

# Jaromir Gumulec

## List of Publications by Year in descending order

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76  
papers

3,292  
citations

186265

28  
h-index

155660

55  
g-index

83  
all docs

83  
docs citations

83  
times ranked

6205  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Role of Metallothionein in Oxidative Stress. <i>International Journal of Molecular Sciences</i> , 2013, 14, 6044-6066.	4.1	632
2	Redox status expressed as GSH:GSSG ratio as a marker for oxidative stress in paediatric tumour patients. <i>Oncology Letters</i> , 2012, 4, 1247-1253.	1.8	483
3	Cell segmentation methods for label-free contrast microscopy: review and comprehensive comparison. <i>BMC Bioinformatics</i> , 2019, 20, 360.	2.6	137
4	Sarcosine as a Potential Prostate Cancer Biomarker—A Review. <i>International Journal of Molecular Sciences</i> , 2013, 14, 13893-13908.	4.1	93
5	Clinical significance of head and neck squamous cell cancer biomarkers. <i>Oral Oncology</i> , 2014, 50, 168-177.	1.5	88
6	Metallothionein polymorphisms in pathological processes. <i>Metallomics</i> , 2014, 6, 55-68.	2.4	86
7	Serum and Tissue Zinc in Epithelial Malignancies: A Meta-Analysis. <i>PLoS ONE</i> , 2014, 9, e99790.	2.5	82
8	Cisplatin enhances cell stiffness and decreases invasiveness rate in prostate cancer cells by actin accumulation. <i>Scientific Reports</i> , 2019, 9, 1660.	3.3	70
9	Comparison of the effects of silver phosphate and selenium nanoparticles on <i>Staphylococcus aureus</i> growth reveals potential for selenium particles to prevent infection. <i>FEMS Microbiology Letters</i> , 2014, 351, 195-201.	1.8	69
10	Insight to Physiology and Pathology of Zinc(II) Ions and Their Actions in Breast and Prostate Carcinoma. <i>Current Medicinal Chemistry</i> , 2011, 18, 5041-5051.	2.4	67
11	Unexpected therapeutic effects of cisplatin. <i>Metallomics</i> , 2019, 11, 1182-1199.	2.4	67
12	Complexes of Silver(I) Ions and Silver Phosphate Nanoparticles with Hyaluronic Acid and/or Chitosan as Promising Antimicrobial Agents for Vascular Grafts. <i>International Journal of Molecular Sciences</i> , 2013, 14, 13592-13614.	4.1	62
13	Metallothionein – Immunohistochemical Cancer Biomarker: A Meta-Analysis. <i>PLoS ONE</i> , 2014, 9, e85346.	2.5	61
14	The Quantitative-Phase Dynamics of Apoptosis and Lytic Cell Death. <i>Scientific Reports</i> , 2020, 10, 1566.	3.3	60
15	Platinum nanoparticles induce damage to DNA and inhibit DNA replication. <i>PLoS ONE</i> , 2017, 12, e0180798.	2.5	60
16	Multimodal Holographic Microscopy: Distinction between Apoptosis and Oncosis. <i>PLoS ONE</i> , 2015, 10, e0121674.	2.5	59
17	Cisplatin-resistant prostate cancer model: Differences in antioxidant system, apoptosis and cell cycle. <i>International Journal of Oncology</i> , 2014, 44, 923-933.	3.3	58
18	Relevance of infection with human papillomavirus: The role of the p53 tumor suppressor protein and E6/E7 zinc finger proteins. <i>International Journal of Oncology</i> , 2013, 43, 1754-1762.	3.3	57

