

Alessandro Romagnoli

List of Publications by Year in descending order

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143
papers

3,604
citations

108046

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206121

51
g-index

143
all docs

143
docs citations

143
times ranked

2853
citing authors

#	ARTICLE	IF	CITATIONS
1	Bayesian optimization for effective thermal conductivity measurement of thermal energy storage: An experimental and numerical approach. <i>Journal of Energy Storage</i> , 2022, 52, 104795.	3.9	6
2	Performance enhancement of horizontal extension and thermal energy storage to an abandoned exploitation well and satellite LNG station integrated ORC system. <i>Applied Thermal Engineering</i> , 2022, 214, 118736.	3.0	10
3	Multi-injection turbine housing for turbine performance improvement: A numerical and experimental analysis. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2021, 235, 368-382.	0.8	1
4	Solar power-to-gas application to an island energy system. <i>Renewable Energy</i> , 2021, 164, 1005-1016.	4.3	53
5	Investigating the effects of integrating an absorption heat transformer with a combined cooling, heating and power system: A thermodynamic and economic analysis. <i>Energy Conversion and Management</i> , 2021, 228, 113677.	4.4	8
6	Thermal performance enhancement of eutectic PCM laden with functionalised graphene nanoplatelets for an efficient solar absorption cooling storage system. <i>Journal of Energy Storage</i> , 2021, 33, 102092.	3.9	42
7	A review on liquid air energy storage: History, state of the art and recent developments. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 137, 110572.	8.2	93
8	Active TES With PCM for Refrigeration Applications. , 2021, , .		2
9	Progress and prospects of thermo-mechanical energy storage—a critical review. <i>Progress in Energy</i> , 2021, 3, 022001.	4.6	91
10	A comprehensive review on sub-zero temperature cold thermal energy storage materials, technologies, and applications: State of the art and recent developments. <i>Applied Energy</i> , 2021, 288, 116555.	5.1	72
11	Shell-and-Tube Latent Heat Thermal Energy Storage Design Methodology with Material Selection, Storage Performance Evaluation, and Cost Minimization. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4180.	1.3	10
12	A techno-economic assessment on the adoption of latent heat thermal energy storage systems for district cooling optimal dispatch & operations. <i>Applied Energy</i> , 2021, 289, 116646.	5.1	33
13	Geometry optimization of solar thermoelectric generator under different operating conditions via Taguchi method. <i>Energy Conversion and Management</i> , 2021, 238, 114158.	4.4	34
14	Optimized integration of Hydrogen technologies in Island energy systems. <i>Renewable Energy</i> , 2021, 174, 850-864.	4.3	37
15	Impact of carbon pricing on distributed energy systems planning. <i>Applied Energy</i> , 2021, 301, 117324.	5.1	26
16	The adoption of a planning tool software platform for optimized polygeneration design and operation — A district cooling application in South-East Asia. <i>Applied Thermal Engineering</i> , 2021, 199, 117532.	3.0	4
17	Innovative cryogenic Phase Change Material (PCM) based cold thermal energy storage for Liquid Air Energy Storage (LAES) — Numerical dynamic modelling and experimental study of a packed bed unit. <i>Applied Energy</i> , 2021, 301, 117417.	5.1	45
18	A Combined Cycle Gas Turbine Model for Heat and Power Dispatch Subject to Grid Constraints. <i>IEEE Transactions on Sustainable Energy</i> , 2020, 11, 448-456.	5.9	20

