Zvia Agur

List of Publications by Year
in descending order

63 papers	2,414 citations	186254 28 h-index	206102 48 g-index
68 all docs	68 docs citations	68 times ranked	2024 citing authors

#	Article	IF	Citations
1	Pulse mass measles vaccination across age cohorts.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 11698-11702.	7.1	279
2	The growth law of primary breast cancer as inferred from mammography screening trials data. British Journal of Cancer, 1998, 78, 382-387.	6.4	145
3	Improving alloreactive CTL immunotherapy for malignant gliomas using a simulation model of their interactive dynamics. Cancer Immunology, Immunotherapy, 2008, 57, 425-439.	4.2	125
4	A computer algorithm describing the process of vessel formation and maturation, and its use for predicting the effects of anti-angiogenic and anti-maturation therapy on vascular tumor growth. Angiogenesis, 2002, 5, 203-214.	7.2	107
5	Predicting Outcomes of Prostate Cancer Immunotherapy by Personalized Mathematical Models. PLoS ONE, 2010, 5, e15482.	2.5	107
6	A theoretical analysis of interval drug dosing for cell-cycle-phase-specific drugs. Mathematical Biosciences, 1992, 109, 85-97.	1.9	91
7	Cancer Immunotherapy by Interleukin-21: Potential Treatment Strategies Evaluated in a Mathematical Model. Cancer Research, 2006, 66, 7293-7300.	0.9	90
8	Reduction of cytotoxicity to normal tissues by new regimens of cell-cycle phase-specific drugs. Mathematical Biosciences, 1988, 92, 1-15.	1.9	86
9	Ordered appearance of antigenic variants of African trypanosomes explained in a mathematical model based on a stochastic switch process and immune-selection against putative switch intermediates.. Proceedings of the National Academy of Sciences of the United States of America, 1989, 86, 9626-9630.	7.1	72
10	Efficacy of Weekly Docetaxel and Bevacizumab in Mesenchymal Chondrosarcoma: A New Theranostic Method Combining Xenografted Biopsies with a Mathematical Model. Cancer Research, 2008, 68, 9033-9040.	0.9	61
11	Hopf point analysis for angiogenesis models. Discrete and Continuous Dynamical Systems - Series B, 2003, 4, 29-38.	0.9	58
12	Pulse vaccination strategy in the SIR epidemic model. Bulletin of Mathematical Biology, 1998, 60, 1123-48.	1.9	58
13	Drug resistance as a dynamic process in a model for multistep gene amplification under various levels of selection stringency. Cancer Chemotherapy and Pharmacology, 1992, 30, 469-476.	2.3	55
14	A mathematical model of Doxorubicin treatment efficacy for non-Hodgkin?s lymphoma: investigation of the current protocol through theoretical modelling results. Bulletin of Mathematical Biology, 2005, 67, 79-99.	1.9	55
15	Optimizing Chemotherapy Scheduling Using Local Search Heuristics. Operations Research, 2006, 54, 829-846.	1.9	52
16	Mathematical Modeling in Immunotherapy of Cancer: Personalizing Clinical Trials. Molecular Therapy, 2012, 20, 1-2.	8.2	51
17	The complex effect of granulocyte colony-stimulating factor on human granulopoiesis analyzed by a new physiologically-based mathematical model. Journal of Theoretical Biology, 2005, 234, 311-327.	1.7	47
18	Reconsidering the Paradigm of Cancer Immunotherapy by Computationally Aided Real-time Personalization. Cancer Research, 2012, 72, 2218-2227.	0.9	47

