# Arvind K Bansal

List of Publications by Year
in descending order

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Version: 2024-02-01

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|---|---|---|---|
| 76 papers | 2,252 citations | 279701 23 h-index | 233338 45 g-index |
| 77 all docs | 77 docs citations | 77 times ranked | 2028 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Amorphous Drug Delivery Systems: Molecular Aspects, Design, and Performance. Critical Reviews in Therapeutic Drug Carrier Systems, 2004, 21, 133-193. | 1.2 | 249 |
| 2 | Stability and Solubility of Celecoxib-PVP Amorphous Dispersions: A Molecular Perspective. Pharmaceutical Research, 2004, 21, 1762-1769. | 1.7 | 190 |
| 3 | Compression Physics in the Formulation Development of Tablets. Critical Reviews in Therapeutic Drug Carrier Systems, 2006, 23, 1-66. | 1.2 | 167 |
| 4 | Effect of Particle Size and Compression Force on Compaction Behavior and Derived Mathematical Parameters of Compressibility. Pharmaceutical Research, 2006, 24, 111-124. | 1.7 | 110 |
| 5 | Challenges in Translational Development of Pharmaceutical Cocrystals. Journal of Pharmaceutical Sciences, 2017, 106, 457-470. | 1.6 | 83 |
| 6 | Impact of Crystal Habit on Biopharmaceutical Performance of Celecoxib. Crystal Growth and Design, 2013, 13, 2824-2832. | 1.4 | 77 |
| 7 | Dynamic Vapor Sorption as a Tool for Characterization and Quantification of Amorphous Content in Predominantly Crystalline Materials. Journal of Pharmaceutical Sciences, 2014, 103, 3364-3376. | 1.6 | 76 |
| 8 | Molecular Understanding of the Compaction Behavior of Indomethacin Polymorphs. Molecular Pharmaceutics, 2013, 10, 631-639. | 2.3 | 75 |
| 9 | Wettability and surface chemistry of crystalline and amorphous forms of a poorly water soluble drug. European Journal of Pharmaceutical Sciences, 2010, 40, 84-93. | 1.9 | 72 |
| 10 | Use of biorelevant dissolution and PBPK modeling to predict oral drug absorption. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 129, 222-246. | 2.0 | 60 |
| 11 | Molecular interactions in celecoxib-PVP-meglumine amorphous system. Journal of Pharmacy and Pharmacology, 2010, 57, 303-310. | 1.2 | 53 |
| 12 | Relationship between crystal structure and mechanical properties of ranitidine hydrochloride polymorphs. CrystEngComm, 2013, 15, 3959. | 1.3 | 51 |
| 13 | Counterintuitive Compaction behavior of Clopidogrel Bisulfate Polymorphs. Journal of Pharmaceutical Sciences, 2012, 101, 2408-2416. | 1.6 | 49 |
| 14 | Mechanistic investigation on pressure dependency of Heckel parameter. International Journal of Pharmaceutics, 2010, 389, 66-73. | 2.6 | 47 |
| 15 | Implication of microstructure on the mechanical behaviour of an aspirinâ€“paracetamol eutectic mixture. CrystEngComm, 2014, 16, 8471-8478. | 1.3 | 45 |
| 16 | Influence of Drugâ€“Polymer Interactions on Dissolution of Thermodynamically Highly Unstable Cocrystal. Molecular Pharmaceutics, 2019, 16, 151-164. | 2.3 | 45 |
| 17 | Oral Bioavailability and Pharmacodynamic Activity of Hesperetin Nanocrystals Generated Using a Novel Bottom-up Technology. Molecular Pharmaceutics, 2015, 12, 1158-1170. | 2.3 | 43 |
| 18 | Correlating Single Crystal Structure, Nanomechanical, and Bulk Compaction Behavior of Febuxostat Polymorphs. Molecular Pharmaceutics, 2017, 14, 866-874. | 2.3 | 41 |

