ilastik: interactive machine learning for (bio)image anal

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Citation Report

#	Article	IF	Citations
1	Mass Cytometry Imaging for the Study of Human Diseasesâ€"Applications and Data Analysis Strategies. Frontiers in Immunology, 2019, 10, 2657.	2.2	139
2	QUINT: Workflow for Quantification and Spatial Analysis of Features in Histological Images From Rodent Brain. Frontiers in Neuroinformatics, 2019, 13, 75.	1.3	51
3	BactMAP: An R package for integrating, analyzing and visualizing bacterial microscopy data. Molecular Microbiology, 2020, 113, 297-308.	1.2	26
4	Mapping Heterogeneous Buried Archaeological Features Using Multisensor Data from Unmanned Aerial Vehicles. Remote Sensing, 2020, 12, 41.	1.8	25
5	Application of automated electron microscopy imaging and machine learning to characterise and quantify nanoparticle dispersion in aqueous media. Journal of Microscopy, 2020, 279, 177-184.	0.8	21
6	Examining the Progressive Behavior and Neuropathological Outcomes Associated with Chronic Repetitive Mild Traumatic Brain Injury in Rats. Cerebral Cortex Communications, 2020, 1, tgaa002.	0.7	6
7	Interactive machine learning for fast and robust cell profiling. PLoS ONE, 2020, 15, e0237972.	1.1	1
8	The use and limitations of singleâ€cell mass cytometry for studying human microglia function. Brain Pathology, 2020, 30, 1178-1191.	2.1	18
9	MitoSegNet: Easy-to-use Deep Learning Segmentation for Analyzing Mitochondrial Morphology. IScience, 2020, 23, 101601.	1.9	44
10	Osteopontin Expression Identifies a Subset of Recruited Macrophages Distinct from Kupffer Cells in the Fatty Liver. Immunity, 2020, 53, 641-657.e14.	6.6	287
11	Amoeboid Swimming Is Propelled by Molecular Paddling in Lymphocytes. Biophysical Journal, 2020, 119, 1157-1177.	0.2	26
12	AnnotatorJ: an ImageJ plugin to ease hand annotation of cellular compartments. Molecular Biology of the Cell, 2020, 31, 2179-2186.	0.9	30
13	ACDC: Automated Cell Detection and Counting for Time-Lapse Fluorescence Microscopy. Applied Sciences (Switzerland), 2020, 10, 6187.	1.3	9
14	A Plasma Membrane Nanodomain Ensures Signal Specificity during Osmotic Signaling in Plants. Current Biology, 2020, 30, 4654-4664.e4.	1.8	40
15	Large-scale characterization of the microvascular geometry in development and disease by tissue clearing and quantitative ultramicroscopy. Journal of Cerebral Blood Flow and Metabolism, 2020, 41, 0271678X2096185.	2.4	10
16	Highâ€content, labelâ€free analysis of proplatelet production from megakaryocytes. Journal of Thrombosis and Haemostasis, 2020, 18, 2701-2711.	1.9	11
17	Apical Relaxation during Mitotic Rounding Promotes Tension-Oriented Cell Division. Developmental Cell, 2020, 55, 695-706.e4.	3.1	20
18	Energy Sources of the Depth-Generalist Mixotrophic Coral Stylophora pistillata. Frontiers in Marine Science, 2020, 7, 988.	1.2	36

#	Article	IF	Citations
19	Mechanical Tension Promotes Formation of Gastrulation-like Nodes and Patterns Mesoderm Specification in Human Embryonic Stem Cells. Developmental Cell, 2020, 55, 679-694.e11.	3.1	84
20	Warburg-like Metabolic Reprogramming in Aging Intestinal Stem Cells Contributes to Tissue Hyperplasia. Cell Reports, 2020, 33, 108423.	2.9	36
21	Single Cell Characterization of a Synthetic Bacterial Clock with a Hybrid Feedback Loop Containing dCas9-sgRNA. ACS Synthetic Biology, 2020, 9, 3377-3387.	1.9	13
22	OpSeF: Open Source Python Framework for Collaborative Instance Segmentation of Bioimages. Frontiers in Bioengineering and Biotechnology, 2020, 8, 558880.	2.0	9
23	FUS is lost from nuclei and gained in neurites of motor neurons in a human stem cell model of VCP-related ALS. Brain, 2020, 143, e103-e103.	3.7	15
24	Heat Shock Factor 1-dependent extracellular matrix remodeling mediates the transition from chronic intestinal inflammation to colon cancer. Nature Communications, 2020, 11, 6245.	5.8	51
25	Content-based Propagation of User Markings for Interactive Segmentation of Patterned Images. , 2020, , .		2
26	The dose threshold for nanoparticle tumour delivery. Nature Materials, 2020, 19, 1362-1371.	13.3	295
27	Repetitive Mild Traumatic Brain Injuries in Mice during Adolescence Cause Sexually Dimorphic Behavioral Deficits and Neuroinflammatory Dynamics. Journal of Neurotrauma, 2020, 37, 2718-2732.	1.7	13
28	VPS72/YL1-Mediated H2A.Z Deposition Is Required for Nuclear Reassembly after Mitosis. Cells, 2020, 9, 1702.	1.8	15
29	Epigenomic State Transitions Characterize Tumor Progression in Mouse Lung Adenocarcinoma. Cancer Cell, 2020, 38, 212-228.e13.	7.7	140
30	BIAFLOWS: A Collaborative Framework to Reproducibly Deploy and Benchmark Bioimage Analysis Workflows. Patterns, 2020, 1, 100040.	3.1	25
31	EllipTrack: A Global-Local Cell-Tracking Pipeline for 2D Fluorescence Time-Lapse Microscopy. Cell Reports, 2020, 32, 107984.	2.9	25
32	Functional annotation of human long noncoding RNAs via molecular phenotyping. Genome Research, 2020, 30, 1060-1072.	2.4	109
33	Versatile phenotype-activated cell sorting. Science Advances, 2020, 6, .	4.7	33
34	Cell Tracking Profiler: a user-driven analysis framework for evaluating 4D live cell imaging data. Journal of Cell Science, 2020, 133, .	1.2	7
35	Epithelial layer unjamming shifts energy metabolism toward glycolysis. Scientific Reports, 2020, 10, 18302.	1.6	30
36	Brainstem development requires galactosylceramidase and is critical for pathogenesis in a model of Krabbe disease. Nature Communications, 2020, 11, 5356.	5.8	21

#	Article	IF	Citations
37	Pomegranate: 2D segmentation and 3D reconstruction for fission yeast and other radially symmetric cells. Scientific Reports, 2020, 10, 16580.	1.6	9
38	Unraveling spatial cellular pattern by computational tissue shuffling. Communications Biology, 2020, 3, 605.	2.0	5
39	Single-cell profiling reveals an endothelium-mediated immunomodulatory pathway in the eye choroid. Journal of Experimental Medicine, 2020, 217, .	4.2	55
40	Functional organisation of the endomembrane network in the digestive gland of the Venus flytrap: revisiting an old story with a new microscopy toolbox. Journal of Microscopy, 2020, 280, 86-103.	0.8	9
41	A New Methodology to Evaluate Huff and Puff Effectiveness at in-Situ Conditions. , 2020, , .		1
42	Deciphering the Immune Microenvironment on A Single Archival Formalin-Fixed Paraffin-Embedded Tissue Section by An Immediately Implementable Multiplex Fluorescence Immunostaining Protocol. Cancers, 2020, 12, 2449.	1.7	22
43	Infarct Collagen Topography Regulates Fibroblast Fate via p38-Yes-Associated Protein Transcriptional Enhanced Associate Domain Signals. Circulation Research, 2020, 127, 1306-1322.	2.0	40
44	Chromatin arranges in chains of mesoscale domains with nanoscale functional topography independent of cohesin. Science Advances, 2020, 6, .	4.7	97
45	Non-invasive imaging of mouse embryo metabolism in response to induced hypoxia. Journal of Assisted Reproduction and Genetics, 2020, 37, 1797-1805.	1.2	6
46	Nutil: A Pre- and Post-processing Toolbox for Histological Rodent Brain Section Images. Frontiers in Neuroinformatics, 2020, 14, 37.	1.3	31
47	Dense neuronal reconstruction through X-ray holographic nano-tomography. Nature Neuroscience, 2020, 23, 1637-1643.	7.1	98
48	Erythrocyte viscoelastic recovery after liver transplantation in a cirrhotic patient affected by spur cell anaemia. Journal of Microscopy, 2020, 280, 287-296.	0.8	6
49	Biomolecular Ultrasound Imaging of Phagolysosomal Function. ACS Nano, 2020, 14, 12210-12221.	7.3	38
50	Mechanical design of the highly porous cuttlebone: A bioceramic hard buoyancy tank for cuttlefish. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23450-23459.	3.3	65
51	Saving time maintaining reliability: a new method for quantification of Tetranychus urticae damage in Arabidopsis whole rosettes. BMC Plant Biology, 2020, 20, 397.	1.6	11
52	Pinpointing Cell Identity in Time and Space. Frontiers in Molecular Biosciences, 2020, 7, 209.	1.6	15
53	Digitally deconstructing leaves in 3D using Xâ€ray microcomputed tomography and machine learning. Applications in Plant Sciences, 2020, 8, e11380.	0.8	23
54	Single-cell mass cytometry reveals complex myeloid cell composition in active lesions of progressive multiple sclerosis. Acta Neuropathologica Communications, 2020, 8, 136.	2.4	35

#	Article	IF	Citations
55	IBEX: A versatile multiplex optical imaging approach for deep phenotyping and spatial analysis of cells in complex tissues. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 33455-33465.	3.3	97
56	Flow studies on human GPVI-deficient blood under coagulating and noncoagulating conditions. Blood Advances, 2020, 4, 2953-2961.	2.5	35
57	Hypothesis-driven quantitative fluorescence microscopy â€“ the importance of reverse-thinking in experimental design. Journal of Cell Science, 2020, 133, .	1.2	28
58	Automated 3D bio-imaging analysis of nuclear organization by NucleusJ 2.0. Nucleus, 2020, 11, 315-329.	0.6	18
59	Introducing Biomedisa as an open-source online platform for biomedical image segmentation. Nature Communications, 2020, 11, 5577.	5.8	96
60	Inhibition of LTÎ²R signalling activates WNT-induced regeneration in lung. Nature, 2020, 588, 151-156.	13.7	81
61	Dissecting Neuronal Activation on a Brain-Wide Scale With Immediate Early Genes. Frontiers in Neuroscience, 2020, 14, 569517.	1.4	31
62	Novel HDAC inhibitor MAKV-8 and imatinib synergistically kill chronic myeloid leukemia cells via inhibition of BCR-ABL/MYC-signaling: effect on imatinib resistance and stem cells. Clinical Epigenetics, 2020, 12, 69.	1.8	19
63	Cerebellar Astrocyte Transduction as Gene Therapy for Megalencephalic Leukoencephalopathy. Neurotherapeutics, 2020, 17, 2041-2053.	2.1	7
64	Deep learning approach for quantification of organelles and misfolded polypeptide delivery within degradative compartments. Molecular Biology of the Cell, 2020, 31, 1512-1524.	0.9	20
65	Cryo-FIB-SEM as a promising tool for localizing proteins in 3D. Journal of Structural Biology, 2020, 211, 107528.	1.3	43
66	Using optogenetics to tackle systems-level questions of multicellular morphogenesis. Current Opinion in Cell Biology, 2020, 66, 19-27.	2.6	22
67	Membrane Curvature Catalyzes Lipid Droplet Assembly. Current Biology, 2020, 30, 2481-2494.e6.	1.8	80
68	Effect of uremic state in intestine through a co-culture in vitro intestinal epithelial model. International Journal of Pharmaceutics, 2020, 584, 119450.	2.6	6
69	Role of Artificial Intelligence and Machine Learning in Nanosafety. Small, 2020, 16, e2001883.	5.2	86
70	Lysophosphatidic Acid Increases Maturation of Brush Borders and SGLT1 Activity in MYO5B-deficient Mice, a Model of Microvillus Inclusion Disease. Gastroenterology, 2020, 159, 1390-1405.e20.	0.6	23
71	Image-based high-content screening in drug discovery. Drug Discovery Today, 2020, 25, 1348-1361.	3.2	52
72	Software tools for 3D nuclei segmentation and quantitative analysis in multicellular aggregates. Computational and Structural Biotechnology Journal, 2020, 18, 1287-1300.	1.9	33

#	Article	IF	Citations
73	Disrupted Neurogenesis in Germ-Free Mice: Effects of Age and Sex. Frontiers in Cell and Developmental Biology, 2020, 8, 407.	1.8	39
74	Assessment of the Retina of Plp-Î±-Syn Mice as a Model for Studying Synuclein-Dependent Diseases. , 2020, 61, 12.		5
75	Guided vascularization in the rat heart leads to transient vessel patterning. APL Bioengineering, 2020, 4, 016105.	3.3	7
76	Intravital imaging of megakaryocytes. Platelets, 2020, 31, 599-609.	1.1	3
77	Monitoring the spatio-temporal organization and dynamics of the genome. Nucleic Acids Research, 2020, 48, 3423-3434.	6.5	56
78	A multistep deep learning framework for the automated detection and segmentation of astrocytes in fluorescent images of brain tissue. Scientific Reports, 2020, 10, 5137.	1.6	21
79	Ratiometric population sensing by a pump-probe signaling system in Bacillus subtilis. Nature Communications, 2020, 11, 1176.	5.8	20
80	Volatile organic compounds kill the white-nose syndrome fungus, Pseudogymnoascus destructans, in hibernaculum sediment. Canadian Journal of Microbiology, 2020, 66, 593-599.	0.8	10
81	Interactive machine learning for soybean seed and seedling quality classification. Scientific Reports, 2020, 10, 11267.	1.6	43
82	Applications and Challenges of Machine Learning to Enable Realistic Cellular Simulations. Frontiers in Physics, 2020, 7, .	1.0	7
83	Floral organ development goes live. Journal of Experimental Botany, 2020, 71, 2472-2478.	2.4	15
84	Quantitative 3D structural analysis of the cellular microstructure of sea urchin spines (I): Methodology. Acta Biomaterialia, 2020, 107, 204-217.	4.1	23
85	Ex Vivo MRI Analytical Methods and Brain Pathology in Preterm Lambs Treated with Postnatal Dexamethasone â€. Brain Sciences, 2020, 10, 211.	1.1	5
86	Precise Spatiotemporal Control of Nodal Na+ Channel Clustering by Bone Morphogenetic Protein-1/Tolloid-like Proteinases. Neuron, 2020, 106, 806-815.e6.	3.8	9
87	Transcribing In Vivo Blood Vessel Networks into In Vitro Perfusable Microfluidic Devices. Advanced Materials Technologies, 2020, 5, 2000103.	3.0	16
88	Microglial physiological properties and interactions with synapses are altered at presymptomatic stages in a mouse model of Huntingtonâ€™s disease pathology. Journal of Neuroinflammation, 2020, 17, 98.	3.1	68
89	Coordinated Localization and Antagonistic Function of NtPLC3 and PI4P 5-Kinases in the Subapical Plasma Membrane of Tobacco Pollen Tubes. Plants, 2020, 9, 452.	1.6	9
90	Brain tumor classification of virtual NMR voxels based on realistic blood vesselâ€induced spin dephasing using support vector machines. NMR in Biomedicine, 2020, , e4307.	1.6	4

#	Article	IF	Citations
91	An adaptable analysis workflow for characterization of platelet spreading and morphology. Platelets, 2021, 32, 54-58.	1.1	18
92	Quantifying plasmid dynamics using single-cell microfluidics and image bioinformatics. Plasmid, 2021, 113, 102517.	0.4	6
93	Rethinking embryology in vitro: A synergy between engineering, data science and theory. Developmental Biology, 2021, 474, 48-61.	0.9	15
94	New insights into the clinical and molecular spectrum of the novel CYFIP2-related neurodevelopmental disorder and impairment of the WRC-mediated actin dynamics. Genetics in Medicine, 2021, 23, 543-554.	1.1	32
95	Quantitative analysis of fluorescent ligand binding to dopamine D 3 receptors using liveâ€cell microscopy. FEBS Journal, 2021, 288, 1514-1532.	2.2	11
96	Towards Automatic Protein Co-Expression Quantification in Immunohistochemical TMA Slides. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 393-402.	3.9	5
97	Towards the understanding of transport limitations in a proton-exchange membrane fuel cell catalyst layer: Performing agglomerate scale direct numerical simulations on electron-microscopy-based geometries. Journal of Power Sources, 2021, 482, 228893.	4.0	9
98	Advances and opportunities in image analysis of bacterial cells and communities. FEMS Microbiology Reviews, 2021, 45, .	3.9	52
99	Developmental roles of Auxin Binding Protein 1 in Arabidopsis thaliana. Plant Science, 2021, 303, 110750.	1.7	26
100	Erythrocyte membrane fluidity as a marker of diabetic retinopathy in type 1 diabetes mellitus. European Journal of Clinical Investigation, 2021, 51, e13455.	1.7	18
101	Automation of hemocompatibility analysis using image segmentation and supervised classification. Engineering Applications of Artificial Intelligence, 2021, 97, 104009.	4.3	8
102	Cellpose: a generalist algorithm for cellular segmentation. Nature Methods, 2021, 18, 100-106.	9.0	1,375
103	Detecting cells in intravital video microscopy using a deep convolutional neural network. Computers in Biology and Medicine, 2021, 129, 104133.	3.9	7
104	Tracking and interpreting long-range chromatin interactions with super-resolution live-cell imaging. Current Opinion in Cell Biology, 2021, 70, 18-26.	2.6	50
105	The spatiotemporal spread of cervical spinal cord contusion injury pathology revealed by 3D in-line phase contrast synchrotron X-ray microtomography. Experimental Neurology, 2021, 336, 113529.	2.0	9
106	De novo synthesis of hepatitis B virus nucleocapsids is dispensable for the maintenance and transcriptional regulation of cccDNA. JHEP Reports, 2021, 3, 100195.	2.6	33
107	Eimeria bovis infections induce G₁ cell cycle arrest and a senescence-like phenotype in endothelial host cells. Parasitology, 2021, 148, 341-353.	0.7	6
108	Determination of the pressure in micrometric bubbles in irradiated nuclear fuels. Journal of Nuclear Materials, 2021, 543, 152591.	1.3	4

#	Article	IF	Citations
109	Chemical shiftâ€“based prospective kâ€space anonymization. Magnetic Resonance in Medicine, 2021, 85, 962-969.	1.9	2
110	Optimizing Model Training in Interactive Learning Scenarios. Advances in Intelligent Systems and Computing, 2021, , 156-165.	0.5	1
112	Bioimage Analysis and Cell Motility. Patterns, 2021, 2, 100170.	3.1	12
113	TraCurate: Efficiently curating cell tracks. SoftwareX, 2021, 13, 100656.	1.2	5
115	Vitamin D3â€“elicited CD14+ human skin dendritic cells promote thymic stromal lymphopoietinâ€“independent type 2 Tâ€helper responses. Allergy: European Journal of Allergy and Clinical Immunology, 2021, 76, 2044-2056.	2.7	3
116	Computational Methods for Protein Localization Analysis. , 2021, , 315-344.		0
117	Time Evolution and Effect of Dispersant on the Morphology and Viscosity of Water-In-Crude-Oil Emulsions. Langmuir, 2021, 37, 1725-1742.	1.6	12
119	Optimizing Instance Selection Strategies in Interactive Machine Learning: An Application to Fraud Detection. Advances in Intelligent Systems and Computing, 2021, , 124-133.	0.5	2
120	Reproducible image handling and analysis. EMBO Journal, 2021, 40, e105889.	3.5	30
121	Advances in Confocal Microscopy and Selected Applications. Methods in Molecular Biology, 2021, 2304, 1-35.	0.4	9
122	Aneuploidy renders cancer cells vulnerable to mitotic checkpoint inhibition. Nature, 2021, 590, 486-491.	13.7	135
123	Densities and numbers of calbindin and parvalbumin positive neurons across the rat and mouse brain. IScience, 2021, 24, 101906.	1.9	35
124	IRVINE: A Design Study on Analyzing Correlation Patterns of Electrical Engines. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 11-21.	2.9	20
127	The Role of Mass Cytometry in Early Detection, Diagnosis, and Treatment of Head and Neck Cancer. , 2021, , 121-136.		0
128	Iterative Bounding Box Annotation for Object Detection. , 2021, , .		10
129	Deep Representation Learning for Image-Based Cell Profiling. Lecture Notes in Computer Science, 2021, , 487-497.	1.0	1
130	Quantitative image analysis of microbial communities with BiofilmQ. Nature Microbiology, 2021, 6, 151-156.	5.9	181
131	TDP-43 and FUS mislocalization in VCP mutant motor neurons is reversed by pharmacological inhibition of the VCP D2 ATPase domain. Brain Communications, 2021, 3, fcab166.	1.5	13

