

Stereo-seq Article List (August 2026)

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No.	Epub	Title	Journal	IF	DOI	App. Area
1	2021-08-02	Identification of HSC/MPP expansion units in fetal liver by single-cell spatiotemporal transcriptomics	Cell Research	28.1	10.1038/s41422-021-00540-7	Regenerative Medicine
2	2022-01-26	Clinical challenges of tissue preparation for spatial transcriptome	Clinical and Translational Medicine	7.9	10.1002/ctm2.669	Bioinformatics Tools
3	2022-03-09	Spatial Transcriptome Uncovers the Mouse Lung Architectures and Functions	Frontiers in Genetics	2.8	10.3389/fgene.2022.858808	Growth and Development
4	2022-03-15	Spatial transcriptome unveils a discontinuous inflammatory pattern in proficient mismatch repair colorectal adenocarcinoma	Fundamental Research	5.7	10.1016/j.fmre.2022.01.036	Disease Research / Malignant Tumors
5	2022-04-01	Deciphering spatial domains from spatially resolved transcriptomics with an adaptive graph attention auto-encoder	Nature Communications	14.7	10.1038/s41467-022-29439-6	Bioinformatics Tools
6	2022-05-04	Spatiotemporal transcriptomic atlas of mouse organogenesis using DNA nanoball-patterned arrays	Cell	45.5	10.1016/j.cell.2022.04.003	Growth and Development
7	2022-05-04	Spatiotemporal mapping of gene expression landscapes and developmental trajectories during zebrafish embryogenesis	Developmental Cell	10.7	10.1016/j.devcel.2022.04.009	Growth and Development
8	2022-05-04	High-resolution 3D spatiotemporal transcriptomic maps of developing Drosophila embryos and larvae	Developmental Cell	10.7	10.1016/j.devcel.2022.04.006	Growth and Development
9	2022-05-04	The single-cell stereo-seq reveals region-specific cell subtypes and transcriptome profiling in Arabidopsis leaves	Developmental Cell	10.7	10.1016/j.devcel.2022.04.011	Growth and Development
10	2022-05-17	A Cellular Resolution Spatial Transcriptomic Landscape of the Medial Structures in Postnatal Mouse Brain	Frontiers in Cell and Developmental Biology	4.6	10.3389/fcell.2022.878346	Other Studies
11	2022-07-06	Spatial transcriptome analysis on peanut tissues shed light on cell heterogeneity of the peg	Plant Biotechnology Journal	10.1	10.1111/pbi.13884	Growth and Development
12	2022-08-19	Single-nucleus RNA sequencing and spatial transcriptomics reveal the immunological microenvironment of cervical squamous cell carcinoma	Advanced Science	14.3	10.1002/advs.202203040	Disease Research / Malignant Tumors
13	2022-09-02	Single-cell Stereo-seq reveals induced progenitor cells involved in axolotl brain regeneration	Science	44.7	10.1126/science.abp9444	Regenerative Medicine
14	2022-09-21	A cellular hierarchy in melanoma uncouples growth and metastasis	Nature	50.5	10.1038/s41586-022-05242-7	Disease Research / Malignant Tumors
15	2022-11-08	Spatially resolved gene regulatory and disease-related vulnerability map of the adult Macaque cortex	Nature Communications	14.7	10.1038/s41467-022-34413-3	Disease Research / Non-cancerous Di...
16	2022-12-06	Resolving the gene expression maps of human first-trimester chorionic villi with spatial transcriptome	Frontiers in Cell and Developmental Biology	4.6	10.3389/fcell.2022.1060298	Growth and Development
17	2022-12-10	Spatial-ID: a cell typing method for spatially resolved transcriptomics via transfer learning and spatial embedding	Nature Communications	14.7	10.1038/s41467-022-35288-0	Bioinformatics Tools
18	2023-01-09	Implantation underneath the abdominal anterior rectus sheath enables effective and functional engraftment of stem-cell-derived islets	Nature Metabolism	18.9	10.1038/s42255-022-00713-7	Regenerative Medicine
19	2023-02-01	Developmental deficits of MGE-derived interneurons in the Cntnap2 knockout mouse model of autism spectrum disorder	Frontiers in Cell and Developmental Biology	4.6	10.3389/fcell.2023.1112062	Disease Research / Non-cancerous Di...