#	Article	IF	Citations
19	The Use of Hybrid Cellular Automaton Models for Improving Cancer Therapy. Lecture Notes in Computer Science, 2004, , 444-453.	1.3	44
20	Vessel maturation effects on tumour growth: validation of a computer model in implanted human ovarian carcinoma spheroids. European Journal of Cancer, 2005, 41, 159-167.	2.8	44
21	Effect of the dosing interval on myelotoxicity and survival in mice treated by cytarabine. European Journal of Cancer, 1992, 28, 1085-1090.	2.8	40
22	Cellular Immunotherapy for High Grade Gliomas: Mathematical Analysis Deriving Efficacious Infusion Rates Based on Patient Requirements. SIAM Journal on Applied Mathematics, 2010, 70, 1953-1976.	1.8	37
23	A new validated mathematical model of the Wnt signalling pathway predicts effective combinational therapy by sFRP and Dkk. Biochemical Journal, 2012, 444, 115-125.	3.7	37
24	Disruption of a Quorum Sensing mechanism triggers tumorigenesis: a simple discrete model corroborated by experiments in mammary cancer stem cells. Biology Direct, 2010, 5, 20.	4.6	36
25	New TPO treatment schedules of increased safety and efficacy: pre-clinical validation of a thrombopoiesis simulation model. British Journal of Haematology, 2003, 123, 683-691.	2.5	33
26	Targeted Drug Delivery by Gemtuzumab Ozogamicin: Mechanism-Based Mathematical Model for Treatment Strategy Improvement and Therapy Individualization. PLoS ONE, 2011, 6, e24265.	2.5	33
27	The Effect of Drug Schedule on Responsiveness to Chemotherapy. Annals of the New York Academy of Sciences, 1987, 504, 274-277.	3.8	32
28	Personalizing oncology treatments by predicting drug efficacy, sideâ€effects, and improved therapy: mathematics, statistics, and their integration. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2014, 6, 239-253.	6.6	32
29	Randomness, synchrony and population persistence. Journal of Theoretical Biology, 1985, 112, 677-693.	1.7	30
30	Employing dynamical computational models for personalizing cancer immunotherapy. Expert Opinion on Biological Therapy, 2016, 16, 1373-1385.	3.1	29
31	Dickkopf1 Regulates Fate Decision and Drives Breast Cancer Stem Cells to Differentiation: An Experimentally Supported Mathematical Model. PLoS ONE, 2011, 6, e24225.	2.5	28
32	Personalising docetaxel and G-CSF schedules in cancer patients by a clinically validated computational model. British Journal of Cancer, 2012, 107, 814-822.	6.4	28
33	Increasing 1-beta-D-arabinofuranosylcytosine efficacy by scheduled dosing intervals based on direct measurements of bone marrow cell kinetics. Cancer Research, 1994, 54, 6446-51.	0.9	28
34	Analyzing transformation of myelodysplastic syndrome to secondary acute myeloid leukemia using a large patient database. American Journal of Hematology, 2012, 87, 853-860.	4.1	26
35	From the evolution of toxin resistance to virtual clinical trials: the role of mathematical models in oncology. Future Oncology, 2010, 6, 917-927.	2.4	22
36	Optimization of interleukin-21 immunotherapeutic strategies. Journal of Theoretical Biology, 2007, 248, 259-266.	1.7	21