#	Article	IF	Citations
132	Visualizing the Prevalence and Interactions of Maternal Immune Cells and Fetal Trophoblasts Using Imaging Mass Cytometry: The Prominence of Myeloid Cells. SSRN Electronic Journal, 0, , .	0.4	0
136	Image analysis in drug discovery. , 2021, , 159-189.		0
137	Breast cancer mitotic cell detection using cascade convolutional neural network with U-Net. Mathematical Biosciences and Engineering, 2021, 18, 673-695.	1.0	10
138	A framework for automated time-resolved analysis of cell colony growth after irradiation. Physics in Medicine and Biology, 2021, 66, 035017.	1.6	3
139	A Semi-automated Organoid Screening Method Demonstrates Epigenetic Control of Intestinal Epithelial Differentiation. Frontiers in Cell and Developmental Biology, 2020, 8, 618552.	1.8	13
140	A High-Resolution Model of the Human Entorhinal Cortex in the â€˜BigBrainâ€™ â€“ Use Case for Machine Learning and 3D Analyses. Lecture Notes in Computer Science, 2021, , 3-21.	1.0	3
143	Temperature-induced microstructural changes in shells of laboratory-grown Arctica islandica (Bivalvia). PLoS ONE, 2021, 16, e0247968.	1.1	14
145	Fiji plugins for qualitative image annotations: routine analysis and application to image classification. F1000Research, 2020, 9, 1248.	0.8	3
146	Strategies and Tools for Studying Microglial-Mediated Synapse Elimination and Refinement. Frontiers in Immunology, 2021, 12, 640937.	2.2	10
149	Adult trkB Signaling in Parvalbumin Interneurons is Essential to Prefrontal Network Dynamics. Journal of Neuroscience, 2021, 41, 3120-3141.	1.7	16
152	Two Subpopulations of Human Monocytes That Differ by Mitochondrial Membrane Potential. Biomedicines, 2021, 9, 153.	1.4	0
155	Dendritic cell actin dynamics control contact duration and priming efficiency at the immunological synapse. Journal of Cell Biology, 2021, 220, .	2.3	25
156	In situ genome sequencing resolves DNA sequence and structure in intact biological samples. Science, 2021, 371, .	6.0	141
158	Automated and unbiased discrimination of ALS from control tissue at single cell resolution. Brain Pathology, 2021, 31, e12937.	2.1	9
159	Interactive biomedical segmentation tool powered by deep learning and ImJoy. F1000Research, 0, 10, 142.	0.8	7
162	TRIPODD: a Novel Fluorescence Imaging Platform for In Situ Quantification of Drug Distribution and Therapeutic Response. Molecular Imaging and Biology, 2021, 23, 650-664.	1.3	4
164	AutoScanJ: A Suite of ImageJ Scripts for Intelligent Microscopy. Frontiers in Bioinformatics, 2021, 1, .	1.0	8
166	The circadian oscillator analysed at the singleâ€transcript level. Molecular Systems Biology, 2021, 17, e10135.	3.2	11

#	Article	IF	Citations
168	Discovery of Bivalent GalNAc-Conjugated Betulin as a Potent ASGPR-Directed Agent against Hepatocellular Carcinoma. Bioconjugate Chemistry, 2021, 32, 763-781.	1.8	12
173	DeepMIB: User-friendly and open-source software for training of deep learning network for biological image segmentation. PLoS Computational Biology, 2021, 17, e1008374.	1.5	42
174	Design decisions for incorporating spatial and mechanical aspects in models of signaling networks. Current Opinion in Systems Biology, 2021, 25, 70-77.	1.3	1
175	Creatine transport and pathological changes in creatine transporter deficient mice. Journal of Inherited Metabolic Disease, 2021, 44, 939-948.	1.7	7
176	Sequential semi-supervised segmentation for serial electron microscopy image with small number of labels. Journal of Neuroscience Methods, 2021, 351, 109066.	1.3	7
178	Compliant Substrates Enhance Macrophage Cytokine Release and NLRP3 Inflammasome Formation During Their Pro-Inflammatory Response. Frontiers in Cell and Developmental Biology, 2021, 9, 639815.	1.8	26
179	Whole-organ analysis of TGF-Î²-mediated remodelling of the tumour microenvironment by tissue clearing. Communications Biology, 2021, 4, 294.	2.0	14
180	Adenosine Receptor Agonist HE-NECA Enhances Antithrombotic Activities of Cangrelor and Prasugrel in vivo by Decreasing of Fibrinogen Density in Thrombus. International Journal of Molecular Sciences, 2021, 22, 3074.	1.8	4
181	Self-organized patterning of cell morphology via mechanosensitive feedback. ELife, 2021, 10, .	2.8	31
182	Pore-scale influence of methane hydrate on permeability of porous media. Journal of Natural Gas Science and Engineering, 2021, 87, 103758.	2.1	23
187	Multiplexed histology analyses for the phenotypic and spatial characterization of human innate lymphoid cells. Nature Communications, 2021, 12, 1737.	5.8	26
188	AIDeveloper: Deep Learning Image Classification in Life Science and Beyond. Advanced Science, 2021, 8, e2003743.	5.6	31
190	Mycobacterium smegmatis Resists the Bactericidal Activity of Hypochlorous Acid Produced in Neutrophil Phagosomes. Journal of Immunology, 2021, 206, 1901-1912.	0.4	8
194	TDP-43 and PINK1 mediate CHCHD10S59L mutationâ€“induced defects in Drosophila and in vitro. Nature Communications, 2021, 12, 1924.	5.8	19
196	Transcranial focused ultrasound stimulation with high spatial resolution. Brain Stimulation, 2021, 14, 290-300.	0.7	47
197	Actin cables and comet tails organize mitochondrial networks in mitosis. Nature, 2021, 591, 659-664.	13.7	92
198	Excision of mutagenic replication-blocking lesions suppresses cancer but promotes cytotoxicity and lethality in nitrosamine-exposed mice. Cell Reports, 2021, 34, 108864.	2.9	16
199	The spatial landscape of lung pathology during COVID-19 progression. Nature, 2021, 593, 564-569.	13.7	249

#	Article	IF	Citations
200	Deep learning-based real-time detection of neurons in brain slices for in vitro physiology. Scientific Reports, 2021, 11, 6065.	1.6	5
202	Biological Cell Tracking And Lineage Inference Via Random Finite Sets. , 2021, , .		2
207	Automated in vivo Tracking of Cortical Oligodendrocytes. Frontiers in Cellular Neuroscience, 2021, 15, 667595.	1.8	9
209	A Review of Recent Deep Learning Approaches in Human-Centered Machine Learning. Sensors, 2021, 21, 2514.	2.1	41
210	Automatic Multi Class Organelle Segmentation For Cellular Fib-Sem Images. , 2021, , .		3
212	Unsupervised Cell Segmentation and Labelling in Neural Tissue Images. Applied Sciences (Switzerland), 2021, 11, 3733.	1.3	1
214	Targeting Gys1 with AAVâ€SaCas9 Decreases Pathogenic Polyglucosan Bodies and Neuroinflammation in Adult Polyglucosan Body and Lafora Disease Mouse Models. Neurotherapeutics, 2021, 18, 1414-1425.	2.1	26
215	FtsZ treadmilling is essential for Z-ring condensation and septal constriction initiation in Bacillus subtilis cell division. Nature Communications, 2021, 12, 2448.	5.8	53
216	Singleâ€cell analyses reveal SARSâ€CoVâ€2 interference with intrinsic immune response in the human gut. Molecular Systems Biology, 2021, 17, e10232.	3.2	78
217	Deep Learning Based Instance Segmentation of Titanium Dioxide Particles in the Form of Agglomerates in Scanning Electron Microscopy. Nanomaterials, 2021, 11, 968.	1.9	18
218	Data science in cell imaging. Journal of Cell Science, 2021, 134, .	1.2	15
219	Quantitative Characterization of Highly Porous Structures with Fluorescence Microscopy and Microcomputed Tomography. Industrial & Engineering Chemistry Research, 2021, 60, 5463-5470.	1.8	1
220	CODEX, a neural network approach to explore signaling dynamics landscapes. Molecular Systems Biology, 2021, 17, e10026.	3.2	15
222	Open-source deep-learning software for bioimage segmentation. Molecular Biology of the Cell, 2021, 32, 823-829.	0.9	50
224	FIB-SEM as a Volume Electron Microscopy Approach to Study Cellular Architectures in SARS-CoV-2 and Other Viral Infections: A Practical Primer for a Virologist. Viruses, 2021, 13, 611.	1.5	29
225	The remediation of nano-/microplastics from water. Materials Today, 2021, 48, 38-46.	8.3	56
226	Volutrauma Increases Exhaled Pentanal in Rats: A Potential Breath Biomarker for Ventilator-Induced Lung Injury. Anesthesia and Analgesia, 2021, 133, 263-273.	1.1	5
227	Developing open-source software for bioimage analysis: opportunities and challenges. F1000Research, 2021, 10, 302.	0.8	20

#	Article	IF	Citations
228	Democratising deep learning for microscopy with ZeroCostDL4Mic. Nature Communications, 2021, 12, 2276.	5.8	295
229	Deep learning classification of lipid droplets in quantitative phase images. PLoS ONE, 2021, 16, e0249196.	1.1	12
230	Loss of stra8 Increases Germ Cell Apoptosis but Is Still Compatible With Sperm Production in Atlantic Salmon (Salmo salar). Frontiers in Cell and Developmental Biology, 2021, 9, 657192.	1.8	6
231	Differential cellular responses to adhesive interactions with galectin-8- and fibronectin-coated substrates. Journal of Cell Science, 2021, 134, .	1.2	16
232	Image-based rock typing using grain geometry features. Computers and Geosciences, 2021, 149, 104703.	2.0	13
233	O-GlcNAc modification of nuclear pore complexes accelerates bidirectional transport. Journal of Cell Biology, 2021, 220, .	2.3	20
234	Imaging cell lineage with a synthetic digital recording system. Science, 2021, 372, .	6.0	78
237	Modeling the role for nuclear import dynamics in the early embryonic cell cycle. Biophysical Journal, 2021, 120, 4277-4286.	0.2	3
238	Metformin treatment response is dependent on glucose growth conditions and metabolic phenotype in colorectal cancer cells. Scientific Reports, 2021, 11, 10487.	1.6	18
239	Mycobacterium tuberculosis precursor rRNA as a measure of treatment-shortening activity of drugs and regimens. Nature Communications, 2021, 12, 2899.	5.8	38
240	Red blood cell phenotyping from 3D confocal images using artificial neural networks. PLoS Computational Biology, 2021, 17, e1008934.	1.5	26
241	Disruption of orbitofrontal-hypothalamic projections in a murine ALS model and in human patients. Translational Neurodegeneration, 2021, 10, 17.	3.6	15
242	Propagationâ€Based Phase Contrast Computed Tomography as a Suitable Tool for the Characterization of Spatial 3D Cell Distribution in Biomaterials. Advanced Engineering Materials, 2021, 23, 2001188.	1.6	3
243	An open-source semi-automated robotics pipeline for embryo immunohistochemistry. Scientific Reports, 2021, 11, 10314.	1.6	8
246	High tumor cell plateletâ€derived growth factor receptor beta expression is associated with shorter survival in malignant pleural epithelioid mesothelioma. Journal of Pathology: Clinical Research, 2021, 7, 482-494.	1.3	4
250	Multimodal Visualization of Vaca Muerta Shale Fabric Before and After Maturation. Energy & Fuels, 2021, 35, 9550-9560.	2.5	5
252	VCP/p97 cofactor UBXN1/SAKS1 regulates mitophagy by modulating MFN2 removal from mitochondria. Autophagy, 2021, , 1-20.	4.3	18
255	A deep learning algorithm for 3D cell detection in whole mouse brain image datasets. PLoS Computational Biology, 2021, 17, e1009074.	1.5	44

#	Article	IF	Citations
257	Imaging developmental cell cycles. Biophysical Journal, 2021, 120, 4149-4161.	0.2	3
258	Stateâ€ofâ€theâ€art microscopy to understand islets of Langerhans: what to expect next?. Immunology and Cell Biology, 2021, 99, 509-520.	1.0	9
259	Towards an automatic analysis of CHO-K1 suspension growth in microfluidic single-cell cultivation. Bioinformatics, 2021, 37, 3632-3639.	1.8	6
260	Tau aggregates are RNA-protein assemblies that mislocalize multiple nuclear speckle components. Neuron, 2021, 109, 1675-1691.e9.	3.8	111
261	Recruitment, Infiltration, and Cytotoxicity of HLA-Independent Killer Lymphocytes in Three-Dimensional Melanoma Models. Cancers, 2021, 13, 2302.	1.7	2
262	Etiology-Discriminative Multimodal Imaging of Left Ventricular Hypertrophy and Synchrotron-Based Assessment of Microstructural Tissue Remodeling. Frontiers in Cardiovascular Medicine, 2021, 8, 670734.	1.1	5
263	NK cells integrate signals over large areas when building immune synapses but require local stimuli for degranulation. Science Signaling, 2021, 14, .	1.6	7
264	Segmentor: a tool for manual refinement of 3D microscopy annotations. BMC Bioinformatics, 2021, 22, 260.	1.2	11
265	The synaptic inputs and thalamic projections of two classes of layer 6 corticothalamic neurons in primary somatosensory cortex of the mouse. Journal of Comparative Neurology, 2021, 529, 3751-3771.	0.9	10
266	The in vitro micronucleus assay using imaging flow cytometry and deep learning. Npj Systems Biology and Applications, 2021, 7, 20.	1.4	18
270	Diffusive search and trajectories on tubular networks: a propagator approach. European Physical Journal E, 2021, 44, 80.	0.7	13
271	Interactive Learning in decision-support: an application to Fraud Detection. , 2021, , .		0
272	Ubiquitination is essential for recovery of cellular activities after heat shock. Science, 2021, 372, eabc3593.	6.0	86
274	Excess histone H3 is a competitive Chk1 inhibitor that controls cell-cycle remodeling in the early Drosophila embryo. Current Biology, 2021, 31, 2633-2642.e6.	1.8	15
276	Short and long sleeping mutants reveal links between sleep and macroautophagy. ELife, 2021, 10, .	2.8	22
277	High content genome-wide siRNA screen to investigate the coordination of cell size and RNA production. Scientific Data, 2021, 8, 162.	2.4	9
278	Global constraints within the developmental program of the Drosophila wing. ELife, 2021, 10, .	2.8	18
280	Revealing the spatio-phenotypic patterning of cells in healthy and tumor tissues with mLSR-3D and STAPL-3D. Nature Biotechnology, 2021, 39, 1239-1245.	9.4	14

#	Article	IF	Citations
281	Neuroglian regulates Drosophila intestinal stem cell proliferation through enhanced signaling via the epidermal growth factor receptor. Stem Cell Reports, 2021, 16, 1584-1597.	2.3	7
282	Patterned, organoid-based cartilaginous implants exhibit zone specific functionality forming osteochondral-like tissues in vivo. Biomaterials, 2021, 273, 120820.	5.7	42
283	Signatures and Specificity of Tissue-Resident Lymphocytes Identified in Human Renal Peritumor and Tumor Tissue. Journal of the American Society of Nephrology: JASN, 2021, 32, 2223-2241.	3.0	20
284	ALS- and FTD-associated missense mutations in TBK1 differentially disrupt mitophagy. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	55
285	Artificial intelligence for imaging data analysis in materials science: microscopy and behind. IOP Conference Series: Materials Science and Engineering, 2021, 1155, 012015.	0.3	8
286	The use of ground glass in red glazes: structural 3D imaging and mechanical behaviour using optical coherence tomography and nanoindentation. Heritage Science, 2021, 9, .	1.0	5
288	Cardiolipin Remodeling Defects Impair Mitochondrial Architecture and Function in a Murine Model of Barth Syndrome Cardiomyopathy. Circulation: Heart Failure, 2021, 14, e008289.	1.6	17
289	Collective ERK/Akt activity waves orchestrate epithelial homeostasis by driving apoptosis-induced survival. Developmental Cell, 2021, 56, 1712-1726.e6.	3.1	91
290	From sub- to superdiffusion: fractional Brownian motion of membraneless organelles in early C. elegans embryos. New Journal of Physics, 2021, 23, 063072.	1.2	16
291	Microscopy deep learning predicts virus infections and reveals mechanics of lytic-infected cells. IScience, 2021, 24, 102543.	1.9	14
292	Tubular Cell Dropout in Preimplantation Deceased Donor Biopsies as a Predictor of Delayed Graft Function. Transplantation Direct, 2021, 7, e716.	0.8	7
293	Unscrambling exit site patterns on the endoplasmic reticulum as a quenched demixing process. Biophysical Journal, 2021, 120, 2532-2542.	0.2	4
296	CUBIC-Cloud provides an integrative computational framework toward community-driven whole-mouse-brain mapping. Cell Reports Methods, 2021, 1, 100038.	1.4	12
298	Characterization of the Striatal Extracellular Matrix in a Mouse Model of Parkinsonâ€™s Disease. Antioxidants, 2021, 10, 1095.	2.2	3
300	Deep spatial profiling of human COVID-19 brains reveals neuroinflammation with distinct microanatomical microglia-T-cell interactions. Immunity, 2021, 54, 1594-1610.e11.	6.6	210
301	Collagen Organization Does Not Influence T-Cell Distribution in Stroma of Human Pancreatic Cancer. Cancers, 2021, 13, 3648.	1.7	4
303	Comprehensive assessment of myocardial remodeling in ischemic heart disease by synchrotron propagation based X-ray phase contrast imaging. Scientific Reports, 2021, 11, 14020.	1.6	14
304	Semiâ€automated background removal limits data loss and normalizes imaging mass cytometry data. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2021, 99, 1187-1197.	1.1	18

