

# Cyril Rauch

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

2,072  
citations

361413

20  
h-index

233421

45  
g-index

51  
all docs

51  
docs citations

51  
times ranked

3356  
citing authors

#	ARTICLE	IF	CITATIONS
1	Resistance to cancer chemotherapy: failure in drug response from ADME to P-gp. <i>Cancer Cell International</i> , 2015, 15, 71.	4.1	451
2	Microenvironment acidity as a major determinant of tumor chemoresistance: Proton pump inhibitors (PPIs) as a novel therapeutic approach. <i>Drug Resistance Updates</i> , 2015, 23, 69-78.	14.4	202
3	Glycolysis, tumor metabolism, cancer growth and dissemination. A new pH-based etiopathogenic perspective and therapeutic approach to an old cancer question. <i>Oncoscience</i> , 2014, 1, 777-802.	2.2	198
4	Cariporide and other new and powerful NHE1 inhibitors as potentially selective anticancer drugs – an integral molecular/biochemical/metabolic/clinical approach after one hundred years of cancer research. <i>Journal of Translational Medicine</i> , 2013, 11, 282.	4.4	135
5	Endocytosis Switch Controlled by Transmembrane Osmotic Pressure and Phospholipid Number Asymmetry. <i>Biophysical Journal</i> , 2000, 78, 3036-3047.	0.5	105
6	Proton dynamics in cancer. <i>Journal of Translational Medicine</i> , 2010, 8, 57.	4.4	97
7	The role of proton dynamics in the development and maintenance of multidrug resistance in cancer. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2013, 1832, 606-617.	3.8	91
8	Nongenomic Effects of Cisplatin: Acute Inhibition of Mechanosensitive Transporters and Channels without Actin Remodeling. <i>Cancer Research</i> , 2010, 70, 7514-7522.	0.9	78
9	C <sub>2</sub> myoblast/osteoblast transdifferentiation steps enhanced by epigenetic inhibition of BMP2 endocytosis. <i>American Journal of Physiology - Cell Physiology</i> , 2002, 283, C235-C243.	4.6	66
10	The Possible Role of Helicobacter pylori in Gastric Cancer and Its Management. <i>Frontiers in Oncology</i> , 2019, 9, 75.	2.8	64
11	Cellular acidification as a new approach to cancer treatment and to the understanding and therapeutics of neurodegenerative diseases. <i>Seminars in Cancer Biology</i> , 2017, 43, 157-179.	9.6	59
12	Mechanism of Mucosal Permeability Enhancement of CriticalSorb® (Solutol® HS15) Investigated In Vitro in Cell Cultures. <i>Pharmaceutical Research</i> , 2015, 32, 516-527.	3.5	51
13	Clathrin-Dependent and Clathrin-Independent Endocytosis are Differentially Sensitive to Insertion of Poly (Ethylene Glycol)-Derivatized Cholesterol in the Plasma Membrane. <i>Traffic</i> , 2001, 2, 501-512.	2.7	45
14	Static stretch promotes MEF2A nuclear translocation and expression of neonatal myosin heavy chain in C2C12 myocytes in a calcineurin- and p38-dependent manner. <i>American Journal of Physiology - Cell Physiology</i> , 2005, 288, C593-C605.	4.6	41
15	Toward a mechanical control of drug delivery. On the relationship between Lipinski's 2nd rule and cytosolic pH changes in doxorubicin resistance levels in cancer cells: a comparison to published data. <i>European Biophysics Journal</i> , 2009, 38, 829-846.	2.2	37
16	Multi drug resistance-dependent –vacuum cleaner– functionality potentially driven by the interactions between endocytosis, drug size and Pgp-like transporters surface density. <i>European Biophysics Journal</i> , 2007, 36, 121-131.	2.2	33
17	On the relationship between drug's size, cell membrane mechanical properties and high levels of multi drug resistance: a comparison to published data. <i>European Biophysics Journal</i> , 2009, 38, 537-546.	2.2	33
18	Proton pump inhibitors for the treatment of cancer in companion animals. <i>Journal of Experimental and Clinical Cancer Research</i> , 2015, 34, 93.	8.6	31

