working fluids based on the group contribution method. **2017**, 132, 307-315	30
1010	Organic fluids for Organic Rankine Cycle systems. **2017**, 91-119	0
1009	Dynamic modeling and control of Organic Rankine Cycle plants. **2017**, 153-171	
1008	Mechanical compressor-driven thermochemical storage for cooling applications in tropical insular regions. **2017**, 142, 3415-3420	1
1007	Dynamic study of ORC evaporator operating under fluctuating thermal power from waste heat sources. **2017**, 143, 404-409	2
1006	Nonlinear Optimal Control of a Heavy Duty Truck Exhaust Heat Recovery System. **2017**, 55-66	
1005	On the question of gas-dynamic temperature stratification device optimization. **2017**, 891, 012078	
1004	Modelling and analysis of a ground source heat pump combined with a PV-T and earth energy storage system. **2017**, 142, 886-891	4
1003	Heat transfer resistances in the measurements of cold helium vapour temperature in a subatmospheric process line. **2017**, 171, 012139	
1002	Thermodynamic Modelling of Supersonic Gas Ejector with Droplets. **2017**, 19, 579	4
1001	A Comparison of Organic and Steam Rankine Cycle Power Systems for Waste Heat Recovery on Large Ships. **2017**, 10, 547	44
1000	Case Study of an Organic Rankine Cycle (ORC) for Waste Heat Recovery from an Electric Arc Furnace (EAF). **2017**, 10, 649	44

999	Thermodynamic Optimization of a Geothermal- Based Organic Rankine Cycle System Using an Artificial Bee Colony Algorithm. **2017**, 10, 1691	17
998	Biogas Engine Waste Heat Recovery Using Organic Rankine Cycle. **2017**, 10, 327	41
997	Marine Waste Heat Recovery System. **2017**, 1-24	
996	Modeling and analysis of an open-drive Z-compressor. **2017**, 232, 012062	2
995	Dynamic Simulation of an Organic Rankine CycleDetailed Model of a Kettle Boiler. **2017**, 10, 548	8
994	Modeling and design guidelines for direct steam generation solar receivers. **2018**, 216, 761-776	28
993	A systematic procedure to optimize Integrated Solar Combined Cycle power plants (ISCCs). **2018**, 136, 97-107	15
992	Energy and cost analysis of an Air Cycle used as prime mover of a Thermal Electricity Storage. **2018**, 17, 29-46	14
991	Analytical solution for the coupled heat and mass transfer formulation of one-dimensional drying kinetics. **2018**, 230, 99-113	3
990	Optimal selection of air expansion machine in Compressed Air Energy Storage: A review. **2018**, 87, 77-95	59
989	Consistent Twu Parameters for More than 2500 Pure Fluids from Critically Evaluated Experimental Data. **2018**, 63, 2402-2409	13
988	Impact of ambient temperature on supercritical CO2 recompression Brayton cycle in arid locations: Finding the optimal design conditions. **2018**, 153, 1016-1027	51
987	Speed of Sound Measurements and a Fundamental Equation of State for Hydrogen Chloride. **2018**, 63, 2533-2547	8
986	A theoretically based departure function for multi-fluid mixture models. **2018**, 469, 56-69	9
985	Sleeping evaporator and refrigerant maldistribution: An experimental investigation in an automotive multi-evaporator air-conditioning and battery cooling system. **2018**, 90, 119-131	9
984	Investigating simplified modeling choices for numerical simulation of CO2 storage with thermal effects. **2018**, 72, 49-64	5
983	The effect of lateral thermal coupling between parallel microchannels on two-phase flow distribution. **2018**, 124, 769-781	17
982	Simulation and optimization of a R744 two- temperature supermarket refrigeration system with an ejector. **2018**, 90, 73-82	22

981	Energetic optimization of regenerative Organic Rankine Cycle (ORC) configurations. **2018**, 159, 353-370	86
980	Techno-economic assessment of solid–gas thermochemical energy storage systems for solar thermal power applications. **2018**, 149, 473-484	121
979	Transient analysis and optimization of a recuperative sCO2 Brayton cycle assisted by heat and mass storage systems. **2018**, 150, 979-991	15
978	Thermodynamic feasibility evaluation of hybrid dehumidification–mechanical vapour compression systems. **2018**, 213, 31-44	17
977	Charge-sensitive modelling of organic Rankine cycle power systems for off-design performance simulation. **2018**, 212, 1262-1281	29
976	Exergetic optimization of double stage Organic Rankine Cycle (ORC). **2018**, 149, 296-313	38
975	Generic superstructure synthesis of organic Rankine cycles for waste heat recovery in industrial processes. **2018**, 212, 1203-1225	54
974	Improving the efficiency of a cataphoresis oven with a cogenerative organic Rankine cycle unit. **2018**, 5, 182-194	10
973	Thermodynamic modeling of solarized microturbine for combined heat and power applications. **2018**, 212, 592-606	15
972	Novel scheme for a PCM-based cold energy storage system. Design, modelling, and simulation. **2018**, 132, 256-274	14
971	Influence of the steam generator on the exergetic and exergoeconomic analysis of solar tower plants. **2018**, 145, 313-328	25
970	Real-Gas Effects and Phase Separation in Underexpanded Jets at Engine-Relevant Conditions. **2018**,	7
969	Heat transfer fluid and material selection for an innovative Pumped Thermal Electricity Storage system. **2018**, 147, 155-168	34
968	Real-gas effects on aerodynamic bearings. **2018**, 120, 358-368	18
967	Numerical simulation of the heat transfer process in a corrugated tube. **2018**, 126, 125-136	29
966	A numerical comparison between ideal and dense gas flow structures in the supersonic regime for a cascade of wedge-shaped straight plates. **2018**, 137, 774-783	2
965	Analysis of temperature glide matching of heat pumps with zeotropic working fluid mixtures for different temperature glides. **2018**, 153, 650-660	36
964	Improving the performance of booster heat pumps using zeotropic mixtures. **2018**, 154, 390-402	30

963	Efficient simulation strategy for PCM-based cold-energy storage systems. **2018**, 139, 419-431		8
962	Thermodynamic performance comparison of Organic Rankine Cycle between zeotropic mixtures and pure fluids under open heat source. **2018**, 165, 720-737		32
961	Comparison of organic Rankine cycle concepts for recovering waste heat in a hybrid powertrain on a fast passenger ferry. **2018**, 163, 371-383		11
960	Influence of the working fluid properties on optimized power of an irreversible finite dimensions Carnot engine. **2018**, 163, 444-456		13
959	Temperature and Pressure Dependence of Density of a Shale Oil and Derived Thermodynamic Properties. *Industrial & Engineering Chemistry Research*, **2018**, 57, 5128-5135	3.9	3
958	Mechanical compressor-driven thermochemical storage for cooling applications in tropical insular regions. Concept and efficiency analysis. **2018**, 219, 240-255		22
957	Comparative exergoeconomic assessment of coal-fired power plants □Binary Rankine cycle versus conventional steam cycle. **2018**, 142, 168-179		13
956	Enhanced tunneled surfaces for water pool boiling heat transfer under low pressure. **2018**, 116, 93-103		13
955	Optimum design of a hybrid diesel-ORC / photovoltaic system using PSO: Case study for the city of Cujubim, Brazil. **2018**, 142, 33-45		24
954	A method to calculate uncertainty of empirical compressor maps with the consideration of extrapolation effect and choice of training data. **2018**, 24, 743-758		2
953	Experimental development of natural convection heat transfer correlations for spiral-helical surface water heat exchangers (1385-RP). **2018**, 24, 714-725		4
952	Dimensionless, fluid-independent equations for heat and momentum transfer in supercritical fluids. **2018**, 133, 17-29		5
951	The power flow topology of heat transfer systems at supercritical conditions for performance analysis and optimization. **2018**, 118, 316-326		12
950	Natural convection heat transfer coefficient for newborn baby. **2018**, 54, 2395-2403		7
949	Impact of Dynamics on the Accuracies of Different Experimental Data-Processing Methods for Steady-State Heat Transfer Rate Measurement. **2018**, 10,		
948	Nonmachine energy separation in channel with permeable walls. **2018**, 1129, 012018		0
947	Control of Refrigeration Systems based on Vapour Compression using Multi-objective Optimization Techniques. **2018**, 51, 722-727		4
946	Reducing pressure valve with real gases: an integrated approach for the design. **2018**, 148, 607-614		0

945	Effects of the Working Fluid Charge in Organic Rankine Cycle Power Systems: Numerical and Experimental Analyses. **2018**,	1
944	Molecular Simulations Shed Light on Potential Uses of Ultrasound in Nitrogen Adsorption Experiments. **2018**, 34, 15650-15657	8
943	Critical Review on the Developments and Future Aspects of Adsorption Heat Pumps for Automobile Air Conditioning. **2018**, 8, 2061	8
942	Performance Analysis of Regenerative Organic Rankine Cycle System for Solar Micro Combined Heat and Power Generation Applications. **2018**,	1
941	Cryogenic energy storage system coupled with packed-bed cold storage. **2018**, 44, 00190	1
940	Simulation and Exergy Analysis of Energy Conversion Processes Using a Free and Open-Source Framework Python-Based Object-Oriented Programming for Gas- and Steam Turbine Cycles. **2018**, 11, 2609	9
939	Steps of fronts in chemical engineering: An overview of the publications of FCSE. **2018**, 12, 593-597	
938	A Reference Equation of State for Heavy Water. **2018**, 47, 043102	22
937	Perspective: Excess-entropy scaling. **2018**, 149, 210901	100
936	Methodology to develop off-design models of heat exchangers with non-ideal fluids. **2018**, 145, 716-734	8
935	Computationally efficient modeling strategy for evaporator performance under frost conditions. **2018**, 96, 88-99	1
934	Design of centrifugal compressors for heat pump systems. **2018**, 232, 139-156	24
933	Steady-state and dynamic validation of a parabolic trough collector model using the ThermoCycle Modelica library. **2018**, 174, 866-877	13
932	Optimum design and performance of a solar dish microturbine using tailored component characteristics. **2018**, 231, 660-676	11
931	R744 booster integrated system for full heating supply to supermarkets. **2018**, 96, 191-200	9
930	Thermoeconomic and environmental optimization of geothermal water desalination plant with ejector refrigeration system. **2018**, 178, 65-77	11
929	Reverse Engineering of Working Fluid Selection for Industrial Heat Pump Based on Monte Carlo Sampling and Uncertainty Analysis. *Industrial & Engineering Chemistry Research*, **2018**, 57, 13463-13477	8
928	Evaluation of gray box thermostatic expansion valve mass flow models. **2018**, 96, 161-168	3

927	Waste heat recovery from diesel engines based on Organic Rankine Cycle. **2018**, 231, 138-166		157
926	Experimental and numerical analyses of a 5 kWe oil-free open-drive scroll expander for small-scale organic Rankine cycle (ORC) applications. **2018**, 230, 1140-1156		42
925	A methodology for the preliminary design and performance prediction of high-pressure ratio radial-inflow turbines. **2018**, 164, 1062-1078		19
924	Analysis of an integrated heating and cooling system for a building complex with focus on long-term thermal storage. **2018**, 145, 791-803		23
923	An integrated concentrated solar fuel generator utilizing a tubular solid oxide electrolysis cell as solar absorber. **2018**, 400, 592-604		7
922	Improvements in Transport Phenomena Teaching. **2018**,		
921	Comparative thermodynamic evaluation of a geothermal power plant by using the advanced exergy and artificial bee colony methods. **2018**, 156, 169-180		21
920	Review on flow boiling of refrigerants R236fa and R245fa in mini and micro channels. **2018**, 126, 591-617		12
919	On Riemann solvers and kinetic relations for isothermal two-phase flows with surface tension. **2018**, 69, 1		4
918	Electricity generation from pyrolysis gas produced in charcoal manufacture: Technical and economic analysis. **2018**, 194, 219-242		13
917	Exceptionally reliable density-solving algorithms for multiparameter mixture models from Chebyshev expansion rootfinding. **2018**, 476, 89-102		8
916	Deriving guidelines for the design of plate evaporators in heat pumps using zeotropic mixtures. **2018**, 156, 492-508		4
915	Thermodynamic analysis and optimisation of a combined liquid air and pumped thermal energy storage cycle. **2018**, 18, 90-102		36
914	Flow boiling of R134a in an open-cell metal foam mini-channel evaporator. **2018**, 126, 103-115		14
913	An Accurate and Efficient Look-up Table Equation of State for Two-Phase Compressible Flow Simulations of Carbon Dioxide. *Industrial & Engineering Chemistry Research*, **2018**, 57, 7676-7691	3.9	12
912	Using the forward movement of a container ship navigating in the Arctic to air-cool a marine organic Rankine cycle unit. **2018**, 159, 1046-1059		8
911	Pressure-enthalpy coupled thermal resistance and capacity model (PH-TRCM) for direct-expansion borehole heat exchangers: Application for supercritical CO2. **2018**, 76, 50-59		6
910	Designing and teaching of an effective engineering continuing education course: Modeling and simulation of HVAC systems. **2018**, 26, 739-748		6

909	Effects of humid air on aerodynamic journal bearings. **2018**, 127, 333-340	7
908	Improved model for the isosteric heat of adsorption and impacts on the performance of heat pump cycles. **2018**, 143, 688-700	24
907	Vapor injected compression with economizing in packaged air conditioning systems for high temperature climate. **2018**, 94, 136-150	12
906	A mechanistic model for multi-scale sorption dynamics in shale. **2018**, 234, 996-1014	30
905	Thermodynamic Cycle and Working Fluid Selection for Waste Heat Recovery in a Heavy Duty Diesel Engine. **2018**,	6
904	An Investigation on the Fuel Temperature Variations Along a Solenoid Operated Common-Rail Ballistic Injector by Means of an Adiabatic 1D Model. **2018**,	7
903	Hybridizing a geothermal power plant with concentrating solar power and thermal storage to increase power generation and dispatchability. **2018**, 228, 1837-1852	45
902	System and Second Law Analysis of the Effects of Reformed Fuel Composition in Single-Fuel RCCI Combustion. **2018**, 11, 861-878	8
901	Design of a Two-Phase Gravity-Driven Micro-Scale Thermosyphon Cooling System for High-Performance Computing Data Centers. **2018**,	3
900	Optimization of Pure-Component LNG Cascade Processes with Heat Integration. **2018**, 11, 202	5
899	A Generalised Assessment of Working Fluids and Radial Turbines for Non-Recuperated Subcritical Organic Rankine Cycles. **2018**, 11, 800	17
898	Thermodynamic potential of twelve working fluids in Rankine and flash cycles for waste heat recovery in heavy duty diesel engines. **2018**, 160, 996-1007	16
897	Two-phase heat transfer model of a beam-down gas-solid fluidized bed solar particle receiver. **2018** , 171, 740-750	21
896	An equivalent temperature based approach for selection of the most appropriate working fluids for refrigeration cycles. **2018**, 174, 227-238	4
895	Maximizing the power block efficiency of solar tower plants: Dual-pressure level steam generator. **2018**, 144, 583-592	5
894	A heuristic framework for next-generation models of geostrophic convective turbulence. **2018**, 112, 277-300	32
893	Thermomanagement. **2018**, 809-848	
892	Experimental results of a small-scale organic Rankine cycle: Steady state identification and application to off-design model validation. **2018**, 226, 82-106	20

891	Comparative investigation and multi objective design optimization of a cascaded vapor compression absorption refrigeration system operating with different refrigerants in the vapor compression cycle. **2019**, 55, 467-488	6
890	Effect of Impurities on Compressor and Cooler in Supercritical CO2 Cycles. **2019**, 141,	20
889	Comparative investigation and multi objective design optimization of R744/R717, R744/R134a and R744/R1234yf cascade rerfigeration systems. **2019**, 55, 445-465	5
888	Experimental investigation on the performance of an adsorption system using Maxsorb III + ethanol pair. **2019**, 105, 148-157	5
887	Multi-objective optimization of the basic and single-stage Organic Rankine Cycles utilizing a low-grade heat source. **2019**, 55, 353-374	9
886	Thin Gas Film Isothermal Condensation in Aerodynamic Bearings. **2019**, 141,	2
885	Hydrous Ethanol Steam Reforming and Thermochemical Recuperation to Improve Dual-Fuel Diesel Engine Emissions and Efficiency. **2019**, 141,	3
884	Integrated Thermal Electricity Storage System: Energetic and cost performance. **2019**, 197, 111833	9
883	Impact of Accurate Working Fluid Properties on the Globally Optimal Design of an Organic Rankine Cycle. **2019**, 427-432	8
882	A comparative study of CO2 heat pump performance for combined space and hot water heating. **2019**, 108, 234-245	9
881	Enhancing heat rejection from electronic devices with a supercritical carbon dioxide minichannel heat exchanger. **2019**, 106, 463-473	4
880	Speeds of sound for (CH4 + He) mixtures from p = (0.5 to 20) MPa at T = (273.16 to 375) K. **2019**, 139, 105869	4
879	Physical Properties of 7-Methyl-1,5,7-triazabicyclo[4.4.0]dec-5-ene (mTBD). **2019**, 40, 1	10
878	Investigation of the void fraction□uality correlations for two-phase hydrogen flow based on the capacitive void fraction measurement. **2019**, 44, 18483-18495	10
877	Thermodynamic analysis of the influential mechanism of fuel properties on the performance of an indirect precooled hypersonic airbreathing engine and vehicle. **2019**, 196, 1138-1152	12
876	EOS-LNG: A Fundamental Equation of State for the Calculation of Thermodynamic Properties of Liquefied Natural Gases. **2019**, 48, 033102	21
875	Development and Application of a Thin Flat Heat Pipe Design Optimization Tool for Small Satellite Systems. **2019**,	
874	Direct numerical simulation of sublimating ice particles. **2019**, 145, 105953	6