#	Article	IF	Citations
305	New Concept and Apparatus for Cytocentrifugation and Cell Processing for Microscopy Analysis. International Journal of Molecular Sciences, 2021, 22, 7098.	1.8	1
307	Next-Generation Imaging: New Insights from Multicolor Microscopy in Liver Biology and Disease. Engineering, 2022, 9, 17-21.	3.2	1
308	Tissue clearing to examine tumour complexity in three dimensions. Nature Reviews Cancer, 2021, 21, 718-730.	12.8	50
309	A synthetic circuit for buffering gene dosage variation between individual mammalian cells. Nature Communications, 2021, 12, 4132.	5.8	9
310	Neuronal-epithelial cell alignment: A determinant of health and disease status of the cornea. Ocular Surface, 2021, 21, 257-270.	2.2	10
311	Improving Common Bacterial Blight Phenotyping by Using Rub Inoculation and Machine Learning: Cheaper, Better, Faster, Stronger. Phytopathology, 2022, 112, 691-699.	1.1	2
312	Challenges in 3D Live Cell Imaging. Photonics, 2021, 8, 275.	0.9	12
313	3D multi-scale study on metal/polymer nano-composites. Microscopy and Microanalysis, 2021, 27, 1766-1768.	0.2	1
314	Neoadjuvant cabozantinib and nivolumab convert locally advanced hepatocellular carcinoma into resectable disease with enhanced antitumor immunity. Nature Cancer, 2021, 2, 891-903.	5.7	147
317	Rapid determination of supercritical CO2 and brine relative permeability using an unsteady-state flow method. Advances in Water Resources, 2021, 153, 103953.	1.7	8
318	Mesoscale microscopy and image analysis tools for understanding the brain. Progress in Biophysics and Molecular Biology, 2022, 168, 81-93.	1.4	25
319	Universal autofocus for quantitative volumetric microscopy of whole mouse brains. Nature Methods, 2021, 18, 953-958.	9.0	32
320	Reducing manual operation time to obtain a segmentation learning model for volume electron microscopy using stepwise deep learning with manual correction. Microscopy (Oxford, England), 2021, 70, 526-535.	0.7	2
321	CD16+CD163+ monocytes traffic to sites of inflammation during necrotizing enterocolitis in premature infants. Journal of Experimental Medicine, 2021, 218, .	4.2	28
322	LAG3 is not expressed in human and murine neurons and does not modulate Î±â€synucleinopathies. EMBO Molecular Medicine, 2021, 13, e14745.	3.3	44
323	Machine learningâ€based automated fungal cell counting under a complicated background with ilastik and ImageJ. Engineering in Life Sciences, 2021, 21, 769-777.	2.0	5
324	The role of convolutional neural networks in scanning probe microscopy: a review. Beilstein Journal of Nanotechnology, 2021, 12, 878-901.	1.5	18
325	Competition, Nodule Occupancy, and Persistence of Inoculant Strains: Key Factors in the Rhizobium-Legume Symbioses. Frontiers in Plant Science, 2021, 12, 690567.	1.7	49

#	Article	IF	Citations
326	Spatial omics and multiplexed imaging to explore cancer biology. Nature Methods, 2021, 18, 997-1012.	9.0	279
327	Specific Endothelial Cells Govern Nanoparticle Entry into Solid Tumors. ACS Nano, 2021, 15, 14080-14094.	7.3	60
328	Size scaling in collective cell growth. Development (Cambridge), 2021, 148, .	1.2	5
330	Distinct roles of nonmuscle myosin II isoforms for establishing tension and elasticity during cell morphodynamics. ELife, 2021, 10, .	2.8	18
333	Brain iron enrichment attenuates Î±â€synuclein spreading after injection of preformed fibrils. Journal of Neurochemistry, 2021, 159, 554-573.	2.1	11
334	Single-Cell Imaging Reveals That Staphylococcus aureus Is Highly Competitive Against Pseudomonas aeruginosa on Surfaces. Frontiers in Cellular and Infection Microbiology, 2021, 11, 733991.	1.8	6
335	Python-Microscope â€“ a new open-source Python library for the control of microscopes. Journal of Cell Science, 2021, 134, .	1.2	7
336	Drebrin Regulates Acetylcholine Receptor Clustering and Organization of Microtubules at the Postsynaptic Machinery. International Journal of Molecular Sciences, 2021, 22, 9387.	1.8	2
337	High performance SERS platforms via parametric optimization of the laser-assisted photodeposition of silver and gold nanoparticles. Optical Materials Express, 2021, 11, 3079.	1.6	2
338	Human small intestinal infection by SARS-CoV-2 is characterized by a mucosal infiltration with activated CD8+ T cells. Mucosal Immunology, 2021, 14, 1381-1392.	2.7	50
339	Investigation of Different Free Image Analysis Software for High-Throughput Droplet Detection. ACS Omega, 2021, 6, 22625-22634.	1.6	10
340	Tissue clearing and 3D imaging â€“ putting immune cells into context. Journal of Cell Science, 2021, 134, .	1.2	6
341	Spatial transcriptomics of planktonic and sessile bacterial populations at single-cell resolution. Science, 2021, 373, .	6.0	140
342	Study on Emerging Machine Learning Trends on Nanoparticlesâ€"Nanoinformatics. Advances in Intelligent Systems and Computing, 2022, , 443-458.	0.5	1
343	Maturation of the matrix and viral membrane of HIV-1. Science, 2021, 373, 700-704.	6.0	60
344	Machine Learning for the Fast and Accurate Assessment of Fitness in Coral Early Life History. Remote Sensing, 2021, 13, 3173.	1.8	4
345	Imaging cytoplasmic lipid droplets in vivo with fluorescent perilipin 2 and perilipin 3 knock-in zebrafish. ELife, 2021, 10, .	2.8	21
347	GANDA: A deep generative adversarial network conditionally generates intratumoral nanoparticles distribution pixels-to-pixels. Journal of Controlled Release, 2021, 336, 336-343.	4.8	11

#	Article	IF	Citations
348	Astrocyte Heterogeneity in Multiple Sclerosis: Current Understanding and Technical Challenges. Frontiers in Cellular Neuroscience, 2021, 15, 726479.	1.8	15
349	Controlling oneâ€™s world: Identification of sub-regions of primate PFC underlying goal-directed behavior. Neuron, 2021, 109, 2485-2498.e5.	3.8	23
350	Spatio-Temporal Multiscale Analysis of Western Diet-Fed Mice Reveals a Translationally Relevant Sequence of Events during NAFLD Progression. Cells, 2021, 10, 2516.	1.8	24
351	Summit: Automated Analysis of Arrayed Single-Cell Gel Electrophoresis. SLAS Technology, 2021, 26, 637-649.	1.0	3
352	MOrgAna: accessible quantitative analysis of organoids with machine learning. Development (Cambridge), 2021, 148, .	1.2	31
353	CellProfiler Analyst 3.0: accessible data exploration and machine learning for image analysis. Bioinformatics, 2021, 37, 3992-3994.	1.8	66
354	Massively parallel quantification of phenotypic heterogeneity in single-cell drug responses. Science Advances, 2021, 7, eabf9840.	4.7	9
355	Time-resolved in situ synchrotron-microCT: 4D deformation of bone and bone analogues using digital volume correlation. Acta Biomaterialia, 2021, 131, 424-439.	4.1	24
356	Defect detection in CT scans of cast aluminum parts: A machine vision perspective. Neurocomputing, 2021, 453, 85-96.	3.5	27
358	Applying Machine Learning to Stem Cell Culture and Differentiation. Current Protocols, 2021, 1, e261.	1.3	11
359	Multiscale Microtubule Dynamics in Active Nematics. Physical Review Letters, 2021, 127, 148001.	2.9	18
360	DeepImageJ: A user-friendly environment to run deep learning models in ImageJ. Nature Methods, 2021, 18, 1192-1195.	9.0	128
361	Tissue clearing and 3D imaging in developmental biology. Development (Cambridge), 2021, 148, .	1.2	30
362	Antigen dominance hierarchies shape TCF1+ progenitor CD8 TÂcell phenotypes in tumors. Cell, 2021, 184, 4996-5014.e26.	13.5	84
363	Detection and classification of neurons and glial cells in the MADM mouse brain using RetinaNet. PLoS ONE, 2021, 16, e0257426.	1.1	5
365	Spatiotemporal dynamics of PIEZO1 localization controls keratinocyte migration during wound healing. ELife, 2021, 10, .	2.8	78
366	Integration of spatial and single-cell transcriptomic data elucidates mouse organogenesis. Nature Biotechnology, 2022, 40, 74-85.	9.4	152
367	Brima: Low-Overhead Browser-Only Image Annotation Tool (Preprint). , 2021, , .		5

#	Article	IF	Citations
368	Current approaches to fate mapping and lineage tracing using image data. Development (Cambridge), 2021, 148, .	1.2	13
369	Classification and genetic targeting of cell types in the primary taste and premotor center of the adult Drosophila brain. ELife, 2021, 10, .	2.8	31
370	Axon morphogenesis and maintenance require an evolutionary conserved safeguard function of Wnk kinases antagonizing Sarm and Axed. Neuron, 2021, 109, 2864-2883.e8.	3.8	24
371	Protein kinase D promotes activityâ€dependent <scp>AMPA</scp> receptor endocytosis in hippocampal neurons. Traffic, 2021, 22, 454-470.	1.3	4
372	Targeting Pin1 renders pancreatic cancer eradicable by synergizing with immunochemotherapy. Cell, 2021, 184, 4753-4771.e27.	13.5	99
373	High-resolution structural and functional deep brain imaging using adaptive optics three-photon microscopy. Nature Methods, 2021, 18, 1253-1258.	9.0	69
374	Deep learning for bioimage analysis in developmental biology. Development (Cambridge), 2021, 148, .	1.2	31
375	Metabolic imaging of human cumulus cells reveals associations among metabolic profiles of cumulus cells, patient clinical factors, and oocyte maturity. Fertility and Sterility, 2021, 116, 1651-1662.	0.5	7
376	Development of an Automated Mass-Customization Pipeline for Knee Replacement Surgery Using Biplanar X-Rays. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	1.7	6
378	Integrin Î²1 orchestrates the abnormal cell-matrix attachment and invasive behaviour of E-cadherin dysfunctional cells. Gastric Cancer, 2022, 25, 124-137.	2.7	13
380	Height, but not binding epitope, affects the potency of synthetic TCR agonists. Biophysical Journal, 2021, 120, 3869-3880.	0.2	8
381	Adhesion Percolation Determines Global Deformation Behavior in Biomimetic Emulsions. Frontiers in Physics, 2021, 9, .	1.0	1
382	Tools for efficient analysis of neurons in a 3D reference atlas of whole mouse spinal cord. Cell Reports Methods, 2021, 1, 100074.	1.4	6
386	Differential Requirement of Gata2a and Gata2b for Primitive and Definitive Myeloid Development in Zebrafish. Frontiers in Cell and Developmental Biology, 2021, 9, 708113.	1.8	5
387	CellProfiler 4: improvements in speed, utility and usability. BMC Bioinformatics, 2021, 22, 433.	1.2	592
388	Relationship Between Microbial Growth and Hydraulic Properties at the Sub-Pore Scale. Transport in Porous Media, 2021, 139, 579-593.	1.2	13
389	Spider mite egg extract modifies Arabidopsis response to future infestations. Scientific Reports, 2021, 11, 17692.	1.6	5
391	Whole-body integration of gene expression and single-cell morphology. Cell, 2021, 184, 4819-4837.e22.	13.5	65

#	Article	IF	Citations
392	Complex population dynamics in a spatial microbial ecosystem with Physarum polycephalum. BioSystems, 2021, 208, 104483.	0.9	1
393	Advances in spatial transcriptomic data analysis. Genome Research, 2021, 31, 1706-1718.	2.4	102
394	A Multi-Scale and Multi-Technique Approach for the Characterization of the Effects of Spatially Fractionated X-ray Radiation Therapies in a Preclinical Model. Cancers, 2021, 13, 4953.	1.7	4
395	Artificial Intelligence and Cellular Segmentation in Tissue Microscopy Images. American Journal of Pathology, 2021, 191, 1693-1701.	1.9	30
396	Quantitative analysis of statistical properties of organic-rich mudstone using large field-of-view SEM images. Journal of Natural Gas Science and Engineering, 2021, 95, 104238.	2.1	2
397	Quantitative analysis methods for studying fenestrations in liver sinusoidal endothelial cells. A comparative study. Micron, 2021, 150, 103121.	1.1	8
398	Quantifying spatial position in a branched structure in immunostained mouse tissue sections. STAR Protocols, 2021, 2, 100806.	0.5	1
399	Image-based cell phenotyping with deep learning. Current Opinion in Chemical Biology, 2021, 65, 9-17.	2.8	58
400	Simulating permeability reduction by clay mineral nanopores in a tight sandstone by combining computer X-ray microtomography and focussed ion beam scanning electron microscopy imaging. Solid Earth, 2021, 12, 1-14.	1.2	20
401	Seipin traps triacylglycerols to facilitate their nanoscale clustering in the endoplasmic reticulum membrane. PLoS Biology, 2021, 19, e3000998.	2.6	54
402	The reactivity of an inorganic glass melt with ZIF-8. Dalton Transactions, 2021, 50, 3529-3535.	1.6	5
406	The palette of techniques for cell cycle analysis. FEBS Letters, 2020, 594, 2084-2098.	1.3	24
407	Microscopyâ€based assay for semiâ€quantitative detection of SARSâ€CoVâ€2 specific antibodies in human sera. BioEssays, 2021, 43, e2000257.	1.2	22
408	Deep Interactive Learning: An Efficient Labeling Approach for Deep Learning-Based Osteosarcoma Treatment Response Assessment. Lecture Notes in Computer Science, 2020, , 540-549.	1.0	18
409	Epothilones Improve Axonal Growth and Motor Outcomes after Stroke in the Adult Mammalian CNS. Cell Reports Medicine, 2020, 1, 100159.	3.3	14
410	3D FIB-SEM reconstruction of microtubuleâ€“organelle interaction in whole primary mouse Î² cells. Journal of Cell Biology, 2021, 220, .	2.3	64
411	Computational modelling in single-cell cancer genomics: methods and future directions. Physical Biology, 2020, 17, 061001.	0.8	2
412	TissUUmaps: interactive visualization of large-scale spatial gene expression and tissue morphology data. Bioinformatics, 2020, 36, 4363-4365.	1.8	30

#	Article	IF	Citations
413	Developmental differences in genome replication program and origin activation. Nucleic Acids Research, 2020, 48, 12751-12777.	6.5	14
414	Plasma membrane nano-organization specifies phosphoinositide effects on Rho-GTPases and actin dynamics in tobacco pollen tubes. Plant Cell, 2021, 33, 642-670.	3.1	32
464	3D virtual histology of human pancreatic tissue by multiscale phase-contrast X-ray tomography. Journal of Synchrotron Radiation, 2020, 27, 1707-1719.	1.0	27
465	Oligonucleotide conjugated antibodies permit highly multiplexed immunofluorescence for future use in clinical histopathology. Journal of Biomedical Optics, 2020, 25, 1.	1.4	16
466	Cerebellar nuclei evolved by repeatedly duplicating a conserved cell-type set. Science, 2020, 370, .	6.0	123
467	Loss of MAGEL2 in Prader-Willi syndrome leads to decreased secretory granule and neuropeptide production. JCI Insight, 2020, 5, .	2.3	40
468	Mammary mechanobiology: Investigating roles for mechanically-activated ion channels in lactation and involution. Journal of Cell Science, 2021, 134, .	1.2	7
469	Three-dimensional imaging of intact porcine cochlea using tissue clearing and custom-built light-sheet microscopy. Biomedical Optics Express, 2020, 11, 6181.	1.5	20
470	Automated yeast cells segmentation and counting using a parallel U-Net based two-stage framework. OSA Continuum, 2020, 3, 982.	1.8	20
471	SCRINSHOT enables spatial mapping of cell states in tissue sections with single-cell resolution. PLoS Biology, 2020, 18, e3000675.	2.6	42
472	Reoccurring neural stem cell divisions in the adult zebrafish telencephalon are sufficient for the emergence of aggregated spatiotemporal patterns. PLoS Biology, 2020, 18, e3000708.	2.6	3
473	Local externalization of phosphatidylserine mediates developmental synaptic pruning by microglia. EMBO Journal, 2020, 39, e105380.	3.5	217
474	A quantitative analysis of the interplay of environment, neighborhood, and cell state in 3D spheroids. Molecular Systems Biology, 2020, 16, e9798.	3.2	17
475	CytoCensus, mapping cell identity and division in tissues and organs using machine learning. ELife, 2020, 9, .	2.8	16
476	Defining the role of pulmonary endothelial cell heterogeneity in the response to acute lung injury. ELife, 2020, 9, .	2.8	151
477	Condensin I subunit Cap-G is essential for proper gene expression during the maturation of post-mitotic neurons. ELife, 2020, 9, .	2.8	13
478	Accurate and versatile 3D segmentation of plant tissues at cellular resolution. ELife, 2020, 9, .	2.8	155
479	DeepFRET, a software for rapid and automated single-molecule FRET data classification using deep learning. ELife, 2020, 9, .	2.8	47

#	Article	IF	Citations
480	3D virtual pathohistology of lung tissue from Covid-19 patients based on phase contrast X-ray tomography. ELife, 2020, 9, .	2.8	37
481	Graph-Theoretic Post-Processing of Segmentation With Application to Dense Biofilms. IEEE Transactions on Image Processing, 2021, 30, 8580-8594.	6.0	5
482	CEREBRUMâ€7T: Fast and Fully Volumetric Brain Segmentation of 7 Tesla MR Volumes. Human Brain Mapping, 2021, 42, 5563-5580.	1.9	13
483	Co-chaperone involvement in knob biogenesis implicates host-derived chaperones in malaria virulence. PLoS Pathogens, 2021, 17, e1009969.	2.1	9
484	Viability fingerprint of glioblastoma cell lines: roles of mitotic, proliferative, and epigenetic targets. Scientific Reports, 2021, 11, 20338.	1.6	5
485	Integrative Study of Genotypic and Phenotypic Diversity in the Eurasian Orchid Genus Neotinea. Frontiers in Plant Science, 2021, 12, 734240.	1.7	2
487	Prenatal androgenization causes expression changes of progesterone and androgen receptor mRNAs in the arcuate nucleus of female mice across development. Journal of Neuroendocrinology, 2021, 33, e13058.	1.2	3
488	Mapping the cellular response to electron transport chain inhibitors reveals selective signaling networks triggered by mitochondrial perturbation. Archives of Toxicology, 2022, 96, 259-285.	1.9	7
490	Differentiable biology: using deep learning for biophysics-based and data-driven modeling of molecular mechanisms. Nature Methods, 2021, 18, 1169-1180.	9.0	44
491	The glial framework reveals white matter fiber architecture in human and primate brains. Science, 2021, 374, 762-767.	6.0	22
493	Single Cell Center of Mass for the Analysis of BMP Receptor Heterodimers Distributions. Journal of Imaging, 2021, 7, 219.	1.7	0
494	The Polar Legionella Icm/Dot T4SS Establishes Distinct Contact Sites with the Pathogen Vacuole Membrane. MBio, 2021, 12, e0218021.	1.8	10
495	2D-to-3D image translation of complex nanoporous volumes using generative networks. Scientific Reports, 2021, 11, 20768.	1.6	3
496	Marcelle: Composing Interactive Machine Learning Workflows and Interfaces. , 2021, , .		5
497	Accurate detection of spherical objects in a complex background. Optics Express, 2021, 29, 37048.	1.7	2
498	Visualizing synaptic plasticity in vivo by large-scale imaging of endogenous AMPA receptors. ELife, 2021, 10, .	2.8	33
504	Neurotransmitter signaling regulates distinct phases of multimodal human interneuron migration. EMBO Journal, 2021, 40, e108714.	3.5	16
505	Characterisation of tumour microenvironment remodelling following oncogene inhibition in preclinical studies with imaging mass cytometry. Nature Communications, 2021, 12, 5906.	5.8	36

