Hui Tong Chua

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1400586/publications.pdf

Version: 2024-02-01

110 papers	3,569 citations	126907 33 h-index	144013 57 g-index
116 all docs	116 docs citations	116 times ranked	2192 citing authors

#	Article	IF	Citations
1	Experimental investigation of the silica gelâ€“water adsorption isotherm characteristics. Applied Thermal Engineering, 2001, 21, 1631-1642.	6.0	289
2	Modeling the performance of two-bed, sillica gel-water adsorption chillers. International Journal of Refrigeration, 1999, 22, 194-204.	3.4	232
3	Adsorption Characteristics of Silica Gel + Water Systems. Journal of Chemical & Engineering Data, 2002, 47, 1177-1181.	1.9	223
4	Waste heat driven dual-mode, multi-stage, multi-bed regenerative adsorption system. International Journal of Refrigeration, 2003, 26, 749-757.	3.4	210
5	Transient modeling of a two-bed silica gelâ€“water adsorption chiller. International Journal of Heat and Mass Transfer, 2004, 47, 659-669.	4.8	162
6	The maximum temperature difference and polar characteristic of two-stage thermoelectric coolers. Cryogenics, 2002, 42, 273-278.	1.7	116
7	Improved thermodynamic property fields of LiBrâ€“H 2 O solution. International Journal of Refrigeration, 2000, 23, 412-429.	3.4	112
8	Centrifugal chillers: Thermodynamic modelling and a diagnostic case study. International Journal of Refrigeration, 1995, 18, 253-257.	3.4	108
9	Multi-bed regenerative adsorption chillerÂâ€” improving the utilization of waste heat and reducing the chilled water outlet temperature fluctuation. International Journal of Refrigeration, 2001, 24, 124-136.	3.4	100
10	Two bed silica gelâ€“water adsorption chillers: An effectual lumped parameter model. International Journal of Refrigeration, 2007, 30, 1417-1426.	3.4	79
11	Experimental investigation of silica gelâ€“water adsorption chillers with and without a passive heat recovery scheme. International Journal of Refrigeration, 2005, 28, 756-765.	3.4	77
12	A general model for studying effects of interface layers on thermoelectric devices performance. International Journal of Heat and Mass Transfer, 2002, 45, 5159-5170.	4.8	71
13	Low grade heat driven multi-effect distillation technology. International Journal of Heat and Mass Transfer, 2011, 54, 5497-5503.	4.8	66
14	A novel process for low grade heat driven desalination. Desalination, 2014, 351, 202-212.	8.2	58
15	Optimization of two-stage thermoelectric coolers with two design configurations. Energy Conversion and Management, 2002, 43, 2041-2052.	9.2	57
16	Optimizing chiller operation based on finite-time thermodynamics: universal modeling and experimental confirmation. International Journal of Refrigeration, 1997, 20, 191-200.	3.4	51
17	Microfluidic size selective growth of palladium nano-particles on carbon nano-onions. Chemical Communications, 2012, 48, 10102.	4.1	50
18	Techno-economic analysis of geothermal desalination using Hot Sedimentary Aquifers: A pre-feasibility study for Western Australia. Desalination, 2017, 404, 167-181.	8.2	50