873	High-Fidelity Direct Numerical Simulation of Supercritical Channel Flow Using Discontinuous Galerkin Spectral Element Method. **2019**, 275-289		4
872	Modeling of pressure drop and heat transfer for flow boiling in a mini/micro-channel of rectangular cross-section. **2019**, 140, 1029-1054		10
871	Preliminary evaluation of CAES system concept with partial oxidation gas turbine technology. **2019**, 183, 766-775		5
870	Organic Rankine Cycle Systems Design Using a Case-Based Reasoning Approach. *Industrial & Engineering Chemistry Research*, **2019**, 58, 13198-13209	3.9	3
869	Contribution of Metal-Organic-Heat Carrier nanoparticles in a R245fa low-grade heat recovery Organic Rankine Cycle. **2019**, 199, 111960		8
868	Approximating the Temperature□Entropy Saturation Curve of ORC Working Fluids From the Ideal Gas Isobaric Heat Capacity. **2019**, 12, 3266		7
867	Heat recovery from Combined Cycle Power Plants for Heat Pumps. **2019**, 113, 01011		1
866	Integration of liquid air energy storage into the spanish power grid. **2019**, 187, 115965		20
865	Pore-Size Distribution of Silica Colloidal Crystals from Nitrogen Adsorption Isotherms. **2019**, 35, 14975-14982		8
864	Assessment on density discrepancy of supercritical reactive hydrocarbon fuels using the Monte-Carlo method. **2019**, 164, 345-357		1
863	Mathematical-Experimental Assessment of Energy Efficiency of High-Temperature Heat Pump Distiller. **2019**, 55, 556-561		1
862	Vapor Pressures, Densities, and PC-SAFT Parameters for 11 Bio-compounds. **2019**, 40, 1		19
861	Integrating off-design performance in designing CO2 power cycle systems for engine waste heat recovery. **2019**, 201, 112146		13
860	Techno-economic analysis of a potential energy trading link between Patagonia and Japan based on CO2 free hydrogen. **2019**, 44, 12733-12747		45
859	A pumped thermal energy storage cycle with capacity for concentrated solar power integration. **2019**,		4
858	Particle image velocimetry measurements of a thermally convective supercritical fluid. **2019**, 60, 1		7
857	Configuration optimization of the tandem cooling-compression system for a novel precooled hypersonic airbreathing engine. **2019**, 197, 111827		14
856	A thermo-economic assessment of CSP+TES in the north of Chile for current and future grid scenarios. **2019**,		2

855	Design of Two-Phase Injectors Using Analytical and Numerical Methods with Application to Hybrid Rockets. **2019**,	0
854	CO2 Refrigeration and Heat Pump Systems—A Comprehensive Review. **2019**, 12, 2959	7
853	Thermodynamic assessment on performance extremes of the fuel indirect precooled cycle for hypersonic airbreathing propulsion. **2019**, 186, 115772	10
852	Modelling and experimentation of heat exchangers for Ocean Thermal Energy Conversion during transient operation. **2019**, 35, 298-303	1
851	Analytical Prediction of Gas Permeation through Graphene Nanopores of Varying Sizes: Understanding Transitions across Multiple Transport Regimes. **2019**, 13, 11809-11824	31
850	Novel speed-controlled exhaust-air to supply-air heat pump combined with a ventilation system. **2019**, 162, 114230	5
849	A detailed model of direct dry-cooling for the supercritical carbon dioxide Brayton power cycle. **2019**, 163, 114390	10
848	pyGAPS: a Python-based framework for adsorption isotherm processing and material characterisation. **2019**, 25, 1533-1542	9
847	Modelling of a real CO2 booster installation and evaluation of control strategies for heat recovery applications in supermarkets. **2019**, 107, 288-300	7
846	Analysis of CoolProp library for the assessment of uncertainty propagation for refrigerant fluids in state diagrams and thermodynamic properties. **2019**, 107, 214-224	2
845	Numerical simulation of the growth and interaction of vapour bubbles in superheated liquid jets. **2019**, 121, 103112	7
844	Influence of an internal heat exchanger on the operation of a CO2 direct expansion ground source heat pump. **2019**, 202, 109343	5
843	Technical and economic feasibility of organic Rankine cycle-based waste heat recovery systems on feeder ships: Impact of nitrogen oxides emission abatement technologies. **2019**, 183, 577-589	32
842	Field tests, model validation and performance of a CO2 commercial refrigeration plant integrated with HVAC system. **2019**, 100, 380-391	15
841	Thermodynamic and economic analysis of the integration of high-temperature heat pumps in trigeneration systems. **2019**, 238, 516-533	35
840	Robust optimization for the preliminary design of solar organic Rankine cycle (ORC) systems. **2019**, 184, 338-349	39
839	Generalization of particle impact behavior in gas turbine via non-dimensional grouping. **2019**, 74, 103-151	17
838	A short- and long-term demand based analysis of a CO2 concentrated solar power system with backup heating. **2019**, 160, 114003	4

837	Seismic properties in conductive and convective hot and super-hot geothermal systems. **2019**, 82, 16-33	4
836	The hunt for nonflammable refrigerant blends to replace R-134a. **2019**, 104, 484-484	49
835	Numerical Loss Investigation of a Small Scale, Low Specific Speed Supercritical CO2 Radial Inflow Turbine. **2019**, 141,	10
834	Design of an Annular-Radial Diffuser for Operation With a Supercritical CO2 Radial Inflow Turbine. **2019**, 141,	
833	An experimental study on flow boiling in microchannels under heating pulses and a methodology for predicting the wall temperature fluctuations. **2019**, 159, 113851	3
832	Development and evaluation of a generalized rule-based control strategy for residential ice storage systems. **2019**, 197, 99-111	12
831	Numerical investigation of the flow characteristics of underexpanded methane jets. **2019**, 31, 056105	14
830	Application and comparison of semi-empirical models for performance prediction of a kW-size reciprocating piston expander. **2019**, 249, 143-156	14
829	An open-source density-based solver for two-phase CO2 compressible flows: Verification and validation. **2019**, 106, 526-538	9
828	Finding the ideal automotive battery concept. **2019**, 83, 817-830	4
827	Performance of heat pumps using pure and mixed refrigerants with maldistribution effects in plate heat exchanger evaporators. **2019**, 104, 390-403	5
826	Assessment of Methods for Performance Comparison of Pure and Zeotropic Working Fluids for Organic Rankine Cycle Power Systems. **2019**, 12, 1783	7
825	Comparison of a physical and a data-driven model of a Packed Bed Regenerator for industrial applications. **2019**, 23, 558-578	7
824	Experimental and numerical analysis of a reciprocating piston expander with variable valve timing for small-scale organic Rankine cycle power systems. **2019**, 247, 403-416	13
823	Single vapour bubble growth under flash boiling conditions using a modified HLLC Riemann solver. **2019**, 116, 250-269	5
822	Hybrid Adsorption-Compression Systems for Air Conditioning in Efficient Buildings: Design through Validated Dynamic Models. **2019**, 12, 1161	17
821	Identification of ORC unit operation in biomass-fired cogeneration system. **2019**, 142, 400-414	16
820	Stochastic prediction of fractured caprock by history matching pressure monitoring data. **2019**, 179, 615-630	5

819	Application of the group contribution volume translated Peng-Robinson equation of state to new commercial refrigerant mixtures. **2019**, 103, 316-328	6
818	Emerging sorption pairs for heat pump applications: an overview. **2019**, 1, 161-180	25
817	Load and loss for high-speed lubrication flows of pressurized gases between non-concentric cylinders. **2019**, 867, 1-25	3
816	On the use of tabulated equations of state for multi-phase simulations in the homogeneous equilibrium limit. **2019**, 29, 769-793	9
815	Transient Simulation of Geothermal Combined Heat and Power Generation for a Resilient Energetic and Economic Evaluation. **2019**, 12, 894	8
814	Design Optimization of a Hybrid Steam-PCM Thermal Energy Storage for Industrial Applications. **2019**, 12, 898	6
813	A Holistic Methodology for Optimizing Industrial Resource Efficiency. **2019**, 12, 1315	11
812	District Power-To-Heat/Cool Complemented by Sewage Heat Recovery. **2019**, 12, 364	5
811	Virial Approximation for Load and Loss in High-Speed Journal Bearings Using Pressurized Gases. **2019**, 4, 27	1
810	Analysis of refrigerant pipe pressure drop of a CO2 air conditioning unit for vehicles. **2019**, 106, 583-591	6
809	An Object-Oriented R744 Two-Phase Ejector Reduced-Order Model for Dynamic Simulations. **2019**, 12, 1282	4
808	Comparative analysis between the performances of reciprocating and rolling piston compressors applied to a domestic heat pump water heater. **2019**, 102, 130-141	3
807	A transient coupled model of a variable speed transcritical CO2 direct expansion ground source heat pump for space heating and cooling. **2019**, 140, 1012-1021	12
806	A novel approach to high temperature solar receivers with an absorbing gas as heat transfer fluid and reduced radiative losses. **2019**, 183, 521-531	4
805	Experimental investigation of energy (temperature) separation of a high-velocity air flow in a cylindrical channel with a permeable wall. **2019**, 105, 206-215	12
804	Performance analysis and optimization for maximum exergy efficiency of a geothermal power plant using gravitational search algorithm. **2019**, 185, 155-168	20
803	Thermo-economic study of waste heat recovery from condensing steam for hydrogen production by PEM electrolysis. **2019**, 185, 21-34	20
802	Demand side management analysis of a supermarket integrated HVAC, refrigeration and water loop heat pump system. **2019**, 152, 543-550	9

801	Exergy Analysis of Liquid Nitrogen Power Cycles. **2019**, 201, 01004	
800	Probing the link between residual entropy and viscosity of molecular fluids and model potentials. **2019**, 116, 4070-4079	33
799	Analysis of cycloid type vacuum compressors for water vapor compression systems at sub-atmospheric pressures. **2019**, 604, 012008	1
798	Performance analysis of small-scale power cycles for LNG physical exergy recovery. **2019**, 502, 012146	2
797	Aircraft Weight Reduction and Onboard Combined Power Cycle Efficiency Improvement: An Integrative Approach. **2019**,	0
796	Development of internet resources to assess the effectiveness of some GTP. **2019**, 1385, 012034	
795	Friction and leakage analysis of the blocker-type valve designed for a revolving vane expander. **2019**, 604, 012083	1
794	Efficient Simulation of Thermal Management Systems for BEV. **2019**,	3
793	Computational fluid dynamics simulation of the supercritical carbon dioxide flow in beam dyeing. **2019**, 89, 2604-2615	4
792	Pressure, temperature, and heat flux in high speed lubrication flows of pressurized gases. **2019**, 129, 468-475	6
791	Gas Turbine Fouling Tests: Review, Critical Analysis, and Particle Impact Behavior Map. **2019**, 141,	14
790	Energetic and financial assessment of the implementation of an absorption heat pump in an industrial drying system. **2019**, 37, 1939-1953	4
789	Operational experiences of municipal heating plants with biomass-fired ORC cogeneration units. **2019**, 181, 544-561	24
788	Analysis of a pharmaceutical batch freeze dryer: resource consumption, hotspots, and factors for potential improvement. **2019**, 37, 1563-1582	6
787	A sequential approach for integration of multiple thermal energy storages with fixed mass and variable temperature. **2019**, 148, 278-294	7
786	Influence of the degree of superheating on the performance of a R134a condenser by means of experimental and numerical studies. **2019**, 98, 25-34	5
785	Moving-boundary and finite volume coupling algorithm for heat exchanger with fluid phase change. **2019**, 131, 313-328	3
784	A novel quasi-one-dimensional model for performance estimation of a Vaporizing Liquid Microthruster. **2019**, 84, 1020-1034	11

783	Precooler-design & engine-performance conjugated optimization for fuel direct precooled airbreathing propulsion. **2019**, 170, 546-556		23
782	Toward a simple, generic, and rapid simulation of the drying of solid foods. **2019**, 37, 2025-2033		3
781	A Simple Semiempirical Method for Predicting the Temperature−Entropy Saturation Curve of Pure Fluids. *Industrial & Engineering Chemistry Research*, **2019**, 58, 1038-1043	3.9	9
780	Experimental analysis of a micro-ORC driven by piston expander for low-grade heat recovery. **2019**, 148, 1278-1291		37
779	Analysis of suitability ranges of high temperature heat pump working fluids. **2019**, 150, 628-640		32
778	Error analysis of ORC performance calculation based on the Helmholtz equation with different binary interaction parameters of mixture. **2019**, 166, 414-425		4
777	Conventional and advanced exergy analysis of parallel and series compression-ejection hybrid refrigeration system for a household refrigerator with R290. **2019**, 166, 845-861		26
776	Modeling the phase behavior of refrigerants with ionic liquids using the QC-PC-SAFT equation of state. **2019**, 274, 497-504		8
775	Variable volume ratio free-piston expander: Prototyping and experimental campaign. **2019**, 98, 70-79		3
774	Deterministic global process optimization: Accurate (single-species) properties via artificial neural networks. **2019**, 121, 67-74		38
773	Machine Learning for the prediction of the dynamic behavior of a small scale ORC system. **2019**, 166, 72-82		18
772	Numerical study of asymmetric vertical fluid intrusion in deep reservoirs: Effects of stress, temperature and salinity. **2019**, 750, 280-288		0
771	A comparative study of two simulation tools for the technical feasibility in terms of modeling district heating systems: An optimization case study. **2019**, 91, 48-68		13
770	Combining Low- and High-Temperature Heat Sources in a Heavy Duty Diesel Engine for Maximum Waste Heat Recovery Using Rankine and Flash Cycles. **2019**, 154-171		1
769	Heat pump working fluid selection−Economic and thermodynamic comparison of criteria and boundary conditions. **2019**, 98, 500-513		15
768	Influence of corrugation shape on heat transfer performance in corrugated tubes using numerical simulations. **2019**, 137, 262-275		18
767	Evaluation of Existing Heat Transfer Correlations in Designing Helical Coil Evaporators for Low-Temperature Organic Rankine Cycles via Inverse Design Approach. **2019**, 40, 1137-1152		2
766	The Effect of Transient Power Hotspots on the Heat Transfer Coefficient during Flow Boiling Inside Single Microscale Channels. **2019**, 40, 1337-1348		4

765	Performance assessment of a standard radial turbine as turbo expander for an adapted solar concentration ORC. **2020**, 147, 2833-2841	6
764	Thermal Management for the Cabin of a Battery Electric Vehicle Considering Passengers Comfort. **2020**, 28, 1476-1492	24
763	Hybrid solar-biomass combined Brayton/organic Rankine-cycle plants integrated with thermal storage: Techno-economic feasibility in selected Mediterranean areas. **2020**, 147, 2913-2931	65
762	Neural Network Predictive Control of a Vapor Compression Cycle. **2020**, 45, 779-796	0
761	Identification of simplified energy performance models of variable-speed air conditioners using likelihood ratio test method. **2020**, 26, 75-88	2
760	High-fidelity numerical analysis of non-premixed hydrothermal flames: Flame structure and stabilization mechanism. **2020**, 259, 116162	10
759	Thermoeconomic optimization of organic Rankine bottoming cycles for micro gas turbines. **2020**, 164, 114477	14
758	Performance assessment of a hybrid photovoltaic-thermal and heat pump system for solar heating and electricity. **2020**, 148, 558-572	20
757	On the Prediction of Pressure Fluctuations and Pressure Drop Caused by Confined Bubble Growth During Flow Boiling in a Rectangular Mini/Micro-Channel. **2020**, 41, 1763-1783	4
756	MINLP-based hybrid strategy for operating mode selection of TES-backed-up refrigeration systems. **2020**, 30, 6091-6111	1
755	PDSim: Demonstrating the capabilities of an open-source simulation framework for positive displacement compressors and expanders. **2020**, 110, 323-339	9
754	Combined exergy analysis, energy integration and optimization of syngas and ammonia production plants: A cogeneration and syngas purification perspective. **2020**, 244, 118647	11
753	Theoretical analysis of dynamic characteristics in linear compressors. **2020**, 109, 114-127	14
752	Working fluid selection for organic rankine cycles via deterministic global optimization of design and operation. **2020**, 21, 517-536	11
751	Maximizing specific work output extracted from engine exhaust with novel inverted Brayton cycles over a large range of operating conditions. **2020**, 191, 116350	5
750	PDSim: A general quasi-steady modeling approach for positive displacement compressors and expanders. **2020**, 110, 310-322	10
749	Thermal effects on the diesel injector performance through adiabatic 1D modelling. Part I: Model description and assessment of the adiabatic flow hypothesis. **2020**, 260, 116348	6
748	Optimizing geophysical muon radiography using information theory. **2020**, 220, 1078-1094	2

