Wilfrido Rivera

List of Publications by Year
in descending order

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105 papers	3,298 citations	172386 29 h-index	161767 54 g-index
106 all docs	106 docs citations	106 times ranked	2105 citing authors

#	Article	IF	Citations
1	Wind speed forecasting in three different regions of Mexico, using a hybrid ARIMAâ€“ANN model. Renewable Energy, 2010, 35, 2732-2738.	4.3	335
2	Short term wind speed forecasting in La Venta, Oaxaca, MÃ©xico, using artificial neural networks. Renewable Energy, 2009, 34, 274-278.	4.3	280
3	Wind Speed Prediction Using a Univariate ARIMA Model and a Multivariate NARX Model. Energies, 2016, 9, 109.	1.6	213
4	Wind speed forecasting in the South Coast of Oaxaca, MÃ©xico. Renewable Energy, 2007, 32, 2116-2128.	4.3	189
5	A review on solar photovoltaic thermal integrated desalination technologies. Renewable and Sustainable Energy Reviews, 2021, 141, 110787.	8.2	127
6	A review of thermal cooling systems. Applied Thermal Engineering, 2015, 75, 1162-1175.	3.0	100
7	Analysis and forecasting of wind velocity in chetumal, quintana roo, using the single exponential smoothing method. Renewable Energy, 2010, 35, 925-930.	4.3	89
8	A review of absorption heat transformers. Applied Thermal Engineering, 2015, 91, 654-670.	3.0	89
9	Thermodynamic analysis of a trigeneration system consisting of a micro gas turbine and a double effect absorption chiller. Applied Thermal Engineering, 2011, 31, 3347-3353.	3.0	77
10	Performance comparison between a conventional vapor compression and compression-absorption single-stage and double-stage systems used for refrigeration. Applied Thermal Engineering, 2015, 87, 273-285.	3.0	59
11	Modeling of an intermittent solar absorption refrigeration system operating with ammoniaâ€“lithium nitrate mixture. Solar Energy Materials and Solar Cells, 2003, 76, 417-427.	3.0	58
12	Single stage and double absorption heat transformers used to recover energy in a distillation column of butane and pentane. International Journal of Energy Research, 2003, 27, 1279-1292.	2.2	57
13	Exergy analysis of an experimental heat transformer for water purification. Energy, 2011, 36, 320-327.	4.5	57
14	Evaluation of a solar intermittent refrigeration system for ice production operating with ammonia/lithium nitrate. Solar Energy, 2011, 85, 38-45.	2.9	52
15	Thermodynamic study of advanced absorption heat transformersâ€”I. Single and two stage configurations with heat exchangers. Heat Recovery Systems & CHP, 1994, 14, 173-183.	0.4	51
16	Comparison of the experimental evaluation of a solar intermittent refrigeration system for ice production operating with the mixtures NH3/LiNO3 and NH3/LiNO3/H2O. Renewable Energy, 2012, 38, 62-68.	4.3	50
17	Comparison of the performance of single-effect, half-effect, double-effect in series and inverse and triple-effect absorption cooling systems operating with the NH3â€“LiNO3 mixture. Applied Thermal Engineering, 2014, 66, 612-620.	3.0	49
18	Wind speed forecasting using the NARX model, case: La Mata, Oaxaca, MÃ©xico. Neural Computing and Applications, 2016, 27, 2417-2428.	3.2	46

