# Prashant Dogra

List of Publications by Year
in descending order

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|---|---|---|---|
| 30 papers | 865 citations | 623734<br>14 h-index | 526287<br>27 g-index |
| 35 all docs | 35 docs citations | 35 times ranked | 1148 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Establishing the effects of mesoporous silica nanoparticle properties on in vivo disposition using imaging-based pharmacokinetics. Nature Communications, 2018, 9, 4551. | 12.8 | 189 |
| 2 | Mathematical modeling in cancer nanomedicine: a review. Biomedical Microdevices, 2019, 21, 40. | 2.8 | 122 |
| 3 | A mathematical model to predict nanomedicine pharmacokinetics and tumor delivery. Computational and Structural Biotechnology Journal, 2020, 18, 518-531. | 4.1 | 61 |
| 4 | Theory and Experimental Validation of a Spatio-temporal Model of Chemotherapy Transport to Enhance Tumor Cell Kill. PLoS Computational Biology, 2016, 12, e1004969. | 3.2 | 55 |
| 5 | Integrated nanotechnology platform for tumor-targeted multimodal imaging and therapeutic cargo release. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1877-1882. | 7.1 | 55 |
| 6 | Size‐Optimized Ultrasmall Porous Silica Nanoparticles Depict Vasculature‐Based Differential Targeting in Triple Negative Breast Cancer. Small, 2019, 15, e1903747. | 10.0 | 39 |
| 7 | Understanding Drug Resistance in Breast Cancer with Mathematical Oncology. Current Breast Cancer Reports, 2014, 6, 110-120. | 1.0 | 38 |
| 8 | Intratumoral injection of hydrogel-embedded nanoparticles enhances retention in glioblastoma. Nanoscale, 2020, 12, 23838-23850. | 5.6 | 38 |
| 9 | Innate Immunity Plays a Key Role in Controlling Viral Load in COVID-19: Mechanistic Insights from a Whole-Body Infection Dynamics Model. ACS Pharmacology and Translational Science, 2021, 4, 248-265. | 4.9 | 36 |
| 10 | A mathematical model for the quantification of a patient's sensitivity to checkpoint inhibitors and long-term tumour burden. Nature Biomedical Engineering, 2021, 5, 297-308. | 22.5 | 28 |
| 11 | Image‐guided mathematical modeling for pharmacological evaluation of nanomaterials and monoclonal antibodies. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2020, 12, e1628. | 6.1 | 24 |
| 12 | Targeted phage display-based pulmonary vaccination in mice and non-human primates. Med, 2021, 2, 321-342.e8. | 4.4 | 18 |
| 13 | Targeting a cell surface vitamin D receptor on tumor-associated macrophages in triple-negative breast cancer. ELife, 2021, 10, . | 6.0 | 18 |
| 14 | Sequential deconstruction of composite drug transport in metastatic breast cancer. Science Advances, 2020, 6, eaba4498. | 10.3 | 17 |
| 15 | Mathematical Modeling to Address Challenges in Pancreatic Cancer. Current Topics in Medicinal Chemistry, 2020, 20, 367-376. | 2.1 | 16 |
| 16 | A Mathematical Model to Estimate Chemotherapy Concentration at the Tumor-Site and Predict Therapy Response in Colorectal Cancer Patients with Liver Metastases. Cancers, 2021, 13, 444. | 3.7 | 14 |
| 17 | Microneedle-mediated transdermal delivery of naloxone hydrochloride for treatment of opioid overdose. International Journal of Pharmaceutics, 2021, 604, 120739. | 5.2 | 13 |
| 18 | Translational Modeling Identifies Synergy between Nanoparticle-Delivered miRNA-22 and Standard-of-Care Drugs in Triple-Negative Breast Cancer. Pharmaceutical Research, 2022, 39, 511-528. | 3.5 | 12 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|-----|-----------|
| 19 | Imaging-Based Subtypes of Pancreatic Ductal Adenocarcinoma Exhibit Differential Growth and Metabolic Patterns in the Pre-Diagnostic Period: Implications for Early Detection. Frontiers in Oncology, 2020, 10, 596931. | 2.8 | 10 |
| 20 | A modeling platform for the lymphatic system. Journal of Theoretical Biology, 2020, 493, 110193. | 1.7 | 7 |
| 21 | Genetic and Structural Analysis of SARS-CoV-2 Spike Protein for Universal Epitope Selection. Molecular Biology and Evolution, 2022, 39, . | 8.9 | 7 |
| 22 | Is the worst of the COVID-19 global pandemic yet to come? Application of financial mathematics as candidate predictive tools. Translational Psychiatry, 2021, 11, 299. | 4.8 | 6 |
| 23 | Global dynamics of a cell quota-based model of light-dependent algae growth in a chemostat. Communications in Nonlinear Science and Numerical Simulation, 2020, 90, 105295. | 3.3 | 5 |
| 24 | Amphibian regeneration and mammalian cancer: Similarities and contrasts from an evolutionary biology perspective. BioEssays, 2021, 43, e2000339. | 2.5 | 5 |
| 25 | Dedifferentiation-mediated stem cell niche maintenance in early-stage ductal carcinoma in situ progression: insights from a multiscale modeling study. Cell Death and Disease, 2022, 13, . | 6.3 | 5 |
| 26 | Emerging Lipid-Coated Silica Nanoparticles for Cancer Therapy. Nanotechnology in the Life Sciences, 2021, , 335-361. | 0.6 | 4 |
| 27 | Diffusionâ€induced anisotropic cancer invasion: A novel experimental method based on tumor spheroids. AICHE Journal, 2022, 68, . | 3.6 | 4 |
| 28 | A Multiscale Model to Identify Limiting Factors in Nanoparticle-Based miRNA Delivery for Tumor Inhibition. , 2021, 2021, 4230-4233. |  | 3 |
| 29 | Investigating the Effect of Aging on the Pharmacokinetics and Tumor Delivery of Nanomaterials using Mathematical Modeling. , 2020, 2020, 2447-2450. |  | 2 |
| 30 | Development of a Physiologically-Based Mathematical Model for Quantifying Nanoparticle Distribution in Tumors. , 2019, 2019, 2852-2855. |  | 1 |