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20	2023-03-01	Spatially informed clustering, integration, and deconvolution of spatial transcriptomics with GraphST	Nature Communications	14.7	10.1038/s41467-023-36796-3	Bioinformatics Tools
21	2023-03-16	A single-cell transcriptome atlas profiles early organogenesis in human embryos	Nature Cell Biology	17.3	10.1038/s41556-023-01108-w	Growth and Development
22	2023-04-11	VT3D: a visualization toolbox for 3D transcriptomic data	Journal of Genetics and Genomics	6.6	10.1016/j.jgg.2023.04.001	Bioinformatics Tools
23	2023-04-13	Integrated single-nucleus and spatial transcriptomics captures transitional states in soybean nodule maturation	Nature Plants	15.8	10.1038/s41477-023-01387-z	Growth and Development
24	2023-05-06	Microbiota-mediated shaping of mouse spleen structure and immune function characterized by scRNA-seq and stereo-seq	Journal of Genetics and Genomics	6.6	10.1016/j.jgg.2023.04.012	Other Studies
25	2023-05-24	STellaris: a web server for accurate spatial mapping of single cells based on spatial transcriptomics data	Nucleic Acids Research	16.6	10.1093/nar/gkad419	Bioinformatics Tools
26	2023-06-19	An invasive zone in human liver cancer identified by Stereo-seq promotes hepatocyte-tumor cell crosstalk, local immunosuppression and tumor progression	Cell Research	28.1	10.1038/s41422-023-00831-1	Disease Research / Malignant Tumors
27	2023-06-30	Single-cell and spatiotemporal transcriptomic analyses reveal the effects of microorganisms on immunity and metabolism in the mouse liver	Computational and Structural Biotechnology Journal	4.4	10.1016/j.csbj.2023.06.020	Other Studies
28	2023-07-12	Single-cell spatial transcriptome reveals cell-type organization in the macaque cortex	Cell	45.5	10.1016/j.cell.2023.06.009	Other Studies
29	2023-07-13	Single-cell chromatin accessibility profiling of cell-state-specific gene regulatory programs during mouse organogenesis	Frontiers in neuroscience	3.2	10.3389/fnins.2023.1170355	Growth and Development
30	2023-08-08	Partial alignment of multislice spatially resolved transcriptomics data	Genome Research	6.2	10.1101/gr.277670.123	Bioinformatics Tools
31	2023-08-26	Clonal dynamics and Stereo-seq resolve origin and phenotypic plasticity of adenocarcinoma	NPJ Precision Oncology	6.8	10.1038/s41698-023-00430-8	Disease Research / Malignant Tumors
32	2023-09-11	Spatiotemporal insight into early pregnancy governed by immune-featured stromal cells	Cell	45.5	10.1016/j.cell.2023.08.020	Other Studies
33	2023-09-12	Single-cell RNA sequencing reveals cellular and molecular heterogeneity in fibrocartilaginous enthesis formation	Elife	6.4	10.7554/eLife.85873	Growth and Development
34	2023-09-13	Spatial transcriptomics reveals light-induced chlorenchyma cells involved in promoting shoot regeneration in tomato callus	Proceedings of the National Academy of Sciences of the Unite...	9.4	10.1073/pnas.2310163120	Growth and Development
35	2023-09-15	Cellular atlases of ovarian microenvironment alterations by diet and genetically-induced obesity	Science China-Life Sciences	8	10.1007/s11427-023-2360-3	Other Studies
36	2023-10-17	Cancer-associated fibroblasts undergoing neoadjuvant chemotherapy suppress rectal cancer revealed by single-cell and spatial transcriptomics	Cell Reports Medicine	11.7	10.1016/j.xcrm.2023.101231	Disease Research / Malignant Tumors