#	Article	IF	Citations
37	Maturation of the humoral immune response as an optimization problem. Proceedings of the Royal Society B: Biological Sciences, 1991, 245, 147-150.	2.6	20
38	An Integrated Disease/Pharmacokinetic/Pharmacodynamic Model Suggests Improved Interleukin-21 Regimens Validated Prospectively for Mouse Solid Cancers. PLoS Computational Biology, 2011, 7, e1002206.	3.2	20
39	Predicting time to castration resistance in hormone sensitive prostate cancer by a personalization algorithm based on a mechanistic model integrating patient data. Prostate, 2016, 76, 48-57.	2.3	20
40	The effect of environmental disturbances on the dynamics of marine intertidal populations. Theoretical Population Biology, 1985, 27, 75-90.	1.1	18
41	Response of patients with melanoma to immune checkpoint blockadeÂâ€“ insights gleaned from analysis of a new mathematical mechanistic model. Journal of Theoretical Biology, 2020, 485, 110033.	1.7	17
42	Measles immunization strategies for an epidemiologically heterogeneous population: the Israeli case study. Proceedings of the Royal Society B: Biological Sciences, 1993, 252, 81-84.	2.6	16
43	Predicting response to pembrolizumab in metastatic melanoma by a new personalization algorithm. Journal of Translational Medicine, 2019, 17, 338.	4.4	16
44	Zidovudine toxicity to murine bone marrow may be affected by the exact frequency of drug administration. Experimental Hematology, 1991, 19, 364-8.	0.4	16
45	Personalizing immunotherapy. OncoImmunology, 2012, 1, 1169-1171.	4.6	15
46	Accelerating the Development of Personalized Cancer Immunotherapy by Integrating Molecular Patientsâ€™ Profiles with Dynamic Mathematical Models. Clinical Pharmacology and Therapeutics, 2020, 108, 515-527.	4.7	14
47	A mathematical model for the immunotherapeutic control of the Th1/Th2 imbalance in melanoma. Discrete and Continuous Dynamical Systems - Series B, 2013, 18, 1017-1030.	0.9	13
48	Personal response to immune checkpoint inhibitors of patients with advanced melanoma explained by a computational model of cellular immunity, tumor growth, and drug. PLoS ONE, 2019, 14, e0226869.	2.5	12
49	Use of Virtual Patient Populations for Rescuing Discontinued Drug Candidates and for Reducing the Number of Patients in Clinical Trials. ATLA Alternatives To Laboratory Animals, 2009, 37, 39-45.	1.0	10
50	Improving Cancer Therapy by Doxorubicin and Granulocyte Colony-Stimulating Factor: Insights from a Computerized Model of Human Granulopoiesis. Mathematical Modelling of Natural Phenomena, 2006, 1, 70-80.	2.4	9
51	Alleviation of exhaustion-induced immunosuppression and sepsis by immune checkpoint blockers sequentially administered with antibioticsâ€"analysis of a new mathematical model. Intensive Care Medicine Experimental, 2019, 7, 32.	1.9	8
52	Extracellular inhibitors can attenuate tumorigenic Wnt pathway activity in adenomatous polyposis coli mutants: Predictions of a validated mathematical model. PLoS ONE, 2017, 12, e0179888.	2.5	5
53	A New Method for Optimizing Sepsis Therapy by Nivolumab and Meropenem Combination: Importance of Early Intervention and CTL Reinvigoration Rate as a Response Marker. Frontiers in Immunology, 2021, 12, 616881.	4.8	3
54	The resonance phenomenon in population persistence: can the same theory guide both national security policies and personalized medicine?. Croatian Medical Journal, 2014, 55, 93-102.	0.7	2

#	Article	IF	Citations
55	Complex pattern of interleukin-11-induced inflammation revealed by mathematically modeling the dynamics of C-reactive protein. Journal of Pharmacokinetics and Pharmacodynamics, 2014, 41, 479-491.	1.8	1
56	Application of the Virtual Cancer Patient Engine (VCPE) for improving oncological treatment desig. Journal of Clinical Oncology, 2004, 22, 692-692.	1.6	1
57	Tracheostomy as a Model for Studying the Systemic Effects of Local Tissue Injuries and the Cytokine Patterns of Acute Inflammation: Design, Rationale and Analysis Plan. Anaesthesia and Intensive Care, 2016, 44, 789-790.	0.7	0
58	Optimizing Cancer Chemotherapy: From Mathematical Theories to Clinical Treatment. SIMAI Springer Series, 2012, , 285-299.	0.4	0
59	Personality Measures. Science, 1988, 239, 128-128.	12.6	0
60	Title is missing!. , 2019, 14, e0226869.		0
61	Title is missing!. , 2019, 14, e0226869.		0
62	Title is missing!. , 2019, 14, e0226869.		0
63	Title is missing!. , 2019, 14, e0226869.		0