747	Modelling and cooling power control of a TES-backed-up vapour-compression refrigeration system. **2020**, 164, 114415	4
746	Thermal design and selection of the optimal working fluid for organic Rankine cycles based on the equivalent temperature concept. **2020**, 168, 114860	6
745	Thermodynamic design and optimization of the multi-branch closed Brayton cycle based precooling-compression system for a novel hypersonic aeroengine. **2020**, 205, 112412	2
744	The coupled process-component modeling and optimization for heat exchanger of supercritical CO2 with property variation based on heat current method. **2020**, 168, 114833	5
743	Heat transfer correlation for circular and non-circular ducts in the transition regime. **2020**, 149, 119165	11
742	Predicting the Slope of the Temperature–Entropy Vapor Saturation Curve for Working Fluid Selection Based on Lee–Kesler Modeling. *Industrial & Engineering Chemistry Research*, **2020**, 59, 956-969	3
741	Experimental study of the static and dynamic behavior of a novel heat driven electronic controlled expansion valve. **2020**, 168, 114718	1
740	CoolFOAM: The CoolProp wrapper for OpenFOAM. **2020**, 250, 107047	5
739	Detailed numerical simulations of a single stage of rotatory active magnetic regenerators: Influence of the pin geometry. **2020**, 149, 106198	5
738	Experimental investigation of flow boiling in rectangular mini/micro-channels of different aspect ratios without and with vapour venting membrane. **2020**, 168, 114837	5
737	Shifted thermal extraction rates in large Borehole Heat Exchanger array – A numerical experiment. **2020**, 167, 114750	9
736	Optimization study of heat pumps using refrigerant blends – Ejector versus expansion valve systems. **2020**, 111, 136-146	10
735	Transcritical CO2 commercial refrigeration plant with adiabatic gas cooler and subcooling via HVAC: Field tests and modelling. **2020**, 111, 71-80	7
734	Techno-economic optimization of an energy system with sorption thermal energy storage in different energy markets. **2020**, 258, 114063	11
733	Relationship between the Transport Coefficients of Polar Substances and Entropy. **2019**, 22,	0
732	Numerical Analysis of Two Phase Cross-Flow Heat Exchanger for High Power Density Equipment in Data Centers under Dynamic Conditions. **2020**,	0
731	Hybrid Mechanistic Data-Driven Modeling for the Deterministic Global Optimization of a Transcritical Organic Rankine Cycle. **2020**, 1765-1770	2
730	Water evaporation flux and cooling efficiency of spraying on cross-flow exchangers. **2020**, 180, 115652	1

729	Analysis of a hybrid transcritical CO2 vapor compression and vapor ejector refrigeration system. **2020**, 181, 115945	5
728	Entropy Scaling of Viscosity - II: Predictive Scheme for Normal Alkanes. **2020**, 65,	16
727	Biowaste to hydrogen or Fischer-Tropsch fuels by gasification – A Gibbs energy minimisation study for finding carbon capture potential and fossil carbon displacement on the road. **2020**, 211, 118996	2
726	Modeling study for low-carbon industrial processes integrating solar thermal technologies. A case study in the Italian Alps: The Felicetti Pasta Factory. **2020**, 208, 548-558	11
725	Investigation on the Performance of the Pump-Free Double Heat Source Ejector Refrigeration System with R1234yf. **2020**, 1	0
724	An experimental study of an Organic Rankine Cycle utilizing HCFO-1233zd(E) as a drop-in replacement for HFC-245fa for ultra-low-grade waste heat recovery. **2020**, 180, 115757	7
723	Empirical and numerical determination of the freezing point depression of an unsteady flow in a scraped surface crystallizer. **2020**, 179, 115734	1
722	Three-Dimensional Projection-Based Embedded Discrete-Fracture Model for Compositional Simulation of Fractured Reservoirs. **2020**, 25, 2143-2161	13
721	Carbon dioxide-enhanced geothermal systems for heat and electricity production: Energy and economic analyses for central Poland. **2020**, 220, 113142	8
720	Replacement of R134a with low-GWP fluids in a kW-size reciprocating piston expander: Performance prediction and design optimization. **2020**, 206, 118174	3
719	Quantitative and qualitative evaluation of various positive-displacement compressor modeling platforms. **2020**, 119, 48-63	2
718	Numerical and experimental study of the heat transfer process in a double pipe heat exchanger with inner corrugated tubes. **2020**, 158, 106526	22
717	Comparative Study of a Compression–Absorption Cascade System Operating with NH3-LiNO3, NH3-NaSCN, NH3-H2O, and R134a as Working Fluids. **2020**, 8, 816	3
716	Comparative performance analysis of a combined cooling system with mechanical and adsorption cycles. **2020**, 221, 113208	12
715	Quantitative evaluation of the joint effect of uncertain parameters in CO2 storage in the Sleipner project, using data-driven models. **2020**, 103, 103180	2
714	Techno-Economic Analysis of a Heat Pump Cycle Including a Three-Media Refrigerant/Phase Change Material/Water Heat Exchanger in the Hot Superheated Section for Efficient Domestic Hot Water Generation. **2020**, 10, 7873	6
713	Parametric study of S-CO2 cycles for the DEMO fusion reactor. **2020**, 160, 111992	4
712	Real-gas effects: The state of the art of organic Rankine cycles. **2020**, 277, 124102	1

711	Calculated and experimental evaluation heat pump distiller on pentane as working substance. **2020**, 324, 02007	
710	A multi-scenario approach for a robust design of solar-based ORC systems. **2020**, 161, 1184-1194	12
709	Thermodynamic and Thermoeconomic analysis of a parabolic trough Concentrated Solar Power plant with Energy Storage System. **2020**,	0
708	Optimal control analysis and Practical NMPC applied to refrigeration systems. **2020**, 107, 90-106	0
707	Evaporative cooling in building roofs: Theoretical modeling and experimental validation (Part-1). **2020**, 207, 1122-1131	4
706	Dynamic optimization and economic evaluation of flexible heat integration in a hybrid concentrated solar power plant. **2020**, 276, 115513	5
705	Feasibility analysis of reverse osmosis desalination driven by a solar pond in Mediterranean and semi-arid climates. **2020**, 221, 113190	15
704	Trade-off working fluid selection for heat pumps. **2020**, 791, 012066	1
703	Thermodynamic properties of trifluoroethene (R1123): (p, □T) behavior and fundamental equation of state. **2020**, 119, 457-467	9
702	Evaluation of an □type stirling engine regenerator using a new differential model. **2020**, 209, 118369	6
701	Influence of saturation temperature and heat flux on pool boiling of R245fa. **2020**, 1-18	6
700	Seeded Hydrogen in Nuclear Thermal Propulsion Engines. **2020**, 57, 907-917	3
699	Domestic Organic Rankine Cycle-Based Cogeneration Systems as a Way to Reduce Dust Emissions in Municipal Heating. **2020**, 13, 3983	4
698	Primary breakup regimes for cryogenic flash atomization. **2020**, 132, 103405	7
697	The Status of Thermodynamic Data and Models for CFI and its Mixtures. **2020**, 41, 1	4
696	Evaluation of heat transfer models at various fluidization velocities for biomass pyrolysis conducted in a bubbling fluidized bed. **2020**, 160, 120175	6
695	Densities, Viscosities, and Thermal Conductivities of the Ionic Liquid 7-Methyl-1,5,7-triazabicyclo[4.4.0]dec-5-enium Acetate and Its Mixtures with Water. **2020**, 41, 1	3
694	Assessing fuel consumption reduction in Revercycle, a reversible mobile air conditioning/ Organic Rankine Cycle system. **2020**, 210, 118588	3

693	Vapor Pressures of Phenolic Compounds Found in Pyrolysis Oil. **2020**, 65, 5559-5566		3
692	Reduced-order modelling of equations of state using tensor decomposition for robust, accurate and efficient property calculation in high-pressure fluid flow simulations. **2020**, 165, 104938		
691	Enabling high conductance and high energy density in supercritical fluids for thermal storage applications. **2020**, 42, 1		1
690	Multiobjective Optimization Method for an Organic Rankine Cycle Integrated with the Heat Exchanger Network. *Industrial & Engineering Chemistry Research*, **2020**, 59, 18039-18049	3.9	1
689	Investigation of flow characteristics in a single screw expander: A numerical approach. **2020**, 213, 118730		10
688	Analysing the role of caprock morphology on history matching of Sleipner CO2 plume using an optimisation method. **2020**, 10, 1077-1097		4
687	An Enhanced Vertical Ground Heat Exchanger Model for Whole-Building Energy Simulation. **2020**, 13, 4058		6
686	Optimal Design of a Ljungström Turbine for ORC Power Plants: From a 2D model to a 3D CFD Validation. **2020**, 5, 19		2
685	A Laboratory Test to Evaluate Seeded Hydrogen in a Nuclear Thermal Rocket Engine. **2020**,		
684	Minimizing Power Consumption of Automotive AC System by Condenser Fan Speed Control. **2020**,		
683	Sinking CO in Supercritical Reservoirs. **2020**, 47, e2020GL090456		3
682	Accurate quantum-corrected cubic equations of state for helium, neon, hydrogen, deuterium and their mixtures. **2020**, 524, 112790		4
681	Temperature-dependent vapor–liquid equilibria and solvation free energy estimation from minimal data. **2020**, 66, e16976		5
680	Vapor–Liquid Equilibrium of Ionic Liquid 7-Methyl-1,5,7-triazabicyclo[4.4.0]dec-5-enium Acetate and Its Mixtures with Water. **2020**, 65, 2405-2421		7
679	Equations of State for the Thermodynamic Properties of Binary Mixtures for Helium-4, Neon, and Argon. **2020**, 49, 023101		9
678	Thermoeconomic comparison between the organic flash cycle and the novel organic Rankine flash cycle (ORFC). **2020**, 215, 112926		11
677	Numerical simulation of fault characteristics for refrigeration systems with liquid line receivers. **2020**, 119, 11-23		1
676	Development of a Thermal Management System for Electrified Aircraft. **2020**,		8

675	Towards zero water consumption in solar tower power plants. **2020**, 178, 115505	7
674	A critical review of the most popular mathematical models for nanofluid thermal conductivity. **2020**, 22, 1	5
673	Combining natural gas recovery and CO2-based geothermal energy extraction for electric power generation. **2020**, 269, 115012	35
672	Entropy Scaling of Viscosity - I: A Case Study of Propane. **2020**, 65,	21
671	Multi-objective metaheuristic optimization of combined flash-binary geothermal and humidification dehumidification desalination systems. **2020**, 490, 114456	26
670	Vapor□liquid Equilibria and Diffusion Coefficients of Difluoromethane, 1,1,1,2-Tetrafluoroethane, and 2,3,3,3-Tetrafluoropropene in Low-Viscosity Ionic Liquids. **2020**, 65, 4242-4251	13
669	Exploration of power conversion thermodynamic cycles for ARC fusion reactor. **2020**, 155, 111645	4
668	Subcooled boiling regime map for water at low saturation temperature and subatmospheric pressure. **2020**, 118, 110150	5
667	Enhanced absorption separation of hydrofluorocarbon/hydrofluoroolefin refrigerant blends using ionic liquids. **2020**, 249, 117136	14
666	Organic Rankine Energy Storage (ORES) system. **2020**, 204, 117938	0
665	Experimental and modelling studies on the possible application of heat storage devices for powering the ORC (organic rankine cycle) systems. **2020**, 19, 100586	9
664	Co-simulation methodology of a hybrid latent-heat thermal energy storage unit. **2020**, 178, 115495	3
663	Numerical and experimental analysis of flashing cryogenic nitrogen. **2020**, 130, 103360	14
662	Impact of heat of sorption on thermal enhanced recovery of sorbed gas from gas shale reservoirs □ An experimental and simulation study. **2020**, 79, 103318	3
661	A generalized moving-boundary algorithm to predict the heat transfer rate of transcritical CO2 gas coolers. **2020**, 118, 491-503	4
660	Design of organic Rankine cycle power systems for maritime applications accounting for engine backpressure effects. **2020**, 178, 115527	12
659	An Organic Rankine Cycle Bottoming a Diesel Engine Powered Passenger Car. **2020**, 13, 314	3
658	Neural-network-based optimization for economic dispatch of combined heat and power systems. **2020**, 265, 114785	26

657	Numerical simulation of cavitation for liquid injection in non-condensable gas. **2020**, 127, 103269	7
656	CFD Simulations of Single- and Twin-Screw Machines with OpenFOAM. **2020**, 4, 2	0
655	Dynamic thermal analysis of a residential ground-source heat pump. **2020**, 37, 100608	4
654	A Mixed-Integer Linear Programming Formulation for Optimizing Multi-Scale Material and Energy Integration. **2020**, 8,	16
653	Potential of liquefied natural gas cold energy recovery on board ships. **2020**, 271, 122519	9
652	System-level Impingement cooling with Cryogens. **2020**,	
651	Detailed Experimental and Model-Based Analysis of a Swash-Plate Piston Expander for ORC Application. **2020**, 8,	0
650	Flare Gas Waste Heat Recovery: Assessment of Organic Rankine Cycle for Electricity Production and Possible Coupling with Absorption Chiller. **2020**, 13, 2265	5
649	Functional Equations for Calculating the Properties of Low-GWP R1234ze(E) Refrigerant. **2020**, 13, 3052	6
648	Deterministic global superstructure-based optimization of an organic Rankine cycle. **2020**, 141, 106996	11
647	Organic Rankine cycle-based waste heat recovery system combined with thermal energy storage for emission-free power generation on ships during harbor stays. **2020**, 271, 122394	4
646	Flower Shape Oscillating Heat Pipe – A novel type of oscillating heat pipe in a rotary system of coordinates – An experimental investigation. **2020**, 179, 115702	11
645	A Benchmark Open-Source Implementation of COSMO-SAC. **2020**, 16, 2635-2646	32
644	Development of supercritical CO2 turbomachinery off-design model using 1D mean-line method and Deep Neural Network. **2020**, 263, 114645	17
643	Multi-criteria investigation of a pumped thermal electricity storage (PTES) system with thermal integration and sensible heat storage. **2020**, 208, 112530	34
642	The Method of the Working Fluid Selection for Organic Rankine Cycle (ORC) Systems Employing Volumetric Expanders. **2020**, 13, 573	16
641	Fundamental Thermodynamic Models for Mixtures Containing Ammonia. **2020**, 511, 112496	3
640	Technical potential of salt caverns for hydrogen storage in Europe. **2020**, 45, 6793-6805	91