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19	Comparison of optimization frameworks for the design of a multi-energy microgrid. Applied Energy, 2020, 257, 113982.	5.1	39
20	Overcharging of a cascaded packed bed thermal energy storage: Effects and solutions. Renewable and Sustainable Energy Reviews, 2020, 117, 109421.	8.2	29
21	Application of granular materials for void space reduction within packed bed thermal energy storage system filled with macro-encapsulated phase change materials. Energy Conversion and Management, 2020, 222, 113118.	4.4	30
22	Potential of liquefied natural gas cold energy recovery on board ships. Journal of Cleaner Production, 2020, 271, 122519.	4.6	15
23	Experimental and numerical characterization of sub-zero phase change materials for cold thermal energy storage. Applied Energy, 2020, 275, 115131.	5.1	23
24	Levelised Cost of Storage (LCOS) analysis of liquid air energy storage system integrated with Organic Rankine Cycle. Energy, 2020, 198, 117275.	4.5	60
25	Recent Trends on Liquid Air Energy Storage: A Bibliometric Analysis. Applied Sciences (Switzerland), 2020, 10, 2773.	1.3	43
26	A boil-off gas utilization for improved performance of heavy duty gas turbines in combined cycle. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2019, 233, 96-110.	0.8	6
27	Energy storage technologies as techno-economic parameters for master-planning and optimal dispatch in smart multi energy systems. Applied Energy, 2019, 254, 113682.	5.1	91
28	Achieving low carbon local energy communities in hot climates by exploiting networks synergies in multi energy systems. Applied Energy, 2019, 256, 113901.	5.1	50
29	Cogeneration power plants for smart-district optimal operations - CO2 and primary energy savings in a real industrial application. AIP Conference Proceedings, 2019, , .	0.3	0
30	Dynamic response comparison of direct and indirect evaporation options in ORC systems for waste heat recovery. Energy Procedia, 2019, 158, 1606-1612.	1.8	2
31	Parametric performance maps for design and selection of Liquid Air Energy Storage system for mini to micro-grid scale applications. Energy Procedia, 2019, 158, 5053-5060.	1.8	3
32	Assessment of LNG Cold Energy utilization for Road Vehicles and Data-Centres cooling using Liquid Air. Energy Procedia, 2019, 158, 5047-5052.	1.8	7
33	An experimental and numerical method for thermal characterization of Phase Change Materials for Cold Thermal Energy Storage. Energy Procedia, 2019, 158, 5041-5046.	1.8	0
34	Liquid Air Energy Storage as a polygeneration system to solve the unit commitment and economic dispatch problems in micro-grids applications. Energy Procedia, 2019, 158, 5026-5033.	1.8	13
35	Effect of two-dimensional graphene oxide on the phase change stability of carbon nanotubes and their application for thermal energy storage. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	6
36	Charging performance evaluation of finned conical thermal storage system encapsulated with nano-enhanced phase change material. Applied Thermal Engineering, 2019, 151, 176-190.	3.0	69