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| 19 | Effect of Particle Size on In-die and Out-of-die Compaction Behavior of Ranitidine Hydrochloride Polymorphs. AAPS PharmSciTech, 2013, 14, 1169-1177. | 1.5 | 39 |
| 20 | Spray Drying for Generation of a Ternary Amorphous System of Celecoxib, PVP, and Meglumine. Pharmaceutical Development and Technology, 2005, 10, 273-281. | 1.1 | 36 |
| 21 | Improved dissolution of a poorly water soluble drug in solid dispersions with polymeric and non-polymeric hydrophilic additives. Acta Pharmaceutica, 2008, 58, 257-74. | 0.9 | 30 |
| 22 | Molecular Basis of Water Sorption Behavior of Rivaroxaban-Malonic Acid Cocrystal. Molecular Pharmaceutics, 2019, 16, 2980-2991. | 2.3 | 30 |
| 23 | Nanocrystalline solid dispersions (NSD) of hesperetin (HRN) for prevention of 7, 12-dimethylbenz[a]anthracene (DMBA)-induced breast cancer in Sprague-Dawley (SD) rats. European Journal of Pharmaceutical Sciences, 2019, 128, 240-249. | 1.9 | 26 |
| 24 | Investigation of Atypical Dissolution Behavior of an Encapsulated Amorphous Solid Dispersion. Journal of Pharmaceutical Sciences, 2011, 100, 2460-2468. | 1.6 | 25 |
| 25 | Novel nanocrystal-based formulations of apremilast for improved topical delivery. Drug Delivery and Translational Research, 2021, 11, 966-983. | 3.0 | 25 |
| 26 | Mechanism of generation of drug nanocrystals in celecoxib: mannitol nanocrystalline solid dispersion. International Journal of Pharmaceutics, 2015, 495, 132-139. | 2.6 | 24 |
| 27 | Weak Hydrogen Bonding Interactions Influence Slip System Activity and Compaction Behavior of Pharmaceutical Powders. Journal of Pharmaceutical Sciences, 2013, 102, 4242-4245. | 1.6 | 20 |
| 28 | Effect of counterions on the properties of amorphous atorvastatin salts. European Journal of Pharmaceutical Sciences, 2011, 44, 462-470. | 1.9 | 18 |
| 29 | Amorphous Salts Solid Dispersions of Celecoxib: Enhanced Biopharmaceutical Performance and Physical Stability. Molecular Pharmaceutics, 2021, 18, 2334-2348. | 2.3 | 18 |
| 30 | Impact of differential surface molecular environment on the interparticulate bonding strength of celecoxib crystal habits. International Journal of Pharmaceutics, 2014, 460, 189-195. | 2.6 | 17 |
| 31 | Emerging role of primary heterogeneous nucleation in pharmaceutical crystallization. Drug Development Research, 2020, 81, 3-22. | 1.4 | 17 |
| 32 | NanoCrySP technology for generation of drug nanocrystals: translational aspects and business potential. Drug Delivery and Translational Research, 2016, 6, 392-8. | 3.0 | 16 |
| 33 | Impact of Drug-Polymer Miscibility on Enthalpy Relaxation of Irbesartan Amorphous Solid Dispersions. Pharmaceutical Research, 2018, 35, 29. | 1.7 | 16 |
| 34 | The Role of Cocrystallization-Mediated Altered Crystallographic Properties on the Tabletability of Rivaroxaban and Malonic Acid. Pharmaceutics, 2020, 12, 546. | 2.0 | 16 |
| 35 | Effect of differential surface anisotropy on performance of two plate shaped crystals of aspirin form I. European Journal of Pharmaceutical Sciences, 2017, 99, 318-327. | 1.9 | 15 |
| 36 | Molecular Understanding and Implication of Structural Integrity in the Deformation Behavior of Binary Drugâ€“Drug Eutectic Systems. Molecular Pharmaceutics, 2018, 15, 1917-1927. | 2.3 | 15 |