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19	Physical and biological characteristics of multi drug resistance (MDR): An integral approach considering pH and drug resistance in cancer. <i>Seminars in Cancer Biology</i> , 2017, 43, 42-48.	9.6	27
20	Acid-mediated Lipinski's second rule: application to drug design and targeting in cancer. <i>European Biophysics Journal</i> , 2014, 43, 199-206.	2.2	21
21	On a biophysical and mathematical model of Pgp-mediated multidrug resistance: understanding the "space-time" dimension of MDR. <i>European Biophysics Journal</i> , 2010, 39, 201-211.	2.2	18
22	The "Multi" of Drug Resistance Explained by Oscillating Drug Transporters, Drug-Membrane Physical Interactions and Spatial Dimensionality. <i>Cell Biochemistry and Biophysics</i> , 2011, 61, 103-113.	1.8	15
23	C2C12 Skeletal Muscle Cells Exposure to Phosphatidylcholine Triggers IGF-1 Like-Responses. <i>Cellular Physiology and Biochemistry</i> , 2005, 15, 211-224.	1.6	13
24	On Some Aspects of the Thermodynamic of Membrane Recycling Mediated by Fluid Phase Endocytosis: Evaluation of Published Data and Perspectives. <i>Cell Biochemistry and Biophysics</i> , 2010, 56, 73-90.	1.8	13
25	Stretch-induced activation of ERK in myocytes is p38 and calcineurin-dependent. <i>Cell Biochemistry and Function</i> , 2008, 26, 866-869.	2.9	12
26	A quantitative systems pharmacology approach, incorporating a novel liver model, for predicting pharmacokinetic drug-drug interactions. <i>PLoS ONE</i> , 2017, 12, e0183794.	2.5	12
27	Physics of nail conditions: why do ingrown nails always happen in the big toes?. <i>Physical Biology</i> , 2014, 11, 066004.	1.8	12
28	Influence of culture medium pH on internalization, growth and phenotypic plasticity of <i>Neospora caninum</i> . <i>Veterinary Parasitology</i> , 2011, 177, 267-274.	1.8	11
29	Can long range mechanical interaction between drugs and membrane proteins define the notion of molecular promiscuity? Application to P-glycoprotein-mediated multidrug resistance (MDR). <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2013, 1830, 5112-5118.	2.4	11
30	Impact of maternal dietary fat supplementation during gestation upon skeletal muscle in neonatal pigs. <i>BMC Physiology</i> , 2014, 14, 6.	3.6	11
31	Theoretical evaluation of wall teichoic acids in the cavitation-mediated pores formation in Gram-positive bacteria subjected to an electric field. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2015, 1850, 595-601.	2.4	10
32	On the Role of the Difference in Surface Tensions Involved in the Allosteric Regulation of NHE-1 Induced by Low to Mild Osmotic Pressure, Membrane Tension and Lipid Asymmetry. <i>Cell Biochemistry and Biophysics</i> , 2012, 63, 47-57.	1.8	9
33	Hydrostatic pressure regulates CYP1A2 expression in human hepatocytes via a mechanosensitive aryl hydrocarbon receptor-dependent pathway. <i>American Journal of Physiology - Cell Physiology</i> , 2020, 318, C889-C902.	4.6	8
34	Importance of the Difference in Surface Pressures of the Cell Membrane in Doxorubicin Resistant Cells That do not Express Pgp and ABCG2. <i>Cell Biochemistry and Biophysics</i> , 2013, 66, 499-512.	1.8	6
35	The bio-physics of condensation of divalent cations into the bacterial wall has implications for growth of Gram-positive bacteria. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2017, 1859, 282-288.	2.6	6
36	Bioinspired Hierarchical Designs for Stiff, Strong Interfaces between Materials of Differing Stiffness. <i>Physical Review Applied</i> , 2018, 10, .	3.8	6

#	ARTICLE	IF	CITATIONS
37	A Mechanogenetic Model of Exercise-Induced Pulmonary Haemorrhage in the Thoroughbred Horse. <i>Genes</i> , 2019, 10, 880.	2.4	5
38	Physics of animal health: on the mechano-biology of hoof growth and form. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20190214.	3.4	4
39	Teaching New Dogs Old Tricks: Membrane Biophysical Properties in Drug Delivery and Resistance. <i>Recent Patents on Anti-Cancer Drug Discovery</i> , 2011, 6, 334-346.	1.6	3
40	Pinocytosis as the Biological Mechanism That Protects Pgp Function in Multidrug Resistant Cancer Cells and in Bloodâ€“Brain Barrier Endothelial Cells. <i>Symmetry</i> , 2020, 12, 1221.	2.2	3
41	Inward relocation of exogenous phosphatidylserine triggered by IGF-1 in non-apoptotic C2C12 cells is concentration dependent. <i>Cell Biochemistry and Function</i> , 2005, 23, 383-388.	2.9	2
42	Design, Synthesis and In-Vitro Biological Evaluation of Antofine and Tylophorine Prodrugs as Hypoxia-Targeted Anticancer Agents. <i>Molecules</i> , 2021, 26, 3327.	3.8	2
43	Lipid biophysics and/or soft matter-inspired approach for controlling enveloped virus infectivity. <i>Journal of the Royal Society Interface</i> , 2022, 19, 20210943.	3.4	2
44	Physics of the Chemical Asymmetry of the Cell Membrane: Implications in Gene Regulation and Pharmacology. <i>Symmetry</i> , 2015, 7, 1780-1787.	2.2	1
45	Rethinking therapeutic strategies in cancer: Wars, fields, anomalies and monsters. <i>Social Theory and Health</i> , 2016, 14, 475-492.	1.8	1
46	Analysis of phenotype-genotype associations using genomic informational field theory (GIFT). <i>Journal of Theoretical Biology</i> , 2022, 548, 111198.	1.7	1
47	Multidrug Resistance: A Role for Membrane Physics, pH and Drug Transporters. <i>Resistance To Targeted Anti-cancer Therapeutics</i> , 2013, , 35-46.	0.1	0