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37	New parametric performance maps for a novel sizing and selection methodology of a Liquid Air Energy Storage system. <i>Applied Energy</i> , 2019, 250, 1641-1656.	5.1	61
38	Towards higher energy efficiency in future waste-to-energy plants with novel latent heat storage-based thermal buffer system. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 112, 324-337.	8.2	31
39	Geometry optimization of thermoelectric modules: Simulation and experimental study. <i>Energy Conversion and Management</i> , 2019, 195, 236-243.	4.4	64
40	Comparison of sintering condition and radio frequency plasma discharge on the conversion of coal/biomass fly ash into high-temperature thermal energy storage material. <i>Energy Conversion and Management</i> , 2019, 192, 180-187.	4.4	10
41	Direct vs indirect evaporation in Organic Rankine Cycle (ORC) systems: A comparison of the dynamic behavior for waste heat recovery of engine exhaust. <i>Applied Energy</i> , 2019, 242, 439-452.	5.1	52
42	Effective utilization of natural convection via novel fin design & influence of enhanced viscosity due to carbon nano-particles in a solar cooling thermal storage system. <i>Solar Energy</i> , 2019, 183, 105-119.	2.9	54
43	Numerical study on energy and exergy performances of a microencapsulated phase change material slurry based photovoltaic/thermal module. <i>Energy Conversion and Management</i> , 2019, 183, 708-720.	4.4	73
44	Loss analysis of a mix-flow turbine with nozzled twin-entry volute at different admissions. <i>Energy</i> , 2019, 166, 775-788.	4.5	28
45	Simulation of Organic Rankine Cycle – Quasi-steady state vs dynamic approach for optimal economic performance. <i>Energy</i> , 2019, 167, 619-640.	4.5	28
46	Performance evaluation of low-pressure turbine, turbo-compounding and air-Brayton cycle as engine waste heat recovery method. <i>Energy</i> , 2019, 166, 895-907.	4.5	25
47	Attempt to correlate simulations and measurements of turbine performance under pulsating flows for automotive turbochargers. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2019, 233, 174-187.	1.1	7
48	Computational performance of a-100 kW low pressure turbine to recover gas turbine exhaust energy. <i>Journal of Mechanical Engineering and Sciences</i> , 2019, 13, 4777-4793.	0.3	0
49	Analysis and comparison of dynamic behavior of heat exchangers for direct evaporation in ORC waste heat recovery applications from fluctuating sources. <i>Applied Energy</i> , 2018, 216, 724-740.	5.1	49
50	Thermal power fluctuations in waste heat to power systems: An overview on the challenges and current solutions. <i>Applied Thermal Engineering</i> , 2018, 134, 576-584.	3.0	79
51	Heat storage performance analysis and parameter design for encapsulated phase change materials. <i>Energy Conversion and Management</i> , 2018, 157, 619-630.	4.4	26
52	Compatibility study between aluminium alloys and alternative recycled ceramics for thermal energy storage applications. <i>Applied Energy</i> , 2018, 220, 94-105.	5.1	30
53	On the feature engineering of building energy data mining. <i>Sustainable Cities and Society</i> , 2018, 39, 508-518.	5.1	88
54	Application of high temperature phase change materials for improved efficiency in waste-to-energy plants. <i>Waste Management</i> , 2018, 73, 322-331.	3.7	27

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55	Technological review on enhancing the energy efficiency of MSW incineration plant. , 2018, , .		3
56	Highly efficient nanofiller based on carboxylated graphene oxide in phase change materials for cold thermal energy storage. Energy Procedia, 2018, 152, 198-203.	1.8	10
57	A Microgrid Application of Polygeneration System Fed by Natural Gas: Effect of Fuel Price on Investment Outlook. , 2018, , .		0
58	Cryogenic polygeneration for green data centre. Energy Procedia, 2018, 152, 15-20.	1.8	2
59	Integrating an oxygen enriched waste to energy plant with cryogenic engines and Air Separation Unit: Technical, economic and environmental analysis. Applied Energy, 2018, 231, 423-432.	5.1	13
60	Liquid Air Energy Storage performance enhancement by means of Organic Rankine Cycle and Absorption Chiller. Applied Energy, 2018, 228, 1810-1821.	5.1	67
61	Experimental study on the droplet formation around pins of different geometry for the design of a compact falling-droplet absorber. Heat and Mass Transfer, 2018, 54, 3599-3616.	1.2	0
62	Thermoelectric generation for waste heat recovery: Application of a system level design optimization approach via Taguchi method. Energy Conversion and Management, 2018, 172, 507-516.	4.4	47
63	Characterization of the droplet formation phase for the H2O LiBr absorber: An analytical and experimental analysis. Applied Energy, 2018, 222, 885-897.	5.1	2
64	Recovery of cold energy from liquefied natural gas regasification: Applications beyond power cycles. Energy Conversion and Management, 2018, 174, 336-355.	4.4	35
65	Characterization of a supercharger as boosting & turbo-expansion device in sequential multi-stage systems. Energy Conversion and Management, 2017, 136, 127-141.	4.4	12
66	Storing energy for cooling demand management in tropical climates: A techno-economic comparison between different energy storage technologies. Energy, 2017, 121, 676-694.	4.5	55
67	Tonal noise prediction in a small high speed centrifugal fan and experimental validation. Applied Acoustics, 2017, 125, 59-70.	1.7	16
68	Knowledge management of eco-industrial park for efficient energy utilization through ontology-based approach. Applied Energy, 2017, 204, 1412-1421.	5.1	49
69	A preliminary study on the optimal configuration and operating range of a "microgrid scale" air liquefaction plant for Liquid Air Energy Storage. Energy Conversion and Management, 2017, 143, 275-285.	4.4	75
70	Implementation of industrial waste heat to power in Southeast Asia: an outlook from the perspective of market potentials, opportunities and success catalysts. Energy Policy, 2017, 106, 525-535.	4.2	15
71	Organic Rankine Cycles (ORC) for mobile applications " Economic feasibility in different transportation sectors. Applied Energy, 2017, 204, 1188-1197.	5.1	30
72	Application of material assessment methodology in latent heat thermal energy storage for waste heat recovery. Applied Energy, 2017, 187, 281-290.	5.1	94