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19	Experimental assessment of a hydrophobic membrane-based desorber/condenser with H2O/LiBr mixture for absorption systems. Experimental Thermal and Fluid Science, 2017, 88, 145-159.	1.5	44
20	Thermodynamic analysis of monomethylamineâ€“water solutions in a single-stage solar absorption refrigeration cycle at low generator temperatures. Solar Energy Materials and Solar Cells, 2001, 70, 287-300.	3.0	43
21	Exergy analysis of a heat transformer for water purification increasing heat source temperature. Applied Thermal Engineering, 2010, 30, 2088-2095.	3.0	42
22	Energy and exergy analysis of a double absorption heat transformer operating with water/lithium bromide. International Journal of Energy Research, 2009, 33, 662-674.	2.2	41
23	Exergy analysis of an experimental single-stage heat transformer operating with single water/lithium bromide and using additives (1-octanol and 2-ethyl-1-hexanol). Applied Thermal Engineering, 2011, 31, 3526-3532.	3.0	40
24	Boiling heat transfer coefficients inside a vertical smooth tube for water/ammonia and ammonia lithium nitrate mixtures. International Journal of Heat and Mass Transfer, 1999, 42, 905-921.	2.5	38
25	Theoretical and experimental comparison of the performance of a single-stage heat transformer operating with water/lithium bromide and water/Carrolâ„¢. International Journal of Energy Research, 2002, 26, 747-762.	2.2	36
26	Simulation of an air conditioning absorption refrigeration system in a co-generation process combining a proton exchange membrane fuel cell. International Journal of Hydrogen Energy, 2007, 32, 3174-3182.	3.8	33
27	Experimental evaluation of a single-stage heat transformer used to increase solar pondâ€™s temperature. Solar Energy, 2000, 69, 369-376.	2.9	32
28	Theoretical comparison of performance of an absorption heat pump system for cooling and heating operating with an aqueous ternary hydroxide and water/lithium bromide. Applied Thermal Engineering, 2001, 21, 1137-1147.	3.0	31
29	Experimental assessment of an absorption cooling system operating with the ammonia/lithium nitrate mixture. Energy, 2014, 78, 685-692.	4.5	31
30	Single-stage and advanced absorption heat transformers operating with lithium bromide mixtures used to increase solar pond's temperature. Solar Energy Materials and Solar Cells, 2001, 70, 321-333.	3.0	30
31	Experimental evaluation of a single-stage heat transformer operating with the water/Carrolâ„¢ mixture. Energy, 1999, 24, 317-326.	4.5	29
32	Experimental study of the use of additives in the performance of a single-stage heat transformer operating with water-lithium bromide. International Journal of Energy Research, 2005, 29, 121-130.	2.2	29
33	Thermodynamic study of advanced absorption heat transformersâ€”II. Double absorption configurations. Heat Recovery Systems & CHP, 1994, 14, 185-193.	0.4	27
34	Exergetic and exergoeconomic optimization of a cogeneration pulp and paper mill plant including the use of a heat transformer. Energy, 2010, 35, 1289-1299.	4.5	27
35	Optimal COP prediction of a solar intermittent refrigeration system for ice production by means of direct and inverse artificial neural networks. Solar Energy, 2012, 86, 1108-1117.	2.9	26
36	Comparison of the theoretical performance of a solar air conditioning system operating with water/lithium bromide and an aqueous ternary hydroxide. Solar Energy Materials and Solar Cells, 2000, 63, 387-399.	3.0	25

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37	Optimal operation conditions for a single-stage heat transformer by means of an artificial neural network inverse. Applied Energy, 2011, 88, 1281-1290.	5.1	25
38	Heat transfer coefficients in two phase flow for the water/lithium bromide mixture used in solar absorption refrigeration systems. Solar Energy Materials and Solar Cells, 2001, 70, 309-320.	3.0	24
39	Energy and exergy analysis of an experimental single-stage heat transformer operating with the water/lithium bromide mixture. International Journal of Energy Research, 2010, 34, 1121-1131.	2.2	24
40	Parametric analysis on the experimental performance of an ammonia/water absorption cooling system built with plate heat exchangers. Applied Thermal Engineering, 2019, 148, 87-95.	3.0	24
41	Analysis of the behavior of an experimental absorption heat transformer for water purification for different mass flux rates in the generator. Applied Thermal Engineering, 2013, 52, 38-45.	3.0	22
42	Wind speed variability study based on the Hurst coefficient and fractal dimensional analysis. Energy Science and Engineering, 2019, 7, 361-378.	1.9	22
43	Cogeneration Fuel Cell-Sorption Air Conditioning Systems. Green Energy and Technology, 2011, , .	0.4	22
44	Evaluation of a heat transformer powered by a solar pond. Solar Energy Materials and Solar Cells, 2000, 63, 413-422.	3.0	21
45	Performance evaluation of a monomethylamineâ€“water solar absorption refrigeration system for milk cooling purposes. Applied Thermal Engineering, 2004, 24, 1103-1115.	3.0	21
46	Comparison of the modeling of a solar absorption system for simultaneous cooling and heating operating with an aqueous ternary hydroxide and with water/lithium bromide. Solar Energy Materials and Solar Cells, 2001, 70, 301-308.	3.0	20
47	Experimental study of a thermo-chemical refrigerator using the barium chlorideâ€“ammonia reaction. International Journal of Hydrogen Energy, 2007, 32, 3154-3158.	3.8	20
48	A novel cogeneration system: A proton exchange membrane fuel cell coupled to a heat transformer. Applied Thermal Engineering, 2013, 50, 1530-1535.	3.0	20
49	Comparative study of a cascade cycle for simultaneous refrigeration and heating operating with ammonia, R134a, butane, propane, and CO₂as working fluids. International Journal of Sustainable Energy, 2012, 31, 365-381.	1.3	19
50	Experimental assessment of an absorption cooling system utilizing a falling film absorber and generator. Applied Thermal Engineering, 2016, 103, 1105-1111.	3.0	19
51	Thermodynamic design data for absorption heat transformers. Part six: Operating on water-carrol. Heat Recovery Systems & CHP, 1994, 14, 427-436.	0.4	18
52	Modelling of single-stage and advanced absorption heat transformers operating with the water/carrol mixture. Applied Thermal Engineering, 1997, 17, 1111-1122.	3.0	18
53	Theoretical comparison of single stage and advanced absorption heat transformers operating with water/lithium bromide and water/Carrol mixtures. International Journal of Energy Research, 1998, 22, 427-442.	2.2	18
54	Thermodynamic design data for absorption heat pump systems operating on ammonia-lithium nitrateâ€”Part two. Heating. Heat Recovery Systems & CHP, 1991, 11, 103-111.	0.4	17