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19	Rilzabrutinib, an Oral BTK Inhibitor, in Immune Thrombocytopenia. <i>New England Journal of Medicine</i> , 2022, 386, 1421-1431.	27.0	52
20	Simultaneous Automatic Electrochemical Detection of Zinc, Cadmium, Copper and Lead Ions in Environmental Samples Using a Thin-Film Mercury Electrode and an Artificial Neural Network. <i>Sensors</i> , 2015, 15, 592-610.	3.8	51
21	Zinc and Copper Homeostasis in Head and Neck Cancer: Review and Meta-Analysis. <i>Current Medicinal Chemistry</i> , 2016, 23, 1304-1330.	2.4	47
22	Effect of Ampicillin, Streptomycin, Penicillin and Tetracycline on Metal Resistant and Non-Resistant <i>Staphylococcus aureus</i> . <i>International Journal of Environmental Research and Public Health</i> , 2014, 11, 3233-3255.	2.6	45
23	Expression profiles of miR-29c, miR-200b and miR-375 in tumour and tumour-adjacent tissues of head and neck cancers. <i>Tumor Biology</i> , 2016, 37, 12627-12633.	1.8	42
24	Electrophoretic fingerprint metallothionein analysis as a potential prostate cancer biomarker. <i>Electrophoresis</i> , 2011, 32, 1952-1961.	2.4	39
25	Haloperidol Cytotoxicity and Its Relation to Oxidative Stress. <i>Mini-Reviews in Medicinal Chemistry</i> , 2013, 13, 1993-1998.	2.4	39
26	Caveolin-1 as a potential high-risk prostate cancer biomarker. <i>Oncology Reports</i> , 2012, 27, 831-41.	2.6	36
27	Determination of common urine substances as an assay for improving prostate carcinoma diagnostics. <i>Oncology Reports</i> , 2014, 31, 1846-1854.	2.6	35
28	Reduction of Doxorubicin-Induced Cardiotoxicity Using Nanocarriers: A Review. <i>Current Drug Metabolism</i> , 2017, 18, 237-263.	1.2	35
29	A Novel Insight into the Cardiotoxicity of Antineoplastic Drug Doxorubicin. <i>International Journal of Molecular Sciences</i> , 2013, 14, 21629-21646.	4.1	29
30	Mechanical Properties of cellulose fibers measured by Brillouin spectroscopy. <i>Cellulose</i> , 2020, 27, 4209-4220.	4.9	28
31	Evaluation of alpha-methylacyl-CoA racemase, metallothionein and prostate specific antigen as prostate cancer prognostic markers. <i>Neoplasma</i> , 2012, 59, 191-201.	1.6	27
32	Microfluidic tool based on the antibody-modified paramagnetic particles for detection of 8-hydroxy-2'-deoxyguanosine in urine of prostate cancer patients. <i>Electrophoresis</i> , 2011, 32, 3207-3220.	2.4	26
33	Monitoring of the prostate tumour cells redox state and real-time proliferation by novel biophysical techniques and fluorescent staining. <i>Integrative Biology (United Kingdom)</i> , 2012, 4, 672-684.	1.3	25
34	Oxidative Stress Resistance in Metastatic Prostate Cancer: Renewal by Self-Eating. <i>PLoS ONE</i> , 2015, 10, e0145016.	2.5	24
35	Modulation of Induced Cytotoxicity of Doxorubicin by Using Apoferritin and Liposomal Cages. <i>International Journal of Molecular Sciences</i> , 2014, 15, 22960-22977.	4.1	23
36	Structural effects and nanoparticle size are essential for quantum dots-metallothionein complex formation. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 134, 262-272.	5.0	21

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37	Isolation of metallothionein from cells derived from aggressive form of high-grade prostate carcinoma using paramagnetic antibody-modified microbeads offline coupled with electrochemical and electrophoretic analysis. <i>Electrophoresis</i> , 2011, 32, 3576-3588.	2.4	20
38	Determination of oxidative stress and activities of antioxidant enzymes in guinea pigs treated with haloperidol. <i>Experimental and Therapeutic Medicine</i> , 2013, 5, 479-484.	1.8	19
39	Amino Acid Profiling of Zinc Resistant Prostate Cancer Cell Lines: Associations With Cancer Progression. <i>Prostate</i> , 2017, 77, 604-616.	2.3	19
40	Prognostic role of c-Met in head and neck squamous cell cancer tissues: a meta-analysis. <i>Scientific Reports</i> , 2018, 8, 10370.	3.3	18
41	Metabolic and Amino Acid Alterations of the Tumor Microenvironment. <i>Current Medicinal Chemistry</i> , 2021, 28, 1270-1289.	2.4	17
42	Prognostic significance of the tumour-adjacent tissue in head and neck cancers. <i>Tumor Biology</i> , 2015, 36, 9929-9939.	1.8	16
43	Relation of exposure to amino acids involved in sarcosine metabolic pathway on behavior of non-tumor and malignant prostatic cell lines. <i>Prostate</i> , 2016, 76, 679-690.	2.3	16
44	17 $\beta$ -estradiol-containing liposomes as a novel delivery system for the antisense therapy of ER-positive breast cancer: An in vitro study on the MCF-7 cell line. <i>Oncology Reports</i> , 2015, 33, 921-929.	2.6	15
45	Effect of zinc(II) ions on the expression of pro- and anti-apoptotic factors in high-grade prostate carcinoma cells. <i>Oncology Reports</i> , 2012, 28, 806-814.	2.6	14
46	Sensitivity to Cisplatin in Head and Neck Cancer Cells Is Significantly Affected by Patient-Derived Cancer-Associated Fibroblasts. <i>International Journal of Molecular Sciences</i> , 2021, 22, 1912.	4.1	14
47	Evaluation of EGFR as a prognostic and diagnostic marker for head and neck squamous cell carcinoma patients. <i>Oncology Letters</i> , 2016, 12, 2127-2132.	1.8	13
48	Caveolin-1 in oncogenic metabolic symbiosis. <i>International Journal of Cancer</i> , 2020, 147, 1793-1807.	5.1	13
49	Molecular response of 4T1-induced mouse mammary tumours and healthy tissues to zinc treatment. <i>International Journal of Oncology</i> , 2015, 46, 1810-1818.	3.3	12
50	Prognostic Significance of Serum Free Amino Acids in Head and Neck Cancers. <i>Cells</i> , 2019, 8, 428.	4.1	12
51	KRAS NF- $\kappa$ B is involved in the development of zinc resistance and reduced curability in prostate cancer. <i>Metallomics</i> , 2014, 6, 1240.	2.4	11
52	Influence of microbiome species in hard-to-heal wounds on disease severity and treatment duration. <i>Brazilian Journal of Infectious Diseases</i> , 2015, 19, 604-613.	0.6	11
53	Levels of heavy metals and their binding protein metallothionein in type 2 diabetics with kidney disease. <i>Journal of Biochemical and Molecular Toxicology</i> , 2017, 31, e21891.	3.0	11
54	The effect of Benzothiazolone on the expression of Metallothionein in modulating Alzheimer's disease. <i>Brain and Behavior</i> , 2017, 7, e00799.	2.2	11

