Roberto Chignola

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/948345/publications.pdf

Version: 2024-02-01

85	1,221	361413	454955
papers	citations	20 h-index	30 g-index

91	91	91	1582
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Anti-tumour potential of a gallic acid-containing phenolic fraction from Oenothera biennis. Cancer Letters, 2005, 226, 17-25.	7.2	76
2	Forecasting the growth of multicell tumour spheroids: implications for the dynamic growth of solid tumours. Cell Proliferation, 2000, 33, 219-229.	5.3	75
3	Effects of wheat germ agglutinin on human gastrointestinal epithelium: Insights from an experimental model of immune/epithelial cell interaction. Toxicology and Applied Pharmacology, 2009, 237, 146-153.	2.8	68
4	The control of acidity in tumor cells: a biophysical model. Scientific Reports, 2020, 10, 13613.	3.3	46
5	Effects of microencapsulation by ionic gelation on the oxidative stability of flaxseed oil. Food Chemistry, 2018, 269, 293-299.	8.2	43
6	Emergent Properties of Tumor Microenvironment in a Real-Life Model of Multicell Tumor Spheroids. PLoS ONE, 2010, 5, e13942.	2.5	38
7	Plant lectins as carriers for oral drugs: Is wheat germ agglutinin a suitable candidate?. Toxicology and Applied Pharmacology, 2005, 207, 170-178.	2.8	35
8	Production of stable food-grade microencapsulated astaxanthin by vibrating nozzle technology. Food Chemistry, 2017, 221, 289-295.	8.2	34
9	Association between B-cell receptor responsiveness and disease progression in B-cell chronic lymphocytic leukemia: results from single cell network profiling studies. Haematologica, 2013, 98, 626-634.	3.5	32
10	Expression of Î±-amylase inhibitors in diploid Triticum species. Food Chemistry, 2012, 135, 2643-2649.	8.2	30
11	Planar AFM macro-probes to study the biomechanical properties of large cells and 3D cell spheroids. Acta Biomaterialia, 2019, 94, 505-513.	8.3	30
12	Oscillating growth patterns of multicellular tumour spheroids. Cell Proliferation, 1999, 32, 39-48.	5.3	28
13	Estimating the Growth Kinetics of Experimental Tumors From as Few as Two Determinations of Tumor Size: Implications for Clinical Oncology. IEEE Transactions on Biomedical Engineering, 2005, 52, 808-815.	4.2	28
14	Heterogeneous response of individual multicellular tumour spheroids to immunotoxins and ricin toxin. British Journal of Cancer, 1995, 72, 607-614.	6.4	27
15	Self-potentiation of Ligand-Toxin Conjugates Containing Ricin A Chain Fused with Viral Structures. Journal of Biological Chemistry, 1995, 270, 23345-23351.	3.4	27
16	Quantitative Determination of Dietary Lectin Activities by Enzyme-Linked Immunosorbent Assay Using Specific Glycoproteins Immobilized on Microtiter Plates. Journal of Agricultural and Food Chemistry, 2002, 50, 6266-6270.	5.2	27
17	Temperature-dependent decay of wheat germ agglutinin activity and its implications for food processing and analysis. Food Control, 2004, 15, 391-395.	5.5	24
18	Sos1 Regulates Macrophage Podosome Assembly and Macrophage Invasive Capacity. Journal of Immunology, 2015, 195, 4900-4912.	0.8	23

#	Article	IF	Citations
19	Active soybean lectin in foods: quantitative determination by ELISA using immobilised asialofetuin. Food Research International, 2003, 36, 815-821.	6.2	21
20	A phenomenological approach to the simulation of metabolism and proliferation dynamics of large tumour cell populations. Physical Biology, 2005, 2, 8-22.	1.8	21
21	Interplay between distribution of live cells and growth dynamics of solid tumours. Scientific Reports, 2012, 2, 990.	3.3	21
22	Pulsation-limited oxygen diffusion in the tumour microenvironment. Scientific Reports, 2017, 7, 39762.	3.3	21
23	Isolation and Identification of Two Lipid Transfer Proteins in Pomegranate (Punica granatum). Journal of Agricultural and Food Chemistry, 2007, 55, 11057-11062.	5.2	20
24	Study on the Immunoreactivity of Triticum monococcum (Einkorn) Wheat in Patients with Wheat-Dependent Exercise-Induced Anaphylaxis for the Production of Hypoallergenic Foods. Journal of Agricultural and Food Chemistry, 2015, 63, 8299-8306.	5.2	17
25	Distribution of endocytosed molecules to intracellular acidic environments correlates with immunotoxin activity. International Journal of Cancer, 1990, 46, 1117-1123.	5.1	16
26	COMPUTATIONAL CHALLENGES OF TUMOR SPHEROID MODELING. Journal of Bioinformatics and Computational Biology, 2011, 09, 559-577.	0.8	16
27	Metabolic scaling in solid tumours. Scientific Reports, 2013, 3, 1938.	3.3	15
28	Low catalase expression confers redox hypersensitivity and identifies an indolent clinical behavior in CLL. Blood, 2018, 131, 1942-1954.	1.4	15
29	Cytoreductive effects of anti-transferrin receptor immunotoxins in a multicellular tumor spheroid model. International Journal of Cancer, 1994, 57, 268-274.	5.1	14
30	Analysis of CIITA encoding AIR-1 gene promoters in insulin-dependent diabetes mellitus and rheumatoid arthritis patients from the northeast of Italy: absence of sequence variability. Human Immunology, 2000, 61, 599-604.	2.4	14
31	Ab initiophenomenological simulation of the growth of large tumor cell populations. Physical Biology, 2007, 4, 114-133.	1.8	14
32	Full-fledged proteomic analysis of bioactive wheat amylase inhibitors by a 3-D analytical technique: Identification of new heterodimeric aggregation states. Electrophoresis, 2007, 28, 460-466.	2.4	14
33	Numerical integration methods for large-scale biophysical simulations. Computer Physics Communications, 2009, 180, 2166-2174.	7.5	14
34	Effects of macromolecular crowding on a small lipid binding protein probed at the single-amino acid level. Archives of Biochemistry and Biophysics, 2016, 606, 99-110.	3.0	12
35	Collective radioresistance of T47D breast carcinoma cells is mediated by a Syncytin-1 homologous protein. PLoS ONE, 2019, 14, e0206713.	2.5	12
36	Numerical simulation of tumor spheroid dynamics. Physica A: Statistical Mechanics and Its Applications, 2004, 338, 261-266.	2.6	11

