

# Prashant Dogra

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/824260/publications.pdf>

Version: 2024-02-01

30  
papers

865  
citations

623574

14  
h-index

526166

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. <i>Nature Communications</i> , 2018, 9, 4551.                                       | 5.8  | 189       |
| 2  | Mathematical modeling in cancer nanomedicine: a review. <i>Biomedical Microdevices</i> , 2019, 21, 40.   | 1.4  | 122       |
| 3  | A mathematical model to predict nanomedicine pharmacokinetics and tumor delivery. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 518-531.   | 1.9  | 61        |
| 4  | Theory and Experimental Validation of a Spatio-temporal Model of Chemotherapy Transport to Enhance Tumor Cell Kill. <i>PLoS Computational Biology</i> , 2016, 12, e1004969.  | 1.5  | 55        |
| 5  | Integrated nanotechnology platform for tumor-targeted multimodal imaging and therapeutic cargo release. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1877-1882. | 3.3  | 55        |
| 6  | Size-Optimized Ultrasmall Porous Silica Nanoparticles Depict Vasculature-Based Differential Targeting in Triple Negative Breast Cancer. <i>Small</i> , 2019, 15, e1903747.   | 5.2  | 39        |
| 7  | Understanding Drug Resistance in Breast Cancer with Mathematical Oncology. <i>Current Breast Cancer Reports</i> , 2014, 6, 110-120.  | 0.5  | 38        |
| 8  | Intratumoral injection of hydrogel-embedded nanoparticles enhances retention in glioblastoma. <i>Nanoscale</i> , 2020, 12, 23838-23850.  | 2.8  | 38        |
| 9  | Innate Immunity Plays a Key Role in Controlling Viral Load in COVID-19: Mechanistic Insights from a Whole-Body Infection Dynamics Model. <i>ACS Pharmacology and Translational Science</i> , 2021, 4, 248-265.         | 2.5  | 36        |
| 10 | A mathematical model for the quantification of a patient's sensitivity to checkpoint inhibitors and long-term tumour burden. <i>Nature Biomedical Engineering</i> , 2021, 5, 297-308.                                  | 11.6 | 28        |
| 11 | Image-guided mathematical modeling for pharmacological evaluation of nanomaterials and monoclonal antibodies. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2020, 12, e1628.            | 3.3  | 24        |
| 12 | Targeted phage display-based pulmonary vaccination in mice and non-human primates. <i>Med</i> , 2021, 2, 321-342.e8.   | 2.2  | 18        |
| 13 | Targeting a cell surface vitamin D receptor on tumor-associated macrophages in triple-negative breast cancer. <i>ELife</i> , 2021, 10, .   | 2.8  | 18        |
| 14 | Sequential deconstruction of composite drug transport in metastatic breast cancer. <i>Science Advances</i> , 2020, 6, eaba4498.  | 4.7  | 17        |
| 15 | Mathematical Modeling to Address Challenges in Pancreatic Cancer. <i>Current Topics in Medicinal Chemistry</i> , 2020, 20, 367-376.  | 1.0  | 16        |
| 16 | A Mathematical Model to Estimate Chemotherapy Concentration at the Tumor-Site and Predict Therapy Response in Colorectal Cancer Patients with Liver Metastases. <i>Cancers</i> , 2021, 13, 444.                        | 1.7  | 14        |
| 17 | Microneedle-mediated transdermal delivery of naloxone hydrochloride for treatment of opioid overdose. <i>International Journal of Pharmaceutics</i> , 2021, 604, 120739.   | 2.6  | 13        |
| 18 | Translational Modeling Identifies Synergy between Nanoparticle-Delivered miRNA-22 and Standard-of-Care Drugs in Triple-Negative Breast Cancer. <i>Pharmaceutical Research</i> , 2022, 39, 511-528.                     | 1.7  | 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. <i>Frontiers in Oncology</i> , 2020, 10, 596931. | 1.3 | 10        |
| 20 | A modeling platform for the lymphatic system. <i>Journal of Theoretical Biology</i> , 2020, 493, 110193.   | 0.8 | 7         |
| 21 | Genetic and Structural Analysis of SARS-CoV-2 Spike Protein for Universal Epitope Selection. <i>Molecular Biology and Evolution</i> , 2022, 39, .  | 3.5 | 7         |
| 22 | Is the worst of the COVID-19 global pandemic yet to come? Application of financial mathematics as candidate predictive tools. <i>Translational Psychiatry</i> , 2021, 11, 299.   | 2.4 | 6         |
| 23 | Global dynamics of a cell quota-based model of light-dependent algae growth in a chemostat. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2020, 90, 105295.  | 1.7 | 5         |
| 24 | Amphibian regeneration and mammalian cancer: Similarities and contrasts from an evolutionary biology perspective. <i>BioEssays</i> , 2021, 43, e2000339.   | 1.2 | 5         |
| 25 | Dedifferentiation-mediated stem cell niche maintenance in early-stage ductal carcinoma in situ progression: insights from a multiscale modeling study. <i>Cell Death and Disease</i> , 2022, 13, .                             | 2.7 | 5         |
| 26 | Emerging Lipid-Coated Silica Nanoparticles for Cancer Therapy. <i>Nanotechnology in the Life Sciences</i> , 2021, , 335-361.   | 0.4 | 4         |
| 27 | Diffusion-induced anisotropic cancer invasion: A novel experimental method based on tumor spheroids. <i>AIChE Journal</i> , 2022, 68, .  | 1.8 | 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         |