# Vasanth Kumar Kannuchamy

List of Publications by Year
in descending order

| 78 | 6,922 | 109321 | 71685 |
|---|---|---|---|
| papers | citations | 35 | 76 |
| | | h-index | g-index |

| 78 | 78 | 78 | 7516 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | TOF-SIMS analysis of curcuminoids and curcumin crystals crystallized from their pure and impure solutions. CrystEngComm, 2022, 24, 2485-2504. | 2.6 | 1 |
| 2 | Probing adsorbent heterogeneity using Toth isotherms. Journal of Materials Chemistry A, 2021, 9, 944-962. | 10.3 | 12 |
| 3 | Deep neural networks in chemical engineering classrooms to accurately model adsorption equilibrium data. Education for Chemical Engineers, 2021, 36, 115-127. | 4.8 | 18 |
| 4 | Pure Curcumin Spherulites from Impure Solutions *via* Nonclassical Crystallization. ACS Omega, 2021, 6, 23884-23900. | 3.5 | 10 |
| 5 | Advanced Size Distribution Control in Batch Cooling Crystallization Using Ultrasound. Organic Process Research and Development, 2019, 23, 935-944. | 2.7 | 4 |
| 6 | Characterization of the adsorption site energies and heterogeneous surfaces of porous materials. Journal of Materials Chemistry A, 2019, 7, 10104-10137. | 10.3 | 187 |
| 7 | Nanoporous Materials for the Onboard Storage of Natural Gas. Chemical Reviews, 2017, 117, 1796-1825. | 47.7 | 241 |
| 8 | Salt Templating with Pore Padding: Hierarchical Pore Tailoring towards Functionalised Porous Carbons. ChemSusChem, 2017, 10, 199-209. | 6.8 | 24 |
| 9 | Understanding the Hydrophilicity and Water Adsorption Behavior of Nanoporous Nitrogen-Doped Carbons. Journal of Physical Chemistry C, 2016, 120, 18167-18179. | 3.1 | 46 |
| 10 | Bio-inspired carbon electro-catalysts for the oxygen reduction reaction. Journal of Energy Chemistry, 2016, 25, 228-235. | 12.9 | 25 |
| 11 | Insights on the physical adsorption of hydrogen and methane in UiO series of MOFs using molecular simulations. Computational and Theoretical Chemistry, 2015, 1061, 36-45. | 2.5 | 18 |
| 12 | Effect of Nitrogen Doping on the $CO_2$ Adsorption Behavior in Nanoporous Carbon Structures: A Molecular Simulation Study. Journal of Physical Chemistry C, 2015, 119, 22310-22321. | 3.1 | 108 |
| 13 | The required level of isosteric heat for the adsorptive/storage delivery of $H_2$ in the UiO series of MOFs. RSC Advances, 2014, 4, 44848-44851. | 3.6 | 4 |
| 14 | Co-adsorption of $N_2$ in the presence of $CH_4$ within carbon nanospaces: evidence from molecular simulations. Nanotechnology, 2013, 24, 035401. | 2.6 | 20 |
| 15 | Effect of pore structure on the selectivity of carbon materials for the separation of CO2/H2 mixtures: new insights from molecular simulation. RSC Advances, 2012, 2, 9671. | 3.6 | 21 |
| 16 | A site energy distribution function for the characterization of the continuous distribution of binding sites for gases on a heterogeneous surface. RSC Advances, 2012, 2, 784-788. | 3.6 | 4 |
| 17 | Effect of Pore Morphology on the Adsorption of Methane/Hydrogen Mixtures on Carbon Micropores. Journal of Physical Chemistry C, 2012, 116, 11820-11829. | 3.1 | 61 |
| 18 | Site Energy Distribution Function for the Sips Isotherm by the Condensation Approximation Method and Its Application to Characterization of Porous Materials. Journal of Chemical &amp; Engineering Data, 2011, 56, 2218-2224. | 1.9 | 27 |