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55	Establishment of oral squamous cell carcinoma cell line and magnetic bead-based isolation and characterization of its CD90/CD44 subpopulations. <i>Oncotarget</i> , 2017, 8, 66254-66269.	1.8	11
56	DeepFoci: Deep learning-based algorithm for fast automatic analysis of DNA double-strand break ionizing radiation-induced foci. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 6465-6480.	4.1	10
57	Novel biophysical determination of miRNAs related to prostate and head and neck cancers. <i>European Biophysics Journal</i> , 2015, 44, 131-138.	2.2	9
58	HPV, protein p16 and squamous cell carcinoma of the oral cavity. <i>Biomedical Papers of the Medical Faculty of the University Palacky&amp;#x0301;, Olomouc, Czechoslovakia</i> , 2020, 164, 292-299.	0.6	9
59	MicroRNAs and zinc metabolism-related gene expression in prostate cancer cell lines treated with zinc(II) ions. <i>International Journal of Oncology</i> , 2012, 41, 2237-2244.	3.3	8
60	Study of Linkage between Glutathione Pathway and the Antibiotic Resistance of Escherichia coli from Patients&#x2013; Swabs. <i>International Journal of Molecular Sciences</i> , 2015, 16, 7210-7229.	4.1	8
61	Influence of Long-Distance Bicycle Riding on Serum/Urinary Biomarkers of Prostate Cancer. <i>International Journal of Molecular Sciences</i> , 2016, 17, 377.	4.1	6
62	Effect of sarcosine on antioxidant parameters and metallothionein content in the PC-3 prostate cancer cell line. <i>Oncology Reports</i> , 2013, 29, 2459-2466.	2.6	5
63	Quantitative Phase Dynamics of Cancer Cell Populations Affected by Blue Light. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2597.	2.5	5
64	Post&#x2013;treatment urinary sarcosine as a predictor of recurrent relapses in patients with prostate cancer. <i>Cancer Medicine</i> , 2018, 7, 5411-5419.	2.8	4
65	Cancer cell viscoelasticity measurement by quantitative phase and flow stress induction. <i>Biophysical Journal</i> , 2022, 121, 1632-1642.	0.5	4
66	mRNA Subtype of Cancer-Associated Fibroblasts Significantly Affects Key Characteristics of Head and Neck Cancer Cells. <i>Cancers</i> , 2022, 14, 2286.	3.7	4
67	Effect of HPV on tumor expression levels of the most commonly used markers in HNSCC. <i>Tumor Biology</i> , 2016, 37, 7193-7201.	1.8	3
68	$\gamma$ H2AX/53BP1 foci as a potential pre-treatment marker of HNSCC tumors radiosensitivity &#x201c; preliminary methodological study and discussion. <i>European Physical Journal D</i> , 2017, 71, 1.	1.3	3
69	Self-supervised pretraining for transferable quantitative phase image cell segmentation. <i>Biomedical Optics Express</i> , 2021, 12, 6514.	2.9	3
70	Utilization of paramagnetic microparticles for automated isolation of free circulating mRNA as a new tool in prostate cancer diagnostics. <i>Electrophoresis</i> , 2014, 35, 306-315.	2.4	1
71	HNSCC Biomarkers Derived from Key Processes of Cancerogenesis. , 2016, , 115-160.		1
72	Label-Free Nuclear Staining Reconstruction in Quantitative Phase Images Using Deep Learning. <i>IFMBE Proceedings</i> , 2019, , 239-242.	0.3	1

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73	All-in-one detector of circulating mRNA based on a smartphone. , 2016, , .		0
74	VPA does not enhance platinum binding to DNA in cisplatin-resistant neuroblastoma cancer cells. Tumor Biology, 2017, 39, 101042831771165.	1.8	0
75	Low Molecular Weight Heparin in Sufficient Dose of 70 IU/kg as an Effective and Safe Thromboprophylaxis in Patients with Newly Diagnosed Multiple Myeloma during Conventional VAD Induction Therapy.. Blood, 2007, 110, 2732-2732.	1.4	0
76	Abstract C7: Analysis of high-risk prostate cancer markers at RNA and protein level.. , 2011, , .		0