

# G Venkatarathnam

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/8842409/g-venkatarathnam-publications-by-year.pdf>

**Version:** 2024-04-29

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

58  
papers

783  
citations

17  
h-index

25  
g-index

64  
ext. papers

892  
ext. citations

2.8  
avg, IF

4.48  
L-index

#	Paper	IF	Citations
58	New pressure and density based methods for isothermal-isobaric flash calculations. <i>Fluid Phase Equilibria</i> , <b>2021</b> , 537, 112980	2.5	
57	Prediction of vapour-liquid equilibria of neon-nitrogen, neon-oxygen and neon-argon mixtures used in J-T refrigerators. <i>Cryogenics</i> , <b>2020</b> , 106, 103039	1.8	2
56	Performance of JT refrigerators operating with mixtures and coiled wire-finned heat exchangers. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2020</b> , 141, 2169-2175	4.1	1
55	Performance of a Linde-Hampson refrigerator operating from 120 °C to 80 °C with optimised R14-hydrocarbon mixtures exhibiting vapour-liquid-liquid equilibria. <i>Heat and Mass Transfer</i> , <b>2020</b> , 56, 1523-1535	2.2	2
54	Prediction of vapour-liquid and vapour-liquid-liquid equilibria of nitrogen-hydrocarbon mixtures used in J-T refrigerators. <i>Cryogenics</i> , <b>2018</b> , 90, 70-85	1.8	4
53	Estimation of performance of a J-T refrigerators operating with nitrogen-hydrocarbon mixtures and a coiled tubes-in-tube heat exchanger. <i>Cryogenics</i> , <b>2018</b> , 92, 27-35	1.8	7
52	Comparison of performance of a vapor absorption refrigeration system operating with some hydrofluorocarbons and hydrofluoroolefins as refrigerants along with ionic liquid [hmim][TF2N] as the absorbent. <i>International Journal of Refrigeration</i> , <b>2018</b> , 88, 370-382	3.8	28
51	Occurrence of Dry-Out Phenomenon in an Auto Refrigerant Cascade Refrigerator Operating With Zeotropic Mixtures. <i>Journal of Thermal Science and Engineering Applications</i> , <b>2017</b> , 9,	1.9	3
50	Performance of a vapour absorption heat transformer operating with ionic liquids and ammonia. <i>Energy</i> , <b>2017</b> , 141, 924-936	7.9	17
49	Density Marching Method for Drawing Phase Envelopes. 3. P-xy Diagrams of Binary Mixtures. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 13894-13904	3.9	6
48	Studies on capillary tube expansion device used in J-T refrigerators operating with nitrogen-hydrocarbon mixtures. <i>Cryogenics</i> , <b>2017</b> , 87, 76-84	1.8	2
47	Experimental investigation on mixed refrigerant cryocooler operating at 70 K for cooling high temperature superconductors. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 171, 012073 <sup>1</sup>	0.4	
46	Studies on Phase Shifting Mechanism in Pulse Tube Cryocooler. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 171, 012082	0.4	
45	Relationship between composition of mixture charged and that in circulation in an auto refrigerant cascade and a J-T refrigerator operating in liquid refrigerant supply mode. <i>Cryogenics</i> , <b>2017</b> , 81, 42-46	1.8	18
44	Identification of the phase of a substance from the derivatives of pressure, volume and temperature, without prior knowledge of saturation properties: Extension to solid phase. <i>Fluid Phase Equilibria</i> , <b>2016</b> , 425, 269-277	2.5	2
43	Performance of two mixed refrigerant processes providing refrigeration at 70 K. <i>Cryogenics</i> , <b>2016</b> , 78, 66-73	1.8	10
42	Effect of anion chain length on physicochemical properties of N,N-dimethylethanolammonium based protic ionic liquids. <i>Fluid Phase Equilibria</i> , <b>2016</b> , 415, 1-7	2.5	24

41	Comparison of the Straight Adiabatic Capillary Tube Expansion Devices Used in Refrigeration Systems Operating With Refrigerants R134a and R1234yf. <i>Journal of Thermal Science and Engineering Applications</i> , <b>2016</b> , 8,	1.9	2
40	Performance of an organic Rankine cycle with multicomponent mixtures. <i>Energy</i> , <b>2015</b> , 88, 690-696	7.9	13
39	Density Marching Method for Calculating Phase Envelopes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 3723-3730	3.9	16
38	Density Marching Method for Calculating Phase Envelopes. 2. Three-Phase Envelopes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 12122-12128	3.9	7
37	Performance of a vapour absorption refrigeration system operating with ionic liquid-ammonia combination with water as cosolvent. <i>Applied Thermal Engineering</i> , <b>2014</b> , 72, 250-257	5.8	20
36	A mixed refrigerant cycle for providing refrigeration below 70 k for superconducting applications. <i>Indian Journal of Cryogenics</i> , <b>2014</b> , 39, 43	1.5	1
35	Studies on the performance of a small reciprocating compressor with different nitrogenHydrocarbon mixtures. <i>International Journal of Refrigeration</i> , <b>2013</b> , 36, 2091-2096	3.8	4
34	Refrigerants for vapour compression refrigeration systems <b>2012</b> , 17, 139-162		21
33	A Review of Refrigeration Methods in the Temperature Range 4B00 K. <i>Journal of Thermal Science and Engineering Applications</i> , <b>2011</b> , 3,	1.9	32
32	A review on transient test techniques for obtaining heat transfer design data of compact heat exchanger surfaces. <i>Experimental Thermal and Fluid Science</i> , <b>2011</b> , 35, 738-743	3	14
31	Identification of the phase of a fluid using partial derivatives of pressure, volume, and temperature without reference to saturation properties: Applications in phase equilibria calculations. <i>Fluid Phase Equilibria</i> , <b>2011</b> , 301, 225-233	2.5	29
30	Effect of mixture composition and hardware on the performance of a single stage JT refrigerator. <i>Cryogenics</i> , <b>2011</b> , 51, 446-451	1.8	18
29	Measurement of the performance of very high effectiveness heat exchangers <b>2010</b> ,		3
28	A method for estimating the composition of the mixture to be charged to get the desired composition in circulation in a single stage JT refrigerator operating with mixtures. <i>Cryogenics</i> , <b>2010</b> , 50, 93-101	1.8	33
27	Relationship between the cooldown characteristics of JT refrigerators and mixture composition. <i>Cryogenics</i> , <b>2010</b> , 50, 421-425	1.8	12
26	Performance of an auto refrigerant cascade refrigerator operating in liquid refrigerant supply (LRS) mode with different cascade heat exchangers. <i>Cryogenics</i> , <b>2010</b> , 50, 720-727	1.8	15
25	A general relation for identifying the liquid like and vapour like regions of supercritical fluids. <i>Canadian Journal of Chemical Engineering</i> , <b>2009</b> , 87, 568-571	2.3	1
24	The coefficient of performance of an ideal air conditioner. <i>International Journal of Refrigeration</i> , <b>2009</b> , 32, 1929-1931	3.8	3