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|---|---------|-----|-----------|
| 19 | Molecular Simulation of Hydrogen Physisorption and Chemisorption in Nanoporous Carbon Structures. Adsorption Science and Technology, 2011, 29, 799-817. | 3.2 | 36 |
| 20 | A site energy distribution function from Toth isotherm for adsorption of gases on heterogeneous surfaces. Physical Chemistry Chemical Physics, 2011, 13, 5753. | 2.8 | 55 |
| 21 | Heat of adsorption and binding affinity for hydrogen on pitch-based activated carbons. Chemical Engineering Journal, 2011, 168, 972-978. | 12.7 | 21 |
| 22 | On the initial reaction rate of Peleg's model for rehydration kinetics. Journal of the Taiwan Institute of Chemical Engineers, 2011, 42, 278-280. | 5.3 | 9 |
| 23 | A continuous site energy distribution function from Redlichâ€"Peterson isotherm for adsorption on heterogeneous surfaces. Chemical Physics Letters, 2010, 492, 187-192. | 2.6 | 38 |
| 24 | Adsorption on Heterogeneous Surfaces: Site Energy Distribution Functions from Fritzâ€"SchlÃ¼ender Isotherms. ChemPhysChem, 2010, 11, 2555-2560. | 2.1 | 6 |
| 25 | Kinetics and thermodynamics of sucrose crystal growth in the presence of a non-ionic surfactant. Surface Science, 2010, 604, 981-987. | 1.9 | 12 |
| 26 | Neural network and principal component analysis for modeling of hydrogen adsorption isotherms on KOH activated pitch-based carbons containing different heteroatoms. Chemical Engineering Journal, 2010, 159, 272-279. | 12.7 | 16 |
| 27 | Hybrid isotherms for adsorption and capillary condensation of N2 at 77K on porous and non-porous materials. Chemical Engineering Journal, 2010, 162, 424-429. | 12.7 | 49 |
| 28 | A Continuous Binding Site Affinity Distribution Function from the Freundlich Isotherm for the Supercritical Adsorption of Hydrogen on Activated Carbon. Journal of Physical Chemistry C, 2010, 114, 13759-13765. | 3.1 | 15 |
| 29 | A Pseudo Second-Order Kinetic Expression for Dissolution Kinetic Profiles of Solids in Solutions. Industrial &amp; Engineering Chemistry Research, 2010, 49, 7257-7262. | 3.7 | 18 |
| 30 | Equilibrium and thermodynamics of dye removal from aqueous solution by adsorption using rubber wood saw dust. International Journal of Environmental Technology and Management, 2009, 10, 295. | 0.2 | 8 |
| 31 | Modelling the solidâ€"liquid adsorption processes using artificial neural networks trained by pseudo second order kinetics. Chemical Engineering Journal, 2009, 148, 20-25. | 12.7 | 63 |
| 32 | On the effect of a non-ionic surfactant on the surface of sucrose crystals and on the crystal growth process by inverse gas chromatography. Journal of Chromatography A, 2009, 1216, 8528-8534. | 3.7 | 15 |
| 33 | Regression Analysis for the Two-Step Growth Kinetics of Crystals in Pure Solutions. Industrial &amp; Engineering Chemistry Research, 2009, 48, 7852-7859. | 3.7 | 8 |
| 34 | Simple Kinetic Expressions to Study the Transport Process during the Growth of Crystals in Solution. Industrial &amp; Engineering Chemistry Research, 2009, 48, 11236-11240. | 3.7 | 7 |
| 35 | Simple kinetic models to explain the change in dislocation activity of crystals during a growth process. Philosophical Magazine Letters, 2009, 89, 599-604. | 1.2 | 0 |
| 36 | A Semiempirical Kinetics for Modeling and Simulation of the Crystal Growth Process in Pure Solutions. Industrial &amp; Engineering Chemistry Research, 2009, 48, 5105-5110. | 3.7 | 2 |