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73	A review of heat transfer in turbochargers. Renewable and Sustainable Energy Reviews, 2017, 79, 1442-1460.	8.2	45
74	Techno-economic Analysis of a Liquid Air Energy Storage (LAES) for Cooling Application in Hot Climates. Energy Procedia, 2017, 105, 4450-4457.	1.8	39
75	A Simulation Study on a Thermoelectric Generator for Waste Heat Recovery from a Marine Engine. Journal of Electronic Materials, 2017, 46, 2908-2914.	1.0	20
76	Response time characterization of Organic Rankine Cycle evaporators for dynamic regime analysis with fluctuating load. Energy Procedia, 2017, 129, 427-434.	1.8	11
77	Improving energy recovery efficiency by retrofitting a PCM-based technology to an ORC system operating under thermal power fluctuations. Applied Energy, 2017, 208, 972-985.	5.1	61
78	Working Fluid Selection and Optimal Power-to-Weight Ratio for ORC in Long-Haul Trucks. Energy Procedia, 2017, 129, 754-761.	1.8	11
79	Techno-Economic Analysis of Waste Heat Recovery with ORC from Fluctuating Industrial Sources. Energy Procedia, 2017, 129, 503-510.	1.8	40
80	Potential of district cooling in hot and humid climates. Applied Energy, 2017, 208, 49-61.	5.1	50
81	Multi-Injection Turbine Housing: A Novel Concept for Tip-Leakage Improvement in Radial Turbines. , 2017, , .		3
82	Analytical Investigation of a Thermal-Supercharged Internal Combustion Engine Compounded With Organic Rankine Cycle for Waste Heat Recovery. , 2017, , .		0
83	Towards Intelligent Thermal Energy Management of Eco-industrial Park through Ontology-based Approach. Energy Procedia, 2017, 105, 3295-3300.	1.8	2
84	Economic Feasibility of Organic Rankine Cycles (ORC) in Different Transportation Sectors. Energy Procedia, 2017, 105, 1401-1407.	1.8	9
85	Dynamic study of ORC evaporator operating under fluctuating thermal power from waste heat sources. Energy Procedia, 2017, 143, 404-409.	1.8	5
86	Planning tool for polygeneration design in microgrids. Energy Procedia, 2017, 143, 762-766.	1.8	1
87	Non-eutectic Phase Change Materials for Cold Thermal Energy Storage. Energy Procedia, 2017, 143, 656-661.	1.8	10
88	Improving liquefaction process of microgrid scale Liquid Air Energy Storage (LAES) through waste heat recovery (WHR) and absorption chiller. Energy Procedia, 2017, 143, 699-704.	1.8	19
89	From Numerical Model to Computational Intelligence: The Digital Transition of Urban Energy System. Energy Procedia, 2017, 143, 884-890.	1.8	21
90	Optimization of a compact falling-droplet absorber for cooling power generation. Energy Procedia, 2017, 143, 354-360.	1.8	0