#	Article	IF	Citations
506	Avoiding a replication crisis in deep-learning-based bioimage analysis. Nature Methods, 2021, 18, 1136-1144.	9.0	56
507	Gouge formation and dilation impacts to flow during fracture shearing. International Journal of Rock Mechanics and Minings Sciences, 2021, 147, 104920.	2.6	1
508	IL-1beta promotes the age-associated decline of beta cell function. IScience, 2021, 24, 103250.	1.9	10
525	Kinetic and structural roles for the surface in guiding SAS-6 self-assembly to direct centriole architecture. Nature Communications, 2021, 12, 6180.	5.8	10
526	Tutorial: methods for three-dimensional visualization of archival tissue material. Nature Protocols, 2021, 16, 4945-4962.	5.5	7
527	Creep and creep damage behavior of stainless steel 316L manufactured by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 830, 142223.	2.6	18
528	Correlating whole sample EDS and Raman mappings â€“ A case study of a Chelyabinsk meteorite fragment. Micron, 2022, 153, 103177.	1.1	2
529	A brain-penetrant microtubule-targeting agent that disrupts hallmarks of glioma tumorigenesis. Neuro-Oncology Advances, 2021, 3, vdaa165.	0.4	10
533	Automated Deep Lineage Tree Analysis Using a Bayesian Single Cell Tracking Approach. Frontiers in Computer Science, 2021, 3, .	1.7	44
534	Narrative online guides for the interpretation of digital-pathology images and tissue-atlas data. Nature Biomedical Engineering, 2022, 6, 515-526.	11.6	17
535	Computational toolbox for ultrastructural quantitative analysis of filament networks in cryo-ET data. Journal of Structural Biology, 2021, 213, 107808.	1.3	22
537	Effect of Oil Properties on the Generation of Nano-Aerosols During Bubble Bursting Through Crude Oilâ€“Dispersant Slicks. Langmuir, 2021, 37, 13365-13378.	1.6	1
538	Quantifying Percolated Triple Phase Boundary Density and Its Effects on Anodic Polarization in Ni-Infiltrated Ni/YSZ SOFC Anodes. Journal of the Electrochemical Society, 2021, 168, 114507.	1.3	3
539	Uncomplicated oocyte donation pregnancies display an elevated CD163â€positive type 2 macrophage load in the decidua, which is associated with fetalâ€maternal HLA mismatches. American Journal of Reproductive Immunology, 2022, 87, e13511.	1.2	3
540	Research Techniques Made Simple: Volume Scanning Electron Microscopy. Journal of Investigative Dermatology, 2022, 142, 265-271.e1.	0.3	6
541	Light sheet fluorescence microscopy. Nature Reviews Methods Primers, 2021, 1, .	11.8	105
546	Integrated Cells and Collagen Fibers Spatial Image Analysis. Frontiers in Bioinformatics, 2021, 1, .	1.0	3
547	Single-cell analysis of the human pancreas in type 2 diabetes using multi-spectral imaging mass cytometry. Cell Reports, 2021, 37, 109919.	2.9	33

#	Article	IF	Citations
558	Fiji plugins for qualitative image annotations: routine analysis and application to image classification. F1000Research, 2020, 9, 1248.	0.8	4
565	Object detection neural network improves Fourier ptychography reconstruction. Optics Express, 2020, 28, 37199.	1.7	9
566	In vivo and in vitro short-term bisphenol A exposures disrupt testicular energy metabolism and negatively impact spermatogenesis in zebrafish. Reproductive Toxicology, 2022, 107, 10-21.	1.3	9
567	Abundance and community composition of free-living nematodes as a function of soil structure under different vineyard managements. Applied Soil Ecology, 2022, 170, 104291.	2.1	9
568	CellProfiler Analyst Web (CPAW) - Exploration, analysis, and classification of biological images on the web. , 2021, , .		2
571	Microfluidic droplet detection via region-based and single-pass convolutional neural networks with comparison to conventional image analysis methodologies. Machine Learning With Applications, 2022, 7, 100222.	3.0	10
573	Moving beyond velocity: Opportunities and challenges to quantify immune cell behavior*. Immunological Reviews, 2022, 306, 123-136.	2.8	7
576	Quantitative Evaluation of Cardiac Cell Interactions and Responses to Cyclic Strain. Cells, 2021, 10, 3199.	1.8	3
577	Live Plant Cell Tracking: Fiji plugin to analyze cell proliferation dynamics and understand morphogenesis. Plant Physiology, 2022, 188, 846-860.	2.3	5
578	Whole-cell segmentation of tissue images with human-level performance using large-scale data annotation and deep learning. Nature Biotechnology, 2022, 40, 555-565.	9.4	297
579	Differential Uptake of Antisense Oligonucleotides in Mouse Hepatocytes and Macrophages Revealed by Simultaneous Two-Photon Excited Fluorescence and Coherent Raman Imaging. Nucleic Acid Therapeutics, 2021, , .	2.0	6
582	Emerging technologies and infection models in cellular microbiology. Nature Communications, 2021, 12, 6764.	5.8	19
584	A coarse-grained NADH redox model enables inference of subcellular metabolic fluxes from fluorescence lifetime imaging. ELife, 2021, 10, .	2.8	6
586	Using metaâ€learning to predict performance metrics in machine learning problems. Expert Systems, 2023, 40, .	2.9	12
587	Three-dimensional virtual histology of the human hippocampus based on phase-contrast computed tomography. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	19
588	SARS-CoV-2 infection triggers profibrotic macrophage responses and lung fibrosis. Cell, 2021, 184, 6243-6261.e27.	13.5	277
591	Distinct contributions of partial and full EMT to breast cancer malignancy. Developmental Cell, 2021, 56, 3203-3221.e11.	3.1	160
594	MCMICRO: a scalable, modular image-processing pipeline for multiplexed tissue imaging. Nature Methods, 2022, 19, 311-315.	9.0	102

#	Article	IF	Citations
596	A workflow for low-cost automated image analysis of myxomycete spore numbers, size and shape. PeerJ, 2021, 9, e12471.	0.9	3
597	SpineRacks and SpinalJ for efficient analysis of neurons in a 3D reference atlas of the mouse spinal cord. STAR Protocols, 2021, 2, 100897.	0.5	2
599	Galectinâ€9 activates platelet ITAM receptors glycoprotein VI and Câ€type lectinâ€like receptorâ€2. Journal of Thrombosis and Haemostasis, 2022, 20, 936-950.	1.9	7
600	ZELDA: A 3D Image Segmentation and Parent-Child Relation Plugin for Microscopy Image Analysis in napari. Frontiers in Computer Science, 2022, 3, .	1.7	5
601	APOE4 confers transcriptomic and functional alterations to primary mouse microglia. Neurobiology of Disease, 2022, 164, 105615.	2.1	22
602	Label-free spectroscopic characterization of exosomes reveals cancer cell differentiation. Analytica Chimica Acta, 2022, 1192, 339359.	2.6	12
604	Root architecture characterization in relation to biomass allocation and biological nitrogen fixation in a collection of European soybean genotypes. OCL - Oilseeds and Fats, Crops and Lipids, 2021, 28, 48.	0.6	2
605	Chronic Cocaine Exposure Alters Genome-Wide DNA Methylation and Gene Expression and Exacerbates the Neurological Impairments and Neuropathologies in the Long-Term HIV Tat-Expressing Mouse Model of HIV Associated Neurocognitive Disorder. SSRN Electronic Journal, 0, , .	0.4	0
606	Splenic morphologic changes induced by a strenuous and exhaustive training program in Wistar rats. Journal of Sports Medicine and Physical Fitness, 2021, , .	0.4	0
607	DeepImageTranslator: A free, user-friendly graphical interface for image translation using deep-learning and its applications in 3D CT image analysis. SLAS Technology, 2022, 27, 76-84.	1.0	10
608	The histone H4 lysine 20 demethylase DPY-21 regulates the dynamics of condensin DC binding. Journal of Cell Science, 2022, 135, .	1.2	6
609	Benchmarking conventional and machine learning segmentation techniques for digital rock physics analysis of fractured rocks. Environmental Earth Sciences, 2022, 81, 1.	1.3	16
610	Axonal and Dendritic Morphology of Excitatory Neurons in Layer 2/3 Mouse Barrel Cortex Imaged Through Whole-Brain Two-Photon Tomography and Registered to a Digital Brain Atlas. Frontiers in Neuroanatomy, 2021, 15, 791015.	0.9	7
612	Peroxisome function relies on organelle-associated mRNA translation. Science Advances, 2022, 8, eabk2141.	4.7	18
613	Automated Detection and Localization of Synaptic Vesicles in Electron Microscopy Images. ENeuro, 2022, 9, ENEURO.0400-20.2021.	0.9	5
614	Spatial proteogenomics reveals distinct and evolutionarily conserved hepatic macrophage niches. Cell, 2022, 185, 379-396.e38.	13.5	343
615	Application of proper orthogonal decomposition for evaluation of coherent structures and energy contents in microbial biofilms. Journal of Microbiological Methods, 2022, 194, 106420.	0.7	1
616	Proximity of immune and tumor cells underlies response to BRAF/MEK-targeted therapies in metastatic melanoma patients. Npj Precision Oncology, 2022, 6, 6.	2.3	4

#	Article	IF	Citations
617	Seeing the Forest and Its Trees Together: Implementing 3D Light Microscopy Pipelines for Cell Type Mapping in the Mouse Brain. Frontiers in Neuroanatomy, 2021, 15, 787601.	0.9	11
618	New Approach to Accelerated Image Annotation by Leveraging Virtual Reality and Cloud Computing. Frontiers in Bioinformatics, 2022, 1, .	1.0	4
619	Robust optical flow algorithm for general single cell segmentation. PLoS ONE, 2022, 17, e0261763.	1.1	3
620	Comparability of in situ crude oil emulsification in phase equilibrium and under porous-media-flow conditions. Journal of Colloid and Interface Science, 2022, 615, 196-205.	5.0	8
621	CellSeg: a robust, pre-trained nucleus segmentation and pixel quantification software for highly multiplexed fluorescence images. BMC Bioinformatics, 2022, 23, 46.	1.2	44
622	Image-Based Monitoring of Cracks: Effectiveness Analysis of an Open-Source Machine Learning-Assisted Procedure. Journal of Imaging, 2022, 8, 22.	1.7	7
623	Metabolic state of human blastocysts measured by fluorescence lifetime imaging microscopy. Human Reproduction, 2022, 37, 411-427.	0.4	13
624	Seipin localizes at endoplasmic-reticulum-mitochondria contact sites to control mitochondrial calcium import and metabolism in adipocytes. Cell Reports, 2022, 38, 110213.	2.9	29
625	Computational Methods for Single-Cell Imaging and Omics Data Integration. Frontiers in Molecular Biosciences, 2021, 8, 768106.	1.6	13
626	WASp triggers mechanosensitive actin patches to facilitate immune cell migration in dense tissues. Developmental Cell, 2022, 57, 47-62.e9.	3.1	47
627	Microstructural Mapping of Arctica islandica Shells Reveals Environmental and Physiological Controls on Biomineral Size. Frontiers in Earth Science, 2022, 9, .	0.8	5
630	CPVT-associated calmodulin variants N53I and A102V dysregulate Ca2+ signalling via different mechanisms. Journal of Cell Science, 2022, 135, .	1.2	7
631	Emergence of a geometric pattern of cell fates from tissue-scale mechanics in the Drosophila eye. ELife, 2022, 11, .	2.8	13
633	Cell2location maps fine-grained cell types in spatial transcriptomics. Nature Biotechnology, 2022, 40, 661-671.	9.4	335
634	Nucleus segmentation: towards automated solutions. Trends in Cell Biology, 2022, 32, 295-310.	3.6	31
635	The INDEPTH (Impact of Nuclear Domains on Gene Expression and Plant Traits) Academy: a community resource for plant science. Journal of Experimental Botany, 2022, , .	2.4	3
636	Targeted search for scaling genes reveals matrix metalloproteinase 3 as a scaler of the dorsal-ventral pattern in Xenopus laevis embryos. Developmental Cell, 2022, 57, 95-111.e12.	3.1	6
638	Particle Recognition on Transmission Electron Microscopy Images Using Computer Vision and Deep Learning for Catalytic Applications. Catalysts, 2022, 12, 135.	1.6	16

#	Article	IF	Citations
641	Mosaic dysfunction of mitophagy in mitochondrial muscle disease. Cell Metabolism, 2022, 34, 197-208.e5.	7.2	35
642	Raw Data to Results: A Hands-On Introduction and Overview of Computational Analysis for Single-Molecule Localization Microscopy. Frontiers in Bioinformatics, 2022, 1, .	1.0	8
643	Methods for the Study of Apical During Ascidian. Methods in Molecular Biology, 2022, 2438, 377-413.	0.4	0
646	A SIMPLI (Single-cell Identification from MultiPLexed Images) approach for spatially-resolved tissue phenotyping at single-cell resolution. Nature Communications, 2022, 13, 781.	5.8	19
647	Spatial components of molecular tissue biology. Nature Biotechnology, 2022, 40, 308-318.	9.4	148
648	Axonal Length Determines Distinct Homeostatic Phenotypes in Human iPSC Derived Motor Neurons on a Bioengineered Platform. Advanced Healthcare Materials, 2022, 11, e2101817.	3.9	7
649	Epigenetic state determines inflammatory sensing in neuroblastoma. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	21
650	SM-Omics is an automated platform for high-throughput spatial multi-omics. Nature Communications, 2022, 13, 795.	5.8	73
651	Resolving the Heterogeneous Tumor-Centric Cellular Neighborhood through Multiplexed, Spatial Paracrine Interactions in the Setting of Immune Checkpoint Blockade. Cancer Research Communications, 2022, 2, 78-89.	0.7	2
652	Artificial neural network approach for multiphase segmentation of battery electrode nano-CT images. Npj Computational Materials, 2022, 8, .	3.5	20
653	LABKIT: Labeling and Segmentation Toolkit for Big Image Data. Frontiers in Computer Science, 2022, 4, .	1.7	85
655	Mesenchymal-epithelial crosstalk shapes intestinal regionalisation via Wnt and Shh signalling. Nature Communications, 2022, 13, 715.	5.8	15
657	Dynamic assembly of the mRNA m6A methyltransferase complex is regulated by METTL3 phase separation. PLoS Biology, 2022, 20, e3001535.	2.6	22
658	VascuViz: a multimodality and multiscale imaging and visualization pipeline for vascular systems biology. Nature Methods, 2022, 19, 242-254.	9.0	15
659	Foudroyant cerebral venous (sinus) thrombosis triggered through CLEC-2 and GPIIb/IIIa dependent platelet activation. , 2022, 1, 132-141.		18
660	A damage-tolerant, dual-scale, single-crystalline microlattice in the knobby starfish, Protoreaster nodosus. Science, 2022, 375, 647-652.	6.0	63
661	DynaMorph: self-supervised learning of morphodynamic states of live cells. Molecular Biology of the Cell, 2022, 33, mbcE21110561.	0.9	18
663	Exploiting the Transformative Features of Metal Halides for the Synthesis of CsPbBr₃@SiO₂ Coreâ€“Shell Nanocrystals. Chemistry of Materials, 2022, 34, 405-413.	3.2	29

#	Article	IF	Citations
664	A genetically encoded fluorescent biosensor for extracellular l-lactate. Nature Communications, 2021, 12, 7058.	5.8	46
665	Temperature-responsive optogenetic probes of cell signaling. Nature Chemical Biology, 2022, 18, 152-160.	3.9	21
666	Volumetric morphometry reveals spindle width as the best predictor of mammalian spindle scaling. Journal of Cell Biology, 2022, 221, .	2.3	10
668	A modular platform for automated cryo-FIB workflows. ELife, 2021, 10, .	2.8	65
669	Multidisciplinary bioimaging approach to study plant morphogenesis. Plant Morphology, 2021, 33, 15-23.	0.1	0
670	Naturalistic Glucocorticoid Receptor Activation Programs Key Cell Phenotypes and Functional Epigenomic Patterns in Human Fibroblasts. SSRN Electronic Journal, 0, , .	0.4	0
671	Monitoring Virus-Induced Stress Granule Dynamics Using Long-Term Live-Cell Imaging. Methods in Molecular Biology, 2022, 2428, 325-348.	0.4	0
672	Optogenetic inhibition of actomyosin reveals mechanical bistability of the mesoderm epithelium during Drosophila mesoderm invagination. ELife, 2022, 11, .	2.8	15
673	Comparing Machine Learning and Binary Thresholding Methods for Quantification of Callose Deposits in the Citrus Phloem. Plants, 2022, 11, 624.	1.6	5
675	Visualizing cellular and tissue ultrastructure using Ten-fold Robust Expansion Microscopy (TREx). ELife, 2022, 11, .	2.8	70
676	Quantitative Chemical Imaging of Bone Tissue for Intraoperative and Diagnostic Applications. Analytical Chemistry, 2022, 94, 3791-3799.	3.2	3
677	FIBER-ML, an Open-Source Supervised Machine Learning Tool for Quantification of Fibrosis in Tissue Sections. American Journal of Pathology, 2022, 192, 783-793.	1.9	3
678	Mitochondrial dysfunction and oxidative stress contribute to cognitive and motor impairment in FOXP1 syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	12
679	Automated Cell Foregroundâ€“Background Segmentation with Phase-Contrast Microscopy Images: An Alternative to Machine Learning Segmentation Methods with Small-Scale Data. Bioengineering, 2022, 9, 81.	1.6	0
681	Disrupted Peyerâ€™s Patch Microanatomy in COVID-19 Including Germinal Centre Atrophy Independent of Local Virus. Frontiers in Immunology, 2022, 13, 838328.	2.2	9
682	FASTMAP: Open-Source Flexible Atlas Segmentation Tool for Multi-Area Processing of Biological Images. ENeuro, 2022, 9, ENEURO.0325-21.2022.	0.9	8
683	Synthetic mammalian signaling circuits for robust cell population control. Cell, 2022, 185, 967-979.e12.	13.5	23
684	Pituitary Gonadotropin Gene Expression During Induced Onset of Postsmolt Maturation in Male Atlantic Salmon: In Vivo and Tissue Culture Studies. Frontiers in Endocrinology, 2022, 13, 826920.	1.5	4

#	Article	IF	Citations
685	Generation of Human Lung Organoid Cultures from Healthy and Tumor Tissue to Study Infectious Diseases. Journal of Virology, 2022, 96, e0009822.	1.5	11
686	Social image aesthetic classification and optimization algorithm in machine learning. Neural Computing and Applications, 2023, 35, 4283-4293.	3.2	2
687	Automated Analysis of Blood Smear Images for Leukemia Detection: A Comprehensive Review. ACM Computing Surveys, 2022, 54, 1-37.	16.1	10
688	Statistical distortion of supervised learning predictions in optical microscopy induced by image compression. Scientific Reports, 2022, 12, 3464.	1.6	2
689	User-Accessible Machine Learning Approaches for Cell Segmentation and Analysis in Tissue. Frontiers in Physiology, 2022, 13, 833333.	1.3	5
691	Single-neuron projectome of mouse prefrontal cortex. Nature Neuroscience, 2022, 25, 515-529.	7.1	87
692	From Shallow to Deep: Exploiting Feature-Based Classifiers for Domain Adaptation in Semantic Segmentation. Frontiers in Computer Science, 2022, 4, .	1.7	4
693	The arginine methyltransferase PRMT7 promotes extravasation of monocytes resulting in tissue injury in COPD. Nature Communications, 2022, 13, 1303.	5.8	42
694	Development of a fully automated platform for agar-based measurement of viable bacterial growth. SLAS Technology, 2022, 27, 247-252.	1.0	3
695	Automated and manual classification of metallic nanoparticles with respect to size and shape by analysis of scanning electron micrographs. Materialwissenschaft Und Werkstofftechnik, 2022, 53, 270-283.	0.5	7
696	The landscape of pioneer factor activity reveals the mechanisms of chromatin reprogramming and genome activation. Molecular Cell, 2022, 82, 986-1002.e9.	4.5	38
699	MCL1 alternative polyadenylation is essential for cell survival and mitochondria morphology. Cellular and Molecular Life Sciences, 2022, 79, 164.	2.4	8
700	Novel endosomolytic compounds enable highly potent delivery of antisense oligonucleotides. Communications Biology, 2022, 5, 185.	2.0	7
701	Copper induces cell death by targeting lipoylated TCA cycle proteins. Science, 2022, 375, 1254-1261.	6.0	1,539
702	Investigating the electrowetting of silverâ€based gasâ€diffusion electrodes during oxygen reduction reaction with electrochemical and optical methods. Electrochemical Science Advances, 2023, 3, .	1.2	10
703	Temporal control of the integrated stress response by a stochastic molecular switch. Science Advances, 2022, 8, eabk2022.	4.7	13
706	â€œTongaâ€: A Novel Toolbox for Straightforward Bioimage Analysis. Frontiers in Computer Science, 2022, 4, .	1.7	2
707	Temporal and spatial topography of cell proliferation in cancer. Nature Cell Biology, 2022, 24, 316-326.	4.6	34