23	Performance of an auto refrigerant cascade refrigerator operating in gas refrigerant supply (GRS) mode with nitrogenHydrocarbon and argonHydrocarbon refrigerants. <i>Cryogenics</i> , <b>2009</b> , 49, 350-359	1.8	20
22	Influence of surface evaporation on stratification in liquid hydrogen tanks of different aspect ratios. <i>International Journal of Hydrogen Energy</i> , <b>2007</b> , 32, 1954-1960	6.7	59
21	Performance of a Throttle Cycle Refrigerator with Nitrogen-Hydrocarbon and Argon-Hydrocarbon Mixtures. <i>AIP Conference Proceedings</i> , <b>2004</b> ,	0	3
20	Experimental Studies on a Heat Pump Operating With R22, R407C and R407A: Comparison From an Exergy Point of View. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , <b>2003</b> , 125, 101-112	2.6	12
19	Transient testing of perforated plate matrix heat exchangers. <i>Cryogenics</i> , <b>2003</b> , 43, 101-109	1.8	14
18	Performance comparison of HFC227 and CFC114 in compression heat pumps. <i>Applied Thermal Engineering</i> , <b>2003</b> , 23, 1559-1566	5.8	6
17	Optimization of Matrix Heat Exchanger Geometry. <i>Journal of Heat Transfer</i> , <b>2000</b> , 122, 579-586	1.8	5
16	Effect of mixture composition on the formation of pinch points in condensers and evaporators for zeotropic refrigerant mixtures. <i>International Journal of Refrigeration</i> , <b>1999</b> , 22, 205-215	3.8	41
15	Performance of a counterflow heat exchanger with heat loss through the wall at the cold end. <i>Cryogenics</i> , <b>1999</b> , 39, 43-52	1.8	36
14	Analysis of performance of heat exchangers used in practical micro miniature refrigerators. <i>Cryogenics</i> , <b>1999</b> , 39, 517-527	1.8	17
13	Performance of a counter flow heat exchanger with longitudinal heat conduction through the wall separating the fluid streams from the environment. <i>Cryogenics</i> , <b>1999</b> , 39, 811-819	1.8	18
12	A Method For Avoiding Trivial Roots in Isothermal Flash Calculations Using Cubic Equations of State. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1999</b> , 38, 3530-3534	3.9	7
11	Performance degradation due to longitudinal heat conduction in very high NTU counterflow heat exchangers. <i>Cryogenics</i> , <b>1998</b> , 38, 927-930	1.8	16
10	Transient response of perforated plate matrix heat exchangers. <i>Cryogenics</i> , <b>1998</b> , 38, 1243-1249	1.8	1
9	Performance of some zeotropic mixtures as alternative refrigerants to R22 and R502. <i>International Journal of Energy Research</i> , <b>1998</b> , 22, 1065-1073	4.5	6
8	A Straightforward Method for the Sizing of Perforated Plate Matrix Heat Exchangers <b>1998</b> , 1643-1650		3
7	Closure to Discussion of Analysis of Matrix Heat Exchanger Performance (1998, ASME J. Heat Transfer, 120, pp. 801-803). <i>Journal of Heat Transfer</i> , <b>1998</b> , 120, 803-806	1.8	
6	An apparatus for the testing of small cryogenic heat exchangers. <i>Review of Scientific Instruments</i> , <b>1996</b> , 67, 584-588	1.7	4

5	Effectiveness-Ntu relationship in perforated plate matrix heat exchangers. <i>Cryogenics</i> , <b>1996</b> , 36, 235-241	1.8	20
4	Occurrence of pinch points in condensers and evaporators for zeotropic refrigerant mixtures. <i>International Journal of Refrigeration</i> , <b>1996</b> , 19, 361-368	3.8	70
3	CRESP - A Steady State Simulator for Cryogenic Process Plants <b>1994</b> , 1237-1244		1
2	Analysis of Matrix Heat Exchanger Performance. <i>Journal of Heat Transfer</i> , <b>1991</b> , 113, 830-836	1.8	15
1	Matrix heat exchangers and their application in cryogenic systems. <i>Cryogenics</i> , <b>1990</b> , 30, 907-918	1.8	39