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| 37 | Effect of Variability of Physical Properties of Povidone K30 on Crystallization and Drugâ€“Polymer Miscibility of Celecoxibâ€“Povidone K30 Amorphous Solid Dispersions. Molecular Pharmaceutics, 2019, 16, 4139-4148. | 2.3 | 15 |
| 38 | Development and Optimization of a Starch-Based Co-processed Excipient for Direct Compression Using Mixture Design. AAPS PharmSciTech, 2018, 19, 866-880. | 1.5 | 14 |
| 39 | Permeability Behavior of Nanocrystalline Solid Dispersion of Dipyridamole Generated Using NanoCrySP Technology. Pharmaceutics, 2018, 10, 160. | 2.0 | 14 |
| 40 | Biorelevant dissolution testing and physiologically based absorption modeling to predict in vivo performance of supersaturating drug delivery systems. International Journal of Pharmaceutics, 2021, 607, 120958. | 2.6 | 14 |
| 41 | Effect of Mannitol on Nucleation and Crystal Growth of Amorphous Flavonoids: Implications on the Formation of Nanocrystalline Solid Dispersion. Journal of Pharmaceutical Sciences, 2015, 104, 3789-3797. | 1.6 | 13 |
| 42 | Characterization and Thermodynamic Relationship of Three Polymorphs of a Xanthine Oxidase Inhibitor, Febuxostat. Journal of Pharmaceutical Sciences, 2015, 104, 3722-3730. | 1.6 | 13 |
| 43 | Molecular Interpretation of Mechanical Behavior in Four Basic Crystal Packing of Isoniazid with Homologous Cocrystal Formers. Crystal Growth and Design, 2020, 20, 832-844. | 1.4 | 13 |
| 44 | Analytical and Computational Methods for the Determination of Drug-Polymer Solubility and Miscibility. Molecular Pharmaceutics, 2021, 18, 2835-2866. | 2.3 | 13 |
| 45 | Nanocrystals for improved topical delivery of medium soluble drug: A case study of acyclovir. Journal of Drug Delivery Science and Technology, 2021, 65, 102662. | 1.4 | 12 |
| 46 | Investigating the Role of the Reduced Solubility of the Pirfenidoneâ€“Fumaric Acid Cocrystal in Sustaining the Release Rate from Its Tablet Dosage Form by Conducting Comparative Bioavailability Study in Healthy Human Volunteers. Molecular Pharmaceutics, 2022, 19, 1557-1572. | 2.3 | 12 |
| 47 | Role of Structure, Microenvironmental pH, and Speciation To Understand the Formation and Properties of Febuxostat Eutectics. Molecular Pharmaceutics, 2019, 16, 4610-4620. | 2.3 | 11 |
| 48 | Effect of Different â€œStatesâ€•of Sorbed Water on Amorphous Celecoxib. Journal of Pharmaceutical Sciences, 2014, 103, 2033-2041. | 1.6 | 10 |
| 49 | Impact of Tert-Butyl Alcohol on Crystallization Kinetics of Gemcitabine Hydrochloride in Frozen Aqueous Solutions. Journal of Pharmaceutical Sciences, 2015, 104, 87-97. | 1.6 | 10 |
| 50 | A novel approach to design febuxostat-salicylic acid eutectic system: evaluation and characterization. CrystEngComm, 2019, 21, 310-320. | 1.3 | 10 |
| 51 | Assessment of Biopharmaceutical Performance of Supersaturating Formulations of Carbamazepine in Rats Using Physiologically Based Pharmacokinetic Modeling. AAPS PharmSciTech, 2019, 20, 179. | 1.5 | 10 |
| 52 | Molecular Relaxation Behavior and Isothermal Crystallization above Glass Transition Temperature of Amorphous Hesperetin. Journal of Pharmaceutical Sciences, 2014, 103, 167-178. | 1.6 | 9 |
| 53 | Differential compaction behaviour of roller compacted granules of clopidogrel bisulphate polymorphs. International Journal of Pharmaceutics, 2014, 472, 288-295. | 2.6 | 9 |
| 54 | Co-processing of small molecule excipients with polymers to improve functionality. Expert Opinion on Drug Delivery, 2021, 18, 907-928. | 2.4 | 9 |