#	Article	IF	Citations
708	Pore-scale observations of natural hydrate-bearing sediments via pressure core sub-coring and micro-CT scanning. Scientific Reports, 2022, 12, 3471.	1.6	10
709	Mosaic composition of RIP1â€“RIP3 signalling hub and its role in regulating cell death. Nature Cell Biology, 2022, 24, 471-482.	4.6	35
710	Extracellular vesiculo-tubular structures associated with suberin deposition in plant cell walls. Nature Communications, 2022, 13, 1489.	5.8	17
711	Fully automated platelet differential interference contrast image analysis via deep learning. Scientific Reports, 2022, 12, 4614.	1.6	2
714	Response of subsoil organic matter contents and physical properties to longâ€term, highâ€rate farmyard manure application. European Journal of Soil Science, 2022, 73, .	1.8	10
716	Electron microscopy of cardiac 3D nanodynamics: form, function, future. Nature Reviews Cardiology, 2022, 19, 607-619.	6.1	5
718	SuRVoS 2: Accelerating Annotation and Segmentation for Large Volumetric Bioimage Workflows Across Modalities and Scales. Frontiers in Cell and Developmental Biology, 2022, 10, 842342.	1.8	10
719	Signalling dynamics, cell decisions, and homeostatic control in health and disease. Current Opinion in Cell Biology, 2022, 75, 102066.	2.6	17
720	A FIB-SEM Study of Illite Morphology in Aeolian Rotliegend Sandstones: Implications for Understanding the Petrophysical Properties of Reservoir Rocks. Clays and Clay Minerals, 2022, 70, 84-105.	0.6	3
722	Cracking predictions of lithium-ion battery electrodes by X-ray computed tomography and modelling. Journal of Power Sources, 2022, 526, 231119.	4.0	47
723	Spatially mapping the immune landscape of melanoma using imaging mass cytometry. Science Immunology, 2022, 7, eabi5072.	5.6	60
724	LGR5 expressing skin fibroblasts define a major cellular hub perturbed in scleroderma. Cell, 2022, 185, 1373-1388.e20.	13.5	50
725	Easing batch image processing from OMERO: a new toolbox for ImageJ. F1000Research, 0, 11, 392.	0.8	1
726	DRGquant: A new modular AI-based pipeline for 3D analysis of the DRG. Journal of Neuroscience Methods, 2022, 371, 109497.	1.3	11
727	Radiomics-based tumor phenotype determination based on medical imaging and tumor microenvironment in a preclinical setting. Radiotherapy and Oncology, 2022, 169, 96-104.	0.3	11
728	Cell-intrinsic Aryl Hydrocarbon Receptor signalling is required for the resolution of injury-induced colonic stem cells. Nature Communications, 2022, 13, 1827.	5.8	25
729	Multiplexed imaging mass cytometry of the chemokine milieus in melanoma characterizes features of the response to immunotherapy. Science Immunology, 2022, 7, eabk1692.	5.6	100
730	Proteomic analysis reveals exercise training induced remodelling of hepatokine secretion and uncovers syndecan-4 as a regulator of hepatic lipid metabolism. Molecular Metabolism, 2022, 60, 101491.	3.0	12

#	Article	IF	Citations
732	Land use impact on carbon mineralization in well aerated soils is mainly explained by variations of particulate organic matter rather than of soil structure. Soil, 2022, 8, 253-267.	2.2	7
733	A Semi-Automated Workflow for Brain Slice Histology Alignment, Registration, and Cell Quantification (SHARCQ). ENeuro, 2022, 9, ENEURO.0483-21.2022.	0.9	8
735	Automated detection and classification of tumor histotypes on dynamic PET imaging data through machine-learning driven voxel classification. Computers in Biology and Medicine, 2022, 145, 105423.	3.9	11
736	Automated Microscopy Image Segmentation and Analysis with Machine Learning. Methods in Molecular Biology, 2022, 2440, 349-365.	0.4	2
738	Male triploid oysters of Crassostrea gigas exhibit defects in mitosis and meiosis during early spermatogenesis. FEBS Open Bio, 2022, 12, 1438-1452.	1.0	3
741	A Systematic, Open-Science Framework for Quantification of Cell-Types in Mouse Brain Sections Using Fluorescence Microscopy. Frontiers in Neuroanatomy, 2021, 15, 722443.	0.9	2
742	Chemical-Biology-derived in vivo Sensors: Past, Present, and Future. Chimia, 2021, 75, 1017.	0.3	1
743	Label-free multiplexed microtomography of endogenous subcellular dynamics using generalizable deep learning. Nature Cell Biology, 2021, 23, 1329-1337.	4.6	47
747	Training a deep learning model for single-cell segmentation without manual annotation. Scientific Reports, 2021, 11, 23995.	1.6	11
748	The Plant Cell Atlas: focusing new technologies on the kingdom that nourishes the planet. Plant Physiology, 2022, 188, 675-679.	2.3	7
749	Clinical Impact of Immune Cells and Their Spatial Interactions in Diffuse Large B-Cell Lymphoma Microenvironment. Clinical Cancer Research, 2022, 28, 781-792.	3.2	21
750	Using Imaging Mass Cytometry to Define Cell Identities and Interactions in Human Tissues. Frontiers in Physiology, 2021, 12, 817181.	1.3	7
751	Reconstruction of calcium silicate hydrates using multiple 2D and 3D imaging techniques: Light microscopy, Î¼â€CT, SEM, FIBâ€nT combined with EDX. Journal of Microscopy, 2022, 286, 102-107.	0.8	4
752	Protocols for Generating Surfaces and Measuring 3D Organelle Morphology Using Amira. Cells, 2022, 11, 65.	1.8	35
753	Deciphering tumour tissue organization by 3D electron microscopy and machine learning. Communications Biology, 2021, 4, 1390.	2.0	9
754	Generation and analysis of innovative genomically humanized knockin SOD1, TARDBP (TDP-43), and FUS mouse models. IScience, 2021, 24, 103463.	1.9	4
755	phenopype: A phenotyping pipeline for Python. Methods in Ecology and Evolution, 2022, 13, 569-576.	2.2	8
756	The Active Segmentation Platform for Microscopic Image Classification and Segmentation. Brain Sciences, 2021, 11, 1645.	1.1	4

#	Article	IF	Citations
757	From imaging a single cell to implementing precision medicine: an exciting new era. Emerging Topics in Life Sciences, 2021, 5, 837-847.	1.1	4
758	Image-based modelling of coke combustion in a multiscale porous medium using a micro-continuum framework. Journal of Fluid Mechanics, 2022, 932, .	1.4	6
759	Mathematical and bioinformatic tools for cellÂtracking. , 2022, , 341-361.		0
760	Applications of advanced metrology for understanding the effects of drying temperature in the lithium-ion battery electrode manufacturing process. Journal of Materials Chemistry A, 2022, 10, 10593-10603.	5.2	10
762	Actomyosin activity-dependent apical targeting of Rab11 vesicles reinforces apical constriction. Journal of Cell Biology, 2022, 221, .	2.3	2
765	Dynamics of Drosophila endoderm specification. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2112892119.	3.3	4
766	Connectome of the lamina reveals the circuit for early color processing in the visual pathway of a butterfly. Current Biology, 2022, 32, 2291-2299.e3.	1.8	16
767	Deep learning Ââ€“ promises for 3D nuclear imaging: a guide for biologists. Journal of Cell Science, 2022, 135, .	1.2	5
768	Marine biofouling resistance rating using image analysis. Journal of Coatings Technology Research, 2022, 19, 1127-1138.	1.2	4
769	VisuStatRâ€"Visualizing Motility and Morphology Statistics on Images in R. Bioinformatics, 2022, , .	1.8	0
770	High-Throughput 3D Phenotyping of Plant Shoot Apical Meristems From Tissue-Resolution Data. Frontiers in Plant Science, 2022, 13, 827147.	1.7	1
771	Deep learning for robust and flexible tracking in behavioral studies for C. elegans. PLoS Computational Biology, 2022, 18, e1009942.	1.5	16
772	DOPAMAP, high-resolution images of dopamine 1 and 2 receptor expression in developing and adult mouse brains. Scientific Data, 2022, 9, 175.	2.4	4
773	3D imaging for driving cancer discovery. EMBO Journal, 2022, 41, e109675.	3.5	5
775	Microscale carbon distribution around pores and particulate organic matter varies with soil moisture regime. Nature Communications, 2022, 13, 2098.	5.8	44
776	Microscopy analysis neural network to solve detection, enumeration and segmentation from image-level annotations. Nature Machine Intelligence, 2022, 4, 455-466.	8.3	16
777	Label-Free Imaging to Track Reprogramming of Human Somatic Cells. , 2022, 1, 176-191.		1
778	Strong Coupling between Biomineral Morphology and Sr/Ca of Arctica islandica (Bivalvia)â€"Implications for Shell Sr/Ca-Based Temperature Estimates. Minerals (Basel, Switzerland), 2022, 12, 500.	0.8	4

#	Article	IF	Citations
779	Breast tumor microenvironment structures are associated with genomic features and clinical outcome. Nature Genetics, 2022, 54, 660-669.	9.4	88
780	Quantification of vascular networks in photoacoustic mesoscopy. Photoacoustics, 2022, 26, 100357.	4.4	13
790	Multimodal Singleâ€€Cell Analyses Outline the Immune Microenvironment and Therapeutic Effectors of Interstitial Cystitis/Bladder Pain Syndrome. Advanced Science, 2022, 9, e2106063.	5.6	17
791	Hidden Markov modeling for maximum probability neuron reconstruction. Communications Biology, 2022, 5, 388.	2.0	4
792	Challenges and advances in optical 3D mesoscale imaging. Journal of Microscopy, 2022, 286, 201-219.	0.8	13
793	Toward 3D-bioprinting of an endocrine pancreas: A building-block concept for bioartificial insulin-secreting tissue. Journal of Tissue Engineering, 2022, 13, 204173142210910.	2.3	8
794	Combining State of the Art Open Source and Proprietary Machine Learning Technologies to Build a Data Analysis Pipeline for Gasoline Particulate Filters using X-Ray Microscopy, Focused Ion Beam-Scanning Electron Microscopy and Transmission Electron Microscopy. Johnson Matthey Technology Review, 2022, 66, 355-371.	0.5	0
795	Revealing the Impact of Mitochondrial Fitness During Early Neural Development Using Human Brain Organoids. Frontiers in Molecular Neuroscience, 2022, 15, 840265.	1.4	1
797	A classification and review of tools for developing and interacting with machine learning systems. , 2022, , .		3
800	Convergent extension requires adhesion-dependent biomechanical integration of cell crawling and junction contraction. Cell Reports, 2022, 39, 110666.	2.9	17
801	Neurogenesis mediated plasticity is associated with reduced neuronal activity in CA1 during context fear memory retrieval. Scientific Reports, 2022, 12, 7016.	1.6	13
802	Stepwise-edited, human melanoma models reveal mutationsâ€™ effect on tumor and microenvironment. Science, 2022, 376, eabi8175.	6.0	24
803	Intravital Imaging with Two-Photon Microscopy: A Look into the Kidney. Photonics, 2022, 9, 294.	0.9	4
804	High-content high-throughput imaging reveals distinct connections between mitochondrial morphology and functionality for OXPHOS complex I, III, and V inhibitors. Cell Biology and Toxicology, 2023, 39, 415-433.	2.4	8
805	Combining multiple fluorescence imaging techniques in biology: when one microscope is not enough. Molecular Biology of the Cell, 2022, 33, tp1.	0.9	5
807	Smart imaging to empower brain-wide neuroscience at single-cell levels. Brain Informatics, 2022, 9, 10.	1.8	1
808	Tissue Transglutaminase Knock-Out Preadipocytes and Beige Cells of Epididymal Fat Origin Possess Decreased Mitochondrial Functions Required for Thermogenesis. International Journal of Molecular Sciences, 2022, 23, 5175.	1.8	3
809	Using positional information to provide context for biological image analysis with MorphoGraphX 2.0. ELife, 2022, 11, .	2.8	41

#	Article	IF	Citations
810	Developmental landscape of human forebrain at a single-cell level identifies early waves of oligodendrogenesis. Developmental Cell, 2022, 57, 1421-1436.e5.	3.1	26
811	GIANI â€“ open-source software for automated analysis of 3D microscopy images. Journal of Cell Science, 2022, 135, .	1.2	4
812	Expansion Microscopy for Imaging the Cellâ€“Material Interface. ACS Nano, 2022, 16, 7559-7571.	7.3	10
813	Reducing lipid bilayer stress by monounsaturated fatty acids protects renal proximal tubules in diabetes. ELife, 2022, 11, .	2.8	18
814	HIV Tat and cocaine interactively alter genome-wide DNA methylation and gene expression and exacerbate learning and memory impairments. Cell Reports, 2022, 39, 110765.	2.9	5
815	Recycling of memory B cells between germinal center and lymph node subcapsular sinus supports affinity maturation to antigenic drift. Nature Communications, 2022, 13, 2460.	5.8	16
816	Orchestrating nonmuscle myosin II filament assembly at the onset of cytokinesis. Molecular Biology of the Cell, 2022, 33, mbcE21120599.	0.9	6
817	Development and Application of Automatized Routines for Optical Analysis of Synaptic Activity Evoked by Chemical and Electrical Stimulation. Frontiers in Bioinformatics, 2022, 2, .	1.0	2
818	Target deconvolution of HDAC pharmacopoeia reveals MBLAC2 as common off-target. Nature Chemical Biology, 2022, 18, 812-820.	3.9	36
819	Contour: A semi-automated segmentation and quantitation tool for cryo-soft-X-ray tomography. Biological Imaging, 2022, 2, .	1.0	6
820	One-dimensional acoustic potential landscapes guide the neurite outgrowth and affect the viability of B35 neuroblastoma cells. Physical Biology, 2022, 19, 046005.	0.8	2
821	Frequency modulation of a bacterial quorum sensing response. Nature Communications, 2022, 13, 2772.	5.8	10
822	Different hotspot p53 mutants exert distinct phenotypes and predict outcome of colorectal cancer patients. Nature Communications, 2022, 13, 2800.	5.8	21
823	PHGDH heterogeneity potentiates cancerÂcell dissemination and metastasis. Nature, 2022, 605, 747-753.	13.7	77
824	Deep Visual Proteomics defines single-cell identity and heterogeneity. Nature Biotechnology, 2022, 40, 1231-1240.	9.4	160
825	Tumor-immune microenvironment revealed by Imaging Mass Cytometry in a metastatic sarcomatoid urothelial carcinoma with a prolonged response to pembrolizumab.. Cold Spring Harbor Molecular Case Studies, 2022, 8, .	0.7	6
826	In vivo phenotyping of the microvasculature in necrotizing enterocolitis with multicontrast optical imaging. Microcirculation, 2022, 29, e12768.	1.0	6
827	Visceral organ morphogenesis via calcium-patterned muscle constrictions. ELife, 2022, 11, .	2.8	17

#	Article	IF	Citations
828	SimSearch: A Human-in-The-Loop Learning Framework for Fast Detection of Regions of Interest in Microscopy Images. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 4079-4089.	3.9	3
833	Recrystallization mechanisms and associated microstructure evolution during billet conversion of a gamma-gammaâ€² nickel based superalloy. Journal of Alloys and Compounds, 2022, 916, 165465.	2.8	15
834	Convolutional Neural Networks for Classifying Chromatin Morphology in Live-Cell Imaging. Methods in Molecular Biology, 2022, , 17-30.	0.4	1
835	Machine-Learning-Aided Quantification of Area Coverage of Adherent Cells from Phase-Contrast Images. Microscopy and Microanalysis, 0, , 1-8.	0.2	0
837	Investigation of DHA-Induced Regulation of Redox Homeostasis in Retinal Pigment Epithelium Cells through the Combination of Metabolic Imaging and Molecular Biology. Antioxidants, 2022, 11, 1072.	2.2	8
842	Creation of Highâ€Dimensional Reduction Analysisâ€Compatible Histocytometry Files from Images of Denselyâ€Packed Cells and/or Variable Stain Intensity. Current Protocols, 2022, 2, .	1.3	1
843	Engineered 2D materials for optical bioimaging and path toward therapy and tissue engineering. Journal of Materials Research, 2022, 37, 1689-1713.	1.2	12
846	Self-generated gradients steer collective migration on viscoelastic collagen networks. Nature Materials, 2022, 21, 1200-1210.	13.3	29
849	Stress routes clients to the proteasome via a BAG2 ubiquitin-independent degradation condensate. Nature Communications, 2022, 13, .	5.8	23
850	Deep-SAGA: a deep-learning-based system for automatic gaze annotation from eye-tracking data. Behavior Research Methods, 2023, 55, 1372-1391.	2.3	5
851	TrackMate 7: integrating state-of-the-art segmentation algorithms into tracking pipelines. Nature Methods, 2022, 19, 829-832.	9.0	269
852	Machine learning approaches for biomolecular, biophysical, and biomaterials research. Biophysics Reviews, 2022, 3, .	1.0	6
854	Finding Nano-Ã–tzi: Cryo-Electron Tomography Visualization Guided by Learned Segmentation. IEEE Transactions on Visualization and Computer Graphics, 2023, 29, 4198-4214.	2.9	4
855	Imaging mass cytometry reveals the prominent role of myeloid cells at the maternal-fetal interface. IScience, 2022, 25, 104648.	1.9	17
856	Proteasomal inhibition preferentially stimulates lysosome activity relative to autophagic flux in primary astrocytes. Autophagy, 2023, 19, 570-596.	4.3	6
857	Optogenetic actuator â€“ ERK biosensor circuits identify MAPK network nodes that shape ERKÂdynamics. Molecular Systems Biology, 2022, 18, .	3.2	27
858	cytoNet: Spatiotemporal network analysis of cell communities. PLoS Computational Biology, 2022, 18, e1009846.	1.5	3
859	Spatially resolved multi-omics deciphers bidirectional tumor-host interdependence in glioblastoma. Cancer Cell, 2022, 40, 639-655.e13.	7.7	166