37	2023-10-31	1512 Single-cell resolution spatial transcriptomics detection of pathogens followed by studying the immune milieu: using virus-associated cancers from different organs as paradigm	Journal for ImmunoTherapy of Cancer	10.6	10.1136/jitc-2023-SITC2023.1512	Disease Research / Malignant Tumors
38	2023-11-03	Adrenomedullin has a pivotal role in trophoblast differentiation: A promising nanotechnology-based therapeutic target for early-onset preeclampsia	Science Advances	11.7	10.1126/sciadv.adi4777	Other Studies
39	2023-11-06	Chromosome-level genomes of three key Allium crops and their trait evolution	Nature Genetics	31.7	10.1038/s41588-023-01546-0	Growth and Development
40	2023-11-11	STOmicsDB: a comprehensive database for spatial transcriptomics data sharing, analysis and visualization	Nucleic Acids Research	16.6	10.1093/nar/gkad933	Other Studies

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41	2023-11-17	Cellular and molecular mechanisms of fibrosis and resolution in bleomycin-induced pulmonary fibrosis mouse model revealed by spatial transcriptome analysis	Heliyon	3.4	10.1016/j.heliyon.2023.e22461	Disease Research / Non-cancerous Di...
42	2023-11-21	Multiomic analysis of cervical squamous cell carcinoma identifies cellular ecosystems with biological and clinical relevance	Nature Genetics	31.7	10.1038/s41588-023-01570-0	Disease Research / Malignant Tumors
43	2023-11-28	Dbh+ catecholaminergic cardiomyocytes contribute to the structure and function of the cardiac conduction system in murine heart	Nature Communications	14.7	10.1038/s41467-023-42658-9	Growth and Development
44	2023-12-12	Spatiotemporal transcriptome atlas reveals the regional specification of the developing human brain	Cell	45.5	10.1016/j.cell.2023.11.016	Other Studies
45	2023-12-15	The spatial transcriptomic landscape of human gingiva in health and periodontitis	Science China-Life Sciences	8	10.1007/s11427-023-2467-1	Disease Research / Non-cancerous Di...
46	2023-12-19	Single-cell and spatial transcriptomics reveal POSTN+ cancer-associated fibroblasts correlated with immune suppression and tumour progression in non-small cell lung cancer	Clinical and Translational Medicine	7.9	10.1002/ctm2.1515	Disease Research / Malignant Tumors
47	2024-01-02	Presence of onco-fetal neighborhoods in hepatocellular carcinoma is associated with relapse and response to immunotherapy	Nature Cancer	23.5	10.1038/s43018-023-00672-2	Disease Research / Malignant Tumors
48	2024-01-03	Single-cell landscape of idiopathic multicentric castleman disease in identical twins	Blood	21	10.1182/blood.2023021992	Disease Research / Non-cancerous Di...
49	2024-01-05	MENDER: fast and scalable tissue structure identification in spatial omics data	Nature Communications	14.7	10.1038/s41467-023-44367-9	Bioinformatics Tools
50	2024-02-02	Whole-brain spatial organization of hippocampal single-neuron projectomes	Science	44.7	10.1126/science.adj9198	Other Studies
51	2024-02-06	Region-specific transcriptomic responses to obesity and diabetes in macaque hypothalamus	Cell Metabolism	27.7	10.1016/j.cmet.2024.01.003	Disease Research / Non-cancerous Di...
52	2024-02-12	Spatiotemporal transcriptomic atlas of rhizome formation in <i>Oryza longistaminata</i>	Plant Biotechnology Journal	10.1	10.1111/pbi.14294	Growth and Development
53	2024-02-12	High-robustness autofocusing method in the microscope with laser-based arrayed spots	Optics Express	3.2	10.1364/OE.510835	Spatio-temporal Technology
54	2024-02-16	Effects of flora deficiency on the structure and function of the large intestine	iScience	4.6	10.1016/j.isci.2024.108941	Disease Research / Non-cancerous Di...