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| 55 | Surface characterization of pharmaceutical solids. TrAC - Trends in Analytical Chemistry, 2021, 138, 116228. | 5.8 | 9 |
| 56 | Investigation of Need of Natural Bioenhancer for a Metabolism Susceptible Drugâ€"Raloxifene, in a Designed Self-Emulsifying Drug Delivery System. AAPS PharmSciTech, 2017, 18, 2529-2540. | 1.5 | 8 |
| 57 | Single-Crystal Plasticity Defies Bulk-Phase Mechanics in Isoniazid Cocrystals with Analogous Coformers. Crystal Growth and Design, 2019, 19, 4465-4475. | 1.4 | 8 |
| 58 | Understanding the Oral Absorption of Irbesartan Using Biorelevant Dissolution Testing and PBPK Modeling. AAPS PharmSciTech, 2020, 21, 102. | 1.5 | 8 |
| 59 | Correlationship of Drug-Polymer Miscibility, Molecular Relaxation and Phase Behavior of Dipyridamole Amorphous Solid Dispersions. Journal of Pharmaceutical Sciences, 2021, 110, 1470-1479. | 1.6 | 8 |
| 60 | Role of Surface Characteristics of Mannitol in Crystallization of Fenofibrate During Spray Drying. Journal of Pharmaceutical Sciences, 2020, 109, 1105-1114. | 1.6 | 7 |
| 61 | Understanding Poor Milling Behavior of Voriconazole from Crystal Structure and Intermolecular Interactions. Molecular Pharmaceutics, 2022, 19, 985-997. | 2.3 | 6 |
| 62 | Factors Affecting Crystallization Kinetics of Fenofibrate and Its Implications for the Generation of Nanocrystalline Solid Dispersions via Spray Drying. Crystal Growth and Design, 2019, 19, 4417-4428. | 1.4 | 5 |
| 63 | Impact of differential particle size of fenofibrate nanosuspensions on biopharmaceutical performance using physiologically based absorption modeling in rats. Journal of Drug Delivery Science and Technology, 2020, 60, 102040. | 1.4 | 5 |
| 64 | Role of solvent in differential phase behavior of celecoxib during spray drying. International Journal of Pharmaceutics, 2020, 585, 119489. | 2.6 | 5 |
| 65 | Design of Ascorbic Acid Eutectic Mixtures With Sugars to Inhibit Oxidative Degradation. Frontiers in Chemistry, 2022, 10, . | 1.8 | 5 |
| 66 | Nanocrystal-based gel of apremilast ameliorates imiquimod-induced psoriasis by suppressing inflammatory responses. International Journal of Pharmaceutics, 2022, 622, 121873. | 2.6 | 5 |
| 67 | Novel Co-crystals and Eutectics of Febuxostat: Characterization, Mechanism of Formation, and Improved Dissolution. AAPS PharmSciTech, 2022, 23, 43. | 1.5 | 4 |
| 68 | Optimization of Particle Properties of Nanocrystalline Solid Dispersion Based Dry Powder for Inhalation of Voriconazole. Journal of Pharmaceutical Sciences, 2022, 111, 2592-2605. | 1.6 | 4 |
| 69 | Revealing the Role of Structural Features in Bulk Mechanical Performance of Ternary Molecular Solids of Isoniazid. Molecular Pharmaceutics, 2018, 15, 5252-5262. | 2.3 | 3 |
| 70 | Crystallization of Cyclophosphamide Monohydrate During Lyophilization. Journal of Pharmaceutical Sciences, 2019, 108, 1195-1202. | 1.6 | 3 |
| 71 | Effect of surfactants on the molecular mobility and crystallization kinetics of hesperetin. CrystEngComm, 2019, 21, 3788-3797. | 1.3 | 2 |
| 72 | Effect of process parameters on phase behavior and particle size of aspirin during freeze concentration. Drying Technology, 2020, 38, 1891-1903. | 1.7 | 2 |

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| 73 | Role of surface molecular environment and amorphous content in moisture sorption behavior of milled Terbutaline Sulphate. European Journal of Pharmaceutical Sciences, 2021, 161, 105782. | 1.9 | 2 |
| 74 | Preparation and Characterization of Co-Processed Mannitol and Sorbitol Using NanoCrySP Technology. AAPS PharmSciTech, 2021, 22, 201. | 1.5 | 1 |
| 75 | Evaluation of two novel plant gums for bioadhesive microsphere and sustained-release formulations of metformin hydrochloride. Polimery W Medycynie, 2017, 47, 13-23. | 0.6 | 1 |
| 76 | High dose nanocrystalline solid dispersion powder of voriconazole for inhalation. International Journal of Pharmaceutics, 2022, 622, 121827. | 2.6 | 1 |