#	Article	IF	Citations
861	Live imaging of the co-translational recruitment of XBP1 mRNA to the ER and its processing by diffuse, non-polarized IRE1Î±. ELife, 0, 11, .	2.8	4
862	Peak density of immature nerve cells occurs with highâ€grade dysplasia in intraductal papillary mucinous neoplasms of the pancreas. Journal of Pathology, 0, , .	2.1	2
863	Unraveling trajectories of diffusive particles on networks. Physical Review Research, 2022, 4, .	1.3	6
864	Identification of epithelial and mesenchymal circulating tumor cells in clonal lineage of an aggressive prostate cancer case. Npj Precision Oncology, 2022, 6, .	2.3	10
865	Live-cell microscopy or fluorescence anisotropy with budded baculovirusesâ€"which way to go with measuring ligand binding to M ₄ muscarinic receptors?. Open Biology, 2022, 12, .	1.5	6
866	Mitosis of hepatitis B virus-infected cells inÂvitro results in uninfected daughter cells. JHEP Reports, 2022, 4, 100514.	2.6	8
867	The Ankyrin Repeat Protein RARP-1 Is a Periplasmic Factor That Supports Rickettsia parkeri Growth and Host Cell Invasion. Journal of Bacteriology, 2022, 204, .	1.0	5
869	Adipose cells and tissues soften with lipid accumulation while in diabetes adipose tissue stiffens. Scientific Reports, 2022, 12, .	1.6	13
871	Experimentally heatâ€induced transposition increases drought tolerance in Arabidopsis thaliana. New Phytologist, 2022, 236, 182-194.	3.5	12
873	Paving the Way: Contributions of Big Data to Apicomplexan and Kinetoplastid Research. Frontiers in Cellular and Infection Microbiology, 0, 12, .	1.8	2
874	Mammalian Melatonin Agonist Pharmaceuticals Stimulate Rhomboid Proteins in Plants. Biomolecules, 2022, 12, 882.	1.8	0
876	Spatiotemporal distribution of cellular injury and leukocytes during the progression of ventilator-induced lung injury. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2022, 323, L281-L296.	1.3	2
877	Multidisciplinary biophotonics, open science, and â€¦ plug & pray deep learning?. Journal of Biophotonics, 0, , .	1.1	0
878	Research data management for bioimaging: the 2021 NFDI4BIOIMAGE community survey. F1000Research, 0, 11, 638.	0.8	1
879	Coordination of siderophore gene expression among clonal cells of the bacterium Pseudomonas aeruginosa. Communications Biology, 2022, 5, .	2.0	10
880	Effects of bisphenol A and estradiol in adult rat testis after prepubertal and pubertal exposure. Reproductive Toxicology, 2022, 111, 211-224.	1.3	3
881	Biphasic JNKâ€"Erk Signaling Separates Induction and Maintenance of Cell Senescence after DNA Damage. SSRN Electronic Journal, 0, , .	0.4	0
882	The Small Heat Shock Protein, HSPB1, Interacts with and Modulates the Physical Structure of Membranes. International Journal of Molecular Sciences, 2022, 23, 7317.	1.8	6

#	Article	IF	Citations
883	CK2Î² Is a Gatekeeper of Focal Adhesions Regulating Cell Spreading. Frontiers in Molecular Biosciences, 0, 9, .	1.6	1
884	A Hepatitis C virus genotype 1b post-transplant isolate with high replication efficiency in cell culture and its adaptation to infectious virus production in vitro and in vivo. PLoS Pathogens, 2022, 18, e1010472.	2.1	5
885	Visualizing and quantifying molecular and cellular processes in Caenorhabditis elegans using light microscopy. Genetics, 0, , .	1.2	1
886	Single-cell spatial analysis of tumor immune architecture in diffuse large B-cell lymphoma. Blood Advances, 2022, 6, 4675-4690.	2.5	16
889	Spatiotemporally variable incident light, leaf photosynthesis, and yield across a greenhouse: fine-scale hemispherical photography and a photosynthesis model. Precision Agriculture, 2023, 24, 114-138.	3.1	3
890	A Hitchhiker's guide through the bioâ€image analysis software universe. FEBS Letters, 2022, 596, 2472-2485.	1.3	20
892	Sexual Dimorphism in Transcriptional and Functional Glucocorticoid Effects on Mouse Skeletal Muscle. Frontiers in Endocrinology, 0, 13, .	1.5	1
893	Neuron-specific ablation of the Krabbe disease gene galactosylceramidase in mice results in neurodegeneration. PLoS Biology, 2022, 20, e3001661.	2.6	8
894	Active Microphase Separation in Mixtures of Microtubules and Tip-Accumulating Molecular Motors. Physical Review X, 2022, 12, .	2.8	10
895	Self-regulation of phenotypic noise synchronizes emergent organization and active transport in confluent microbial environments. Nature Physics, 2022, 18, 945-951.	6.5	9
896	Rab11FIP1-deficient mice develop spontaneous inflammation and show increased susceptibility to colon damage. American Journal of Physiology - Renal Physiology, 2022, 323, G239-G254.	1.6	2
897	Quantitative analysis of 3D cellular geometry and modelling of the Arabidopsis embryo. Journal of Microscopy, 0, , .	0.8	0
899	How innovations in methodology offer new prospects for volume electron microscopy. Journal of Microscopy, 2022, 287, 114-137.	0.8	11
900	Repeated mild traumatic brain injuries in mice cause age- and sex-specific alterations in dendritic spine density. Experimental Neurology, 2022, 357, 114172.	2.0	5
902	DeepBacs for multi-task bacterial image analysis using open-source deep learning approaches. Communications Biology, 2022, 5, .	2.0	30
903	A modified fluctuation-test framework characterizes the population dynamics and mutation rate of colorectal cancer persister cells. Nature Genetics, 2022, 54, 976-984.	9.4	23
905	LiveCellMiner: A new tool to analyze mitotic progression. PLoS ONE, 2022, 17, e0270923.	1.1	10
906	Nucleus Tractus Solitarius Neurons Activated by Hypercapnia and Hypoxia Lack Mu Opioid Receptor Expression. Frontiers in Molecular Neuroscience, 0, 15, .	1.4	4

#	Article	IF	Citations
907	Distinct histopathological phenotypes of severe alcoholic hepatitis suggest different mechanisms driving liver injury and failure. Journal of Clinical Investigation, 2022, 132, .	3.9	23
908	Volume electron microscopy. Nature Reviews Methods Primers, 2022, 2, .	11.8	46
910	Ontogeny of cellular organization and LGR5 expression in porcine cochlea revealed using tissue clearing and 3D imaging. IScience, 2022, 25, 104695.	1.9	7
911	Zein-stabilized emulsions by ethanol addition; stability and microstructure. Food Hydrocolloids, 2022, 133, 107973.	5.6	9
912	What is Semantic Communication? A View on Conveying Meaning in the Era of Machine Intelligence. Journal of Communications and Information Networks, 2021, 6, 336-371.	3.5	63
913	Nuclear speed and cycle length co-vary with local density during syncytial blastoderm formation in a cricket. Nature Communications, 2022, 13, .	5.8	8
914	A Machine-Learning Method to Assess Growth Patterns in Plants of the Family Lemnaceae. Plants, 2022, 11, 1910.	1.6	3
915	Qudi-HiM: an open-source acquisition software package for highly multiplexed sequential and combinatorial optical imaging. Open Research Europe, 0, 2, 46.	2.0	6
916	Miniaturized and multiplexed high-content screening of drug and immune sensitivity in a multichambered microwell chip. Cell Reports Methods, 2022, 2, 100256.	1.4	3
918	Cochlear ribbon synapse maturation requires Nlgn1 and Nlgn3. IScience, 2022, 25, 104803.	1.9	5
919	Approaches to spatially resolving the tumour immune microenvironment of hepatocellular carcinoma. Therapeutic Advances in Medical Oncology, 2022, 14, 175883592211132.	1.4	8
920	Design and Characterization of Hierarchical Aluminosilicate Composite Materials for Cs Entrapment: Ionic Exchange Efficiency Tied to Microstructure. SSRN Electronic Journal, 0, , .	0.4	1
921	Active Segmentation: Differential Geometry meets Machine Learning. , 2022, , .		0
922	A Survey of Visualization and Analysis in Highâ€Resolution Connectomics. Computer Graphics Forum, 2022, 41, 573-607.	1.8	7
923	Single-nucleus and spatial transcriptome profiling of pancreatic cancer identifies multicellular dynamics associated with neoadjuvant treatment. Nature Genetics, 2022, 54, 1178-1191.	9.4	107
926	Matrix Metalloproteinases Expression Is Associated with SARS-CoV-2-Induced Lung Pathology and Extracellular-Matrix Remodeling in K18-hACE2 Mice. Viruses, 2022, 14, 1627.	1.5	13
928	Too bright for 2 dimensions: recent progress in advanced 3-dimensional microscopy of the kidney. Kidney International, 2022, 102, 1238-1246.	2.6	1
930	A condensate dynamic instability orchestrates actomyosin cortex activation. Nature, 2022, 609, 597-604.	13.7	21

#	Article	IF	Citations
931	Broad Ion Beamâ€“Scanning Electron Microscopy Characterization of Organic Porosity Evolution During Thermal Treatment of Bazhenov Shale Sample. SPE Reservoir Evaluation and Engineering, 2023, 26, 64-74.	1.1	2
932	Guided interactive image segmentation using machine learning and color-based image set clustering. Bioinformatics, 2022, 38, 4622-4628.	1.8	2
935	Chronic stress-driven glucocorticoid receptor activation programs key cell phenotypes and functional epigenomic patterns in human fibroblasts. IScience, 2022, 25, 104960.	1.9	15
936	Hippocampal fear engrams modulate ethanolâ€induced maladaptive contextual generalization in mice. Hippocampus, 2022, 32, 707-715.	0.9	0
937	Glioblastoma hijacks neuronal mechanisms for brain invasion. Cell, 2022, 185, 2899-2917.e31.	13.5	168
938	KaIDA: a modular tool for assisting image annotation in deep learning. Journal of Integrative Bioinformatics, 2022, 19, .	1.0	4
939	Usability of deep learning pipelines for 3D nuclei identification with Stardist and Cellpose. Cells and Development, 2022, 172, 203806.	0.7	5
941	Profiling of syngeneic mouse HCC tumor models as a framework to understand antiâ€“PDâ€1 sensitive tumor microenvironments. Hepatology, 2023, 77, 1566-1579.	3.6	15
942	PaFSe: A Parameter-Free Segmentation Approach for 3D Fluorescent Images. SN Computer Science, 2022, 3, .	2.3	0
943	Hypoalbuminemia affects the spatio-temporal tissue distribution of ochratoxin A in liver and kidneys: consequences for organ toxicity. Archives of Toxicology, 2022, 96, 2967-2981.	1.9	8
944	Job Adverts Analyzer for Cybersecurity Skills Needs Evaluation. , 2022, , .		2
945	Prohormone convertase 1/3 deficiency causes obesity due to impaired proinsulin processing. Nature Communications, 2022, 13, .	5.8	14
946	Human-in-the-loop machine learning: a state of the art. Artificial Intelligence Review, 2023, 56, 3005-3054.	9.7	72
949	A Deep Learning Approach to Capture the Essence of Candida albicans Morphologies. Microbiology Spectrum, 2022, 10, .	1.2	5
950	Engineering bone-forming callus organoid implants in a xenogeneic-free differentiation medium. Frontiers in Chemical Engineering, 0, 4, .	1.3	0
953	Chromatin compaction precedes apoptosis in developing neurons. Communications Biology, 2022, 5, .	2.0	11
955	Combined targeting of pathways regulating synaptic formation and autophagy attenuates Alzheimerâ€™s disease pathology in mice. Frontiers in Pharmacology, 0, 13, .	1.6	0
957	Bridging scales in a multiscale pattern-forming system. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	16

#	Article	IF	Citations
958	VASP localization to lipid bilayers induces polymerization driven actin bundle formation. Molecular Biology of the Cell, 2022, 33, .	0.9	4
959	Graphene nanoplatelets reinforced cement as a solution to leaky wellbores reinforcing weak points in hydrated Portland cement with graphene nanoparticles improves mechanical and chemical durability of wellbore cements. Cement and Concrete Composites, 2022, 133, 104726.	4.6	12
961	Muscular hydraulics drive larva-polyp morphogenesis. Current Biology, 2022, 32, 4707-4718.e8.	1.8	11
962	Lightweight lattice-based skeleton of the sponge Euplectella aspergillum: On the multifunctional design. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 135, 105448.	1.5	6
963	A comparative study of the epiligament of the medial collateral and anterior cruciate ligaments in the human knee: Immunohistochemical analysis of CD 34, Î±-smooth muscle actin and vascular endothelial growth factor in relation to epiligament theory. Knee, 2022, 39, 78-90.	0.8	3
964	Protocol to detect RNAs from tissue sections in mice using Y-branched probe in situ hybridization. STAR Protocols, 2022, 3, 101686.	0.5	0
965	Visualising coke-induced degradation of catalysts used for CO2-reforming of methane with X-ray nano-computed tomography. Carbon Capture Science & Technology, 2022, 5, 100068.	4.9	2
966	Image Informatics. , 2023, , 457-471.		0
967	Patient-by-Patient Deep Transfer Learning for Drug-Response Profiling Using Confocal Fluorescence Microscopy of Pediatric Patient-Derived Tumor-Cell Spheroids. IEEE Transactions on Medical Imaging, 2022, 41, 3981-3999.	5.4	2
968	i.2.i. with the (Fruit) Fly: Quantifying Position Effect Variegation in Drosophila Melanogaster. Learning Materials in Biosciences, 2022, , 147-174.	0.2	0
969	Building a Bioimage Analysis Workflow Using Deep Learning. Learning Materials in Biosciences, 2022, , 59-88.	0.2	1
970	From Astronomy toÂHistology: Adapting theÂFellWalker Algorithm toÂDeep Nuclear Instance Segmentation. Lecture Notes in Computer Science, 2022, , 547-561.	1.0	0
971	Segmentation of Tissues and Proliferating Cells in Light-Sheet Microscopy Images of Mouse Embryos Using Convolutional Neural Networks. IEEE Access, 2022, 10, 105084-105100.	2.6	1
972	A quantitative and spatial analysis of cell cycle regulators during the fission yeast cycle. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	11
973	Cover crop influence on pore size distribution and biopore dynamics: Enumerating root and soil faunal effects. Frontiers in Plant Science, 0, 13, .	1.7	11
974	Water and nutrient availability exert selection on reproductive phenology. American Journal of Botany, 2022, 109, 1702-1716.	0.8	3
975	Bone Marrow Endothelial Cells Increase Prostate Cancer Cell Apoptosis in 3D Triculture Model of Reactive Stroma. Biology, 2022, 11, 1271.	1.3	2
978	Artificial Intelligence for Cell Segmentation, Event Detection, and Tracking for Label-Free Microscopy Imaging. Algorithms, 2022, 15, 313.	1.2	9

#	Article	IF	Citations
979	A Clathrin light chain A reporter mouse for in vivo imaging of endocytosis. PLoS ONE, 2022, 17, e0273660.	1.1	2
981	Spatial Reorganization of Liquid Crystalline Domains of Red Blood Cells in Type 2 Diabetic Patients with Peripheral Artery Disease. International Journal of Molecular Sciences, 2022, 23, 11126.	1.8	2
983	Cardiovascular baroreflex circuit moonlights in sleep control. Neuron, 2022, 110, 3986-3999.e6.	3.8	17
984	Novel lectin-based chimeric antigen receptors target Gb3-positive tumour cells. Cellular and Molecular Life Sciences, 2022, 79, .	2.4	16
985	Research data management for bioimaging: the 2021 NFDI4BIOIMAGE community survey. F1000Research, 0, 11, 638.	0.8	2
986	Effects of Enzymatically Induced Carbonate Precipitation on Capillary Pressureâ€“Saturation Relations. Minerals (Basel, Switzerland), 2022, 12, 1186.	0.8	2
987	Improved segmentation of collagen second harmonic generation images with a deep learning convolutional neural network. Journal of Biophotonics, 2022, 15, .	1.1	5
988	Thermal Decrepitation and Thermally-Induced Cracking of Limestone Used in Quicklime Production. Minerals (Basel, Switzerland), 2022, 12, 1197.	0.8	2
989	Brief communication: Unravelling the composition and microstructure of a permafrost core using X-ray computed tomography. Cryosphere, 2022, 16, 3507-3515.	1.5	2
991	Fibroblast subsets in non-small cell lung cancer: Associations with survival, mutations, and immune features. Journal of the National Cancer Institute, 2023, 115, 71-82.	3.0	13
992	Brain-wide neuronal activation and functional connectivity are modulated by prior exposure to repetitive learning episodes. Frontiers in Behavioral Neuroscience, 0, 16, .	1.0	6
993	Dramatic impacts on brain pathology, anxiety, and cognitive function in the knock-in APPNL-G-F mouse model of Alzheimer disease following long-term voluntary exercise. Alzheimer's Research and Therapy, 2022, 14, .	3.0	5
994	Visualization of a Limonene Synthesis Metabolon Inside Living Bacteria by Hyperspectral SRS Microscopy. Advanced Science, 2022, 9, .	5.6	6
995	An analysis modality for vascular structures combining tissue-clearing technology and topological data analysis. Nature Communications, 2022, 13, .	5.8	7
996	Traject3d allows label-free identification of distinct co-occurring phenotypes within 3D culture by live imaging. Nature Communications, 2022, 13, .	5.8	16
997	Combined nanometric and phylogenetic analysis of unique endocytic compartments in Giardia lamblia sheds light on the evolution of endocytosis in Metamonada. BMC Biology, 2022, 20, .	1.7	5
998	Ketogenic diet uncovers differential metabolic plasticity of brain cells. Science Advances, 2022, 8, .	4.7	20
1000	Spatiotemporal control of ERK pulse frequency coordinates fate decisions during mammary acinar morphogenesis. Developmental Cell, 2022, 57, 2153-2167.e6.	3.1	24

#	Article	IF	Citations
1001	Deep-learning analysis of micropattern-based organoids enables high-throughput drug screening of Huntingtonâ€™s disease models. Cell Reports Methods, 2022, 2, 100297.	1.4	8
1002	Lipid Metabolic Reprogramming Extends beyond Histologic Tumor Demarcations in Operable Human Pancreatic Cancer. Cancer Research, 2022, 82, 3932-3949.	0.4	2
1003	Innate frequency-discrimination hyperacuity in Williams-Beuren syndrome mice. Cell, 2022, 185, 3877-3895.e21.	13.5	5
1004	DS6, Deformation-Aware Semi-Supervised Learning: Application to Small Vessel Segmentation with Noisy Training Data. Journal of Imaging, 2022, 8, 259.	1.7	6
1005	High-Throughput Nanopore Fabrication and Classification Using Xe-Ion Irradiation and Automated Pore-Edge Analysis. ACS Nano, 2022, 16, 16249-16259.	7.3	3
1006	Spatiotemporal organisation of protein processing in the kidney. Nature Communications, 2022, 13, .	5.8	8
1007	helixCAM: A platform for programmable cellular assembly in bacteria and human cells. Cell, 2022, 185, 3551-3567.e39.	13.5	16
1008	Coupled myovascular expansion directs cardiac growth and regeneration. Development (Cambridge), 2022, 149, .	1.2	2
1009	Gliovascular alterations in sporadic and familial Alzheimer's disease: <scp> APOE3 </scp> Christchurch homozygote glioprotection. Brain Pathology, 0, , .	2.1	1
1010	A Statistical Porosity Characterization Approach of Carbon-Fiber-Reinforced Polymer Material Using Optical Microscopy and Neural Network. Materials, 2022, 15, 6540.	1.3	6
1014	Spatially variant immune infiltration scoring in human cancer tissues. Npj Precision Oncology, 2022, 6, .	2.3	14
1015	Easing batch image processing from OMERO: a new toolbox for ImageJ. F1000Research, 0, 11, 392.	0.8	1
1016	DeepProjection: specific and robust projection of curved 2D tissue sheets from 3D microscopy using deep learning. Development (Cambridge), 2022, 149, .	1.2	5
1017	The effect of AÎ² seeding is dependent on the presence of knock-in genes in the AppNLâ^'Gâ^'F mice. , 0, 1, .		1
1020	Development and in vivo validation of small interfering RNAs targeting NOX3 to prevent sensorineural hearing loss. Frontiers in Neurology, 0, 13, .	1.1	2
1021	Spatiotemporal dynamics of self-organized branching in pancreas-derived organoids. Nature Communications, 2022, 13, .	5.8	14
1022	Transplanted human induced pluripotent stem cells- derived retinal ganglion cells embed within mouse retinas and are electrophysiologically functional. IScience, 2022, 25, 105308.	1.9	11
1023	X-ray computerized microtomography and confocal Raman microscopy as complementary techniques to conventional imaging tools for the microstructural characterization of Cheddar cheese. Journal of Dairy Science, 2022, 105, 9387-9403.	1.4	8