#	Article	IF	Citations
37	Studies on the joint cytotoxicity of Wheat Germ Agglutinin and monensin. Toxicology in Vitro, 2004, 18, 821-827.	2.4	11
38	Oscillations in growth of multicellular tumour spheroids: a revisited quantitative analysis. Cell Proliferation, 2010, 43, 344-353.	5.3	11
39	Bridging the gap between the micro- and the macro-world of tumors. AIP Advances, 2012, 2, 011204.	1.3	11
40	Escape mechanisms of human leukemic cells to long-term immunotoxin treatment in anin vitro experimental model. International Journal of Cancer, 1995, 61, 535-541.	5.1	9
41	Egg-matrix for large-scale single-step affinity purification of plant lectins with different carbohydrate specificities. Protein Expression and Purification, 2003, 27, 182-185.	1.3	9
42	Effects of Combination Treatments with Astaxanthin-Loaded Microparticles and Pentoxifylline on Intracellular ROS and Radiosensitivity of J774A.1 Macrophages. Molecules, 2021, 26, 5152.	3.8	9
43	Effects of dietary wheat germ deprivation on the immune system in Wistar rats: a pilot study. International Immunopharmacology, 2002, 2, 1495-1501.	3.8	8
44	A Rapid Method for the Recovery, Quantification and Electrophoretic Analysis of Proteins from Beer. Journal of the Institute of Brewing, 2006, 112, 25-27.	2.3	8
45	Two metallocarboxypeptidase inhibitors are implicated in tomato fruit development and regulated by the Inner No Outer transcription factor. Plant Science, 2018, 266, 19-26.	3.6	8
46	Fine-grained simulations of the microenvironment of vascularized tumours. Scientific Reports, 2019, 9, 11698.	3.3	8
47	Phagocytosis of Astaxanthin-Loaded Microparticles Modulates TGFÎ² Production and Intracellular ROS Levels in J774A.1 Macrophages. Marine Drugs, 2021, 19, 163.	4.6	8
48	Oxygen in the Tumor Microenvironment: Mathematical and Numerical Modeling. Advances in Experimental Medicine and Biology, 2020, 1259, 53-76.	1.6	8
49	Induction of an antitumour adaptive immune response elicited by tumour cells expressing de novo B7-1 mainly depends on the anatomical site of their delivery: the dose applied regulates the expansion of the response. Immunology, 2003, 110, 474-481.	4.4	7
50	A quantitative study of growth variability of tumour cell clones in vitro. Cell Proliferation, 2008, 41, 177-191.	5.3	7
51	Mechanisms involved in serum-dependent inactivation of the immunotoxin enhancers monensin and carrier-protein-monensin. FEBS Journal, 1994, 219, 469-479.	0.2	6
52	Expression of myelin basic protein (MBP) epitopes in human non-neural cells revealed by two anti-MBP IgM monoclonal antibodies. Clinical and Experimental Immunology, 2000, 122, 429-436.	2.6	6
53	Thresholds, long delays and stability from generalized allosteric effect in protein networks. Physica A: Statistical Mechanics and Its Applications, 2006, 371, 463-472.	2.6	6
54	Emulsification of Simulated Gastric Fluids Protects Wheat Î±-Amylase Inhibitor 0.19 Epitopes from Digestion. Food Analytical Methods, 2012, 5, 234-243.	2.6	6