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| 37 | Neural Network Prediction of Interfacial Tension at Crystal/Solution Interface. Industrial &amp; Engineering Chemistry Research, 2009, 48, 4160-4164. | 3.7 | 28 |
| 38 | Isotherms and thermodynamics by linear and non-linear regression analysis for the sorption of methylene blue onto activated carbon: Comparison of various error functions. Journal of Hazardous Materials, 2008, 151, 794-804. | 12.4 | 166 |
| 39 | Comparison of various error functions in predicting the optimum isotherm by linear and non-linear regression analysis for the sorption of basic red 9 by activated carbon. Journal of Hazardous Materials, 2008, 150, 158-165. | 12.4 | 105 |
| 40 | Comments on â€œPhotocatalytic properties of TiO2 modified with platinum and silver nanoparticles in the degradation of oxalic acid in aqueous solutionâ€• Applied Catalysis B: Environmental, 2008, 79, 108-109. | 20.2 | 29 |
| 41 | Comments on â€œRemoval of Congo red from aqueous solution by anilinepropylsilica xerogelâ€•by Pavan FA, Dias SLP, Lima EC, Benvenutti EV. Dyes and Pigments 2008;76:64â€“9. Dyes and Pigments, 2008, 77, 481-482. | 3.7 | 4 |
| 42 | Langmuirâ€“Hinshelwood kinetics â€“ A theoretical study. Catalysis Communications, 2008, 9, 82-84. | 3.3 | 592 |
| 43 | Neural Network Modeling and Simulation of the Solid/Liquid Activated Carbon Adsorption Process. Industrial &amp; Engineering Chemistry Research, 2008, 47, 486-490. | 3.7 | 32 |
| 44 | Modelling of the Batch Sucrose Crystallization Kinetics Using Artificial Neural Networks: Comparison with Conventional Regression Analysis. Industrial &amp; Engineering Chemistry Research, 2008, 47, 4917-4923. | 3.7 | 17 |
| 45 | Modeling the Diffusion Mechanism and the Reaction Kinetics for the Photocatalytic Degradation of Acid Red 151 Aqueous Solutions by ZnO: Comparison of Linear and Non-Linear Methods. Journal of Advanced Oxidation Technologies, 2007, 10, . | 0.5 | 0 |
| 46 | Isotherms for Malachite Green onto rubber wood (Hevea brasiliensis) sawdust: Comparison of linear and non-linear methods. Dyes and Pigments, 2007, 72, 124-129. | 3.7 | 103 |
| 47 | Batch adsorber design for different solution volume/adsorbent mass ratios using the experimental equilibrium data with fixed solution volume/adsorbent mass ratio of malachite green onto orange peel. Dyes and Pigments, 2007, 74, 590-594. | 3.7 | 68 |
| 48 | Optimum sorption isotherm by linear and non-linear methods for malachite green onto lemon peel. Dyes and Pigments, 2007, 74, 595-597. | 3.7 | 218 |
| 49 | Reply to â€˜Comments on â€œAn adsorption and kinetic study of lac dyeing on silkâ€â€™ by Yuh-Shan Ho: Discussion on pseudo second order kinetic expression. Dyes and Pigments, 2007, 75, 253-254. | 3.7 | 3 |
| 50 | Pseudo-second order models for the adsorption of safranin onto activated carbon: Comparison of linear and non-linear regression methods. Journal of Hazardous Materials, 2007, 142, 564-567. | 12.4 | 93 |
| 51 | Equilibrium, kinetics and mechanism modeling and simulation of basic and acid dyes sorption onto jute fiber carbon: Eosin yellow, malachite green and crystal violet single component systems. Journal of Hazardous Materials, 2007, 143, 311-327. | 12.4 | 237 |
| 52 | Mass transfer, kinetics and equilibrium studies for the biosorption of methylene blue using Paspalum notatum. Journal of Hazardous Materials, 2007, 146, 214-226. | 12.4 | 155 |
| 53 | Comments on â€œadsorption of 4-chlorophenol from aqueous solutions by xad-4 resin: Isotherm, kinetic, and thermodynamic analysisâ€• Journal of Hazardous Materials, 2007, 143, 598-599. | 12.4 | 12 |
| 54 | Comments on â€œEquilibrium and kinetic studies for the biosorption system of copper(II) ion from aqueous solution using Tectona grandis L.f. leaves powderâ€• Journal of Hazardous Materials, 2007, 146, 428-429. | 12.4 | 7 |