#	Article	IF	Citations
1025	No cell is an island: characterising the leaf epidermis using <scp>epidermalmorph,</scp> a new R package. New Phytologist, 2023, 237, 354-366.	3.5	4
1026	Quantifying the Relationship Between Microstructure and Performance in Gadolinium-Doped Ceria Infiltrated Ni/YSZ Symmetric Cells. Jom, 2022, 74, 4527-4532.	0.9	1
1027	A high-content endogenous GLUT4 trafficking assay reveals new aspects of adipocyte biology. Life Science Alliance, 2023, 6, e202201585.	1.3	3
1028	Automating the High-Throughput Screening of Protein-Based Optical Indicators and Actuators. Biochemistry, 2023, 62, 169-177.	1.2	1
1029	Omnipose: a high-precision morphology-independent solution for bacterial cell segmentation. Nature Methods, 2022, 19, 1438-1448.	9.0	71
1030	CRISPRi screens in human iPSC-derived astrocytes elucidate regulators of distinct inflammatory reactive states. Nature Neuroscience, 2022, 25, 1528-1542.	7.1	35
1032	Diabetic Macular Edema: Current Understanding, Molecular Mechanisms and Therapeutic Implications. Cells, 2022, 11, 3362.	1.8	45
1033	Interferon-Driven Immune Dysregulation in Common Variable Immunodeficiencyâ€“Associated Villous Atrophy and Norovirus Infection. Journal of Clinical Immunology, 2023, 43, 371-390.	2.0	12
1035	Influence of Standard Image Processing of 3D X-ray Microscopy on Morphology, Topology and Effective Properties. Energies, 2022, 15, 7796.	1.6	2
1036	Generalâ€Purpose Ultrasound Neuromodulation System for Chronic, Closedâ€Loop Preclinical Studies in Freely Behaving Rodents. Advanced Science, 2022, 9, .	5.6	7
1037	CP12 fine-tunes the Calvin-Benson cycle and carbohydrate metabolism in cyanobacteria. Frontiers in Plant Science, 0, 13, .	1.7	8
1038	Persistent muscle hyperalgesia after adolescent stress is exacerbated by a mild-nociceptive input in adulthood and is associated with microglia activation. Scientific Reports, 2022, 12, .	1.6	2
1039	Human Brain Organoids-on-Chip: Advances, Challenges, and Perspectives for Preclinical Applications. Pharmaceutics, 2022, 14, 2301.	2.0	14
1041	Inhibition of cytochrome P450 enhances the nephro- and hepatotoxicity of ochratoxin A. Archives of Toxicology, 2022, 96, 3349-3361.	1.9	10
1042	Distribution of Mn Oxidation States in Grassland Soils and Their Relationships with Soil Pores. Environmental Science & Technology, 2022, 56, 16462-16472.	4.6	5
1043	Mass Balance Imaging: A Phase Portrait Analysis for Characterizing Growth Kinetics of Biomolecular Condensates. Methods in Molecular Biology, 2023, , 413-424.	0.4	2
1044	A multi-omic analysis of MCF10A cells provides a resource for integrative assessment of ligand-mediated molecular and phenotypic responses. Communications Biology, 2022, 5, .	2.0	14
1045	Spatial modeling reveals nuclear phosphorylation and subcellular shuttling of YAP upon drug-induced liver injury. ELife, 0, 11, .	2.8	4

#	Article	IF	Citations
1050	Relating individual cell division events to single-cell ERK and Akt activity time courses. Scientific Reports, 2022, 12, .	1.6	3
1051	Unsupervised discovery of tissue architecture in multiplexed imaging. Nature Methods, 2022, 19, 1653-1661.	9.0	25
1054	Self-supervised machine learning for live cell imagery segmentation. Communications Biology, 2022, 5, .	2.0	10
1055	Rheology of vesicle prototissues: A microfluidic approach. Frontiers in Physics, 0, 10, .	1.0	1
1056	A new protocol for whole-brain biodistribution analysis of AAVs by tissue clearing, light-sheet microscopy and semi-automated spatial quantification. Gene Therapy, 2022, 29, 665-679.	2.3	4
1059	Gene delivery available in molluscan cells by strong promoter discovered from bivalve-infectious virus. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	1
1061	Atlas-based data integration for mapping the connections and architecture of the brain. Science, 2022, 378, 488-492.	6.0	17
1063	Membrane potential drives the exit from pluripotency and cell fate commitment via calcium and mTOR. Nature Communications, 2022, 13, .	5.8	9
1064	Confinement-Tunable Transition Dipole Moment Orientation in Perovskite Nanoplatelet Solids and Binary Blends. ACS Nano, 2022, 16, 18459-18471.	7.3	2
1065	Automated staging of zebrafish embryos using machine learning. Wellcome Open Research, 0, 7, 275.	0.9	4
1067	Mesoscale connections and gene expression empower whole-brain modeling of Î±-synuclein spread, aggregation, and decay dynamics. Cell Reports, 2022, 41, 111631.	2.9	2
1070	Wholeâ€brain microscopy reveals distinct temporal and spatial efficacy of antiâ€AÎ² therapies. EMBO Molecular Medicine, 0, , .	3.3	4
1071	Restructuring in high burn-up pressurized water reactor UO2 fuel central parts: Experimental 3D characterization by focused ion beamâ€"scanning electron microscopy. Journal of Applied Physics, 2022, 132, .	1.1	5
1072	Application of Machine Learning in Spatial Proteomics. Journal of Chemical Information and Modeling, 2022, 62, 5875-5895.	2.5	16
1074	Cellpose 2.0: how to train your own model. Nature Methods, 2022, 19, 1634-1641.	9.0	221
1075	Machine learning-based detection of label-free cancer stem-like cell fate. Scientific Reports, 2022, 12, .	1.6	3
1076	Insights into highly multiplexed tissue images: A primer for Mass Cytometry Imaging data analysis. TrAC - Trends in Analytical Chemistry, 2022, 157, 116794.	5.8	2
1077	A comprehensive review of computational and image analysis techniques for quantitative evaluation of striated muscle tissue architecture. Biophysics Reviews, 2022, 3, 041302.	1.0	3

#	Article	IF	Citations
1078	Could artificial intelligence revolutionize the development of nanovectors for gene therapy and mRNA vaccines?. Nano Today, 2022, 47, 101665.	6.2	11
1079	The dynamics of single-to-multi layer transition in bacterial swarms. , 0, 2, .		2
1080	UnMICST: Deep learning with real augmentation for robust segmentation of highly multiplexed images of human tissues. Communications Biology, 2022, 5, .	2.0	14
1082	Effect of capillary fluid flow on single cancer cell cycle dynamics, motility, volume and morphology. Lab on A Chip, 2022, 23, 92-105.	3.1	1
1083	Design and characterization of hierarchical aluminosilicate composite materials for Cs entrapment: Adsorption efficiency tied to microstructure. Journal of Water Process Engineering, 2023, 51, 103381.	2.6	1
1084	Automation and artificial intelligence in filamentous fungi-based bioprocesses: A review. Bioresource Technology, 2023, 369, 128421.	4.8	7
1085	Dataset documenting reaction-induced changes to five fractured foamed wellbore cement cores during CO2 fluid flow. Data in Brief, 2023, 46, 108840.	0.5	0
1086	Modulation of intestinal growth and differentiation by photoperiod and dietary treatment during smoltification in Atlantic salmon (Salmo salar, L.). Aquaculture, 2023, 566, 739164.	1.7	1
1087	An open access, machine learning pipeline for high-throughput quantification of cell morphology. STAR Protocols, 2023, 4, 101947.	0.5	1
1088	The effects of seeding density and osteoclastic supplement concentration on osteoclastic differentiation and resorption. Bone Reports, 2023, 18, 101651.	0.2	1
1089	Acute gut inflammation reduces neural activity and spine maturity in hippocampus but not basolateral amygdala. Scientific Reports, 2022, 12, .	1.6	0
1090	Highly multiplexed spatial profiling with CODEX: bioinformatic analysis and application in human disease. Seminars in Immunopathology, 2023, 45, 145-157.	2.8	11
1091	Dynamics and consequences of the HTLV-1 proviral plus-strand burst. PLoS Pathogens, 2022, 18, e1010774.	2.1	2
1092	Phase Transformation and Microstructural Evolution of CuS Electrodes in Solidâ€State Batteries Probed by In Situ 3D Xâ€Ray Tomography. Advanced Energy Materials, 2023, 13, .	10.2	3
1093	Low intensity repetitive transcranial magnetic stimulation modulates brain-wide functional connectivity to promote anti-correlated c-Fos expression. Scientific Reports, 2022, 12, .	1.6	14
1095	Igneous: Distributed dense 3D segmentation meshing, neuron skeletonization, and hierarchical downsampling. Frontiers in Neural Circuits, 0, 16, .	1.4	1
1097	Mussels Fabricate Porous Glues via Multiphase Liquidâ€“Liquid Phase Separation of Multiprotein Condensates. ACS Nano, 2022, 16, 20877-20890.	7.3	8
1098	Evolution of Î³â€² Precipitation During the Early Stages of Industrial Forging of a Nickel-Based Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2023, 54, 2022-2036.	1.1	1

#	Article	IF	Citations
1099	Structured cerebellar connectivity supports resilient pattern separation. Nature, 2023, 613, 543-549.	13.7	17
1100	St18 specifies globus pallidus projection neuron identity in MGE lineage. Nature Communications, 2022, 13, .	5.8	0
1102	Organoids. Nature Reviews Methods Primers, 2022, 2, .	11.8	130
1103	A novel feature for monitoring the enzymatic harvesting process of adherent cell cultures based on lens-free imaging. Scientific Reports, 2022, 12, .	1.6	0
1104	Zeolite-Enhanced Portland Cement: Solution for Durable Wellbore-Sealing Materials. Materials, 2023, 16, 30.	1.3	1
1106	Quantitative spatial evaluation of tumor-immune interactions in the immunotherapy setting of metastatic melanoma lymph nodes. Frontiers in Immunology, 0, 13, .	2.2	3
1108	What is Missing in XAI So Far?. KI - Kunstliche Intelligenz, 2022, 36, 303-315.	2.2	3
1109	A novel time-lapse imaging method for studying developing bacterial biofilms. Scientific Reports, 2022, 12, .	1.6	3
1113	A new in vitro monitoring system reveals a specific influence of Arabidopsis nitrogen nutrition on its susceptibility to Alternaria brassicicola at the seedling stage. Plant Methods, 2022, 18, .	1.9	1
1114	PIK3CA gain-of-function mutation in adipose tissue induces metabolic reprogramming with Warburg-like effect and severe endocrine disruption. Science Advances, 2022, 8, .	4.7	5
1115	Deep neural network automated segmentation of cellular structures in volume electron microscopy. Journal of Cell Biology, 2023, 222, .	2.3	9
1116	The local and longâ€range input landscape of inhibitory neurons in mouse auditory cortex. Journal of Comparative Neurology, 2023, 531, 502-514.	0.9	1
1117	Detection of Changes in Macrophage Polarization as a Result of 5-Aminolevulinic Acid Photodynamic Therapy Using Fluorescence-Lifetime Imaging Microscopy. Photonics, 2022, 9, 961.	0.9	2
1118	Differential diagnosis of thyroid nodule capsules using random forest guided selection of image features. Scientific Reports, 2022, 12, .	1.6	4
1120	Novel transfer learning schemes based on Siamese networks and synthetic data. Neural Computing and Applications, 2023, 35, 8423-8436.	3.2	2
1121	Reconstruction and deconstruction of human somitogenesis in vitro. Nature, 2023, 614, 500-508.	13.7	37
1122	Automated detection of GFAP-labeled astrocytes in micrographs using YOLOv5. Scientific Reports, 2022, 12, .	1.6	2
1123	The energetic cost of early reproductive development in juvenile Antarctic krill at the Western Antarctic Peninsula. Frontiers in Marine Science, 0, 9, .	1.2	3

#	Article	IF	Citations
1125	Spatial omics technologies at multimodal and single cell/subcellular level. Genome Biology, 2022, 23, .	3.8	32
1126	Evolutionary rescue of resistant mutants is governed by a balance between radial expansion and selection in compact populations. Nature Communications, 2022, 13, .	5.8	2
1127	Myoglobinâ€mediated lipid shuttling increases adrenergic activation of brown and white adipocyte metabolism and is as a marker of thermogenic adipocytes in humans. Clinical and Translational Medicine, 2022, 12, .	1.7	8
1128	Guidelines for mouse and human DC functional assays. European Journal of Immunology, 2023, 53, .	1.6	1
1130	The spring-like effect of microRNA-31 in balancing inflammatory and regenerative responses in colitis. Frontiers in Microbiology, 0, 13, .	1.5	1
1131	Single-cell high-dimensional imaging mass cytometry: one step beyond in oncology. Seminars in Immunopathology, 0, , .	2.8	4
1132	Manufacturing size effect on the structural and mechanical properties of additively manufactured Ti-6Al-4V microbeams. Journal of Materials Science and Technology, 2023, 149, 18-30.	5.6	6
1133	High-Resolution Bacterial Cytological Profiling Reveals Intrapopulation Morphological Variations upon Antibiotic Exposure. Antimicrobial Agents and Chemotherapy, 2023, 67, .	1.4	7
1134	Controlling human organoid symmetry breaking reveals signaling gradients drive segmentation clock waves. Cell, 2023, 186, 513-527.e19.	13.5	23
1135	A magnetically actuated, optically sensed tensile testing method for mechanical characterization of soft biological tissues. Science Advances, 2023, 9, .	4.7	4
1137	FUS-ALS hiPSC-derived astrocytes impair human motor units through both gain-of-toxicity and loss-of-support mechanisms. Molecular Neurodegeneration, 2023, 18, .	4.4	17
1138	Massively parallel identification of mRNA localization elements in primary cortical neurons. Nature Neuroscience, 0, , .	7.1	7
1139	Collective directional migration drives the formation of heteroclonal cancer cell clusters. Molecular Oncology, 2023, 17, 1699-1725.	2.1	2
1140	Controlling organoid symmetry breaking uncovers an excitable system underlying human axial elongation. Cell, 2023, 186, 497-512.e23.	13.5	24
1141	Single-cell transcriptomic analysis reveals diversity within mammalian spinal motor neurons. Nature Communications, 2023, 14, .	5.8	12
1143	Anagen hair follicles transplanted into mature human scars remodel fibrotic tissue. Npj Regenerative Medicine, 2023, 8, .	2.5	6
1144	Optofluidic imaging meets deep learning: from merging to emerging. Lab on A Chip, 2023, 23, 1011-1033.	3.1	10
1145	Geometric deep learning reveals the spatiotemporal features of microscopic motion. Nature Machine Intelligence, 2023, 5, 71-82.	8.3	18

#	Article	IF	Citations
1146	Methodological advancements in organ-specific ectopic lipid quantitative characterization: Effects of high fat diet on muscle and liver intracellular lipids. Molecular Metabolism, 2023, 68, 101669.	3.0	2
1147	Particle tracking velocimetry as a method for chip ejection studies during groove milling of particleboard. European Journal of Wood and Wood Products, 2023, 81, 605-615.	1.3	0
1150	Distinct spatiotemporal features of microglia and monocyteâ€derived macrophages in glioma. European Journal of Immunology, 2023, 53, .	1.6	2
1151	A comprehensive single-cell map of T cell exhaustion-associated immune environments in human breast cancer. Nature Communications, 2023, 14, .	5.8	39
1152	Deep learning-assisted analysis of single molecule dynamics from liquid-phase electron microscopy. Chemical Communications, 2023, 59, 1701-1704.	2.2	1
1153	SARS-CoV-2 variants induce distinct disease and impact in the bone marrow and thymus of mice. IScience, 2023, 26, 105972.	1.9	3
1154	Î³Î´ T cells are effectors of immunotherapy in cancers with HLA class I defects. Nature, 2023, 613, 743-750.	13.7	79
1155	Analysis of Collective Migration Patterns Within Tumors. Methods in Molecular Biology, 2023, , 305-323.	0.4	0
1156	Shared and Distinct Brain Regions Targeted for Immediate Early Gene Expression by Ketamine and Psilocybin. ACS Chemical Neuroscience, 2023, 14, 468-480.	1.7	33
1157	Enhanced loss but limited mobility of pyrogenic and organic matter in continuous permafrost-affected forest soils. Soil Biology and Biochemistry, 2023, , 108959.	4.2	1
1159	MRI/PET multimodal imaging of the innate immune response in skeletal muscle and draining lymph node post vaccination in rats. Frontiers in Immunology, 0, 13, .	2.2	1
1161	Microstructure, mechanical properties and fracture mechanisms in a 7017 aluminium alloy tailored for powder bed fusion â€“ laser beam. Materials and Design, 2023, 226, 111602.	3.3	2
1162	Easing the Reuse of ML Solutions by Interactive Clustering-based Autotuning in Scientific Applications. , 2022, , .		1
1164	mRNA transport, translation, and decay in adult mammalian central nervous system axons. Neuron, 2023, 111, 650-668.e4.	3.8	16
1165	Network Neuroscience Untethered: Brain-Wide Immediate Early Gene Expression for the Analysis of Functional Connectivity in Freely Behaving Animals. Biology, 2023, 12, 34.	1.3	5
1166	Low Data Image Analysis with a Generative Adversarial Network: A Case Study on Women Pelvic MRI Scans. , 2022, , .		0
1168	Weakly supervised learning analysis of AÎ² plaque distribution in the whole rat brain. Frontiers in Neuroscience, 0, 16, .	1.4	0
1169	Chronic Gq activation of ventral hippocampal neurons and astrocytes differentially affects memory and behavior. Neurobiology of Aging, 2023, 125, 9-31.	1.5	6

