

Peter Horvath

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

4,332
citations

270111

25
h-index

169272

56
g-index

60
all docs

60
docs citations

60
times ranked

9532
citing authors

#	ARTICLE	IF	CITATIONS
1	Neuropilin-1 is a host factor for SARS-CoV-2 infection. <i>Science</i> , 2020, 370, 861-865.	6.0	1,015
2	Data-analysis strategies for image-based cell profiling. <i>Nature Methods</i> , 2017, 14, 849-863.	9.0	535
3	Screening out irrelevant cell-based models of disease. <i>Nature Reviews Drug Discovery</i> , 2016, 15, 751-769.	21.5	402
4	Ex vivo drug response profiling detects recurrent sensitivity patterns in drug-resistant acute lymphoblastic leukemia. <i>Blood</i> , 2017, 129, e26-e37.	0.6	195
5	nucleAlzer: A Parameter-free Deep Learning Framework for Nucleus Segmentation Using Image Style Transfer. <i>Cell Systems</i> , 2020, 10, 453-458.e6.	2.9	163
6	Deep Visual Proteomics defines single-cell identity and heterogeneity. <i>Nature Biotechnology</i> , 2022, 40, 1231-1240.	9.4	160
7	The Host Nonsense-Mediated mRNA Decay Pathway Restricts Mammalian RNA Virus Replication. <i>Cell Host and Microbe</i> , 2014, 16, 403-411.	5.1	150
8	CIDRE: an illumination-correction method for optical microscopy. <i>Nature Methods</i> , 2015, 12, 404-406.	9.0	129
9	Test-time augmentation for deep learning-based cell segmentation on microscopy images. <i>Scientific Reports</i> , 2020, 10, 5068.	1.6	125
10	CellTracker (not only) for dummies. <i>Bioinformatics</i> , 2016, 32, 955-957.	1.8	107
11	Diffusion and retention are major determinants of protein targeting to the inner nuclear membrane. <i>Journal of Cell Biology</i> , 2015, 209, 687-704.	2.3	101
12	Genome-wide RNAi Screening Identifies Protein Modules Required for 40S Subunit Synthesis in Human Cells. <i>Cell Reports</i> , 2015, 13, 2879-2891.	2.9	90
13	Histone Deacetylase 8 Is Required for Centrosome Cohesion and Influenza A Virus Entry. <i>PLoS Pathogens</i> , 2011, 7, e1002316.	2.1	78
14	Advanced Cell Classifier: User-Friendly Machine-Learning-Based Software for Discovering Phenotypes in High-Content Imaging Data. <i>Cell Systems</i> , 2017, 4, 651-655.e5.	2.9	77
15	Comprehensive Drug Testing of Patient-derived Conditionally Reprogrammed Cells from Castration-resistant Prostate Cancer. <i>European Urology</i> , 2017, 71, 319-327.	0.9	74
16	Phenotypic Image Analysis Software Tools for Exploring and Understanding Big Image Data from Cell-Based Assays. <i>Cell Systems</i> , 2018, 6, 636-653.	2.9	74
17	Concerns, challenges and promises of high-content analysis of 3D cellular models. <i>Nature Reviews Drug Discovery</i> , 2018, 17, 606-606.	21.5	64
18	Accurate Morphology Preserving Segmentation of Overlapping Cells based on Active Contours. <i>Scientific Reports</i> , 2016, 6, 32412.	1.6	60

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19	Genome-Wide Small Interfering RNA Screens Reveal VAMP3 as a Novel Host Factor Required for Uukuniemi Virus Late Penetration. <i>Journal of Virology</i> , 2014, 88, 8565-8578.	1.5	48
20	Role for formin-like 1-dependent acto-myosin assembly in lipid droplet dynamics and lipid storage. <i>Nature Communications</i> , 2017, 8, 14858.	5.8	48
21	A deep convolutional neural network approach for astrocyte detection. <i>Scientific Reports</i> , 2018, 8, 12878.	1.6	42
22	A functional genetic screen defines the AKT-induced senescence signaling network. <i>Cell Death and Differentiation</i> , 2020, 27, 725-741.	5.0	40
23	<i>Candida albicans</i> Enhances the Progression of Oral Squamous Cell Carcinoma <i>In Vitro</i> and <i>In Vivo</i> . <i>MBio</i> , 2022, 13, e0314421.	1.8	39
24	MISpherID: a knowledgebase and transparency tool for minimum information in spheroid identity. <i>Nature Methods</i> , 2021, 18, 1294-1303.	9.0	38
25	Image-based RNA interference screening reveals an individual dependence of acute lymphoblastic leukemia on stromal cysteine support. <i>Oncotarget</i> , 2014, 5, 11501-11512.	0.8	37
26	Software tools for 3D nuclei segmentation and quantitative analysis in multicellular aggregates. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 1287-1300.	1.9	33
27	Active Learning Strategies for Phenotypic Profiling of High-Content Screens. <i>Journal of Biomolecular Screening</i> , 2014, 19, 685-695.	2.6	32
28	Nucleus segmentation: towards automated solutions. <i>Trends in Cell Biology</i> , 2022, 32, 295-310.	3.6	31
29	AnnotatorJ: an ImageJ plugin to ease hand annotation of cellular compartments. <i>Molecular Biology of the Cell</i> , 2020, 31, 2179-2186.	0.9	30
30	Hsp70-associated chaperones have a critical role in buffering protein production costs. <i>ELife</i> , 2018, 7, .	2.8	29
31	Evolution of Robustness to Protein Mistranslation by Accelerated Protein Turnover. <i>PLoS Biology</i> , 2015, 13, e1002291.	2.6	29
32	The NF45/NF90 Heterodimer Contributes to the Biogenesis of 60S Ribosomal Subunits and Influences Nucleolar Morphology. <i>Molecular and Cellular Biology</i> , 2015, 35, 3491-3503.	1.1	28
33	Automatic deep learning-driven label-free image-guided patch clamp system. <i>Nature Communications</i> , 2021, 12, 936.	5.8	22
34	3D-Cell-Annotator: an open-source active surface tool for single-cell segmentation in 3D microscopy images. <i>Bioinformatics</i> , 2020, 36, 2948-2949.	1.8	18
35	Computationally prioritized drugs inhibit SARS-CoV-2 infection and syncytia formation. <i>Briefings in Bioinformatics</i> , 2022, 23, .	3.2	17
36	Nuclear Motility in Glioma Cells Reveals a Cell-Line Dependent Role of Various Cytoskeletal Components. <i>PLoS ONE</i> , 2014, 9, e93431.	1.1	16