#	Article	IF	Citations
19	Experimental study of the fundamental properties of reciprocating chillers and their relation to thermodynamic modeling and chiller design. International Journal of Heat and Mass Transfer, 1996, 39, 2195-2204.	4.8	49
20	Thermodynamic modeling of an ammoniaâ€“water absorption chiller. International Journal of Refrigeration, 2002, 25, 896-906.	3.4	47
21	The electro-adsorption chiller: a miniaturized cooling cycle with applications to micro-electronics. International Journal of Refrigeration, 2002, 25, 1025-1033.	3.4	47
22	New MED based desalination process for low grade waste heat. Desalination, 2016, 395, 57-71.	8.2	46
23	Diagnostics and optimization of reciprocating chillers: theory and experiment. Applied Thermal Engineering, 1997, 17, 263-276.	6.0	45
24	Adsorption Measurements of Methane on Activated Carbon in the Temperature Range (281 to 343) K and Pressures to 1.2 MPa. Journal of Chemical & Engineering Data, 2010, 55, 2700-2706.	1.9	44
25	Thermodynamic optimisation of multi effect distillation driven by sensible heat sources. Desalination, 2014, 336, 160-167.	8.2	43
26	Application of geothermal absorption air-conditioning system: A case study. Applied Thermal Engineering, 2013, 50, 71-80.	6.0	42
27	Thermo-economic analysis of two novel low grade sensible heat driven desalination processes. Desalination, 2015, 365, 316-328.	8.2	42
28	Entropy generation analysis of two-bed, silica gel-water, non-regenerative adsorption chillers. Journal Physics D: Applied Physics, 1998, 31, 1471-1477.	2.8	40
29	Thermodynamic perspective for the specific energy consumption of seawater desalination. Desalination, 2016, 386, 13-18.	8.2	40
30	A numerical study of the Hampson-type miniature Jouleâ€“Thomson cryocooler. International Journal of Heat and Mass Transfer, 2006, 49, 582-593.	4.8	39
31	Hydrogen storage in Pdâ€“Ni doped defective carbon nanotubes through the formation of CH (x= 1, 2). Carbon, 2010, 48, 3250-3255.	10.3	38
32	A comparative evaluation of two different heat-recovery schemes as applied to a two-bed adsorption chiller. International Journal of Heat and Mass Transfer, 2007, 50, 433-443.	4.8	37
33	Boosted Multi-Effect Distillation for sensible low-grade heat sources: A comparison with feed pre-heating Multi-Effect Distillation. Desalination, 2015, 366, 32-46.	8.2	35
34	Thermo-economic analysis of low-grade heat driven multi-effect distillation based desalination processes. Desalination, 2018, 448, 36-48.	8.2	34
35	Shear flow assisted decoration of carbon nano-onions with platinum nanoparticles. Chemical Communications, 2013, 49, 5171.	4.1	32
36	Predicting isosteric heats for gas adsorption. Physical Chemistry Chemical Physics, 2013, 15, 473-482.	2.8	32

#	Article	IF	Citations
37	Temperature-entropy formulation of thermoelectric thermodynamic cycles. Physical Review E, 2002, 65, 056111.	2.1	31
38	How varying condenser coolant flow rate affects chiller performance: thermodynamic modeling and experimental confirmation. Applied Thermal Engineering, 2000, 20, 1149-1159.	6.0	29
39	A general thermodynamic framework for understanding the behaviour of absorption chillers. International Journal of Refrigeration, 2000, 23, 491-507.	3.4	28
40	Thermodynamic analysis of absorption chillers: internal dissipation and process average temperature. Applied Thermal Engineering, 1998, 18, 671-682.	6.0	27
41	The direct decomposition of NO over the La2CuO4 nanofiber catalyst. Journal of Solid State Chemistry, 2008, 181, 2804-2807.	2.9	26
42	Numerical simulation of a supercritical CO2 geothermosiphon. International Communications in Heat and Mass Transfer, 2010, 37, 1447-1451.	5.6	24
43	Performance simulation of multi-bed silica gel-water adsorption chillers. International Journal of Refrigeration, 2015, 52, 32-41.	3.4	24
44	Entropy production analysis and experimental confirmation of absorption systems. International Journal of Refrigeration, 1997, 20, 179-190.	3.4	23
45	The role of internal dissipation and process average temperature in chiller performance and diagnostics. Journal of Applied Physics, 1998, 83, 1831-1836.	2.5	23
46	Time-dependent, irreversible entropy production and geodynamics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 285-300.	3.4	23
47	Thermodynamic Property Fields of an Adsorbateâ"Adsorbent System. Langmuir, 2003, 19, 2254-2259.	3.5	20
48	Optimization and thermodynamic understanding of conduction-cooled Peltier current leads. Cryogenics, 2002, 42, 141-145.	1.7	19
49	Application of the Boosted MED process for low-grade heat sources â€" A pilot plant. Desalination, 2015, 366, 47-58.	8.2	19
50	On the modeling of absorption chillers with external and internal irreversibilities. Applied Thermal Engineering, 1997, 17, 413-425.	6.0	17
51	High-yield synthesis of silicon carbide nanowires by solar and lamp ablation. Nanotechnology, 2013, 24, 335603.	2.6	17
52	Generating Hydrogen Gas from Methane with Carbon Captured as Pure Spheroidal Nanomaterials. Chemistry - A European Journal, 2011, 17, 9188-9192.	3.3	16
53	Thermal performance prediction of outdoor swimming pools. Building and Environment, 2019, 160, 106167.	6.9	16
54	Thermodynamic Modeling of Absorption Chiller and Comparison with Experiments. Heat Transfer Engineering, 1999, 20, 42-51.	1.9	15