639	On the sustainability of CO2 storage through CO2 Enhanced oil recovery. **2020**, 261, 114467	38
638	Assessment of fuel as alternative heat sink for future aircraft. **2020**, 170, 114985	14
637	A pressure-based solution framework for sub- and supersonic flows considering real-gas effects and phase separation under engine-relevant conditions. **2020**, 202, 104452	8
636	A comparison of three methodological approaches for meanline design of supercritical CO2 radial inflow turbines. **2020**, 206, 112500	16
635	A New Semi-Empirical Model for Saturated Vapor Density of Pure Compounds. **2020**, 65, 577-590	4
634	The benefit of droplet injection on the performance of an ejector refrigeration cycle working with R245fa. **2020**, 113, 276-287	4
633	Simulating onset and evolution of thermal runaway in Li-ion cells using a coupled thermal and venting model. **2020**, 268, 114972	22
632	Minimization of entropy generation of a closed Brayton cycle based precooling-compression system for advanced hypersonic airbreathing engine. **2020**, 209, 112548	12
631	Multi-Criteria Economic Analysis of a Pumped Thermal Electricity Storage (PTES) With Thermal Integration. **2020**, 8,	16
630	Nonlinear Finite Element Analysis-Based Flow Distribution and Heat Transfer Model. **2020**, 13, 1664	2
629	Correction to "Molecular Simulations Shed Light on Potential Uses of Ultrasound in Nitrogen Adsorption Experiments". **2020**, 36, 4853-4854	1
628	Modified auxiliary exergy costing in advanced exergoeconomic analysis applied to a hybrid solar-biomass organic Rankine cycle plant. **2020**, 268, 114888	23
627	Regression Models for the Evaluation of the Techno-Economic Potential of Organic Rankine Cycle-Based Waste Heat Recovery Systems on Board Ships Using Low Sulfur Fuels. **2020**, 13, 1378	6
626	The influence of cubic real-gas equations of state in the supersonic regime of dense gases. **2020**, 34, 1581-1589	1
625	Investigation of heat pump performance in heterogeneous ground. **2020**, 211, 112736	7
624	Thermal performance of diffusion-bonded compact heat exchangers. **2020**, 153, 106384	15
623	Control trajectory optimisation and optimal control of an electric vehicle HVAC system for favourable efficiency and thermal comfort. **2021**, 22, 83-102	7
622	Theoretical models for compact printed circuit heat exchangers with straight semicircular channels. **2021**, 184, 115435	5

621	Compressed air energy storage systems: Components and operating parameters □A review. **2021**, 34, 102000	44
620	Piston trajectory optimization of a reciprocating compressor. **2021**, 121, 159-167	4
619	A pressure-based solver for low-Mach number flow using a discontinuous Galerkin method. **2021**, 425, 109877	4
618	Effect of dedicated mechanical subcooler size and gas cooler pressure control on transcritical CO2 booster systems. **2021**, 182, 116145	5
617	Integration of a flue gas condensing heat pump within a combined cycle: Thermodynamic, environmental and market assessment. **2021**, 184, 116276	5
616	Heat-driven direct reverse osmosis for high-performance and robust ad hoc seawater desalination. **2021**, 500, 114800	4
615	An experimental investigation of performance and instabilities of the R744 vapour compression rack equipped with a two-phase ejector based on short-term, long-term and unsteady operations. **2021**, 185, 116353	5
614	Review of stationary and transport CO2 refrigeration and air conditioning technologies. **2021**, 185, 116422	13
613	Computational investigation of real fluid effects in cryogenic laminar premixed CH4□O2 flames. **2021**, 168, 105045	2
612	Design and simulation of a heat-driven direct reverse osmosis device for seawater desalination powered by solar thermal energy. **2021**, 284, 116039	6
611	A novel semi-batch autoclave reactor to overcome thermal dwell time in solvent liquefaction experiments. **2021**, 417, 128074	1
610	Reconstructing Magma Storage Depths for the 2018 K□auean Eruption From Melt Inclusion CO2 Contents: The Importance of Vapor Bubbles. **2021**, 22, e2020GC009364	9
609	A hierarchical and categorized algorithm for efficient and robust simulation of thermal systems based on the heat current method. **2021**, 215, 119105	2
608	Composition optimization method for mixed refrigerant MR JT cryocooler. **2021**, 113, 103223	3
607	Characteristic of cryogenic hydrogen flames from high-aspect ratio nozzles. **2021**, 46, 12320-12328	2
606	Future Space-Transport-System Components under High Thermal and Mechanical Loads. **2021**,	
605	Multi-component fuel drop-wall interactions at high ambient pressures. **2021**, 283, 119071	3
604	Performance characterization of a direct evaporative cooling pad based on pottery material. **2021**, 14, 46-56	8

603	Parahydrogen□Orthohydrogen Conversion on Catalyst-Loaded Scrim for Vapor-Cooled Shielding of Cryogenic Storage Vessels. **2021**, 35, 142-151	2
602	Binary geothermal power plant. **2021**, 113-129	
601	Optimal Selection of Thermal Energy Storage Technology for Fossil-Free Steam Production in the Processing Industry. **2021**, 11, 1063	1
600	Towards Full Resolution of Spray Breakup in Flash Atomization Conditions Using DNS. **2021**, 209-224	1
599	Performance analysis of a Brayton Pumped Thermal Electricity Storage (PTES) with a liquid sensible heat storage. **2021**, 238, 10007	
598	Pumped Thermal Energy Storage With Liquid Storage. **2021**,	0
597	Techno-Economic Analysis of Power-to-Heat Systems. **2021**, 238, 03003	0
596	Numerical Investigation of a Supercritical CO(_2) Centrifugal Compressor with an In-House Density Based Compressible CFD Solver. **2021**, 87-99	
595	Modeling the transformation of □and □ types kerogen by the method of entropy maximization. **2021**,	
594	Model-Based Evaluation of Air-Side Fouling in Closed-Circuit Cooling Towers. **2021**, 14, 695	
593	Experimental demonstration of pressure-driven flash boiling for transient two-phase cooling. **2021**, 1-1	
592	A RANS Approach to Supercritical CO2Single-Jet Impingement at Ultra-High Reynolds Numbers. **2021**,	0
591	Development of a concept power plant using a Small Modular Reactor coupled with a Supercritical CO2 Brayton cycle for sustainable Antarctic stations. **2021**, 132, 103606	1
590	Systematic Search of Suitable Metal□Organic Frameworks for Thermal Energy-Storage Applications with Low Global Warming Potential Refrigerants. **2021**, 9, 3157-3171	3
589	The potential for energy savings in U.S. houses by using isothermal dehumidification. **2021**, 27, 776-787	
588	Mapping geological hydrogen storage capacity and regional heating demands: An applied UK case study. **2021**, 283, 116348	16
587	Investigation of boiling hydrogen flow characteristics under low-pressure conditions - Flow regime transition characteristics. **2021**, 46, 8239-8252	3
586	Rate capability and Ragone plots for phase change thermal energy storage. **2021**, 6, 295-302	30

585	Thermodynamic analysis and optimization of Transcritical and Supercritical Organic Rankine and Brayton Cycles coupled to parabolic trough collectors. **2021**, 1037, 012044	1
584	Entropy Scaling of Viscosity□II: Application to Refrigerants and Their Mixtures. **2021**, 66, 1385-1398	15
583	A New Method of Regulating the Cooling Capacity of a Cooling System with CO2. **2021**, 14, 1922	0
582	Water injection for gasoline direct injection engines: fundamental investigations in an evaporation chamber. **2021**, 6, 31-44	
581	On the Complex Indicator of Perfection in Selecting Environmentally Acceptable and Thermodynamically Effective Working Substances for High-Temperature Heat Pumps. **2021**, 56, 943-950	
580	Optimization of an Organic Rankine Cycle-Based Waste Heat Recovery System Using a Novel Target-Temperature-Line Approach. **2021**, 143,	1
579	Efficient and Precise Representation of Pure Fluid Phase Equilibria with Chebyshev Expansions. **2021**, 42, 1	4
578	Photoacoustic hygrometer for icing wind tunnel water content measurement: design, analysis, and intercomparison. **2021**, 14, 2477-2500	1
577	Multi-scale evaluation of ejector performances: The influence of refrigerants and ejector design. **2021**, 186, 116502	13
576	ORC Optimal Design through Clusterization for Waste Heat Recovery in Anaerobic Digestion Plants. **2021**, 11, 2762	2
575	Measurements of Thermal Conductivity of LWC Cement Composites Using Simplified Laboratory Scale Method. **2021**, 14,	4
574	Cooling System with PCM Storage for an Office Building: Experimental Investigation Aided by a Model of the Office Thermal Dynamics. **2021**, 14,	0
573	New Equations of State for Binary Hydrogen Mixtures Containing Methane, Nitrogen, Carbon Monoxide, and Carbon Dioxide. **2021**, 50, 013102	5
572	Fabrication and embedded sensors characterization of a micromachined water-propellant vaporizing liquid microthruster. **2021**, 188, 116625	3
571	Calculation of self-diffusion coefficients in supercritical carbon dioxide using mean force kinetic theory. **2021**, 154, 134101	0
570	Sensitivity Analysis of OTEC-CC-MX-1 kWe Plant Prototype. **2021**, 14, 2585	1
569	Solid-liquid coexistence of neon, argon, krypton, and xenon studied by simulations. **2021**, 154, 134501	4
568	Timing and energy stability of resonant dispersive wave emission in gas-filled hollow-core waveguides. **2021**, 3, 025004	0

567	Multi-scale evaluation of an R290 variable geometry ejector. **2021**, 188, 116612	6
566	Hybrid Data-Driven and Mechanistic Modeling Approaches for Multiscale Material and Process Design. **2021**, 7, 1231-1231	5
565	Theoretical Performance Assessment of Low-GWP Refrigerant R1233zd(E) Applied in High Temperature Heat Pump System. **2021**, 131, 897-897	1
564	Performance of the Condensation Process for Water Vapour in the Presence of a Non-Condensable Gas on Vertical Plates and Horizontal Tubes. **2021**, 14, 2291	1
563	Experimental study on a high efficient and ultra-lean burn meso-scale thermoelectric system based on porous media combustion. **2021**, 234, 113966	5
562	Organic Rankine Cycle Optimization Performance Analysis Based on Super-Heater Pressure: Comparison of Working Fluids. **2021**, 14, 2548	4
561	Thermoeconomic analysis of CO2 Ejector-Expansion Refrigeration Cycle (EERC) for low-temperature refrigeration in warm climates. **2021**, 188, 116613	8
560	Heat transfer investigation of a 90° zigzag channel diffusion-bonded heat exchanger. **2021**, 190, 116823	3
559	Design and optimization strategy for ejectors applied in refrigeration cycles. **2021**, 189, 116682	6
558	Application of the resonant energy separation effect at natural gas reduction points in order to improve the energy efficiency of the gas distribution system. 248, 253-259	3
557	Experimental performance analysis of a CO2 direct-expansion solar assisted heat pump water heater. **2021**, 125, 52-63	4
556	A new oscillatory instability in Rayleigh□Bénard convection of a binary mixture with positive separation ratio. **2021**, 33, 054113	4
555	Comprehensive comparison of various working media and corresponding power cycle layouts for the helium-cooled DEMO reactor. **2021**, 166, 112287	1
554	Analysis of heat extraction performance and long-term sustainability for multiple deep borehole heat exchanger array: A project-based study. **2021**, 289, 116590	16
553	Thermodynamic modeling of hydrogen refueling for heavy-duty fuel cell buses and comparison with aggregated real data. **2021**, 46, 18630-18643	6
552	Numerical and experimental study of the transient behavior of a domestic vapor compression refrigeration system □nfluence of refrigerant charge and ambient temperature. **2021**, 190, 116728	4
551	Impact of the expander lubricant oil on the performance of the plate heat exchangers and the scroll expander in a micro-scale organic Rankine cycle system. **2021**, 189, 116714	4
550	Part-load performance prediction model for supercritical CO2 radial inflow turbines. **2021**, 235, 113964	5

549	Influence of inlet vapour quality perturbations on the transient response of flow-boiling heat transfer. **2021**, 170, 121017		2
548	Performance characteristics and working fluid selection for high-temperature organic Rankine cycle driven by solar parabolic trough collector.		1
547	Enhanced thermal efficiency organic Rankine cycle for renewable power generation. **2021**, 189, 116706		1
546	Speed-of-Sound Measurements and a Fundamental Equation of State for Propylene Glycol. **2021**, 50, 023105		3
545	Comparison of Gravity Independence Criteria for Two-Phase Flow. 1-13		1
544	Hybrid Hydrogen Home Storage for Decentralized Energy Autonomy. **2021**, 46, 21748-21763		10
543	Numerical Simulation of the Two-Dimensional Heat Diffusion in the Cold Substrate and Performance Analysis of a Thermoelectric Air Cooler Using The Lattice Boltzmann Method. **2021**, 7, 1		1
542	Recommended Correlations for the Surface Tension of n-Alkanes. **2021**, 50, 023104		5
541	Survey of Data and Models for Refrigerant Mixtures Containing Halogenated Olefins. **2021**, 66, 2335-2354		8
540	Multi-Phase Impact on the Heat Load Characteristics of a Multi-Element Methane-Oxygen Rocket Thrust Chamber. **2021**, 172, 121113		0
539	On Direct Injection of Supercritical Water into Spark Ignition Engines as a Strategy for Heat Recovery. **2021**, 9, 2100198		0
538	Superancillary Equations for Cubic Equations of State. *Industrial & Engineering Chemistry Research*, **2021**, 60, 9983-9991	3.9	3
537	Effect of nonideal fluid behavior on the jet mixing process under high-pressure and supersonic flow conditions. **2021**, 172, 105195		2
536	Adsorption of difluoromethane onto activated carbon based composites: Thermophysical properties and adsorption characterization. **2021**, 171, 121112		6
535	Techno-economic feasibility analysis of zeotropic mixtures and pure fluids for organic Rankine cycle systems. **2021**, 192, 116791		9
534	Assessing the use of copper slags as thermal energy storage material for packed-bed systems. **2021**, 227, 120370		8
533	A detailed study of the transient behavior of dual-skin chest-freezer with R290. **2021**, 131, 300-300		0
532	Optimized operation of recompression sCO2 Brayton cycle based on adjustable recompression fraction under variable conditions. **2021**, 227, 120334		6

531	Sensitivity of the Non-Equilibrium Approach for Mixture Condensation to Heat and Mass Transfer Correlations and Thermophysical Properties. **2021**, 143,	0
530	Assessment of Electrical and Thermal Performance of Photovoltaic Thermal Air Collector in the Climate of Pantnagar, Uttarakhand. **2021**, 1168, 012016	
529	TES-PD: A Fast and Reliable Numerical Model to Predict the Performance of Thermal Reservoir for Electricity Energy Storage Units. **2021**, 6, 256	2
528	Sizing and control rules of dedicated mechanical subcooler in transcritical CO2 booster systems for commercial refrigeration. **2021**, 193, 116953	4
527	Performance Analysis and Optimization of a Series Heat Exchangers Organic Rankine Cycle Utilizing Multi-Heat Sources from a Marine Diesel Engine. **2021**, 23,	2
526	A proposed new model for the prediction of latitude-dependent atmospheric pressures at altitude. **2021**, 27, 1221-1242	0
525	Direct numerical simulation of a supercritical hydrothermal flame in a turbulent jet. **2021**, 922,	1
524	Thermodynamic analysis of chemical precooled turbine combined engine cycle. **2021**, 239, 114184	4
523	An experimental study of the thermohydraulic characteristics of flow boiling in horizontal pipes: Linking spatiotemporally resolved and integral measurements. **2021**, 194, 117085	3
522	Comparative study of the supercritical carbon-dioxide recompression Brayton cycle with different control strategies. **2021**, 137, 103770	2
521	Estimation of the utility value of unused heat sources for a CO2 network system in Tokyo. **2021**, 226, 120302	
520	Compound-choking theory for supersonic ejectors working with real gas. **2021**, 227, 120396	5
519	Sensitivity of Hybrid NEP-Chemical Vehicle Mass to Assumptions for Crewed Opposition-Class Mars Missions. **2021**,	0
518	Dynamic Crossover in Fluids: From Hard Spheres to Molecules. **2021**, 12, 6411-6417	9
517	Thermodynamic Evaluation Of Solid Oxide Fuel Cells Converting Biogas Into Hydrogen And Electricity. **2021**, 24, 204-214	1
516	Validation of a multi-circuit heat exchanger model for evaluating the effect of refrigerant circuitry on cross-fin conduction in evaporator mode. **2021**,	1
515	Simulation of multi-species flow and heat transfer using physics-informed neural networks. **2021**, 33, 087101	8
514	Vapour quality determination for heat pumps using two-phase suction. **2021**, 131, 766-766	

