

Vittorio Cristini

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6180614/publications.pdf>

Version: 2024-02-01

59
papers

2,905
citations

172457

29
h-index

182427

51
g-index

65
all docs

65
docs citations

65
times ranked

3475
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiscale Cancer Modeling. Annual Review of Biomedical Engineering, 2011, 13, 127-155.	12.3	353
2	Establishing the effects of mesoporous silica nanoparticle properties on in vivo disposition using imaging-based pharmacokinetics. Nature Communications, 2018, 9, 4551.	12.8	189
3	Simulating cancer growth with multiscale agent-based modeling. Seminars in Cancer Biology, 2015, 30, 70-78.	9.6	183
4	Transport properties of pancreatic cancer describe gemcitabine delivery and response. Journal of Clinical Investigation, 2014, 124, 1525-1536.	8.2	164
5	Mathematical modeling in cancer nanomedicine: a review. Biomedical Microdevices, 2019, 21, 40.	2.8	122
6	Perioperative nivolumab monotherapy versus nivolumab plus ipilimumab in resectable hepatocellular carcinoma: a randomised, open-label, phase 2 trial. The Lancet Gastroenterology and Hepatology, 2022, 7, 208-218.	8.1	105
7	The effect of interstitial pressure on therapeutic agent transport: Coupling with the tumor blood and lymphatic vascular systems. Journal of Theoretical Biology, 2014, 355, 194-207.	1.7	91
8	A Computational Model for Predicting Nanoparticle Accumulation in Tumor Vasculature. PLoS ONE, 2013, 8, e56876.	2.5	88
9	Integrated intravital microscopy and mathematical modeling to optimize nanotherapeutics delivery to tumors. AIP Advances, 2012, 2, 11208.	1.3	84
10	Therapeutic potential of FLANC, a novel primate-specific long non-coding RNA in colorectal cancer. Gut, 2020, 69, 1818-1831.	12.1	80
11	A Visually Apparent and Quantifiable CT Imaging Feature Identifies Biophysical Subtypes of Pancreatic Ductal Adenocarcinoma. Clinical Cancer Research, 2018, 24, 5883-5894.	7.0	76
12	Computational Modeling of 3D Tumor Growth and Angiogenesis for Chemotherapy Evaluation. PLoS ONE, 2014, 9, e83962.	2.5	70
13	Mechanistic patient-specific predictive correlation of tumor drug response with microenvironment and perfusion measurements. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14266-14271.	7.1	65
14	Mechanistic Modeling Identifies Drug-Uptake History as Predictor of Tumor Drug Resistance and Nano-Carrier-Mediated Response. ACS Nano, 2013, 7, 11174-11182.	14.6	63
15	A mathematical model to predict nanomedicine pharmacokinetics and tumor delivery. Computational and Structural Biotechnology Journal, 2020, 18, 518-531.	4.1	61
16	Tumor vascular permeabilization using localized mild hyperthermia to improve macromolecule transport. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, 1487-1496.	3.3	58
17	Integrated PK-PD and agent-based modeling in oncology. Journal of Pharmacokinetics and Pharmacodynamics, 2015, 42, 179-189.	1.8	55
18	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

#	ARTICLE	IF	CITATIONS
19	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
20	Understanding the Connection between Nanoparticle Uptake and Cancer Treatment Efficacy using Mathematical Modeling. Scientific Reports, 2018, 8, 7538.	3.3	49
21	A Geometrically-Constrained Mathematical Model of Mammary Gland Ductal Elongation Reveals Novel Cellular Dynamics within the Terminal End Bud. PLoS Computational Biology, 2016, 12, e1004839.	3.2	47
22	Mathematical prediction of clinical outcomes in advanced cancer patients treated with checkpoint inhibitor immunotherapy. Science Advances, 2020, 6, eaay6298.	10.3	41
23	A novel, patient-specific mathematical pathology approach for assessment of surgical volume: application to ductal carcinoma in situ of the breast. Analytical Cellular Pathology, 2011, 34, 247-63.	1.4	40
24	A Novel, Patient-Specific Mathematical Pathology Approach for Assessment of Surgical Volume: Application to Ductal Carcinoma <i>in situ</i> of The Breast. Analytical Cellular Pathology, 2011, 34, 247-263.	1.4	39
25	Size-Optimized Ultrasmall Porous Silica Nanoparticles Depict Vasculature-Based Differential Targeting in Triple Negative Breast Cancer. Small, 2019, 15, e1903747.	10.0	39
26	An Introduction to Physical Oncology. , 0, , .		39
27	Understanding Drug Resistance in Breast Cancer with Mathematical Oncology. Current Breast Cancer Reports, 2014, 6, 110-120.	1.0	38
28	Intratumoral injection of hydrogel-embedded nanoparticles enhances retention in glioblastoma. Nanoscale, 2020, 12, 23838-23850.	5.6	38
29	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
30	Conversion of RNA Aptamer into Modified DNA Aptamers Provides for Prolonged Stability and Enhanced Antitumor Activity. Journal of the American Chemical Society, 2021, 143, 7655-7670.	13.7	34
31	Intra-tumoral heterogeneity of gemcitabine delivery and mass transport in human pancreatic cancer. Physical Biology, 2014, 11, 065002.	1.8	32
32	Impact of Diffusion Barriers to Small Cytotoxic Molecules on the Efficacy of Immunotherapy in Breast Cancer. PLoS ONE, 2013, 8, e61398.	2.5	29
33	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
34	Development of a sampling-based global sensitivity analysis workflow for multiscale computational cancer models. IET Systems Biology, 2014, 8, 191-197.	1.5	27
35	ncRNA therapy with miRNA-22-3p suppresses the growth of triple-negative breast cancer. Molecular Therapy - Nucleic Acids, 2021, 23, 930-943.	5.1	26
36	Resolving the Disproportionate Left Ventricular Enlargement in Mitral Valve Prolapse Due to Barlow Disease. JACC: Cardiovascular Imaging, 2021, 14, 573-584.	5.3	25