55	2024-02-16	Spatial and single-nucleus transcriptomics decoding the molecular landscape and cellular organization of avian optic tectum	iScience	4.6	10.1016/j.isci.2024.109009	Other Studies
56	2024-02-20	SAW: an efficient and accurate data analysis workflow for Stereo-seq spatial transcriptomics	Gigabyte	1.2	10.46471/gigabyte.111	Bioinformatics Tools
57	2024-02-20	Generating single-cell gene expression profiles for high-resolution spatial transcriptomics based on cell boundary images	Gigabyte	1.2	10.46471/gigabyte.110	Bioinformatics Tools
58	2024-02-20	Molecular, Metabolic, and Subcellular Mapping of the Tumor Immune Microenvironment via 3D Targeted and Non-Targeted Multiplex Multi-Omics Analyses	Cancers	4.5	10.3390/cancers16050846	Disease Research / Malignant Tumors
59	2024-02-21	Single-cell spatial transcriptomic and translomic profiling of dopaminergic neurons in health, aging, and disease	Cell Reports	7.5	10.1016/j.celrep.2024.113784	Other Studies

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60	2024-02-26	Single-cell multi-omics analysis of lineage development and spatial organization in the human fetal cerebellum	Cell Discovery	13	10.1038/s41421-024-00656-1	Growth and Development
61	2024-03-29	Spatially resolved single-cell atlas of ascidian endostyle provides insight into the origin of vertebrate pharyngeal organs	Science Advances	11.7	10.1126/sciadv.adi9035	Biological Evolution
62	2024-04-08	DAIS: a method for identifying spatial domains based on density clustering of spatial omics data	Journal of Genetics and Genomics	6.6	10.1016/j.jgg.2024.04.002	Bioinformatics Tools
63	2024-04-15	Spatiotemporal Evolution of Developing Palate in Mice	Journal of Dental Research	5.7	10.1177/00220345241232317	Growth and Development
64	2024-04-16	A spatiotemporal atlas of mouse liver homeostasis and regeneration	Nature Genetics	31.7	10.1038/s41588-024-01709-7	Regenerative Medicine
65	2024-04-16	A spatiotemporal atlas of cholestatic injury and repair in mice	Nature Genetics	31.7	10.1038/s41588-024-01687-w	Regenerative Medicine
66	2024-04-23	3D reconstruction of a gastrulating human embryo	Cell	45.5	10.1016/j.cell.2024.03.041	Growth and Development
67	2024-04-25	Analysis of synthetic cellular barcodes in the genome and transcriptome with BARTab and bartools	Cell Reports Methods	4.3	10.1016/j.crmeth.2024.100763	Bioinformatics Tools
68	2024-05-14	A spatial transcriptome map of the developing maize ear	Nature Plants	15.8	10.1038/s41477-024-01683-2	Growth and Development
69	2024-05-18	Spatially resolved transcriptomic profiling of placental development in dairy cow	Zoological Research	4	10.24272/j.issn.2095-8137.2023.205	Other Studies
70	2024-05-25	Benchmarking mapping algorithms for cell-type annotating in mouse brain by integrating single-nucleus RNA-seq and Stereo-seq data	Briefings in Bioinformatics	9.5	10.1093/bib/bbae250	Bioinformatics Tools
71	2024-06-06	Spatiotemporal transcriptomic landscape of rice embryonic cells during seed germination	Developmental Cell	10.7	10.1016/j.devcel.2024.05.016	Growth and Development
72	2024-06-19	Multiscale topology classifies cells in subcellular spatial transcriptomics	Nature	50.5	10.1038/s41586-024-07563-1	Bioinformatics Tools
73	2024-06-21	Deciphering spatial domains from spatial multi-omics with SpatialGlue	Nature Methods	36.1	10.1038/s41592-024-02316-4	Bioinformatics Tools
74	2024-06-22	Dentate Gyrus Morphogenesis is Regulated by an Autism Risk Gene Trio Function in Granule Cells	Neuroscience Bulletin	5.9	10.1007/s12264-024-01241-y	Disease Research / Non-cancerous Di...