#	Article	IF	Citations
55	Predicting the Integral Heat of Adsorption for Gas Physisorption on Microporous and Mesoporous Adsorbents. Journal of Physical Chemistry C, 2014, 118, 8350-8358.	3.1	15
56	Low-grade waste heat driven desalination technology. International Journal for Simulation and Multidisciplinary Design Optimization, 2014, 5, A02.	1.1	15
57	Facile synthesis of electrochemically active Pt nanoparticle decorated carbon nano onions. New Journal of Chemistry, 2015, 39, 915-920.	2.8	15
58	Theoretical and experimental analysis of an absorption chiller. International Journal of Refrigeration, 1994, 17, 351-358.	3.4	14
59	Equipment Design and Control of Advanced Thermal-Processing Module in Lithography. IEEE Transactions on Industrial Electronics, 2010, 57, 1112-1119.	7.9	14
60	A novel flash boosted evaporation process for alumina refineries. Applied Thermal Engineering, 2016, 94, 375-384.	6.0	14
61	Carbon nanofibres from fructose using a light-driven high-temperature spinning disc processor. Chemical Communications, 2014, 50, 1478-1480.	4.1	13
62	Deep geothermal: The â€˜Moon Landingâ€™ mission in the unconventional energy and minerals space. Journal of Earth Science (Wuhan, China), 2015, 26, 2-10.	3.2	13
63	An industrial application of low-grade sensible waste heat driven seawater desalination: A case study. Desalination, 2019, 470, 114055.	8.2	13
64	Performance Evaluation of Centrifugal Chillers in an Air-Conditioning Plant with The Building Automation System (BAS). Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 1994, 208, 249-255.	1.4	12
65	General thermodynamic framework for understanding temperature-entropy diagram of batchwise operating thermodynamic cooling cycles. Journal of Applied Physics, 2001, 89, 5151-5158.	2.5	11
66	Growth of La2CuO4 nanofibers under a mild condition by using single walled carbon nanotubes as templates. Journal of Solid State Chemistry, 2006, 179, 2036-2040.	2.9	11
67	A thermogravimetric analyzer for condensable gas adsorption under subatmospheric conditions. Journal of Thermal Analysis and Calorimetry, 2007, 90, 935-940.	3.6	11
68	The merits of plasmonic desalination. Nature Photonics, 2017, 11, 70-70.	31.4	11
69	Thermionic and tunneling cooling thermodynamics. Applied Physics Letters, 2004, 84, 3999-4001.	3.3	10
70	Light-driven high-temperature continuous-flow synthesis of TiO2 nano-anatase. Chemical Engineering Journal, 2012, 211-212, 195-199.	12.7	10
71	Synthesis of few-layer graphene by lamp ablation. Carbon, 2015, 94, 349-351.	10.3	10
72	On minimizing the heat leak of current leads in cryogenic vacuum systems. Cryogenics, 2002, 42, 779-785.	1.7	8