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91	Environmental performance assessment of the application of high temperature phase change materials in waste-to-energy plants. Energy Procedia, 2017, 143, 460-465.	1.8	4
92	Compatibility tests between molten Aluminium alloys and recycled ceramics from inorganic industrial wastes. Energy Procedia, 2017, 142, 3689-3696.	1.8	7
93	Preliminary assessment of waste heat recovery solution (ORC) to enhance the performance of Liquid Air Energy Storage system. Energy Procedia, 2017, 142, 3609-3616.	1.8	11
94	Analytical and Experimental Study of Micro Gas Turbine as Range Extender for Electric Vehicles in Asian Cities. Energy Procedia, 2017, 143, 53-60.	1.8	11
95	Influence of boundary condition assumption on thermoelectric generator geometry design. , 2017, , .		0
96	Assessment of biodiesel plant waste heat recovery with respect to economics and CO 2 emission. Energy Procedia, 2017, 142, 1100-1105.	1.8	1
97	Selection of Phase Change Material for Thermal Energy Storage in Solar Air Conditioning Systems. Energy Procedia, 2017, 105, 4281-4288.	1.8	52
98	Cooling system investigation of thermoelectric generator used for marine waste heat recovery. , 2016, , .		4
99	Modelling and Design of Thermoelectric Generator for Waste Heat Recovery. , 2016, , .		3
100	A parametric study: The impact of components sizing on range extended electric vehicle's driving range. , 2016, , .		2
101	An evaluation of the technologies for heat recovery to meet onsite cooling demands. Energy Conversion and Management, 2016, 121, 174-185.	4.4	6
102	Application of cold thermal energy storage (CTES) for building demand management in hot climates. Applied Thermal Engineering, 2016, 103, 1186-1195.	3.0	26
103	A novel methodology for the design of waste heat recovery network in eco-industrial park using techno-economic analysis and multi-objective optimization. Applied Energy, 2016, 184, 88-102.	5.1	43
104	One-dimensional pulse-flow modeling of a twin-scroll turbine. Energy, 2016, 115, 1291-1304.	4.5	29
105	Design methodology of a low pressure turbine for waste heat recovery via electric turbocompounding. Applied Thermal Engineering, 2016, 107, 1166-1182.	3.0	10
106	The innovation in the evolution of the "Italian industrial model": lights and shadows. Economic Change and Restructuring, 2016, 49, 309-337.	2.5	3
107	Assessment of Partial-Admission Characteristics in Twin-Entry Turbine Pulse Performance Modelling. , 2015, , .		3
108	DESIGN OF COMBUSTOR FOR MICRO GAS TURBINE TEST RIG AND ITS PERFORMANCE PREDICTION. Jurnal Teknologi (Sciences and Engineering), 2015, 77, .	0.3	0

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109	A New De-throttling Concept in a Twin-Charged Gasoline Engine System. SAE International Journal of Engines, 2015, 8, 1553-1561.	0.4	7
110	Heavy-duty engine electric turbocompounding. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2015, 229, 457-472.	1.1	25
111	Non-adiabatic pressure loss boundary condition for modelling turbocharger turbine pulsating flow. Energy Conversion and Management, 2015, 93, 267-281.	4.4	22
112	Suppression of tonal noise in a centrifugal fan using guide vanes. Journal of Sound and Vibration, 2015, 357, 95-106.	2.1	10
113	Exhaust Gas Energy Recovery Via Electric Turbocompounding. Energy Procedia, 2015, 75, 1555-1559.	1.8	6
114	Waste heat recovery using a novel high performance low pressure turbine for electric turbocompounding in downsized gasoline engines: Experimental and computational analysis. Energy, 2015, 90, 218-234.	4.5	37
115	EFFECTIVENESS OF SERIES AND PARALLEL TURBO COMPOUNDING ON TURBOCHARGED DIESEL ENGINE. Journal of Mechanical Engineering and Sciences, 2015, 8, 1448-1459.	0.3	10
116	COMPARISON OF EXPERIMENTAL, 3D AND 1D MODEL FOR A MIXED-FLOW TURBINE UNDER PULSATING FLOW CONDITIONS. Jurnal Teknologi (Sciences and Engineering), 2015, 77, .	0.3	2
117	Mild Hybridization via Electrification of the Air System: Electrically Assisted and Variable Geometry Turbocharging Impact on an Off-Road Diesel Engine. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	0.5	29
118	Assessment of supercharging boosting component for heavily downsized gasoline engines. , 2014, , 13-26.		6
119	Performance and flow-field assessment of an EGR pulse optimised asymmetric double-entry turbocharger turbine. , 2014, , 321-332.		1
120	Characterisation of a low pressure turbine for turbocompounding applications in a heavily downsized mild-hybrid gasoline engine. Energy, 2014, 64, 3-16.	4.5	45
121	Integration of meanline and one-dimensional methods for prediction of pulsating performance of a turbocharger turbine. Energy Conversion and Management, 2014, 81, 270-281.	4.4	35
122	A Method of Map Extrapolation for Unequal and Partial Admission in a Double Entry Turbine. Journal of Turbomachinery, 2014, 136, .	0.9	5
123	Systematic One Zone Meanline Modelling of Centrifugal Compressors for Industrial Online Applications. , 2013, , .		2
124	Assessment of Cycle Averaged Turbocharger Maps Through One Dimensional and Mean-Line Coupled Codes. , 2013, , .		2
125	A Method of Map Extrapolation for Unequal and Partial Admission in a Double Entry Turbine. , 2013, , .		0
126	Comparison Between the Steady Performance of Double-Entry and Twin-Entry Turbocharger Turbines. Journal of Turbomachinery, 2013, 135, .	0.9	31