513	Entropy Scaling of Thermal Conductivity: Application to Refrigerants and Their Mixtures. *Industrial & Engineering Chemistry Research*, **2021**, 60, 13052-13070	3.9	3
512	Thermodynamic Analysis for Industrial Refrigeration Systems. **2021**, 6, 1-111		1
511	Dynamic Viscosity of Binary Fluid Mixtures: A Review Focusing on Asymmetric Mixtures. **2021**, 42, 1		3
510	Design of Promising Working Fluids for Emergent Combined Cooling, Heating, and Power (CCHP) Systems. **2021**, 9, 11807-11824		1
509	Acoustic modes of rapidly rotating ellipsoids subject to centrifugal gravity. **2021**, 150, 1467		0
508	Towards improvement of waste heat recovery systems: A multi-objective optimization of different organic Rankine cycle configurations. **2021**, 11, 100100		5
507	Experimental performance analysis of a novel ultra-low charge ammonia air condensed chiller. **2021**, 195, 117117		0
506	Development of Generic Superconducting Components Library in MATLAB/Simulink for Thermal-Hydraulic Analyses. **2021**, 31, 1-5		0
505	An Ultra-Low Temperature Transcritical R744 Refrigeration System for Future Detectors at CERN LHC. **2021**, 11, 7399		0
504	Optimization of S-CO2 power conversion layouts with energy storage for the pulsed DEMO reactor. **2021**, 169, 112609		1
503	A New Computational Tool for the Development of Advanced Exergy Analysis and LCA on Single Effect LiBr-H2O Solar Absorption Refrigeration System. **2021**, 9, 76		1
502	Towards chemical equilibrium in thermochemical water splitting. Part 1: Thermal reduction. **2021**,		0
501	Accuracy and efficient solution of helical coiled once-through steam generator model using JFNK method. **2021**, 159, 108290		7
500	Pressure-Based Energy Storage in Natural Gas Transmission Networks: Proof-of-Concept Analysis. **2022**, 144,		1
499	Thermodynamic analysis and optimization of a multi-stage compression system for CO2 injection unit: NSGA-II and gradient-based methods. **2021**, 43, 1		1
498	Multi-objective optimization of biogas systems producing hydrogen and electricity with solid oxide fuel cells. **2021**,		0
497	Impact of neglecting the variations in the relative surface roughnesses of capillary tubes on the accuracy of a capillary tube model. **2021**, 129, 194-203		
496	Thermodynamic analysis of auto-cascade refrigeration cycles, with and without ejector, for ultra low temperature freezing using a mixture of refrigerants R600a and R1150. **2021**, 117598		6

495	A numerical study of supercritical carbon dioxide as a medium for thermal energy storage applications under natural convection. 1-23	3
494	Effects of Lubricating oil on the performance of a Four-Intersecting-Vane Rotary Expander. **2021**, 1180, 012030	1
493	Energy analysis of a solar driven vaccine refrigerator using environment-friendly refrigerants for off-grid locations. **2021**, 11, 100095	1
492	Graph-based configuration optimization for S-CO2 power generation systems. **2021**, 244, 114448	2
491	Proper Orthogonal Decomposition for Reduced Order Dynamic Modeling of Vapor Compression Systems. **2021**,	0
490	Gasification of Coal by CO2: The Impact of the Heat Transfer Limitation on the Progress, Reaction Rate and Kinetics of the Process. **2021**, 14, 5569	1
489	The IRC-PD Tool: A Code to Design Steam and Organic Waste Heat Recovery Units. **2021**, 14, 5611	0
488	Numerical evaluation of a Carnot battery system comprising a chemical heat storage/pump and a Brayton cycle. **2021**, 41, 102955	4
487	COMANDO: A Next-Generation Open-Source Framework for Energy Systems Optimization. **2021**, 152, 107366	6
486	Equations of State for the Thermodynamic Properties of Three Hexane Isomers: 3-Methylpentane, 2,2-Dimethylbutane, and 2,3-Dimethylbutane. **2021**, 50, 033103	1
485	Numerical Analysis of a Water-Cooled Condenser at Startup Conditions for Refrigeration Applications Supported with Experiments.	
484	Energy and exergy analysis of an absorption system with working pairs LiBr-H2O and Carrol-H2O at applications of cooling and heating. **2021**, 132, 156-156	1
483	Experimental investigation of self-pressurized propellant injection into a simulated rocket motor combustion chamber. **2021**, 142, 103707	2
482	Design Parameter Influence on Losses and Downstream Flow Field Uniformity in Supersonic ORC Radial-Inflow Turbine Stators. **2021**, 6, 38	1
481	Organic Rankine Cycle-Ground Source Heat Pump with Seasonal Energy Storage Based Micro-Cogeneration System in Cold Climates: The Case for Canada. **2021**, 14, 5705	
480	CFD modelling of the isobaric evaporation of cryogenic liquids in storage tanks. **2021**, 176, 121419	4
479	Recommended Correlations for the Surface Tension of 80 Esters. **2021**, 50, 033106	2
478	Development of an Analytic Convection Model for a Heated Multi-Hole Probe for Aircraft Applications. **2021**, 21,	

477	A Fast-Reduced Model for an Innovative Latent Thermal Energy Storage for Direct Integration in Heat Pumps. **2021**, 11, 8972	2
476	Heat Exchangers in Carnot Batteries: Condensation and Evaporation in a Reversible Device. **2021**, 14, 5620	2
475	Experimental study of an organic Rankine cycle with R1233zd(E) for waste heat recovery from the coolant of a heavy-duty truck engine. **2021**, 244, 114500	2
474	Modeling and parameter sensitivity analysis of fluidized bed solid particle/sCO2 heat exchanger for concentrated solar power plant. **2021**, 197, 117429	3
473	Evaluation of the property methods for pure and mixture of CO2 for power cycles analysis. **2021**, 245, 114568	3
472	Energy, Exergy, Exergoeconomic, and environmental (4E) analyses of thermal power plants for municipal solid waste to energy application in Bangladesh. **2021**, 134, 136-148	2
471	The effect of boiling in a thermosyphon on surface tension and contact angle of silica and graphene oxide nanofluids. **2021**, 627, 127082	6
470	Thermoeconomic analysis of improved exhaust waste heat recovery system for natural gas engine based on Vortex Tube heat booster and supercritical CO2 Brayton cycle. **2021**, 47, 101355	2
469	Convective condensation of R600a, R290, R1270 and their zeotropic binary mixtures in horizontal tubes. **2021**, 130, 27-43	5
468	Pseudo-boiling and concentration gradient in an enclosed supercritical binary mixture. **2021**, 177, 121544	0
467	Subsurface renewable energy storage capacity for hydrogen, methane and compressed air □A performance assessment study from the North German Basin. **2021**, 149, 111422	6
466	Teaching chemical engineering using Jupyter notebook: Problem generators and lecturing tools. **2021**, 37, 1-10	3
465	Global optimization of a vapor compression refrigeration system with a self-adaptive differential evolution algorithm. **2021**, 197, 117427	3
464	Flow boiling of hydrocarbons and their zeotropic binary mixtures under pre- and post-dryout conditions. **2021**, 198, 117483	1
463	Frosting in heat pump evaporators part A: Experimental investigation. **2021**, 199, 117487	5
462	Machine learning and CFD for mapping and optimization of CO2 ejectors. **2021**, 199, 117604	4
461	Optimal design of power hubs for offshore petroleum platforms. **2021**, 235, 121353	2
460	Solar and biomass hybridization through hydrothermal carbonization. **2021**, 177, 268-279	3

459	Equation of state based analytical formulation for optimization of sCO2 Brayton cycle. **2021**, 177, 105351	1
458	Effect of low heat and mass fluxes on the boiling heat transfer coefficient of R-245fa. **2021**, 180, 121743	2
457	High pressure viscosity measurements of ternary (methane + propane + heptane) mixtures. **2021**, 223, 106984	0
456	Analytic models and effective resistances for coaxial ground heat exchangers. **2021**, 97, 102224	1
455	Comparative performance evaluation of the mechanical and adsorption hybrid cooling systems for the cascaded and the serial connected evaporators configurations. **2021**, 28, 101489	0
454	Gas solubility and diffusivity of hydrofluorocarbons and hydrofluoroolefins in cyanide-based ionic liquids for the separation of refrigerant mixtures. **2021**, 549, 113210	4
453	The impact of the thermal lag on the interpretation of cellulose pyrolysis. **2021**, 236, 121497	6
452	Spray characteristics of biofuels for advance combustion engines. **2021**, 5, 100265	1
451	Absorption separation of fluorinated refrigerant gases with ionic liquids: Equilibrium, mass transport, and process design. **2021**, 276, 119363	9
450	Experimental investigation of the influence of boiling-induced ageing on high heat flux flow boiling in a copper microchannel. **2021**, 181, 121862	0
449	Thermodynamic optimization of the indirect precooled engine cycle using the method of cascade utilization of cold sources. **2022**, 238, 121769	2
448	Ocean Thermal Energy Converters. **2022**, 161-185	
447	Analysis of a transpiration cooled LOX/CH4 rocket thrust chamber. **2022**, 182, 121986	2
446	Exhaust waste heat recovery from a heavy-duty truck engine: Experiments and simulations. **2022**, 238, 121698	0
445	Techno-economic evaluation of integrated energy systems for heat recovery applications in food retail buildings. **2022**, 305, 117799	3
444	Dynamic simulation of solar-powered ORC using open-source tools: A case study combining SAM and coolprop via Python. **2022**, 239, 121935	2
443	Experimental investigation of internal leakages and effects of lubricating oil on the performance of a four-intersecting-vane rotary expander. **2022**, 238, 121689	1
442	3D simulation of a ballistic direct injection cycle for the assessment of fuel property effects on cavitating injector internal flow dynamics and primary breakup. **2022**, 308, 121775	0

441	Influence of non-steady transient heat flux on flow boiling heat transfer and pressure drop in horizontal pipes. **2022**, 182, 121927	1
440	Experimental demonstration of an air-source heat pump application using an integrated phase change material storage as a desuperheater for domestic hot water generation. **2022**, 305, 117890	3
439	Application of Taguchi and ANOVA methods in the optimisation of a direct evaporative cooling pad. **2021**, 14, 1218-1228	0
438	Modeling of supersonic jet behavior in the vacuum refining process. **2021**, 118, 114	1
437	Sinking CO2 in supercritical reservoirs.	1
436	Detailed Performance Assessment of Variable Capacity Inverter-Driven Cold Climate Air Source Heat Pumps. **2019**, 441-451	2
435	On the Consideration of Diffusive Fluxes Within High-Pressure Injections. **2021**, 195-208	1
434	Adaptive boundary observer design for linear hyperbolic systems; Application to estimation in heat exchangers. **2020**, 114, 108824	6
433	Performance Evaluation and Comparison of Experimental Organic Rankine Cycle Prototypes from Published Data. **2017**, 105, 1706-1711	6
432	Exergetic and integrated exergoeconomic assessments of a hybrid solar-biomass organic Rankine cycle cogeneration plant. **2020**, 215, 112905	25
431	Thermodynamic analysis and optimization of supercritical carbon dioxide Brayton cycles for use with low-grade geothermal heat sources. **2020**, 216, 112978	24
430	Optimal energy supply structures for industrial food processing sites in different countries considering energy transitions. **2018**, 146, 112-123	18
429	Heat transfer and flow resistance analysis of a novel freeze-cast regenerator. **2020**, 155, 119772	9
428	A sequential approach for achieving separate sensible and latent cooling. **2020**, 117, 104-113	2
427	Robust optimization of an organic Rankine cycle for geothermal application. **2020**, 161, 1120-1129	6
426	Refrigerant selection for ejector refrigeration systems: a multiscale evaluation. **2020**, 197, 10011	1
425	Design and CFD Analysis of a Radial-Inflow Turbine for Small Scale ORC Applications. **2020**, 197, 11005	2
424	Experimental study of convection in the compressible regime. **2019**, 4,	3

423	Experimental and numerical investigation of phase separation due to multicomponent mixing at high-pressure conditions. **2019**, 4,	21
422	Development and Application of a Thin Flat Heat Pipe Design Optimization Tool for Small Satellite Systems. **2021**, 143,	1
421	THERMODYNAMICS OF TYPE II KEROGEN TRANSFORMATION. **2019**, 3, 25-40	0
420	MCycle: A Python package for 1D sizing and analysis of thermodynamic power cycles. **2018**, 3, 710	1
419	TESPy: Thermal Engineering Systems in Python. **2020**, 5, 2178	12
418	Thermosteam: BioSTEAM's Premier Thermodynamic Engine. **2020**, 5, 2814	4
417	GEODYNAMICS. **2021**, 2(29)2020, 79-88	0
416	Empirical Fundamental Equations of State for Pure Fluids and Mixtures. **2020**, 365-407	7
415	Design and Optimization of Ram Air‐Based Thermal Management Systems for Hybrid-Electric Aircraft. **2021**, 8, 3	13
414	Structured Mesh Generation and Numerical Analysis of a Scroll Expander in an Open-Source Environment. **2020**, 13, 666	7
413	A Multi-Domain Component Based Modeling Toolset for Dynamic Integrated Power and Thermal System Modeling.	0
412	How to Improve SI Engine Performances by Means of Supercritical Water Injection.	2
411	Sizing the thermal energy storage (TES) device for organic Rankine cycle (ORC) power systems. **2021**, 345, 00018	1
410	The efficiency of transcritical CO2 cycle near critical point and with high temperature. **2021**, 345, 00005	
409	Identifying and evaluating symbiotic opportunities for wood processing through techno-economic superstructure optimisation – A methodology and case study for the Kawerau industrial cluster in New Zealand. **2021**, 129494	0
408	Thermodynamic efficiency of trilateral flash cycle, organic Rankine cycle and partially evaporated organic Rankine cycle. **2021**, 249, 114731	3
407	Coupled power plant and geostorage simulations of porous media compressed air energy storage (PM-CAES). **2021**, 249, 114849	1
406	Design and performance of a new type of boiler using concentrated solar flux. **2021**, 249, 114835	

405	ThermoState: A state manager for thermodynamics courses. **2018**, 1, 33	0
404	Thermomanagement. **2019**, 811-850	
403	Equilibrium temperatures of hydrocarbon gas formation in sedimentary strata of the Western oil and gas region of Ukraine (according to thermodynamic modelling). **2019**, 4, 66-77	
402	GIBBS FREE ENERGY OF NATURAL GAS COMPONENTS FORMATION IN SEDIMENTARY STRATA. **2019**, 2, 37-46	1
401	HYBRID ELECTRIC POWERTRAIN FOR LONG-HAUL TRUCKS AND BUSES: PRELIMINARY ANALYSIS OF A NEW CONCEPT BASED ON A COMBINED CYCLE POWER PLANT. **2020**, 4, 63-79	
400	Thermodynamic and Thermophysical Properties of Dry Air by Using Cubic Peng-Robinson EoS for Gas Mixtures. **2020**, 23, 139-145	
399	Sinking CO2 in supercritical reservoirs Key points.	
398	A Reference Correlation for the Viscosity of Krypton From Entropy Scaling. **2022**, 43, 1	2
397	Configuration Selection of the Multi-Loop Organic Rankine Cycle for Recovering Energy from a Single Source. **2021**, 23,	1
396	A new indicator for minimizing size of an orc power plant based on heat exchanger and turbine design parameters. **2021**, 117750	1
395	Feasibility of a Helium Closed-Cycle Gas Turbine for UAV Propulsion. **2021**, 11, 28	0
394	Numerical analysis and optimization of the performance of CO2-Plume Geothermal (CPG) production wells and implications for electric power generation. **2022**, 98, 102270	4
393	Analytic characterization and operational limits of a hybrid two-phase mechanically pumped fluid loop based on the capillary pumped loop. **2022**, 183, 122019	1
392	A Quasi-dimensional Numerical Investigation of the Scroll Expander of an Organic Rankine Cycle Unit. **2020**, 197, 11001	
391	Waste heat recovery from a heavy-duty natural gas engine by Organic Rankine Cycle. **2020**, 197, 06023	0
390	Development of a New Ejector Performance Map for Design of an Automotive Air Conditioning System.	
389	Multi-Row Adjoint-Based Optimization of NICFD Turbomachinery Using a Cad-Based Parametrization. **2021**,	1
388	Work in Progress: Using Jupyter Notebooks to Climb Bloom□ Taxonomy in Thermodynamics.	