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55	Energy and Exergy Analysis of Water-LiBr Absorption Systems with Adiabatic Absorbers for Heating and Cooling. Energy Procedia, 2014, 57, 2676-2685.	1.8	17
56	Neural network and polynomial model to improve the coefficient of performance prediction for solar intermittent refrigeration system. Solar Energy, 2016, 129, 28-37.	2.9	15
57	Comparison of single and double stage absorption and resorption heat transformers operating with the ammonia-lithium nitrate mixture. Applied Thermal Engineering, 2017, 125, 53-68.	3.0	15
58	Comparison of the Performance of Single Effect, Half Effect, Double Effect in Series and Inverse Absorption Cooling Systems Operating with the Mixture H2O-LiBr. Energy Procedia, 2014, 57, 2534-2543.	1.8	14
59	Experimental assessment of double-absorption heat transformer operating with H2O/LiBr. Applied Thermal Engineering, 2018, 132, 432-440.	3.0	14
60	Modeling of Novel Thermodynamic Cycles to Produce Power and Cooling Simultaneously. Processes, 2020, 8, 320.	1.3	14
61	Novel intermittent absorption cooling system based on membrane separation process. Applied Thermal Engineering, 2018, 136, 718-729.	3.0	13
62	Investigation of new cooling cogeneration cycle using NH3H2O mixture. International Journal of Refrigeration, 2020, 114, 88-97.	1.8	13
63	Modeling of a new absorption heat pump-transformer used to produce heat and power simultaneously. Energy, 2018, 165, 112-133.	4.5	12
64	Parametric analysis on the performance of an experimental ammonia/lithium nitrate absorption cooling system. International Journal of Energy Research, 2018, 42, 4402-4416.	2.2	12
65	Experimental assessment of an air-cooled absorption cooling system. Applied Thermal Engineering, 2019, 155, 147-156.	3.0	12
66	Thermodynamic design data for absorption heat pump systems operating on ammonia-lithium nitrateâ€”part three. Simultaneous cooling and heating. Heat Recovery Systems & CHP, 1991, 11, 199-212.	0.4	10
67	Thermodynamic design data for absorption heat transformers. Part seven: operating on an aqueous ternary hydroxide. Applied Thermal Engineering, 1998, 18, 147-156.	3.0	10
68	Characteristics of an ammonia/lithium nitrate double effect heat pump-transformer. Applied Thermal Engineering, 2016, 99, 518-527.	3.0	10
69	Preliminary assessment of a solar absorption air conditioning pilot plant. Case Studies in Thermal Engineering, 2018, 12, 672-676.	2.8	10
70	Thermodynamic analysis of a novel absorption heat transformer. Applied Thermal Engineering, 2019, 162, 114268.	3.0	9
71	Role of Membrane Technology in Absorption Heat Pumps: A Comprehensive Review. Membranes, 2020, 10, 216.	1.4	9
72	Thermodynamic design data for absorption heat transformersâ€”part four. operating on ammonia-lithium nitrate. Heat Recovery Systems & CHP, 1990, 10, 539-548.	0.4	8