#	Article	IF	Citations
1171	Functional Analysis of Phospholipid Signaling and Actin Dynamics: The Use of Apical Growing Tobacco Pollen Tubes in a Case Study. Methods in Molecular Biology, 2023, , 237-247.	0.4	0
1172	Quantifying microstructures of earth materials using higher-order spatial correlations and deep generative adversarial networks. Scientific Reports, 2023, 13, .	1.6	2
1174	Effects of Crude Oil Properties and Dispersant on the Microstructure and Viscosity of Seawater-in-Oil Emulsions. Langmuir, 2023, 39, 2043-2062.	1.6	1
1175	Selective Destabilization of Transcripts by mRNA Decapping Regulates Oocyte Maturation and Innate Immunity Gene Expression during Ageing in C. elegans. Biology, 2023, 12, 171.	1.3	1
1176	Relieving Pixel-Wise Labeling Effort forÂPathology Image Segmentation withÂSelf-training. Lecture Notes in Computer Science, 2023, , 577-592.	1.0	1
1177	Tracking unlabeled cancer cells imaged with low resolution in wide migration chambers via U-NET class-1 probability (pseudofluorescence). Journal of Biological Engineering, 2023, 17, .	2.0	0
1178	Geometric control of myosin II orientation during axis elongation. ELife, 0, 12, .	2.8	9
1180	Tissue libraries enable rapid determination of conditions that preserve antibody labeling in cleared mouse and human tissue. ELife, 0, 12, .	2.8	3
1183	Co-administration of alcohol and combination antiretroviral therapy (cART) in male Sprague Dawley rats: A study on testicular morphology, oxidative and cytokines perturbations. Anatomy and Cell Biology, 2023, 56, 236-251.	0.5	2
1184	Efficient end-to-end learning for cell segmentation with machine generated weak annotations. Communications Biology, 2023, 6, .	2.0	6
1185	SARS-CoV-2 Spike Protein and Neutralizing Anti-Spike Protein Antibodies Modulate Blood Platelet Function. International Journal of Molecular Sciences, 2023, 24, 5312.	1.8	2
1186	Natural transition of the supersonic streamwise corner flow. Applied Physics Letters, 2023, 122, .	1.5	2
1187	Spatial profiling technologies illuminate the tumor microenvironment. Cancer Cell, 2023, 41, 404-420.	7.7	41
1189	Aggregating in vitro-grown adipocytes to produce macroscale cell-cultured fat tissue with tunable lipid compositions for food applications. ELife, 0, 12, .	2.8	8
1190	Androgen Receptor (AR) Depletion Underlies the Reproductive Dysfunctions in Male Rats Exposed to Alcohol and Combination Antiretroviral Therapy (cART). Andrologia, 2023, 2023, 1-12.	1.0	0
1192	Sensitivity optimization of a rhodopsin-based fluorescent voltage indicator. Neuron, 2023, 111, 1547-1563.e9.	3.8	20
1193	Are Antarctic aquatic invertebrates hitchhiking on your footwear?. Journal for Nature Conservation, 2023, 72, 126354.	0.8	1
1194	Classification of FIB/SEM-tomography images for highly porous multiphase materials using random forest classifiers. Journal of Power Sources, 2023, 570, 233030.	4.0	8

#	Article	IF	Citations
1195	Tissue clearing and three-dimensional imaging of the whole cochlea and vestibular system from multiple large-animal models. STAR Protocols, 2023, 4, 102220.	0.5	2
1196	Discrete element method and electrochemical modelling of lithium ion cathode structures characterised by X-ray computed tomography. Chemical Engineering Journal, 2023, 465, 142749.	6.6	7
1197	Structure turnover times of grassland soils under different moisture regimes. Geoderma, 2023, 433, 116464.	2.3	4
1201	Retention of dissolved organic matter during podzolisation: Testing processes in laboratory experiments and at the submicron scale. Geoderma Regional, 2023, 32, e00606.	0.9	0
1202	Experimental CO2 interactions with fractured Utica and Marcellus Shale samples at elevated pressure. , 2023, 222, 211484.		2
1204	Pumping up the volume. Journal of Cell Biology, 2023, 222, .	2.3	0
1205	Osteopontin and Ki-67 expression in World Health Organization graded canine meningioma. Journal of Comparative Pathology, 2023, 201, 41-48.	0.1	2
1206	The selective autophagy adaptor p62/SQSTM1 forms phase condensates regulated by HSP27 that facilitate the clearance of damaged lysosomes via lysophagy. Cell Reports, 2023, 42, 112037.	2.9	18
1207	Computation of oxygen diffusion properties of the gas diffusion medium -microporous layer assembly from the combination of X-ray microtomography and focused ion beam three dimensional digital images. Journal of Power Sources, 2023, 561, 232735.	4.0	2
1208	Quantitative analysis of myofiber type composition inÂhuman and mouse skeletal muscles. STAR Protocols, 2023, 4, 102075.	0.5	2
1209	Quantification of structural heterogeneity in H&E stained clear cell renal cell carcinoma using refractive index tomography. Biomedical Optics Express, 2023, 14, 1071.	1.5	5
1211	A transcriptome atlas of leg muscles from healthy human volunteers reveals molecular and cellular signatures associated with muscle location. ELife, 0, 12, .	2.8	4
1212	High-multiplex tissue imaging in routine pathologyâ€"are we there yet?. Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin, 2023, 482, 801-812.	1.4	5
1214	Distinct tissue niches direct lung immunopathology via CCL18 and CCL21 in severe COVID-19. Nature Communications, 2023, 14, .	5.8	15
1215	Basic Methods of Cell Cycle Analysis. International Journal of Molecular Sciences, 2023, 24, 3674.	1.8	8
1217	Platelet-instructed SPP1+ macrophages drive myofibroblast activation in fibrosis in a CXCL4-dependent manner. Cell Reports, 2023, 42, 112131.	2.9	38
1219	The effect of Abi3 locus deletion on the progression of Alzheimerâ€™s disease-related pathologies. Frontiers in Immunology, 0, 14, .	2.2	1
1223	Developing synthetic sandstones using geopolymer binder for constraining coupled processes in porous rocks. SN Applied Sciences, 2023, 5, .	1.5	0

#	Article	IF	Citations
1224	Quanty-cFOS, a Novel ImageJ/Fiji Algorithm for Automated Counting of Immunoreactive Cells in Tissue Sections. Cells, 2023, 12, 704.	1.8	2
1226	Fusome topology and inheritance during insect gametogenesis. PLoS Computational Biology, 2023, 19, e1010875.	1.5	3
1228	Myosin II regulatory light chain phosphorylation and formin availability modulate cytokinesis upon changes in carbohydrate metabolism. ELife, 0, 12, .	2.8	3
1231	Correlative microscopy and block-face imaging (CoMBI): a 3D imaging method with wide applicability in the field of biological science. Anatomical Science International, 2023, 98, 353-359.	0.5	2
1233	Cardiogenic control of affective behavioural state. Nature, 2023, 615, 292-299.	13.7	72
1234	YOUPI: Your powerful and intelligent tool for segmenting cells from imaging mass cytometry data. Frontiers in Immunology, 0, 14, .	2.2	0
1237	Growth anisotropy of the extracellular matrix shapes a developing organ. Nature Communications, 2023, 14, .	5.8	17
1238	Fatigue performance of wind turbine rotor blade epoxy adhesives. Polymer Testing, 2023, 121, 107975.	2.3	2
1240	Eip74EF is a dominant modifier for ALS-FTD-linked VCPR152H phenotypes in the Drosophila eye model. BMC Research Notes, 2023, 16, .	0.6	1
1241	Understanding the Ni Migration in Solid Oxide Cell: A Coupled Experimental and Modeling Approach. Journal of the Electrochemical Society, 2023, 170, 034504.	1.3	7
1242	Mapping the primate thalamus: systematic approach to analyze the distribution of subcortical neuromodulatory afferents. Brain Structure and Function, 0, , .	1.2	1
1243	A method for quantifying Phytophthora oospore viability using fluorescent dyes and automated image analysis. PhytoFrontiers, 0, , .	0.8	0
1245	Development of multiple <scp>AI</scp> pipelines that predict neoadjuvant chemotherapy response of breast cancer using H&Eâ€stained tissues. Journal of Pathology: Clinical Research, 2023, 9, 182-194.	1.3	2
1247	Multiplex imaging of breast cancer lymph node metastases identifies prognostic single-cell populations independent of clinical classifiers. Cell Reports Medicine, 2023, 4, 100977.	3.3	6
1249	Fast and sensitive GCaMP calcium indicators for imaging neural populations. Nature, 2023, 615, 884-891.	13.7	147
1250	Analysis of CDPK1 targets identifies a trafficking adaptor complex that regulates microneme exocytosis in Toxoplasma. ELife, 0, 12, .	2.8	2
1251	Automated staging of zebrafish embryos using machine learning. Wellcome Open Research, 0, 7, 275.	0.9	0
1252	Impact of Plastic-Related Compounds on P-Glycoprotein and Breast Cancer Resistance Protein In Vitro. Molecules, 2023, 28, 2710.	1.7	1

#	Article	IF	Citations
1253	Early Endosomes Act as Local Exocytosis Hubs to Repair Endothelial Membrane Damage. Advanced Science, 2023, 10, .	5.6	8
1254	CCTV-FullyAware: toward end-to-end feasible privacy-enhancing and CCTV forensics applications. , 2022, , .		0
1256	STrack: A Tool to Simply Track Bacterial Cells in Microscopy Time-Lapse Images. MSphere, 2023, 8, .	1.3	0
1257	Effect of Nitrogen Defects on Pt Nanoparticle Dispersion and Stability Studied by Electron Microscopy Paired with Machine Learning Image Processing for Probing Catalystâ€“Support Interactions. ACS Applied Nano Materials, 2023, 6, 5313-5324.	2.4	0
1258	The cell cycle and cell size influence the rates of global cellular translation and transcription in fission yeast. EMBO Journal, 2023, 42, .	3.5	7
1259	Competition between deformation and free volume quantified by 3D image analysis of red blood cell. Biophysical Journal, 2023, , .	0.2	1
1260	Exploiting volume electron microscopy to investigate structural plasticity and stability of the postsynaptic compartment of central synapses. Frontiers in Cellular Neuroscience, 0, 17, .	1.8	0
1263	Cell-specific occupancy dynamics between the pioneer-like factor Opa/ZIC and Ocelliless/OTX regulate early head development in embryos. Frontiers in Cell and Developmental Biology, 0, 11, .	1.8	0
1264	Deep learning-enabled segmentation of ambiguous bioimages with deepflash2. Nature Communications, 2023, 14, .	5.8	3
1265	Airway and Lung Organoids from Human-Induced Pluripotent Stem Cells Can Be Used to Assess CFTR Conductance. International Journal of Molecular Sciences, 2023, 24, 6293.	1.8	3
1266	Predicting Astrocytic Nuclear Morphology with Machine Learning: A Tree Ensemble Classifier Study. Applied Sciences (Switzerland), 2023, 13, 4289.	1.3	0
1267	Decoupling the Contributions of Different Instability Mechanisms to the PEMFC Performance Decay of Non-noble Metal O₂-Reduction Catalysts. Journal of the American Chemical Society, 2023, 145, 7845-7858.	6.6	7
1269	Dendritic effects of genetically encoded actin-labeling probes in cultured hippocampal neurons. Molecular Biology of the Cell, 2023, 34, .	0.9	0
1270	Imaging Approaches and the Quantitative Analysis of Heart Development. Journal of Cardiovascular Development and Disease, 2023, 10, 145.	0.8	2
1271	The Secretome of Parental and Bone Metastatic Breast Cancer Elicits Distinct Effects in Human Osteoclast Activity after Activation of Î²2 Adrenergic Signaling. Biomolecules, 2023, 13, 622.	1.8	1
1272	Three-Dimensional Imaging Analysis for Skeletal Muscle. Methods in Molecular Biology, 2023, , 463-477.	0.4	0
1273	Best practices for single-cell analysis across modalities. Nature Reviews Genetics, 2023, 24, 550-572.	7.7	128
1274	Quantitative chemometric phenotyping of three-dimensional liver organoids by Raman spectral imaging. Cell Reports Methods, 2023, 3, 100440.	1.4	5

#	Article	IF	Citations
1276	Different approaches to Imaging Mass Cytometry data analysis. Bioinformatics Advances, 2023, 3, .	0.9	10
1277	High-throughput spatiotemporal monitoring of single-cell secretions via plasmonic microwell arrays. Nature Biomedical Engineering, 2023, 7, 943-958.	11.6	7
1278	Padlock Probeâ€"Based Targeted In Situ Sequencing: Overview of Methods and Applications. Annual Review of Genomics and Human Genetics, 2023, 24, 133-150.	2.5	1
1279	Genome-Wide Analysis of Hypoxia-Inducible Factor Binding Reveals Targets Implicated in Impaired Human Placental Syncytiotrophoblast Formation under Low Oxygen. American Journal of Pathology, 2023, 193, 846-865.	1.9	1
1281	Plasticity of wheat seedling responses to K+ deficiency highlighted by integrated phenotyping of roots and root hairs over the whole root system. Stress Biology, 2023, 3, .	1.5	1
1282	The receptor kinase FERONIA regulates phosphatidylserine localization at the cell surface to modulate ROP signaling. Science Advances, 2023, 9, .	4.7	10
1283	Applications and Advances of Multicellular Tumor Spheroids: Challenges in Their Development and Analysis. International Journal of Molecular Sciences, 2023, 24, 6949.	1.8	5
1285	Unsupervised Cyclic Siamese Networks Automating Cell Imagery Analysis. Algorithms, 2023, 16, 205.	1.2	0
1286	Lack of CCDC146, a ubiquitous centriole and microtubule-associated protein, leads to non-syndromic male infertility in human and mouse. ELife, 0, 12, .	2.8	0
1287	Lymphocyte networks are dynamic cellular communities in the immunoregulatory landscape of lung adenocarcinoma. Cancer Cell, 2023, 41, 871-886.e10.	7.7	18
1288	Mathematical modeling identifies LAG3 and HAVCR2 as biomarkers of TÂcell exhaustion in melanoma. IScience, 2023, 26, 106666.	1.9	0
1289	Evolution of Creep Damage of 316L produced by Laser Powder Bed Fusion. Advanced Engineering Materials, 0, , .	1.6	0
1291	A Scalable High-Throughput Isoelectric Fractionation Platform for Extracellular Nanocarriers: Comprehensive and Bias-Free Isolation of Ribonucleoproteins from Plasma, Urine, and Saliva. ACS Nano, 2023, 17, 9388-9404.	7.3	3
1292	High-throughput image analysis with deep learning captures heterogeneity and spatial relationships after kidney injury. Scientific Reports, 2023, 13, .	1.6	3
1293	Spatial characterization of tangle-bearing neurons and ghost tangles in the human inferior temporal gyrus with three-dimensional imaging. Brain Communications, 2023, 5, .	1.5	3
1294	Deep machine learning for cell segmentation and quantitative analysis of radial plant growth. Cells and Development, 2023, 174, 203842.	0.7	0
1295	A positive feedback loop controls Toxoplasma chronic differentiation. Nature Microbiology, 2023, 8, 889-904.	5.9	13
1297	Single-cell transcriptomics of a dynamic cell behavior in murine airways. ELife, 0, 12, .	2.8	3

#	Article	IF	Citations
1298	ICAT: a novel algorithm to robustly identify cell states following perturbations in single-cell transcriptomes. Bioinformatics, 2023, 39, .	1.8	1
1327	ShapeMetrics: A 3D Cell Segmentation Pipeline for Single-Cell Spatial Morphometric Analysis. Methods in Molecular Biology, 2023, , 263-273.	0.4	0
1334	Multiplex Immunostaining to Spatially Resolve the Cellular Landscape in Human and Mouse Livers. Methods in Molecular Biology, 2023, , 245-255.	0.4	0
1368	A Close-Up onÂtheÂAI Radiologist Software. Lecture Notes in Computer Science, 2023, , 431-440.	1.0	0
1383	Advanced Computational Methods to Evaluate Vascular Heterogeneity in Tumor Tissue Based on Single Plane Illumination Microscopy. Methods in Molecular Biology, 2023, , 283-294.	0.4	0
1408	BrainLine: An Open Pipeline for Connectivity Analysis of Heterogeneous Whole-Brain Fluorescence Volumes. Neuroinformatics, 0, , .	1.5	0
1414	Multimodal Mass Spectrometry Imaging of an Aggregated 3D Cell Culture Model. Methods in Molecular Biology, 2023, , 147-159.	0.4	0
1419	Towards foundation models of biological image segmentation. Nature Methods, 2023, 20, 953-955.	9.0	9
1450	Advances in Artificial Intelligence for Image Processing. Advances in Computational Intelligence and Robotics Book Series, 2023, , 73-95.	0.4	41
1460	3D Spheroid Invasion Assay for High-Throughput Screening of Small-Molecule Libraries. Methods in Molecular Biology, 2023, , 201-214.	0.4	0
1465	Understanding Artificial Intelligence Through Its Applications and Concerns. Internet of Things, 2023, , 135-152.	1.3	0
1477	Advancing understanding of microbial biofilms through machine learning-powered studies. Food Science and Biotechnology, 2023, 32, 1653-1664.	1.2	1
1484	Bridging live-cell imaging and next-generation cancer treatment. Nature Reviews Cancer, 2023, 23, 731-745.	12.8	6
1502	Image Based Methodologies, Workflows, and Calculation Approaches for Tortuosity. Springer Series in Materials Science, 2023, , 91-159.	0.4	0
1507	Learning to Correct Sloppy Annotations in Electron Microscopy Volumes. , 2023, , .		0
1533	BiaPy: a ready-to-use library for Bioimage Analysis Pipelines. , 2023, , .		2
1571	Masked Image Modeling forÂLabel-Efficient Segmentation inÂTwo-Photon Excitation Microscopy. Lecture Notes in Computer Science, 2023, , 117-127.	1.0	0
1576	Leveraging Self-attention Mechanism inÂVision Transformers forÂUnsupervised Segmentation ofÂOptical Coherence Microscopy White Matter Images. Lecture Notes in Computer Science, 2024, , 247-256.	1.0	0

#	Article	IF	Citations
1584	Airway Cells 3D Reconstruction via Manual and Machine-Learning Aided Segmentation of Volume EM Datasets. Methods in Molecular Biology, 2024, , 131-146.	0.4	0
1597	Utilizing machine learning to expedite the fabrication and biological application of carbon dots. Materials Advances, 2023, 4, 5974-5997.	2.6	2
1614	Decoding the tumor microenvironment with spatial technologies. Nature Immunology, 2023, 24, 1982-1993.	7.0	6
1632	Exploring Optimal Configurations inÂActive Learning forÂMedical Imaging. Lecture Notes in Computer Science, 2023, , 75-88.	1.0	0
1637	A Deep Learning Approach toÂSegment High-Content Images ofÂtheÂE. coli Bacteria. Lecture Notes in Computer Science, 2023, , 184-195.	1.0	0
1648	Droplet-Based Technology for Studying the Phenotypic Effect of Microplastics on Antimicrobial Resistance. , 0, , .		0
1656	AI Visualization in Nanoscale Microscopy. Lecture Notes in Electrical Engineering, 2024, , 707-719.	0.3	0
1658	Analyzing Trophoblast Fusion Using Immunofluorescence and Split Protein Complementation Assays. Methods in Molecular Biology, 2024, , 87-98.	0.4	0
1695	NU-Net: a self-supervised smart filter for enhancing blobs in bioimages. , 2023, , .		0
1706	AI-enhanced biomedical micro/nanorobots in microfluidics. Lab on A Chip, 2024, 24, 1419-1440.	3.1	0
1711	Cell Tracking in C. elegans with Cell Position Heatmap-Based Alignment and Pairwise Detection. , 2023, , .		0
1714	Development ofÂanÂEnd-to-End Web Application forÂVisualization, Evaluation, andÂPost-processing ofÂResult Data fromÂNeural Network Predictions forÂtheÂMelanoma Use Case. Communications in Computer and Information Science, 2024, , 131-144.	0.4	0
1732	NCL-SM: A Fully Annotated Dataset of Images from Human Skeletal Muscle Biopsies. , 2023, , .		1
1760	Multiplex protein imaging in tumour biology. Nature Reviews Cancer, 2024, 24, 171-191.	12.8	1
1778	Grain quality analysis from the image through the approaches of segmentation. AIP Conference Proceedings, 2024, , .	0.3	0
1783	Host-pathogen interactions: databases and approaches for data generation. , 2024, , 15-51.		0
1809	Imaging Mass Cytometry for In Situ Immune Profiling. Methods in Molecular Biology, 2024, , 407-423.	0.4	0
1811	Semiautomatic assessment of immunofluorescence microscopy on blood smears in inherited platelet disorders using artificial intelligence: a proof of concept.. Hamostaseologie, 2024, , .	0.9	0

#	Article	IF	Citations
1817	Single-Molecule Fluorescent In Situ Hybridization (smFISH) for RNA Detection in Bacteria. Methods in Molecular Biology, 2024, , 3-23.	0.4	0