387	Numerical Simulation of Direct Solar Vapor Generation of Acetone for an Organic Rankine Cycle Using an Evacuated Tube Collector. **2021**, 143,		2
386	Application of the group contribution volume translated Peng-Robinson equation of state to new commercial refrigerant mixtures. **2019**, 103,		1
385	Deep learning inversion of gravity data for detection of CO2 plumes in overlying aquifers. **2022**, 196, 104507		1
384	Smooth implicit hybrid upwinding for compositional multiphase flow in porous media. **2022**, 388, 114288		2
383	Off-design operation of the dry-cooled supercritical CO2 power cycle. **2022**, 251, 114903		1
382	Experimental Investigation of Near- and Supercritical Heat Transfer to R125 Flowing in a Horizontal Tube. **2022**, 183, 122179		0
381	Exergy assessment of a multistage multi-evaporator vapor compression refrigeration system using eighteen refrigerants. **2022**, 8, 153-162		3
380	A Comparison of the Thermohydraulic Performance of Oil-Cooled Heat Sink Geometries for Power Electronics. **2021**,		
379	Performance assessment of R1234ze(E) as a low GWP substitute to R410A in fin-and-tube heat exchangers. **2021**,		0
378	One-Dimensional Systemic Modeling of Thermal Sensors Based on Miniature Bead-Type Thermistors. **2021**, 21,		
377	Testing the Modified Subchannel TEMPA-SC Code in Comparison with Experiments and Other Computer Codes. **2021**,		
376	Equations of State for the Thermodynamic Properties of n-Perfluorobutane, n-Perfluoropentane, and n-Perfluorohexane. *Industrial & Engineering Chemistry Research*, **2021**, 60, 17207-17227	3.9	3
375	Conjugate heat transfer numerical study of the ejector by means of SU2 solver. **2021**, 2088, 012004		
374	Numerical and Experimental Investigation of Wire Cloth Heat Exchanger for Latent Heat Storages. **2021**, 14, 7542		
373	Assessment of Organic Rankine Cycle Part-Load Performance as Gas Turbine Bottoming Cycle with Variable Area Nozzle Turbine Technology. **2021**, 14, 7916		0
372	Analysis of hybrid compression absorption refrigeration using low-GWP HFC or HFO/ionic liquid working pairs. **2021**,		1
371	Theoretical modelling and experimental investigation of the modified revolving vane expander (M-RVE). **2021**, 252, 114997		
370	Techno-Economic Analysis of a Concentrating Solar Power Plant Using Redox-Active Metal Oxides as Heat Transfer Fluid and Storage Media. **2021**, 9,		0

369	Techno-economic analysis of recuperated Joule-Brayton pumped thermal energy storage. **2021**, 252, 115016	3
368	Alternative Propellant Nuclear Thermal Propulsion Engine Architectures. 1-11	0
367	Modeling of heat leak effect in round trip efficiency for Brayton pumped heat energy storage with liquid media, by cooling and heating of the reservoirs tanks. **2022**, 46, 103793	0
366	Extremum analysis based on exergy and economic principle for ejector-absorption cycles combined with regenerative organic-Rankine and gas-turbine cycles. **2022**, 253, 115174	0
365	Study on a near-zero emission SOFC-based multi-generation system combined with organic Rankine cycle and transcritical CO2 cycle for LNG cold energy recovery. **2022**, 253, 115188	2
364	Techno-Economic Performance of Closed-Loop Geothermal Systems for Heat Production and Electricity Generation. **2022**, 100, 102318	3
363	A lumped-element magnetic refrigerator model. **2022**, 204, 117918	1
362	Robustness analysis in supercritical CO2 power generation system configuration optimization. **2022**, 242, 122956	1
361	Design of a rapid transit to Mars mission using laser-thermal propulsion. **2022**, 192, 143-156	0
360	Detailed transient assessment of a small-scale concentrated solar power plant based on the organic Rankine cycle. **2022**, 204, 117959	2
359	The effect of circumferentially non-uniform heat flux on flow boiling heat transfer in a horizontal tube. **2022**, 185, 122428	0
358	A review on the performance and environmental assessment of R-410A alternative refrigerants. **2022**, 47, 103847	2
357	Integral identification of fluid specific heat capacity and heat transfer coefficient distribution in heat exchangers based on multiple-case joint analysis. **2022**, 185, 122394	0
356	Model-based Electronic Expansion Valve Feed-forward Control for Electrified Automotive Vapor Compression Refrigeration System. **2020**,	1
355	Modeling and Identification of an Automotive Refrigerant Circuit with two Parallel Evaporators. **2020**,	
354	Lumped parameter modelling of two-phase ejectors: numerical implications of the equilibrium assumptions. **2021**, 2116, 012089	
353	Vapor Compression Refrigeration Testing on Parabolic Flights: Part 1 - Cycle Stability. **2022**,	1
352	Abandoned Wells and Geothermal Energy: A Survey on the Utilization of Geothermal Heat from Abandoned Wells in Energy Systems. **2022**, 337-355	1

351	Group Contribution and Machine Learning Approaches to Predict Abraham Solute Parameters, Solvation Free Energy, and Solvation Enthalpy.. **2022**,		6
350	Sizing the Thermal Energy Storage Device Utilizing Phase Change Material (PCM) for Low-Temperature Organic Rankine Cycle Systems Employing Selected Hydrocarbons. **2022**, 15, 956		2
349	Short nozzles design for real gas supersonic flow using the method of characteristics. **2022**, 207, 118063		1
348	Basic Equations and Physical Properties of a Reference Binary Mixture. **2022**, 21-30		
347	NiceProp: An interactive Python-based educational tool for non-ideal compressible fluid dynamics. **2022**, 17, 100897		
346	Experimental Flow Boiling Study of R245a at High Reduced Pressures in a Large Diameter Horizontal Tube. **2022**, 15, 864		0
345	Nonuniform Collective Dissolution of Bubbles in Regular Pore Networks. **2022**, 141, 649		0
344	Modeling of Supercritical Co2 Shell-and-Tube Heat Exchangers Under Extreme Conditions. Part 2: Heat Exchanger Model. **2022**,		0
343	Solar Desalination Driven by Organic Rankine Cycles (Orc) and Supercritical CO2 Power Cycles: An Update. **2022**, 10, 153		1
342	Condensation of water vapor from humid air inside vertical channels formed by flat plates.. **2022**, 25, 103565		1
341	Effects of crystal formation on the initial frost thickness and density on cold surfaces. **2022**,		
340	Algorithm to Identify Vapor□liquid□liquid Equilibria of Binary Mixtures from Vapor□liquid Equilibria. *Industrial & Engineering Chemistry Research*,	3.9	2
339	Solar-driven liquid air power plant modeling, design space exploration, and multi-objective optimization. **2022**, 246, 123324		0
338	Evaluating the measurement uncertainty at hydrogen refueling stations using a Bayesian non-parametric approach. **2022**, 47, 7892-7901		1
337	A general approach to integrating compression heat pumps into biomass heating networks for heat recovery. **2022**, 310, 118559		0
336	Application of a novel heat pump model for estimating economic viability and barriers of heat pumps in dairy applications in the United States. **2022**, 310, 118499		1
335	A thermal efficiency-enhancing strategy of parabolic trough collector systems by cascadingly applying multiple solar selective-absorbing coatings. **2022**, 309, 118508		1
334	Experimental investigation of a splitting CO2 transcritical power cycle in engine waste heat recovery. **2022**, 244, 123126		0

333	Heat transfer characteristics of flow boiling in a micro channel array with various inlet geometries. **2022**, 187, 122549	0
332	Optimization of the Adsorption/Desorption Contribution from Metal-Organic-Heat-Carrier Nanoparticles in Waste Heat Recovery Applications: R245fa/MIL101 in Organic Rankine Cycles. **2022**, 15, 1138	0
331	Multi-Objective Optimization of a Hydrogen Hub for the Decarbonization of a Port Industrial Area. **2022**, 10, 231	1
330	Experimental evaluation of R32, R452B and R454B as alternative refrigerants for R410A in a refrigeration system. **2021**,	2
329	Current distribution modeling in the open-source OPENSC2 tool for the multi-physics analysis of HTS and LTS cables. **2022**, 1-1	1
328	Optimization of seawater desalination systems. **2022**, 439-496	
327	Experimental Investigation on the Dynamics of an Organic Rankine Cycle Evaporator with Large-Mass Fins for the Purpose of Reducing Heat Input Fluctuations.	
326	A Novel Desiccant-Based Cooling System for Hot and Humid Climates. **2022**, 673-685	
325	Reference surface excess isotherms for carbon dioxide adsorption on ammonium ZSM-5 at various temperatures. **2022**, 28, 15-25	
324	2Analysis on influence factors of back pressure in an asymmetrical algebraic scroll compressor. **2022**,	1
323	Compressible high-pressure lubrication flows in thrust bearings. **2022**, 939,	
322	A Preliminary Design and Modeling Analysis of Two-Phase Volumetric Expanders for a Novel Reversible Organic Rankine-Based Cycle for Carnot Battery Technology. **2022**, 12, 3557	0
321	Waste Heat Recovery in Automotive Paint Shop via Organic Rankine Cycle and Thermal Energy Storage SystemSelected Thermodynamic Issues. **2022**, 15, 2239	0
320	Thermodynamic Irreversibility Analysis of Dual-Skin Chest-Freezer.. **2022**, 24,	0
319	Preliminary Results for In-Situ Alternative Propellants for Nuclear Thermal Propulsion. 1-11	0
318	Mixture Models for Refrigerants R-1234yf/134a, R-1234yf/1234ze(E), and R-134a/1234ze(E) and Interim Models for R-125/1234yf, R-1234ze(E)/227ea, and R-1234yf/152a. **2022**, 51, 013103	2
317	Solidified-Air Energy Storage: Conceptualization and Thermodynamic Analysis. **2022**, 15, 2159	
316	Techno-economical evaluation of renewable hydrogen production through concentrated solar energy. **2022**, 258, 115372	0

315	Experimental and Theoretical Investigation of Nucleation Site Density and Heat Transfer During Dropwise Condensation on Thin Hydrophobic Coatings. **2022**, 144,	
314	Analysis of Turbomachinery Losses in sCO2 Brayton Power Blocks. **2022**, 144,	
313	Holistic energy flow analysis of a solar driven thermo-chemical reactor set-up for sustainable hydrogen production. **2022**, 189, 1358-1374	0
312	Operation and performance of Brayton Pumped Thermal Energy Storage with additional latent storage. **2022**, 312, 118700	3
311	Self-excited instability regimes of a confined turbulent jet flame at elevated pressure. **2022**, 34, 044103	2
310	Economic and environmental assessment of a CO2 solar-powered plant with packed-bed thermal energy storage. **2022**, 314, 118913	0
309	Modeling of turbulent deflagration behaviors of premixed hydrogen-air in closed space with obstacles. **2022**, 161, 506-519	0
308	A methodology for techno-economic evaluation of asymmetric energy storage systems: A nuclear energy case study. **2022**, 147, 104127	
307	Thermodynamic assessment of a triple cascade refrigeration system utilizing hydrocarbon refrigerants for ultra-low temperature applications. **2022**, 14, 100207	0
306	Techno-economic performances of active condensation in a medium-scale biomass-fired district heating unit. **2022**, 33, 101914	
305	Optimization of heat exchanger design taking corrosion into account. **2022**, 30, 101277	1
304	Adsorption of difluoromethane onto activated carbon based composites: Adsorption kinetics, heat of adsorption, cooling performance and irreversibility evaluation. **2022**, 210, 118359	3
303	On the performance improvement of an inverted Brayton Cycle using a regenerative heat and mass exchanger. **2022**, 249, 123726	0
302	Performance comparison of three chemical precooled turbine engine cycles using methanol and n-decane as the precooling fuels. **2022**, 249, 123606	1
301	Comparative investigation of low-GWP binary and ternary blends as potential replacements of HFC refrigerants for air conditioning systems. **2022**, 210, 118354	1
300	Analysis and comparison of innovative large scale thermo-mechanical closed cycle energy storages. **2022**, 249, 123629	1
299	Fusion DEMO sCO2 layout design with battery farm. **2022**, 249, 123730	0
298	Analysis of transcritical CO2 vortex tube performance using a real gas thermodynamic model. **2022**, 177, 107555	0

297	A performance analysis of the spray-type packed bed thermal energy storage for concentrating solar power generation. **2022**, 51, 104187	0
296	Thermodynamic analysis for a novel steam Rankine cycle based indirect chemical precooled engine used for supersonic flight. **2022**, 321, 123956	0
295	The second law analysis of a humidification-dehumidification desalination system using M-cycle. **2022**, 52, 102141	0
294	Optimization of Sizing and Operation Strategy of Distributed Generation System Based on a Gas Turbine and Renewable Energy. **2021**, 14, 8448	1
293	Assessment of Low Global Warming Potential Refrigerants for Drop-In Replacement by Connecting their Molecular Features to Their Performance.. **2021**, 9, 17034-17048	4
292	Design and Optimization of a Radial Inflow Turbine for Use with a Low Temperature ORC. **2021**, 14, 8526	0
291	Fuel cell behavior and energy balance on board a Hyundai Nexo. 146808742110590	3
290	Surrogate Models Applied to Optimized Organic Rankine Cycles. **2021**, 14, 8456	1
289	Simulation and Exergy Analysis of a Refrigeration System Using an Open-Source Web-Based Interactive Tool□Comparison of the Conventional Approach and a Novel One for Avoidable Exergy Destruction Estimation. **2021**, 11, 11535	1
288	Thermodynamic Optimization of Low-Temperature Cycles for the Power Industry. **2022**, 15, 2979	0
287	Inclination Dependence of a Liquid-to-Liquid Vapor Compression Cycle Against Changes of the Inclination Angle. **2022**, 101305	
286	Assessment and development of the Viscosity prediction capabilities of entropy scaling method coupled with a modified binary interaction parameter estimation model for refrigerant blends. **2022**, 119184	0
285	Heat Transfer and Pressure Drop in Single-Phase Flows in Tapered Microchannels. **2022**,	0
284	Novel decision-making strategy for working fluid selection in Organic Rankine Cycle: A case study for waste heat recovery of a marine diesel engine. **2022**, 124023	1
283	A Comparative Study of Cooling Sources in Organic Rankine Cycle for Low-Temperature Geothermal Heat Sources. **2022**, 1014, 012008	1
282	Assessment of power-to-power renewable energy storage based on the smart integration of hydrogen and micro gas turbine technologies. **2022**,	1
281	Parametric optimization and comparative study of an organic Rankine cycle power plant for two-phase geothermal sources. **2022**, 123910	1
280	Study on high-temperature hydrogen dissociation for nuclear thermal propulsion reactor. **2022**, 392, 111753	0

279	Data_Sheet_1.zip. **2020**,		
278	Table_1.pdf. **2020**,		
277	Table_2.XLSX. **2020**,		
276	Numerical Investigation of Slug Flow in Pulsating Heat Pipes Using an Interface Capturing Approach.		
275	Design and Optimal Thermal Efficiency Analysis on Closed Brayton Cycle System of Fluoride-Salt-Cooled High-Temperature Advanced Reactor (Fustar).		
274	Modelling and Parametric Analysis of a Brine Treatment Unit Using a High-Temperature Heat Pump and a Vacuum Evaporator. **2022**, 12, 4542		
273	The resin sealed column (RESECO) setup for flow-through experiments on solid rocks under high temperature and high pore pressure conditions.		
272	Capability of commercial trackers as compensators for the absolute refractive index of air. **2022**,		1
271	Implementing an Equation of State without Derivatives: teqp. *Industrial & Engineering Chemistry Research*, **2022**, 61, 6010-6027	3.9	5
270	Clapeyron.jl: An Extensible, Open-Source Fluid Thermodynamics Toolkit. *Industrial & Engineering Chemistry Research*,	3.9	4
269	Design of a Battery Cooling System for Hybrid Electric Aircraft. 1-16		0
268	Opportunities and data requirements for data-driven prognostics and health management in liquid hydrogen storage systems. **2022**,		0
267	Numerical Study on the Long-Term Performance and Load Imbalance Ratio for Medium-Shallow Borehole Heat Exchanger System. **2022**, 15, 3444		1
266	Low and Ultra-Low Temperature District Heating Equipped by Heat Pumps: An Analysis of the Best Operative Conditions for a Swiss Case Study. **2022**, 15, 3344		0
265	Direct cooling from the regenerators of Gifford-McMahon cryocoolers, with comparison to pulse tube refrigerators. **2022**, 124, 103473		0
264	Hybrid concentrated solar biomass (HCSB) systems for cogeneration: Techno-economic analysis for beef abattoirs in New South Wales, Australia. **2022**, 262, 115620		
263	Model-predictive energy management system for thermal batch production processes using online load prediction. **2022**, 163, 107830		1
262	Energy and environmental performance of a new solar boiler with heat recovery for seawater desalination. **2022**, 32, 330-343		0