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37	Gene loss and compensatory evolution promotes the emergence of morphological novelties in budding yeast. <i>Nature Ecology and Evolution</i> , 2022, 6, 763-773.	3.4	16
38	SpheroidPicker for automated 3D cell culture manipulation using deep learning. <i>Scientific Reports</i> , 2021, 11, 14813.	1.6	13
39	Comparison of the antiremodeling effects of losartan and mirabegron in a rat model of uremic cardiomyopathy. <i>Scientific Reports</i> , 2021, 11, 17495.	1.6	13
40	DIC image reconstruction using an energy minimization framework to visualize optical path length distribution. <i>Scientific Reports</i> , 2016, 6, 30420.	1.6	12
41	Investigation of the Antihypertrophic and Antifibrotic Effects of Losartan in a Rat Model of Radiation-Induced Heart Disease. <i>International Journal of Molecular Sciences</i> , 2021, 22, 12963.	1.8	11
42	Cell Type-Specific Arousal-Dependent Modulation of Thalamic Activity in the Lateral Geniculate Nucleus. <i>Cerebral Cortex Communications</i> , 2021, 2, tgab020.	0.7	10
43	Investigation of the Antiremodeling Effects of Losartan, Mirabegron and Their Combination on the Development of Doxorubicin-Induced Chronic Cardiotoxicity in a Rat Model. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2201.	1.8	9
44	Combining High-Content Imaging and Phenotypic Classification Analysis of Senescence-Associated Beta-Galactosidase Staining to Identify Regulators of Oncogene-Induced Senescence. <i>Assay and Drug Development Technologies</i> , 2016, 14, 416-428.	0.6	8
45	Regression plane concept for analysing continuous cellular processes with machine learning. <i>Nature Communications</i> , 2021, 12, 2532.	5.8	8
46	Cell lines and clearing approaches: a single-cell level 3D light-sheet fluorescence microscopy dataset of multicellular spheroids. <i>Data in Brief</i> , 2021, 36, 107090.	0.5	8
47	Oral Epithelial Cells Distinguish between <i>Candida</i> Species with High or Low Pathogenic Potential through MicroRNA Regulation. <i>MSystems</i> , 2021, 6, .	1.7	8
48	An In Vitro System to Study Nuclear Envelope Breakdown. <i>Methods in Cell Biology</i> , 2014, 122, 255-276.	0.5	6
49	Spa-RQ: an Image Analysis Tool to Visualise and Quantify Spatial Phenotypes Applied to Non-Small Cell Lung Cancer. <i>Scientific Reports</i> , 2019, 9, 17613.	1.6	5
50	Exercise training worsens cardiac performance in males but does not change ejection fraction and improves hypertrophy in females in a mouse model of metabolic syndrome. <i>Biology of Sex Differences</i> , 2022, 13, 5.	1.8	5
51	Active contours for selective object segmentation. , 2016, , .		4
52	Open-Source Tools for Volume Estimation of 3D Multicellular Aggregates. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1616.	1.3	4
53	DIC Microscopy Image Reconstruction Using a Novel Variational Framework. , 2015, , .		3
54	Pipette Hunter: Patch-Clamp Pipette Detection. <i>Lecture Notes in Computer Science</i> , 2017, , 172-183.	1.0	3

#	ARTICLE	IF	CITATIONS
55	Multiparametric platform for profiling lipid trafficking in human leukocytes. Cell Reports Methods, 2022, 2, 100166.	1.4	3
56	Active Surfaces for Selective Object Segmentation in 3D. , 2017, , .		2
57	A quantitative metric for the comparative evaluation of optical clearing protocols for 3D multicellular spheroids. Computational and Structural Biotechnology Journal, 2021, 19, 1233-1243.	1.9	2
58	Proteome-wide landscape of solubility limits in a bacterial cell. Scientific Reports, 2022, 12, 6547.	1.6	2
59	A versatile transposon-based technology to generate loss- and gain-of-function phenotypes in the mouse liver. BMC Biology, 2022, 20, 74.	1.7	1
60	Cell Delivery: Routing Nanomolar Protein Cargoes to Lipid Raftâ€Mediated/Caveolar Endocytosis through a Ganglioside GM1â€Specific Recognition Tag (Adv. Sci. 4/2020). Advanced Science, 2020, 7, 2070019.	5.6	0