#	ARTICLE	IF	CITATIONS
37	Image-guided mathematical modeling for pharmacological evaluation of nanomaterials and monoclonal antibodies. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2020, 12, e1628.	6.1	24
38	Predictive Modeling of Drug Response in Non-Hodgkin's Lymphoma. <i>PLoS ONE</i> , 2015, 10, e0129433.	2.5	24
39	Current Landscape and Future Directions of Biomarkers for Immunotherapy in Hepatocellular Carcinoma. <i>Journal of Hepatocellular Carcinoma</i> , 2021, Volume 8, 1195-1207.	3.7	19
40	Targeted phage display-based pulmonary vaccination in mice and non-human primates. <i>Med</i> , 2021, 2, 321-342.e8.	4.4	18
41	Targeting a cell surface vitamin D receptor on tumor-associated macrophages in triple-negative breast cancer. <i>ELife</i> , 2021, 10, .	6.0	18
42	Sequential deconstruction of composite drug transport in metastatic breast cancer. <i>Science Advances</i> , 2020, 6, eaba4498.	10.3	17
43	Predicting breast cancer response to neoadjuvant chemotherapy based on tumor vascular features in needle biopsies. <i>JCI Insight</i> , 2019, 4, .	5.0	17
44	A Multiscale Agent-Based Model of Ductal Carcinoma <i>In Situ</i> . <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 1450-1461.	4.2	16
45	Mathematical Modeling to Address Challenges in Pancreatic Cancer. <i>Current Topics in Medicinal Chemistry</i> , 2020, 20, 367-376.	2.1	16
46	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.	3.7	14
47	Tumor core biopsies adequately represent immune microenvironment of high-grade serous carcinoma. <i>Scientific Reports</i> , 2019, 9, 17589.	3.3	12
48	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.	3.5	12
49	A hybrid agent-based model of the developing mammary terminal end bud. <i>Journal of Theoretical Biology</i> , 2016, 407, 259-270.	1.7	10
50	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.	2.8	10
51	Early prediction of clinical response to checkpoint inhibitor therapy in human solid tumors through mathematical modeling. <i>ELife</i> , 2021, 10, .	6.0	8
52	Genetic and Structural Analysis of SARS-CoV-2 Spike Protein for Universal Epitope Selection. <i>Molecular Biology and Evolution</i> , 2022, 39, .	8.9	7
53	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.	4.8	6
54	Amphibian regeneration and mammalian cancer: Similarities and contrasts from an evolutionary biology perspective. <i>BioEssays</i> , 2021, 43, e2000339.	2.5	5

#	ARTICLE	IF	CITATIONS
55	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, .	6.3	5
56	Emerging Lipid-Coated Silica Nanoparticles for Cancer Therapy. <i>Nanotechnology in the Life Sciences</i> , 2021, , 335-361.	0.6	4
57	Diffusion-induced anisotropic cancer invasion: A novel experimental method based on tumor spheroids. <i>AIChE Journal</i> , 2022, 68, .	3.6	4
58	A Multiscale Model to Identify Limiting Factors in Nanoparticle-Based miRNA Delivery for Tumor Inhibition. , 2021, 2021, 4230-4233.		3
59	Development of a Physiologically-Based Mathematical Model for Quantifying Nanoparticle Distribution in Tumors. , 2019, 2019, 2852-2855.		1