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73	Thermodynamic design data for absorption heat pump systems operating on ammonia-sodium thiocyanateâ€"I. Cooling. Heat Recovery Systems & CHP, 1993, 13, 1-9.	0.4	8
74	Heat transfer coefficients in two-phase flow for mixtures used in solar absorption refrigeration systems. Solar Energy Materials and Solar Cells, 2000, 63, 401-411.	3.0	8
75	Thermodynamic simulation of an absorption heat pump-transformer-power cycle operating with the ammonia-water mixture. Applied Thermal Engineering, 2021, 182, 116174.	3.0	8
76	Feasibility Analysis of a Membrane Desorber Powered by Thermal Solar Energy for Absorption Cooling Systems. Applied Sciences (Switzerland), 2020, 10, 1110.	1.3	7
77	Thermodynamic cycles for the simultaneous production of power and cooling: A comprehensive review. International Journal of Energy Research, 2021, 45, 12500-12535.	2.2	7
78	Thermodynamic design data for absorption heat pump systems operating on water-carrol. Part I: Cooling. Heat Recovery Systems & CHP, 1995, 15, 425-434.	0.4	6
79	Thermodynamic design data for absorption heat transformersâ€"Part 5. Operating on ammonia-sodium thiocyanate. Heat Recovery Systems & CHP, 1992, 12, 347-356.	0.4	5
80	Thermodynamic design data for absorption heat pump systems operating on ammonia-sodium thiocyanateâ€"III. Simultaneous cooling and heating. Heat Recovery Systems & CHP, 1993, 13, 23-31.	0.4	5
81	Boiling heat transfer coefficients inside a vertical smooth tube for the water/lithium bromide mixture. International Journal of Energy Research, 2003, 27, 265-275.	2.2	5
82	Thermodynamic Analysis of a Half-Effect Absorption Cooling System Powered by a Low-Enthalpy Geothermal Source. Applied Sciences (Switzerland), 2019, 9, 1220.	1.3	5
83	Analysis of an integrated thermal separation and flashing cooling cogeneration cycle. Applied Thermal Engineering, 2021, 190, 116773.	3.0	5
84	A Cascade Proportional Integral Derivative Control for a Plate-Heat-Exchanger-Based Solar Absorption Cooling System. Energies, 2021, 14, 4058.	1.6	5
85	Development of a Aolar Intermittent Refrigeration System for Ice Production. , 2011, , .		5
86	Modeling of a thermodynamic cycle integrating a dual and a triple-pressure cogeneration cycle. Applied Thermal Engineering, 2022, 201, 117705.	3.0	5
87	Mobile pilot-plant for the production of environmentally clean steam. Applied Thermal Engineering, 1997, 17, 317-326.	3.0	4
88	Evaluation of the cooling potential for a single effect absorption cooling system in the PR2 well of Cerritos Colorados geothermal field, Mexico. Energy Exploration and Exploitation, 2020, 38, 2521-2540.	1.1	4
89	Experimental Performance of a Membrane Desorber Operating under Simulated Warm Weather Condensation Temperatures. Membranes, 2021, 11, 474.	1.4	4
90	Thermodynamic design data for absorption heat pump systems operating on ammonia-sodium thiocyanateâ€"II. Heating. Heat Recovery Systems & CHP, 1993, 13, 11-21.	0.4	3

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91	Thermodynamic design data for absorption heat pump systems operating on monomethylamine-water. Part I: Cooling. Heat Recovery Systems & CHP, 1995, 15, 563-570.	0.4	3
92	State of the Art of Sorption Refrigeration Systems. Green Energy and Technology, 2011, , 55-73.	0.4	3
93	Modeling of a Double Effect Heat Transformer Operating with Water/Lithium Bromide. Processes, 2019, 7, 371.	1.3	3
94	Cooling Potential for Single and Advanced Absorption Cooling Systems in a Geothermal Field in Mexico. Processes, 2022, 10, 583.	1.3	3
95	Thermodynamic design data for absorption heat pump systems operating on monomethylamine-water. Part III: Simultaneous cooling and heating. Heat Recovery Systems & CHP, 1995, 15, 583-589.	0.4	2
96	Thermodynamic design data for absorption heat pump systems operating on water-carrol. Part III: Simultaneous cooling and heating. Heat Recovery Systems & CHP, 1995, 15, 445-456.	0.4	2
97	Experimental energy and exergy analysis of a novel water-LiBr absorption system. International Journal of Exergy, 2017, 23, 31.	0.2	2
98	Single-effect ammonia/lithium nitrate heat pump-transformer: A technology for process heat recycling. International Journal of Energy Research, 2018, 42, 4085-4096.	2.2	2
99	Design and analysis of cooling co-generation cycle using aqua-ammonia as working fluid. Thermal Science and Engineering Progress, 2020, 20, 100744.	1.3	2
100	Thermodynamic design data for absorption heat pump systems operating on water-carrol. Part II: Heating. Heat Recovery Systems & CHP, 1995, 15, 435-444.	0.4	1
101	Thermodynamic design data for absorption heat pump systems operating on monomethylamine-water. Part II: Heating. Heat Recovery Systems & CHP, 1995, 15, 571-581.	0.4	1
102	Boiling Heat Transfer Coefficients in a Falling Film Helical Coil Heat Exchanger for the NH3â€“LiNO3 Mixture. Journal of Heat Transfer, 2019, 141, .	1.2	1
103	Experimental Evaluation of a Solar Intermittent Refrigerator Working With the Mixtures NH3 â€“ LiNO3 and NH3 â€“ LiNO3 â€“ H2O. , 2011, , .		0
104	Sorption Refrigeration Systems. Green Energy and Technology, 2011, , 75-102.	0.4	0
105	Preliminary Assessment of a Solar Absorption System for Air Conditioning Applications. , 2017, , .		0