261	A state-of-the-art review on flow boiling at high reduced pressures. **2022**, 193, 122951		2
260	A one-dimensional modelling methodology of printed circuit heat exchangers for steady, off-design and transient feasibility in a supercritical CO2 power block. **2022**, 193, 122938		0
259	High-resolution ILW outflow boundary treatment for the Navier–Stokes equations. **2022**, 105506		
258	Experimental Investigation on Condensation inside of Storage Tanks during Rapid Cooling in a Heavy Rain Event. **2022**,		0
257	Dynamic Simulation and Performance Enhancement Analysis of a Renewable Driven Trigeneration System. **2022**, 15, 3688		0
256	Searching for Sustainable Refrigerants by Bridging Molecular Modeling with Machine Learning. *Industrial & Engineering Chemistry Research*,	3.9	1
255	Performance Investigation of Supercritical CO2 Brayton Cycles in Combination with Solar Power and Waste Heat Recovery Systems. 1-28		
254	An International Standard Formulation for trans-1-Chloro-3,3,3-trifluoroprop-1-ene [R1233zd(E)] Covering Temperatures from the Triple-Point Temperature to 450 K and Pressures up to 100 MPa. **2022**, 51, 023101		1
253	Recommended Correlations for the Surface Tension of Aromatic, Polyfunctional, and Glyceride Esters. **2022**, 51, 023102		1
252	Flame dynamics of a subscale rocket combustor operating with gaseous methane and gaseous, subcritical or transcritical oxygen. **2022**, 242, 112179		0
251	Air-Cooled Condensers Optimization for Novel Ultra-Low Charge Ammonia Chillers to Achieve Competitive Packaged Units.		
250	Techno-Economic Performance Optimization of Hydrothermal Doublet Systems: Application to the Al Wajh Basin, Western Saudi Arabia.		
249	Effect of heat transfer through the release pipe on simulations of cryogenic hydrogen jet fires and hazard distances. **2022**,		0
248	Thermoeconomic analysis of conventional and recuperative ORC for heat recovery of exothermic reactions. **2022**, 101347		0
247	Performance enhancement of horizontal extension and thermal energy storage to an abandoned exploitation well and satellite LNG station integrated ORC system. **2022**, 118736		0
246	Towards a comprehensive approach to optimal control of non-ideal binary batch distillation.		0
245	Open-Source vapor compression library (VCLib): Heat pump modeling for education and research.		0
244	A Comprehensive Performance Analysis of Meta-Heuristic Optimization Techniques for Effective Organic Rankine Cycle Design. **2022**, 118687		

243	Thermodynamic efficiency of subcritical and transcritical power cycles utilizing selected ACZ working fluids. **2022**, 124432		0
242	Generic and Open-Source Exergy Analysis Extending the Simulation Framework TESPy. **2022**, 15, 4087		
241	Combining liquid inertia and evaporation momentum forces to achieve flow boiling inversion and performance enhancement in asymmetric Dual V-groove microchannels. **2022**, 194, 123009		1
240	Novel industrial gas filling station with an internal cooling system dedicated for speeding up cylinder charging process - Energy and exergy analysis. **2022**, 254, 124369		
239	Thermal Behaviour of Metal Hydride Reactor for Hydrogen Storage During Natural Convection Cooling/Heating Mode.		1
238	D me yk gemisi i h Rejeneratif Organik Rankine evrimi Sisteminin Dekarbonizasyon erindeki Etkisinin Ara mas		
237	Information-Measuring System of Liquid Viscosity by Stokes Method. **2022**,		
236	Green Hydrogen Storage in an Underground Cavern: A Case Study in Salt Diapir of Spain. **2022**, 12, 6081		0
235	Experimental and Numerical Study of Thermal Efficiency of Helically Coiled Tube Heat Exchanger Using Ethylene Glycol-Distilled Water Based Fe3O4 Nanofluid. **2022**, 43,		
234	AERES: Thermodynamic and Economic Optimization Software for Hybrid Solar Waste Heat Systems. **2022**, 15, 4284		1
233	Modeling of a Three-Stage Cascaded Refrigeration System Based on Standard Refrigeration Compressors in Cryogenic Applications above 110 K. **2022**, 3, 255-271		0
232	Energy, exergy, economic and environmental (4E) assessment of hybrid solar system powering adsorption-parallel/series ORC multigeneration system. **2022**,		4
231	The NIST REFPROP Database for Highly Accurate Properties of Industrially Important Fluids. *Industrial & Engineering Chemistry Research*,	3.9	5
230	Predicting Solubility Limits of Organic Solutes for a Wide Range of Solvents and Temperatures. **2022**, 144, 10785-10797		2
229	An International Standard Formulation for 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf) Covering Temperatures from the Triple Point Temperature to 410´K and Pressures Up to 100´MPa. **2022**, 43,		2
228	Experimental demonstration of comminution with transcritical carbon dioxide cycles. **2022**, 117615		1
227	Dynamic energy system modeling using hybrid physics-based and machine learning encoder ecoder models. **2022**, 9, 100172		0
226	Studying the energy efficiency feasibility of composite superabsorbent coated heat exchangers in open-cycle heat transformation applications. **2022**, 266, 115867		0

225	Does the United Kingdom have sufficient geological storage capacity to support a hydrogen economy? Estimating the salt cavern storage potential of bedded halite formations. **2022**, 53, 105109	1
224	Development of transient thermal-hydraulic analysis code for SCO2-cooled reactor coupled with Brayton cycle and its application. **2022**, 175, 109255	0
223	Reduced FV modelling based on CFD database and experimental validation for the thermo-fluid dynamic simulation of flue gases in horizontal fire-tubes. **2022**, 194, 123033	
222	Computational fluid-dynamic investigation of a centrifugal compressor with inlet guide vanes for supercritical carbon dioxide power systems. **2022**, 255, 124469	0
221	Novel molecules as working fluids for refrigeration, heat pump and organic Rankine cycle systems. **2022**, 167, 112549	1
220	Reinforcement Learning for Vapor Compression Cycle Control.	0
219	Multicomponent Effects on the Supercritical CO2 Systems: Mixture Critical Point and Phase Separation.	0
218	Single-tank storage versus multi-tank cascade system in hydrogen refueling stations for fuel cell buses. **2022**,	1
217	Adaptive design methodology of segmented non-uniform fin arrangements for trans-critical natural gas in the printed circuit heat exchanger. **2022**, 119011	0
216	Performance model of an additively manufactured micro-pin array solar thermal central receiver. **2022**, 241, 621-636	
215	Modular Method for Estimation of Velocity and Temperature Profiles in High-Speed Boundary Layers. 1-8	0
214	Techno-economic analysis of a hybrid photovoltaic-thermal solar-assisted heat pump system for domestic hot water and power generation. **2022**, 196, 720-736	1
213	Integrating photovoltaic/linear Fresnel reflector with supercritical carbon dioxide energy storage system: Energy and exergy analysis. **2022**, 53, 105235	0
212	Geometric and operational analysis of a heat recuperator operating with s-CO2 near the pseudocritical region. **2022**, 215, 118933	0
211	Part-load efficiency boost in offshore organic Rankine cycles with a cooling water flow rate control strategy. **2022**, 257, 124713	0
210	Optimization calculation of radial microturbine with water or pentanftorpropane steam in the Python environment. **2020**, 5, 67-75	
209	Gas absorption in a hydraulic air compressor. Part I: Simultaneous hydrodynamic and mass transfer bubbly flow model. **2022**, 260, 117871	0
208	Numerical study of a liquid-piston compressor system for hydrogen applications. **2022**, 216, 118946	0

207	Energy and Exergy-Based Screening of Various Refrigerants, Hydrocarbons and Siloxanes for the Optimization of Biomass Boiler Organic Rankine Cycle (BB ORC) Heat and Power Cogeneration Plants. **2022**, 15, 5513	1
206	Thermal Conductivity of Binary Mixtures of 1,1,1,2-Tetrafluoroethane(R-134a), 2,3,3,3-Tetrafluoropropene (R-1234yf), and trans-1,3,3,3-Tetrafluoropropene (R-1234ze(E)) Refrigerants. **2022**, 61, 11589-11596	0
205	Numerical investigation and extensive parametric analysis of cryogenic latent heat shell and tube thermal energy storage system. **2022**, 101440	0
204	Waste Heat Source Profiles for Marine Application of Organic Rankine Cycle. **2022**, 10, 1122	1
203	How do small changes enable the shift to net-zero? a techno-environmental-economic analysis.	0
202	Mapping hydrogen storage capacities of UK offshore hydrocarbon fields and investigating potential synergies with offshore wind. **2022**, 528,	
201	Design of a Low-Enrichment Uranium Reactor to Power a Future Martian Colony. 1-26	
200	Nucleate pool boiling heat transfer and critical heat flux of FK-649 on an inverter power module.	
199	Equations of State for n-Hexadecane and n-Docosane. **2022**, 43,	1
198	Film Cooling Performance Prediction for Air and Supercritical CO2. 1-30	1
197	Liquid Flooding From an Evaporator Upon Compressor Start-up in Microgravity. **2022**, 34,	0
196	Spontaneous Ignition of Cryo-Compressed Hydrogen in a T-Shaped Channel System. **2022**, 3, 348-360	
195	Selecting working fluids in organic Rankine cycle (ORC) for waste heat applications and optimal cycle parameters for different hot source temperatures.	
194	Experimental evaluation of low-GWP refrigerants R513A, R1234yf and R436A as alternatives for R134a in a cascade refrigeration cycle with R744. **2022**,	
193	Linking viscosity to equations of state using residual entropy scaling theory.	
192	Experimental and numerical studies on the use of a needle for variable capacity single-phase ejectors. **2022**,	0
191	An experimental and numerical investigation of absorber positioning in a natural convection solar drying system. **2022**, 243, 431-442	0
190	Policy and pricing barriers to steel industry decarbonisation: A UK case study. **2022**, 168, 113100	1

189	Water-ethanol blending effects on combustion performance of methane-air premixed-flame burners. **2022**, 34, 101446	
188	Thermodynamic assessment of a novel self-condensing sCO2 recompression system with vortex tube. **2022**, 269, 116110	0
187	Techno-economic performance optimization of hydrothermal doublet systems: Application to the Al Wajh basin, Western Saudi Arabia. **2022**, 105, 102532	
186	Design and off-design system simulation of concentrated solar super-critical CO2 cycle integrating a radial turbine meanline model. **2022**, 8, 1381-1393	0
185	Compressed air energy storage capacity of offshore saline aquifers using isothermal cycling. **2022**, 325, 119830	0
184	Assessment of an algebraic equilibrium wall-function for supercritical flows. **2022**, 197, 123350	
183	Dynamic simulation and exergy analysis of an Organic Rankine Cycle integrated with vapor compression refrigeration system. **2022**, 53, 102684	1
182	Numerical investigation of slug flow in pulsating heat pipes using an interface capturing approach. **2022**, 199, 123459	1
181	Understanding centrifugal casting in the manufacture of functionally graded materials. **2022**, 42, 7089-7101	0
180	Analytical study and experimental validation of vapour condensation in the presence of noncondensable gas in a horizontal tube for unmanned underwater vehicles. **2022**, 198, 123385	0
179	Regimes of evaporation and mixing behaviors of nanodroplets at transcritical conditions. **2023**, 331, 125870	1
178	Flow boiling heat transfer and pressure drop characteristics of water in a copper foam fin microchannel heat sink. **2023**, 218, 119295	0
177	Current status of the thermohydraulic behavior of supercritical refrigerants: A review. **2023**, 218, 119201	1
176	Numerical investigation of working fluid properties impacting performance of magnetocaloric cooling device. **2023**, 218, 119305	0
175	Computational investigation of single and multi-jet array impingement boiling. **2023**, 218, 119342	0
174	Modelling of two-phase expansion in a reciprocating expander. **2023**, 218, 119224	0
173	Thermodynamic analysis for a novel chemical precooling turbojet engine based on a multi-stage precooling-compression cycle. **2023**, 262, 125352	0
172	Off-Design Performance Prediction of Supercritical Co2 Radial Inflow Turbines.	0

171	Thermodynamic limits of atmospheric water harvesting.	1
170	Modelling and Simulation of Flash Evaporation of Cryogenic Liquids. **2022**, 233-250	0
169	Dynamic Modeling of a Vapor Compression Cycle. **2022**, 55, 523-528	0
168	The TEXTAROSSA Approach to Thermal Control of Future HPC Systems. **2022**, 420-433	0
167	Thermal management for gas lubricated, high-speed turbomachinery. **2023**, 218, 119229	0
166	Dendritic bubble growth during the sub-atmospheric boiling of water in a narrow vertical channel. **2023**, 141, 110765	0
165	Investigation of the Cryogenic Nitrogen and Non-Cryogenic N-Dodecane and Ammonia Injections using a Real-Fluid Modelling Approach.	0
164	Toward the Simulation of Flashing Cryogenic Liquids by a Fully Compressible Volume of Fluid Solver. **2022**, 7, 289	1
163	Influence of Different Design Parameters on the Shifted Load Behavious of Borehole Heat Exchanger Array System. **2022**,	0
162	Real Time Mgt Performance Assessment Tool: Comprehensive Transient Behaviour Prediction with Computationally Effective Techniques. **2022**,	0
161	Swirl-Bypass Nozzle for CO2 Two-Phase Ejectors: Numerical Design Exploration. **2022**, 15, 6765	0
160	Energy, exergy, environmental, and economic (4E) analysis and selection of best refrigerant using TOPSIS method for industrial heat pumps. **2022**, 101491	0
159	Techno-Economic Comparison of Supercritical CO2, Steam, and ORC Cycles for WHR Applications. **2022**,	0
158	Air-cooled condensers optimization for novel Ultra-Low Charge ammonia chillers to achieve competitive packaged units. **2022**, 119347	0
157	Performance Study and Multi-Objective Optimization of a Two-Temperature CO2 Refrigeration System with Economizer Based on Energetic, Exergetic and Economic Analysis. **2022**, 31, 1416-1433	0
156	Predictive Controller for Refrigeration Systems Aimed to Electrical Load Shifting and Energy Storage. **2022**, 15, 7125	0
155	An open-source tool for the calculation of field deliverability and cushion gas requirements in volumetric gas reservoir storage sites. **2023**, 528,	0
154	Flow-Enhanced Photothermal Spectroscopy. **2022**, 22, 7148	0

153	Energy Management of Refrigeration Systems with Thermal Energy Storage Based on Non-Linear Model Predictive Control. **2022**, 10, 3167	0
152	Local flow patterns distribution during flow boiling in a micro channel array. **2022**, 110792	1
151	Liquid-phase purification for multi-tonne xenon detectors. **2022**, 82,	0
150	Waste heat-to-power with steam and organic Rankine cycles: Potentials and feed-in tariffs in the EU27+UK. **2022**, 8, 12552-12569	1
149	Viscosity prediction of pure refrigerants applying the residual entropy scaling theory coupled with a Generalized Chart parametrization method for the Statistical Associating Fluid Theory. **2022**, 367, 120479	0
148	Machine learning for predicting the solubility of high-GWP fluorinated refrigerants in ionic liquids. **2022**, 367, 120472	0
147	Carbon Capture and Storage in Depleted Hydrocarbon Reservoirs: Lessons Learned from Projects in Asia Pacific. **2022**,	0
146	Semi-empirical model of a variable speed scroll compressor for R-290 with the focus on compressor efficiencies and transferability. **2022**,	0
145	Waste Heat Recovery in a Compression Ignition Engine for Marine Application Using a Rankine Cycle Operating with an Innovative Organic Working Fluid. **2022**, 15, 7912	0
144	Numerical Prediction of Internal Flows in He/LOx Seals for Liquid Rocket Engine Cryogenic Turbopumps. **2022**, 12, 10776	0
143	Limits of Fluid Modeling for High Pressure Flow Simulations. **2022**, 9, 643	1
142	RMG Database for Chemical Property Prediction. **2022**, 62, 4906-4915	3
141	Finite Element Simulations of Fluids Leakage through the Faulted Reservoir. **2022**, 2, 908-934	0
140	On the understanding of a cryogenic two-phase LOX/GH2 flame: Parametric sensitivity, characteristic scaling and phase instability. **2022**,	0
139	The importance of pseudo-polytropic analysis for supercritical´CO2 turbomachinery and power systems. **2022**, 44,	0
138	Linking Viscosity to Equations of State Using Residual Entropy Scaling Theory. **2022**, 43,	1
137	Verification of TRANSPORT Simulation Environment coupling with PHREEQC for reactive transport modelling. 58, 19-29	0
136	Viscous effects on real gases in quasi-one-dimensional supersonic convergent divergent nozzle flows. **2022**, 951,	0

135	Thermoeconomic assessments and optimization of a vapour compression and an ejector integrated sCO2 trigeneration systems. **2022**, 54, 102832	0
134	Assessing stacked physics-informed machine learning models for co-located wind–solar power forecasting. **2022**, 32, 100943	1
133	A Comparative Study of experiments and theories on steady-State evaporation of water. **2022**, 8, 100091	0
132	Thermal conductivity prediction of pure refrigerants and mixtures based on entropy-scaling concept. **2022**, 368, 120568	0
131	Characterization of a latent thermal energy storage heat exchanger using a charging time energy fraction method with a heat loss model. **2023**, 219, 119526	1
130	Diphenyl-diphenyl oxide eutectic mixture for high temperature waste-heat valorization by a partially evaporated cycle cascade. **2023**, 263, 125812	0
129	Grey box modeling of supermarket refrigeration cabinets. **2023**, 11, 100211	0
128	Experiments of advanced centrifugal heat pump with supply temperature up to 100 °C using low-GWP refrigerant R1233zd(E). **2023**, 263, 126033	0
127	Adaptation of residential solar systems for domestic hot water (DHW) to hybrid organic Rankine Cycle (ORC) distributed generation. **2023**, 263, 125901	0
126	Modified heat transfer correction function for modeling multiphase condensing flows in transonic regime. **2023**, 201, 123597	0
125	Analysis and Qualitative Observability of Two Vapor Compression Cycle Models. **2022**,	0
124	Thermodynamic modeling for numerical simulations based on the generalized cubic equation of state. **2022**, 34, 116126	2
123	Understanding the Molecular Features Controlling the Solubility Differences of R-134a, R-1234ze(E), and R-1234yf in 1-Alkyl-3-methylimidazolium Tricyanomethanide Ionic Liquids.	0
122	Correlation to Predict Conditions that Lead to Liquid-Flooding at Compressor Start-Up as a Function of Evaporator Size and Fluid Properties. **2022**,	0
121	Universal Correlation for Falling Film Evaporation on a Horizontal Plain Tube. **2022**,	0
120	Combustion Modeling Approach for the Optimization of a Temperature Controlled Reactivity Compression Ignition Engine Fueled with Iso-Octane. **2022**, 15, 8216	0
119	Thermal Analysis of a Parabolic Trough Collectors System Coupled to an Organic Rankine Cycle and a Two-Tank Thermal Storage System: Case Study of Itajubá–MG Brazil. **2022**, 15, 8261	2
118	PYroMat: A Python package for thermodynamic properties. **2022**, 7, 4757	0