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127	Mild Hybridization via Electrification of the Air System: Electrically Assisted and Variable Geometry Turbocharging Impact on an Off-Road Diesel Engine. , 2013, , .		3
128	Characterization of a low pressure turbine for turbocompounding applications in a mild-hybrid gasoline engine. , 2012, , 281-293.		1
129	Unsteady Performance Prediction of a Single Entry Mixed Flow Turbine Using 1-D Gas Dynamic Code Extended With Meanline Model. , 2012, , .		6
130	Heat transfer analysis in a turbocharger turbine: An experimental and computational evaluation. Applied Thermal Engineering, 2012, 38, 58-77.	3.0	93
131	Unsteady performance analysis of a twin-entry variable geometry turbocharger turbine. Energy, 2012, 38, 176-189.	4.5	54
132	DESIGN AND DEVELOPMENT OF A LOW PRESSURE TURBINE FOR TURBOCOMPOUNDING APPLICATIONS. International Journal of Gas Turbine, Propulsion and Power Systems, 2012, 4, 1-8.	0.4	15
133	Single Entry Mixed Flow Turbine Performance Prediction With 1-D Gas Dynamic Code Coupled With Mean Line Model. International Journal of Gas Turbine, Propulsion and Power Systems, 2012, 4, 8-16.	0.4	4
134	A High Performance Low Pressure Ratio Turbine for Engine Electric Turbocompounding. , 2011, , .		6
135	Comparison Between the Steady Performance of Double-Entry and Twin-Entry Turbocharger Turbines. , 2011, , .		3
136	Steady state performance evaluation of variable geometry twin-entry turbine. International Journal of Heat and Fluid Flow, 2011, 32, 477-489.	1.1	41
137	Performance prediction of a nozzled and nozzleless mixed-flow turbine in steady conditions. International Journal of Mechanical Sciences, 2011, 53, 557-574.	3.6	58
138	Non-Adiabatic Compressor Efficiency of Turbocharger: A Statistical Approach. , 2010, , .		2
139	Heat Transfer on a Turbocharger Under Constant Load Points. , 2009, , .		11
140	A New Turboexpansion Concept in a Twin-Charged Engine System. , 0, , .		4
141	Ultra Boost for Economy: Extending the Limits of Extreme Engine Downsizing. SAE International Journal of Engines, 0, 7, 387-417.	0.4	126
142	Nozzle Steam Piston Expander for Engine Exhaust Energy Recovery. , 0, , .		5
143	Effect of water/cement ratio on properties of cement-stabilized Singapore soft marine clay for wet deep mixing application. International Journal of Geotechnical Engineering, 0, , 1-8.	1.1	5