Kanchan Chowdhury

List of Publications by Citations

36 papers	335 citations	13 h-index	16 g-index
36 ext. papers	395 ext. citations	3.8 avg, IF	4.47 L-index

#	Paper	IF	Citations
36	Exergy analysis of helium liquefaction systems based on modified Claude cycle with two-expanders. *Cryogenics*, **2011**, 51, 287-294	1.8	26
35	Performance of Cryogenic Heat Exchangers with Heat Leak from the Surroundings **1984**, 273-280		22
34	Role of expanders in helium liquefaction cycles: Parametric studies using Collins cycle. *Fusion Engineering and Design*, **2011**, 86, 318-324	1.7	21
33	LNG boil-off gas reliquefaction by Brayton refrigeration system Part 1: Exergy analysis and design of the basic configuration. *Energy*, **2019**, 176, 753-764	7.9	20
32	Comparisons of thermodynamic and economic performances of cryogenic air separation plants designed for external and internal compression of oxygen. *Applied Thermal Engineering*, **2019**, 160, 114025	5.8	20
31	Exergy based analysis on different expander arrangements in helium liquefiers. *International Journal of Refrigeration*, **2012**, 35, 1188-1199	3.8	20
30	Effect of Flow Maldistribution on Multipassage Heat Exchanger Performance. *Heat Transfer Engineering*, **1985**, 6, 45-54	1.7	20
29	Customization and validation of a commercial process simulator for dynamic simulation of Helium liquefier. *Energy*, **2011**, 36, 3204-3214	7.9	18
28	Application of exergy analysis in designing helium liquefiers. *Energy*, **2012**, 37, 207-219	7.9	17
27	Role of heat exchangers in helium liquefaction cycles: Simulation studies using Collins cycle. *Fusion Engineering and Design*, **2012**, 87, 39-46	1.7	17
26	LNG boil-off gas reliquefaction by Brayton refrigeration system Part 2: Improvements over basic configuration. *Energy*, **2019**, 176, 861-873	7.9	15
25	Process configuration of Liquid-nitrogen Energy Storage System (LESS) for maximum turnaround efficiency. *Cryogenics*, **2017**, 88, 132-142	1.8	14
24	Fires in Indian hospitals: root cause analysis and recommendations for their prevention. *Journal of Clinical Anesthesia*, **2014**, 26, 414-24	1.9	13
23	Zero methane loss in reliquefaction of boil-off gas in liquefied natural gas carrier ships by using packed bed distillation in reverse Brayton system. *Journal of Cleaner Production*, **2020**, 260, 121037	10.3	12
22	Use of dual pressure Claude liquefaction cycles for complete and energy-efficient reliquefaction of boil-off gas in LNG carrier ships. *Energy*, **2020**, 198, 117345	7.9	10
21	Optimum number of stages and intermediate pressure level for highest exergy efficiency in large helium liquefiers. *International Journal of Refrigeration*, **2013**, 36, 2438-2457	3.8	9
20	Applicability of equations of state for modeling helium systems. *Cryogenics*, **2012**, 52, 375-381	1.8	9

19	Comparison between reverse Brayton and Kapitza based LNG boil-off gas reliquefaction system using exergy analysis. *IOP Conference Series: Materials Science and Engineering*, **2017**, 171, 012009	0.4	8
18	Saving power by modifying a double column air separation plant to produce high and low purity pressurized gaseous oxygen simultaneously. *Energy*, **2020**, 210, 118487	7.9	7
17	Enhanced oxygen recovery and energy efficiency in a reconfigured single column air separation unit producing pure and impure oxygen simultaneously. *Chemical Engineering and Processing: Process Intensification*, **2021**, 162, 108354	3.7	7
16	Evaluating performance of mixed mode multistage helium plants for design and off-design conditions by exergy analysis. *International Journal of Refrigeration*, **2014**, 38, 46-57	3.8	6
15	Mitigating an increase of specific power consumption in a cryogenic air separation unit at reduced oxygen production. *IOP Conference Series: Materials Science and Engineering*, **2017**, 171, 012016	0.4	4
14	Exergy Analysis of Different Cold End Configurations for Helium Liquefiers. *Journal of Thermal Science and Engineering Applications*, **2012**, 4,	1.9	4
13	Determining design criteria to reduce power and cost in filling high-pressure oxygen cylinders directly from cryogenic air separation plants. *Cryogenics*, **2021**, 116, 103299	1.8	4
12	Enhancing generation of green power from the cold of vaporizing LNG at 30 bar by optimising heat exchanger surface area in a multi-staged organic Rankine cycle. *Sustainable Energy Technologies and Assessments*, **2021**, 43, 100930	4.7	3
11	Exergy analysis of large-scale helium liquefiers: Evaluating design trade-offs **2014**,		2
10	Mitigation of effects of pulsed heat load from fusion devices on helium refrigerator: A novel technique using vapor compression cycle. *International Journal of Refrigeration*, **2013**, 36, 1776-1789	3.8	1
9	A cycle configuration for large-scale helium refrigerator for fusion devices towards complete mitigation of the effects of pulsed heat load. *Fusion Engineering and Design*, **2013**, 88, 2972-2982	1.7	1
8	Optimization of UA of heat exchangers and BOG compressor exit pressure of LNG boil-off gas reliquefaction system using exergy analysis. *IOP Conference Series: Materials Science and Engineering*, **2015**, 101, 012090	0.4	1
7	Identification of critical equipment and determination of operational limits in helium refrigerators under pulsed heat load. *Cryogenics*, **2014**, 59, 23-37	1.8	1
6	Fatal Accident from an Oxygen Fire in an Indian Steel Plant in 2012: Unresolved Questions **2016**, 205-233		1
5	Effect of precooling with transcritical CO2 cycle on two types of LNG boil-off gas reliquefaction systems. *Journal of Natural Gas Science and Engineering*, **2021**, 89, 103876	4.6	1
4	Essential design criteria for safe and efficient operation of an LNG boil-off gas reliquefier under deteriorated performance of system components. *Cryogenics*, **2021**, 103371	1.8	1
3	Optimizing distribution of heat exchanger surface areas for enhanced power output from vaporizing LNG at 6 bar in an organic Rankine cycle. *Thermal Science and Engineering Progress*, **2021**, 21, 100779	3.6	0
2	Reducing power consumption in a cryogenic air separation plant for filling oxygen cylinders in-situ by utilizing thermal energy of pumped liquid oxygen. *Applied Thermal Engineering*, **2021**, 117623	5.8	0

1 Strategizing practical implementation of additional condenser-reboilers (CR) to reduce power consumption of a dual purity cryogenic single column gaseous oxygen plant. *Cryogenics*, **2022**, 103496 1.8