117	Experimental investigation on micro-ORC system operating with partial evaporation and two‐phase expansion. **2022**, 274, 116415	0
116	Pumped heat energy storage with liquid media: Thermodynamic assessment by a transcritical Rankine-like model. **2022**, 56, 105966	0
115	Axial sCO2 high-performance turbines parametric design. **2022**, 274, 116418	0
114	A Fundamental Equation of State for the Calculation of Thermodynamic Properties of n-Octane. **2022**, 51, 043103	1
113	Natural Gas Storage Filled with Peat-Derived Carbon Adsorbent: Influence of Nonisothermal Effects and Ethane Impurities on the Storage Cycle. **2022**, 12, 4066	1
112	Analysis of energy cascade utilization in the chemically precooled engine cycle from a perspective of indirect combustion. **2023**, 334, 126619	0
111	Compact heat exchanger designs for difluoromethane-activated carbon composites based adsorption cooling systems. **2023**, 140, 106549	0
110	A methodology for propellant composition optimization in aerosol consumer products, considering economic, safety, and environmental objectives. **2023**, 169, 108069	0
109	Dynamic optimization for minimal HVAC demand with latent heat storage, heat recovery, natural ventilation, and solar shadings. **2023**, 276, 116573	0
108	UA and pinch point temperature difference modeling – Finding the best heat exchanger schemes. **2023**, 169, 108085	0
107	An extended mechanism model of gaseous ejectors. **2023**, 264, 126094	0
106	Technoeconomic optimization of superalloy supercritical CO2 microtube shell-and-tube-heat exchangers. **2023**, 220, 119578	0
105	Liquid-film thickness, flow pattern, and void fraction of hydrocarbons and their zeotropic mixtures during convective condensation. **2023**, 159, 104341	0
104	Modelling of bubble growth and detachment in nucleate pool boiling. **2023**, 185, 108041	0
103	Microgravity two-phase flow research in the context of vapor compression cycle experiments on parabolic flights. **2023**, 160, 104358	0
102	Progress in physical modelling and numerical simulation of phase transitions in cryogenic pool boiling and cavitation. **2023**, 116, 327-349	0
101	Nucleate Pool Boiling Regimes Of Power Electronics Cooling. **2022**,	0
100	How Canada Can Supply Europe with Critical Energy by Creating a Trans-Atlantic Energy Bridge.	0

99	Levelling the Photovoltaic Power Profile with the Integrated Energy Storage System. **2022**, 15, 9521	1
98	A Two-Phase Mass Flow Rate Model for Nitrous Oxide Based on Void Fraction. **2022**, 9, 828	0
97	Hierarchical Control of Multi-Generation Solar Thermal Power Plant. **2022**, 119942	0
96	Development and Experimental Validation of a Mechanistic Chamber Model of a Novel Peristaltic Compressor. **2022**,	0
95	Refurbishment of Natural Gas Pipelines towards 100% Hydrogen: A Thermodynamic-Based Analysis. **2022**, 15, 9370	0
94	Design, construction and commissioning of a high-flow radon removal system for XENONnT. **2022**, 82,	0
93	Integration of Dynamic Models and Virtual Reality for the Training of Steam Generator Operators. 1-46	0
92	Experimental and numerical investigation of a micro-ORC system for heat recovery from data centers. **2022**, 2385, 012122	0
91	Definition of a general performance map for single stage radial inflow turbines and analysis of the impact of expander performance on the optimal ORC design in on-board waste heat recovery applications. **2022**, 119857	0
90	Assessment of hydrogen production from waste heat using hybrid systems of Rankine cycle with proton exchange membrane/solid oxide electrolyzer. **2022**,	0
89	Simultaneous optimization of working fluid and temperature matching for heat pump assisted geothermal cascade heating system. **2023**, 41, 102685	0
88	Experimental investigation on the dynamics of an Organic Rankine Cycle evaporator with large-mass fins for the purpose of reducing heat input fluctuations. **2023**, 119995	0
87	Overview of Common Thermophysical Property Modelling Approaches for Cryogenic Fluid Simulations at Supercritical Conditions. **2023**, 16, 885	0
86	On the benefit of integrating vortex tubes in PEMFC system for preheating hydrogen in FCEV technologies. **2023**,	0
85	Understanding Compound Effect of Shear and Squeeze-film Dissipation in a Silicon Lateral Micro-resonator for MEMS-based Environmental Monitoring Applications. **2023**, 114166	0
84	The effect of temperature distribution on parabolic triangular-based CPVT system performances: electrical and thermal perspectives. **2023**, 101664	0
83	Design space analysis for supercritical CO2 radial inflow turbine stators. **2023**, 101659	0
82	Design and Analysis of Charge-Reduced Refrigerant Cycles Using R290.	0

81	Advanced Exergy Analysis of Ultra-Low GWP Reversible Heat Pumps for Residential Applications. **2023**, 16, 703	0
80	Performance analysis of a heat pump dryer with separate heat recovery using an energy, exergy, and economic methodology. 1-15	0
79	CO2-plume geothermal: Power net generation from 3D fluvial aquifers. **2023**, 332, 120546	0
78	Integration of geological compressed air energy storage into future energy supply systems dominated by renewable power sources. **2023**, 277, 116643	0
77	Hydrogen ortho-para conversion: process sensitivities and optimisation. **2023**, 184, 109272	0
76	Thermohydraulic experiments on a supercritical carbon dioxide□air microtube heat exchanger. **2023**, 203, 123840	0
75	Comparative study of geothermal and conventional air conditioner: A case of study for office applications. **2023**, 65, 105786	0
74	Fault detection for vaccine refrigeration via convolutional neural networks trained on simulated datasets. **2022**,	0
73	Fundamentals. **2023**, 1-53	0
72	Closed Brayton-cycle configurations for Gas-cooled Fast Reactors (GFRs) and Very-High-Temperature Reactors (VHTRs). **2023**, 777-835	0
71	Exergetic Analysis of Reheating and Regeneration Alternatives in Steam Cycles for the Generation of Electricity from Municipal Solid Waste. **2023**, 228-242	0
70	Thermal gradient stabilized supercritical droplets and bubbles. **2023**,	0
69	Molecular Simulation of Pervaporation on Polyurethane Membranes. **2023**, 13, 128	0
68	Comparison of PV Power Production Estimation Methods Under Non-homogeneous Temperature Distribution for CPVT Systems. **2023**, 77-91	0
67	Uncertainty Quantification of the CO2 Storage Process in the Bunter Closure 36 Model. **2023**, 15, 2004	0
66	Mixcoatl Software (Part 1): Coupled Thermal Physics and Mechanics for Efficient Engineering Design. 1-10	0
65	Thermoelastic Deformations of Thin-Shell Deployable Booms. **2023**,	0
64	Superancillary Equations for Nonpolar Pure Fluids Modeled with the PC-SAFT Equation of State. **2023**, 62, 1958-1967	0

63	CFD modeling of crystallization fouling with CO2 desorption incorporated for a falling-film evaporator in thermal desalination. **2023**, 553, 116456	0
62	Mass flow characteristics of CO2 operating in a transcritical cycle flowing through a needle expansion valve in a direct-expansion solar assisted heat pump. **2023**, 67, 105963	0
61	Solar-assisted micro gas turbine with humid air or steam-injected option. **2023**, 270, 126783	0
60	A semi-empirical model for the prediction of heat and mass transfer of humid air in a vented cavity. **2023**, 205, 123926	0
59	Thermodynamic analysis of a novel isothermal compressed carbon dioxide energy storage system. **2023**, 61, 106826	0
58	Techno-economic comparison of DEMO power conversion systems. **2023**, 9, 2777-2786	0
57	Flow Rate for Unbiased Operation of Photovoltaic Thermal Hybrid Air Heater in Local Climate. **2022** ,	0
56	Structure Design and Optimization of the Mass Flow Distribution Device of Downcomer for Fluoride-Salt-Cooled High-Temperature Advanced Reactor FuSTAR. **2023**, 53-67	0
55	Global performance analysis of a solar-driven indoor CO2/H2O capture system for air quality enhancement and cooling energy saving. **2023**, 280, 116831	0
54	Separation of volatile organic contaminants from water using a direct-contact dehumidifier: An experimental study and modeling. **2023**, 52, 103520	0
53	Physics model validation of propane and methane for Hydrogen Plus Other Alternative Fuels Risk Assessment Models (HyRAM+). **2023**, 173, 22-38	0
52	Design and optimal thermal efficiency contrastive analysis on closed Brayton cycle systems with different fluids of fluoride-salt-cooled high-temperature advanced reactor. **2023**, 226, 120291	0
51	Design and Off-design Performance Analysis of a Zigzag Channeled Precooler for Indirect Cooling System of Supercritical CO2 Recompression Cycle Incorporated with a Flow-Bypass System. **2023**, 226, 120321	0
50	Mathematical procedure for predicting tube metal temperature in the radiant superheaters of a tangentially and front fired utility boilers. **2023**, 40, 101763	0
49	Experimental operating range evaluation of flat-plate pulsating heat pipes for high-heat flux automotive power electronics cooling. **2023**, 226, 120338	0
48	Thermoeconomic performance assessment of a novel solar-powered high-temperature heat pump/adsorption cogeneration system. **2023**, 255, 71-88	0
47	Two-stage evaporator for R744 heat pumps using greywater as heat source. **2023**, 289, 113047	0
46	Geometric optimization of a solar tower receiver operating with supercritical CO2 as working fluid. **2023**, 228, 120318	0

45	Thermo-economic performance limit analysis of combined heat and power systems for optimal working fluid selections. **2023**, 272, 127041	0
44	Photo-thermal design and analysis of a novel CPC coupled solar air evacuated tube collector. **2023**, 228, 120541	0
43	Comparative analysis of energy losses in hydrogen and helium turbo-expanders for hydrogen liquefiers. **2023**, 227, 120322	0
42	System-level multi-objective optimization of a magnetic air conditioner through coupling of artificial neural networks and genetic algorithms. **2023**, 227, 120368	0
41	NIMOC: A design and analysis tool for supersonic nozzles under non-ideal compressible flow conditions. **2023**, 429, 115210	0
40	Innovations for organic Rankine cycle power systems: Current trends and future perspectives. **2023**, 225, 120201	0
39	Energy, Exergy, Economic and Environmental (4E) analysis of integrated direct air capture and CO2 methanation under uncertainty. **2023**, 344, 127969	0
38	Development and´Analysis of´Design Trends for´Supercritical $${mathrm{{CO}}_{2}}$$ Radial Inflow Turbine Nozzle Guide Vanes. **2022**, 101-128	0
37	Long-duration thermo-mechanical energy storage Present and future techno-economic competitiveness. **2023**, 334, 120628	0
36	Techno-enviro-economic analysis of hydrogen production via low and high temperature electrolyzers powered by PV/Wind turbines/Waste heat. **2023**, 278, 116693	1
35	Optimum combination of diesel and concentrating solar in remote area power generation using supercritical CO2 turbines. **2023**, 278, 116714	0
34	Dynamic modeling and control of a solar-powered Brayton cycle using supercritical CO2 and optimization of its thermal energy storage. **2023**, 206, 336-356	0
33	Design, optimization and thermodynamic analysis of SCO2 Brayton cycle system for FHR. **2023**, 157, 104593	0
32	Cycle Architectures for Two-Door Refrigerators: Performance Breakdown. **2023**,	0
31	Critical assessment of R410A alternatives for mini-split air conditioners in the Egyptian market. **2023**,	0
30	Performance evaluation of an integrated cooling and power system combining supercritical CO2, gas turbine, absorption refrigeration, and organic rankine cycles for waste energy recuperating system. **2023**, 17, 100943	0
29	Simultaneous Solution of Helical Coiled Once-Through Steam Generator with High-Speed Water Property Library. **2023**, 16, 1627	0
28	Deep magma storage during the 2021 La Palma eruption. **2023**, 9,	0

27	A Helmholtz Energy Equation of State for trans-1,1,1,4,4,4-Hexafluoro-2-butene [R-1336mzz(E)] and an Auxiliary Extended Corresponding States Model for the Transport Properties. **2023**, 44,	0
26	Data-Driven Model-Based Control Strategies to Improve the Cooling Performance of Commercial and Institutional Buildings. **2023**, 13, 474	1
25	Reduced modeling of liquid desiccant falling film absorbers. **2023**, 225, 120183	0
24	MATLAB applications for teaching Applied Thermodynamics: Thermodynamic cycles.	0
23	A Reference Equation of State with an Associating Term for the Thermodynamic Properties of Ammonia. **2023**, 52, 013102	0
22	Assessment of the Thermodynamic and Numerical Modeling of LES of Multi-Component Jet Mixing at High Pressure. **2023**, 16, 2113	0
21	Modeling of an Organic Rankine Cycle Integrated into a Double-Effect Absorption System for the Simultaneous Production of Power and Cooling. **2023**, 11, 667	0
20	Thermal Performance Evaluation of a Novel Ejector-Injection Cascade Refrigeration System. **2023**, 39, 101745	0
19	Investigation of boiling hydrogen heat transfer characteristics under low-pressure conditions. **2023**, 131, 103652	0
18	Generalised Isentropic Relations in Thermodynamics. **2023**, 16, 2281	0
17	ThermoFun: A C++/Python library for computing standard thermodynamic properties of substances and reactions across wide ranges of temperatures and pressures. **2023**, 8, 4624	0
16	Visualization study on the flow and migration characteristics of R290/PAG oil in a room air conditioner during startup and defrosting processes. **2023**,	0
15	A performance study of R717 and R22 as the working fluid for OTEC plant. **2023**, 1143, 012018	0
14	FeOs: An Open-Source Framework for Equations of State and Classical Density Functional Theory. **2023**, 62, 5347-5357	0
13	Recommended Correlations for the Surface Tension of Ethers. **2023**, 52, 013103	0
12	Simulation of Condensation of Stagnant or Moving Saturated Vapor on a Horizontal Tube Using the Volume-of-Fluid (VOF) Method. **2023**, 70, 175-193	0
11	Simulation of decay heat removal by active means following emergency shutdown in SFRs. **2023**, 159, 104646	0
10	Estimation of evaporator valve sizes in supermarket refrigeration cabinets. **2023**, 124, 179-186	0

9	Evaporation-Assisted Humidification–Dehumidification Cycles for Desalination Application in Tropical and Subtropical Regions. **2023**, 15, 1125	0
8	Multipolar SAFT-VR Mie Equation of State: Predictions of Phase Equilibria in Refrigerant Systems with No Binary Interaction Parameter. **2023**, 127, 3052-3070	0
7	Modeling and Simulation Challenges and Solutions in Cooling Systems for Nanoscale Integrated Circuits[Feature]. **2023**, 23, 36-56	0
6	Unidimensional and 3D Analyses of a Radial Inflow Turbine for an Organic Rankine Cycle under Design and Off-Design Conditions. **2023**, 16, 3383	0
5	Assessment of control strategies for energy management in vapor compression cycles. **2023**, 101840	0
4	Intermediate cooling from pulse tube refrigerator regenerators operating in the real-fluid regime. **2023**, 103685	0
3	Constrained optimization of s-CO2 compression train system through 1D approach under a new gas-like behavior constraint. **2023**, 105956	0
2	Experimental Validation Through a Parallel Computation Algorithm for Evaluation Uncertainty of the Mathematical Model of Direct Expansion Solar Assisted Heat Pump. 10, 8-24	0
1	Demand–Response Control of Electric Storage Water Heaters Based on Dynamic Electricity Pricing and Comfort Optimization. **2023**, 16, 4104	0