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| 55 | Comments on "Removal of lead from aqueous solution using Syzygium cumini L.: Equilibrium and kinetic studies" Journal of Hazardous Materials, 2007, 147, 677-678. | 12.4 | 6 |
| 56 | Comments on "Biosorption of nickel from protonated rice bran" Journal of Hazardous Materials, 2007, 147, 679-679. | 12.4 | 2 |
| 57 | Sorption isotherm for safranin onto rice husk: Comparison of linear and non-linear methods. Dyes and Pigments, 2007, 72, 130-133. | 3.7 | 124 |
| 58 | Biosorption of malachite green, a cationic dye onto Pithophora sp., a fresh water algae. Dyes and Pigments, 2006, 69, 102-107. | 3.7 | 140 |
| 59 | Reply to the comments on "Study on biosorption of Cr(VI) by Mucor hiemalis" by Y.-S. Ho, Biochem. Eng. J. 26 (2005) 82–83. Biochemical Engineering Journal, 2006, 30, 222-223. | 3.6 | 3 |
| 60 | Isotherm parameters for basic dyes onto activated carbon: Comparison of linear and non-linear method. Journal of Hazardous Materials, 2006, 129, 147-150. | 12.4 | 116 |
| 61 | Equilibrium data, isotherm parameters and process design for partial and complete isotherm of methylene blue onto activated carbon. Journal of Hazardous Materials, 2006, 134, 237-244. | 12.4 | 95 |
| 62 | Selection of optimum sorption kinetics: Comparison of linear and non-linear method. Journal of Hazardous Materials, 2006, 134, 277-279. | 12.4 | 85 |
| 63 | Pseudo second order kinetics and pseudo isotherms for malachite green onto activated carbon: Comparison of linear and non-linear regression methods. Journal of Hazardous Materials, 2006, 136, 721-726. | 12.4 | 118 |
| 64 | A note on the comments by Dr. Y.S. Ho on "Remediation of soil contaminated with the heavy metal (Cd2+)" Journal of Hazardous Materials, 2006, 136, 993-994. | 12.4 | 6 |
| 65 | A note on the comments by Dr. Y.S. Ho on "Nitrate removal from aqueous solution by adsorption onto various materials" Journal of Hazardous Materials, 2006, 136, 995-996. | 12.4 | 5 |
| 66 | Comments on "Equilibrium studies for the adsorption of Acid dye onto modified hectorite" Journal of Hazardous Materials, 2006, 137, 1252-1253. | 12.4 | 6 |
| 67 | Comments on "Adsorption of acid dye onto organobentonite" Journal of Hazardous Materials, 2006, 137, 638-639. | 12.4 | 35 |
| 68 | Linear and non-linear regression analysis for the sorption kinetics of methylene blue onto activated carbon. Journal of Hazardous Materials, 2006, 137, 1538-1544. | 12.4 | 338 |
| 69 | Relation between some two- and three-parameter isotherm models for the sorption of methylene blue onto lemon peel. Journal of Hazardous Materials, 2006, 138, 633-635. | 12.4 | 111 |
| 70 | Reply to Comments on 'Chitosan functionalized with 2[-bis-(pyridylmethyl) aminomethyl]4-methyl-6-formyl-phenol: Equilibrium and kinetics of copper(II) adsorption' by Yuh-Shan Ho: Discussion on pseudo second order kinetic expression. Polymer, 2006, 47, 1772-1773. | 3.8 | 3 |
| 71 | Pseudo second order kinetic models for safranin onto rice husk: Comparison of linear and non-linear regression analysis. Process Biochemistry, 2006, 41, 1198-1202. | 3.7 | 55 |
| 72 | Comparative analysis of linear and non-linear method of estimating the sorption isotherm parameters for malachite green onto activated carbon. Journal of Hazardous Materials, 2006, 136, 197-202. | 12.4 | 135 |

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| 73 | Adsorption of malachite green onto Pithophora sp., a fresh water algae: Equilibrium and kinetic modelling. Process Biochemistry, 2005, 40, 2865-2872. | 3.7 | 218 |
| 74 | Comparison of linear and non-linear method in estimating the sorption isotherm parameters for safranin onto activated carbon. Journal of Hazardous Materials, 2005, 123, 288-292. | 12.4 | 101 |
| 75 | Modeling the mechanism involved during the sorption of methylene blue onto fly ash. Journal of Colloid and Interface Science, 2005, 284, 14-21. | 9.4 | 494 |
| 76 | Equilibrium, kinetics, mechanism, and process design for the sorption of methylene blue onto rice husk. Journal of Colloid and Interface Science, 2005, 286, 90-100. | 9.4 | 1,300 |
| 77 | Removal of methylene blue by mango seed kernel powder. Biochemical Engineering Journal, 2005, 27, 83-93. | 3.6 | 253 |
| 78 | Prediction of optimum sorption isotherm: Comparison of linear and non-linear method. Journal of Hazardous Materials, 2005, 126, 198-201. | 12.4 | 95 |