#	Article	IF	Citations
73	Methane desorption and adsorption measurements on activated carbon in 281â€“343ÂK and pressures to 1.2ÂMPa. Journal of Thermal Analysis and Calorimetry, 2012, 110, 1475-1485.	3.6	8
74	Introduction to Desalination. , 2017, , 1-17.		8
75	A comparison of ground and air source heat pump performance for domestic applications: A case study in Perth, Australia. International Journal of Energy Research, 2021, 45, 20686-20699.	4.5	8
76	Methane production test of the anaerobic sludge from rice parboiling industries with the addition of biodiesel glycerol from rice bran oil in Brazil. Renewable and Sustainable Energy Reviews, 2021, 149, 111331.	16.4	8
77	Activated Carbon Based Supercapacitors with a Reduced Graphene Oxide Additive: Preparation and Properties. Journal of Nanoscience and Nanotechnology, 2020, 20, 4073-4083.	0.9	7
78	A new zero-liquid-discharge brine concentrator using a Cascaded Fluidised Bed Ice Slurry Generator. Desalination, 2021, 520, 115344.	8.2	7
79	A lamp thermoelectricity based integrated bake/chill system for photoresist processing. International Journal of Heat and Mass Transfer, 2007, 50, 580-594.	4.8	6
80	Performance Study of a Four-Bed Silica Gel-Water Adsorption Chiller with the Passive Heat Recovery Scheme. Mathematical Problems in Engineering, 2015, 2015, 1-10.	1.1	6
81	A novel low grade heat driven process to re-concentrate process liquor in alumina refineries. Hydrometallurgy, 2017, 170, 34-42.	4.3	5
82	Entropic Bounds for Multi-Scale and Multi-Physics Coupling in Earth Sciences. Understanding Complex Systems, 2014, , 323-335.	0.6	5
83	Simple thermodynamic diagrams for real refrigeration systems. Journal of Applied Physics, 1999, 85, 641-646.	2.5	4
84	Temperatureâ€“entropy diagram for an irreversible absorption refrigeration cycle. Journal of Applied Physics, 2000, 88, 446-452.	2.5	4
85	A two-stage cuboid-styled thermoelectric cooler with switched polarity. , 0, , .		4
86	Panorama of boron nitride nanostructures via lamp ablation. Nano Research, 2019, 12, 557-562.	10.4	4
87	Resolution analysis of atomic force microscopy using temporal phase modulation interferometry. Optical Engineering, 2004, 43, 75.	1.0	3
88	Equipment design and control of advanced thermal processing system in lithography. , 2007, , .		3
89	Experimental verification of a diagnostic model for reciprocating chillers. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 1997, 211, 259-265.	2.5	2
90	Integrated bake/chill system for across-wafer temperature uniformity control in photoresist processing. Journal of Vacuum Science & Technology B, 2009, 27, 1211.	1.3	2

#	Article	IF	Citations
91	A heater plate assisted bake/chill system for photoresist processing in photolithography. Applied Thermal Engineering, 2009, 29, 985-997.	6.0	2
92	Modeling and Real-Time Control of Multizone Thermal Processing System for Photoresist Processing. Industrial & Engineering Chemistry Research, 2013, 52, 4805-4814.	3.7	2
93	Low Grade Sensible Heat-Driven Distillation. , 2017, , 19-26.		2
94	Boosted Multi-Effect Distillation Pilot Plant. , 2017, , 27-41.		1
95	Resistance of Blended Cement Pastes to Leaching in Distilled Water at Ambient and Higher Temperatures. ACI Materials Journal, 2001, 98, .	0.2	1
96	Design of a scalable multiprocessor architecture and its simulation. Journal of Systems and Software, 2001, 58, 135-152.	4.5	0
97	NANOTIPS COLD-END CONTACT FOR MICROCOOLING SYSTEMS. International Journal of Nanoscience, 2005, 04, 701-707.	0.7	0
98	A thermoelectricity-lamp based integrated bake/chill system for photoresist processing. , 2005, , .		0
99	Fabrication nanotips array for thermoelectic collers using nercom process. , 0, , .		0
100	A lamp thermoelectricity based integrated bake/chill system for advanced photoresist processing. , 2006, , .		0
101	A heater plate assisted integrated bake/chill system for photoresist processing. , 2007, , .		0
102	In-situ real-time temperature control of baking systems in lithography. Proceedings of SPIE, 2008, , .	0.8	0
103	Methane Catalytic Cracking to Make CO_x Free Hydrogen and Carbons (Nanotubes,) Tj ETQq1 1 0.784314 rgBT /Overlock	0.3	0
104	Geothermal air conditioning: typical applications using deep-warm and shallow-cool reservoirs for cooling in Perth, Western Australia. International Journal for Simulation and Multidisciplinary Design Optimization, 2014, 5, A10.	1.1	0
105	Mathematical Simulation. , 2017, , 43-80.		0
106	Application of Novel Low Grade Heat-Driven Distillation to Seawater Desalination. , 2017, , 105-124.		0
107	Pumping Power Analysis. , 2017, , 81-85.		0
108	Thermo-Economic Analysis. , 2017, , 93-104.		0

#	Article	IF	Citations
109	Application of Novel Low Grade Heat-Driven Distillation in Alumina Refineries. , 2017, , 125-161.		0
110	Waste Heat Performance Ratio. , 2017, , 87-92.		0