

# Kannan Aravamudan

## List of Publications by Year in descending order

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27  
papers

518  
citations

687363  
13  
h-index

642732  
23  
g-index

27  
all docs

27  
docs citations

27  
times ranked

484  
citing authors

#	ARTICLE	IF	CITATIONS
1	Heat transfer analysis of canned food sterilization in a still retort. Journal of Food Engineering, 2008, 88, 213-228.	5.2	70
2	CFD studies on natural convective heating of canned food in conical and cylindrical containers. Journal of Food Engineering, 2006, 77, 1024-1036.	5.2	69
3	Holdup and pressure drop studies in structured packings with catalysts. Chemical Engineering Journal, 2004, 104, 45-54.	12.7	44
4	Enhanced food sterilization through inclination of the container walls and geometry modifications. International Journal of Heat and Mass Transfer, 2005, 48, 3753-3762.	4.8	41
5	Combined Homogeneous Surface Diffusion Model – Design of experiments approach to optimize dye adsorption considering both equilibrium and kinetic aspects. Journal of Environmental Management, 2017, 204, 424-435.	7.8	39
6	Photocatalytic degradation of phenol in a rotating annular reactor. Chemical Engineering Science, 2010, 65, 2727-2740.	3.8	37
7	Numerical studies on laminar natural convection inside inclined cylinders of unity aspect ratio. International Journal of Heat and Mass Transfer, 2009, 52, 822-838.	4.8	31
8	Enhancement of solid dissolution process. Chemical Engineering Journal, 2004, 102, 45-49.	12.7	24
9	Simulation and analysis of extractive distillation process in a valve tray column using the rate based model. Korean Journal of Chemical Engineering, 2005, 22, 441-451.	2.7	19
10	Effect of dissolved oxygen concentration and light intensity on photocatalytic degradation of phenol. Korean Journal of Chemical Engineering, 2008, 25, 1300-1308.	2.7	17
11	Effects of Mass Transfer on the Hydrodynamic Behavior of a Karr Reciprocating Plate Column. Industrial & Engineering Chemistry Research, 1999, 38, 1596-1604.	3.7	15
12	Quantifying Enhancement in Heat Transfer Due to Natural Convection During Canned Food Thermal Sterilization in a Still Retort. Food and Bioprocess Technology, 2011, 4, 429-450.	4.7	15
13	Swift, versatile and a rigorous kinetic model based artificial neural network surrogate for single and multicomponent batch adsorption processes. Journal of Molecular Liquids, 2020, 297, 111888.	4.9	14
14	Simulation of non-Newtonian fluid-food particle heat transfer in the holding tube used in aseptic processing operations. Food and Bioprocess Technology, 2013, 91, 129-148.	3.6	13
15	Effect of ultrasound on the solubility limit of a sparingly soluble solid. Ultrasonics Sonochemistry, 2010, 17, 427-434.	8.2	12
16	Effects of Particle Diameter and Position on Hydrodynamics around a Confined Sphere. Industrial & Engineering Chemistry Research, 2011, 50, 13137-13160.	3.7	12
17	Individual and simultaneous adsorption of Ni (II), Cd (II), and Zn (II) ions over polyamide resin: Equilibrium, kinetic and thermodynamic studies. Environmental Progress and Sustainable Energy, 2019, 38, S340.	2.3	12
18	Effect of unstable density gradients on back-mixing in a reciprocating plate column. AIChE Journal, 1996, 42, 2128-2140.	3.6	10

#	ARTICLE	IF	CITATIONS
19	Quantification of surface area and intrinsic mass transfer coefficient for ultrasound-assisted dissolution process of a sparingly soluble solid dispersed in aqueous solutions. <i>Ultrasonics Sonochemistry</i> , 2012, 19, 509-521.	8.2	8
20	A novel, initial guess free optimization algorithm for estimating parameters of batch kinetics model used to simulate adsorption of pollutant molecules in aqueous streams. <i>Journal of Molecular Liquids</i> , 2019, 275, 510-522.	4.9	7
21	Formation of tailed drops in liquid-liquid extraction. <i>Chemical Engineering Science</i> , 2000, 55, 1029-1031.	3.8	2
22	Simulation of a cross flow wind aided evaporator. <i>Desalination</i> , 2014, 340, 18-29.	8.2	2
23	Unified, simple and decentralized treatment process for synthetic and real-time dye contaminated wastewaters. <i>Journal of Hazardous Materials</i> , 2022, 423, 127059.	12.4	2
24	Soft Computing Optimization Algorithms and Their Application in Parameter Estimation of a Rigorous Adsorption Kinetics Model. , 2021, , 145-169.		1
25	Maximizing Adsorption Involving Three Solutes on Enhanced Adsorbents Using the Mixture-Process Variable Design. <i>ACS Omega</i> , 2022, 7, 19561-19578.	3.5	1
26	Identifying steep pareto fronts in multicomponent adsorption using a novel elliptical method. <i>Environmental Science and Pollution Research</i> , 2022, 29, 80336-80352.	5.3	1
27	Simulation of a kinetic model integrated with variable catalyst holdup applied in industrial fluid catalytic cracking risers. <i>International Journal of Chemical Reactor Engineering</i> , 2021, .	1.1	0