#	Article	IF	Citations
55	From Single-Cell Dynamics to Scaling Laws in Oncology. Biophysical Reviews and Letters, 2014, 09, 273-284.	0.8	6
56	Setup of a procedure for cider proteins recovery and quantification. European Food Research and Technology, 2016, 242, 1803-1811.	3.3	6
57	Untargeted Metabolomics Investigation on Selenite Reduction to Elemental Selenium by Bacillus mycoides SeITE01. Frontiers in Microbiology, 2021, 12, 711000.	3.5	6
58	A non-parametric method for the analysis of experimental tumour growth data. Medical and Biological Engineering and Computing, 1999, 37, 537-542.	2.8	5
59	Proliferation and Death in a Binary Environment: A Stochastic Model of Cellular Ecosystems. Bulletin of Mathematical Biology, 2006, 68, 1661-1680.	1.9	5
60	Dynamics of allosteric action in multisite protein modification. Physica A: Statistical Mechanics and Its Applications, 2007, 379, 133-150.	2.6	5
61	Modular model of TNFÎ± cytotoxicity. Bioinformatics, 2011, 27, 1754-1757.	4.1	5
62	Effects of CD20 antibodies and kinase inhibitors on Bâ€cell receptor signalling and survival of chronic lymphocytic leukaemia cells. British Journal of Haematology, 2021, 192, 333-342.	2.5	5
63	New dating of palaeokarst features at Torricelle hills (Verona, Italy). Italian Journal of Geosciences, 2014, 133, 427-438.	0.8	5
64	Statistical approach to the analysis of cell desynchronization data. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 4204-4214.	2.6	4
65	Microplate spectrophotometry for highâ€throughput screening of cytotoxic molecules. Cell Proliferation, 2010, 43, 130-138.	5.3	4
66	Tomato cystine-knot miniproteins possessing anti-angiogenic activity exhibit in vitro gastrointestinal stability, intestinal absorption and resistance to food industrial processing. Food Chemistry, 2017, 221, 1346-1353.	8.2	4
67	A comparison between Nonlinear Least Squares and Maximum Likelihood estimation for the prediction of tumor growth on experimental data of human and rat origin. Biomedical Signal Processing and Control, 2019, 54, 101639.	5.7	4
68	Fluctuations of Atmospheric Pressure and the Sound of Underground Karst Systems: The Antro del Corchia Case (Apuane Alps, Italy). Frontiers in Earth Science, 2019, 7, .	1.8	4
69	Phospho-Specific Flow Cytometry Reveals Signaling Heterogeneity in T-Cell Acute Lymphoblastic Leukemia Cell Lines. Cells, 2022, 11, 2072.	4.1	4
70	Production and characterisation of monoclonal antibodies for the quantification of potentially allergenic xylanase fromAspergillus niger. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2012, 29, 1356-1363.	2.3	3
71	Computer-Aided Biophysical Modeling: A Quantitative Approach to Complex Biological Systems. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2013, 10, 805-810.	3.0	3
72	Evidence for caspase-dependent programmed cell death along with repair processes in affected skeletal muscle fibres in patients with mitochondrial disorders. Clinical Science, 2016, 130, 167-181.	4.3	3

#	Article	IF	Citations
73	Myelin basic protein epitopes secreted by human T cells encounter natural autoantibodies in the serum. Journal of Neuroimmunology, 2003, 141, 83-89.	2.3	2
74	Dynamics of intracellular oscillations in the presence of multisite -binding proteins. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 3172-3178.	2.6	2
75	Disposition of intrathecally administered immunotoxins in rats. A preliminary report. Pharmacological Research, 1992, 25, 290-291.	7.1	1
76	Competing computational approaches to reaction-diffusion equations in clusters of cells. Journal of Physics: Conference Series, 2014, 490, 012129.	0.4	1
77	Population ecology of heterotypic tumour cell cultures. Cell Proliferation, 2014, 47, 476-483.	5.3	1
78	Neighbor search algorithm for lattice-free simulations with short-range forces. , 2014, , .		1
79	Analysis of the fluctuations of the tumour/host interface. Physica A: Statistical Mechanics and Its Applications, 2017, 486, 587-594.	2.6	1
80	Basalt Intrusions in Palaeokarst Caves in the Central Lessini Mountains (Venetian Prealps, Italy). Acta Carsologica, 2017, 46, .	0.7	1
81	Rheology of individual chitosan and polyphenol/chitosan microparticles for food engineering. Food Hydrocolloids, 2022, 132, 107869.	10.7	1
82	Efficient and extendible class scheme for the combined reactionâ€“diffusion of multiple molecular species. Computer Physics Communications, 2014, 185, 826-835.	7.5	0
83	Use of GPUs to boost the performance of a lattice-free tumour growth model. Journal of Physics: Conference Series, 2014, 566, 012019.	0.4	0
84	Dynamical Detection of Boundaries and Cavities in Biophysical Cell-Based Simulations of Growing Tumor Tissues. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2019, 16, 1901-1911.	3.0	0
85	Efficient ensemble stochastic algorithms for agent-based models with spatial predatorâ€“prey dynamics. Mathematics and Computers in Simulation, 2022, , .	4.4	0