75	2024-06-25	Microglia-astrocyte crosstalk in the amyloid plaque niche of an Alzheimer's disease mouse model, as revealed by spatial transcriptomics	Cell Reports	7.5	10.1016/j.celrep.2024.114216	Disease Research / Non-cancerous Di...
76	2024-07-03	Integrating single-nucleus RNA sequencing and spatial transcriptomics to elucidate a specialized subpopulation of astrocytes, microglia and vascular cells in brains of mouse model of lipopolysaccharid...	Journal of Neuroinflammation	9.3	10.1186/s12974-024-03161-0	Disease Research / Non-cancerous Di...
77	2024-07-13	Astrocytic Neuroligin-3 influences gene expression and social behavior, but is dispensable for synapse number	Molecular Psychiatry	9.6	10.1038/s41380-024-02659-6	Other Studies
78	2024-07-19	spatiAlign: an unsupervised contrastive learning model for data integration of spatially resolved transcriptomics	GigaScience	11.8	10.1093/gigascience/giae042	Bioinformatics Tools
79	2024-07-29	Maternal age enhances purifying selection on pathogenic mutations in complex I genes of mammalian mtDNA	Nature Aging	17	10.1038/s43587-024-00672-6	Other Studies
80	2024-07-29	Mapping the molecular landscape of Lotus japonicus nodule organogenesis through spatiotemporal transcriptomics	Nature Communications	14.7	10.1038/s41467-024-50737-8	Growth and Development

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81	2024-08-02	Spatial transcriptome reveals the region-specific genes and pathways regulated by Satb2 in neocortical development	BMC Genomics	3.5	10.1186/s12864-024-10672-w	Growth and Development
82	2024-08-12	CCL19-producing fibroblasts promote tertiary lymphoid structure formation enhancing anti-tumor IgG response in colorectal cancer liver metastasis	Cancer Cell	48.8	10.1016/j.ccell.2024.07.006	Disease Research / Malignant Tumors
83	2024-09-05	Cross-Species Insights into Trophoblast Invasion During Placentation Governed by Immune-Featured Trophoblast Cells	Advanced Science	14.3	10.1002/adv.202407221	Disease Research / Non-cancerous Di...
84	2024-09-25	Chronic lung inflammation and CK14+ basal cell proliferation induce persistent alveolar-bronchiolization in SARS-CoV-2-infected hamsters	EBioMedicine	9.7	10.1016/j.ebiom.2024.105363	Disease Research / Non-cancerous Di...
85	2024-09-27	Cross-species single-cell spatial transcriptomic atlases of the cerebellar cortex	Science	44.7	10.1126/science.ado3927	Other Studies
86	2024-10-07	SpotGF: Denoising spatially resolved transcriptomics data using an optimal transport-based gene filtering algorithm	Cell Systems	9	10.1016/j.cels.2024.09.005	Bioinformatics Tools
87	2024-10-16	Single-cell spatiotemporal analysis of the lungs reveals Slamf9+ macrophages involved in viral clearance and inflammation resolution	Cell Discovery	13	10.1038/s41421-024-00734-4	Disease Research / Non-cancerous Di...
88	2024-10-16	Single-cell spatiotemporal analysis reveals alveolar dendritic cell-T cell immunity hubs defending against pulmonary infection	Cell Discovery	13	10.1038/s41421-024-00733-5	Disease Research / Non-cancerous Di...
89	2024-10-17	Profiling the cell diversity and tissue structure of aqueous humor circulatory system in human eyes using spatial single-cell RNA sequencing	Genes & Diseases	6.9	10.1016/j.gendis.2024.101304	Disease Research / Non-cancerous Di...
90	2024-10-22	A spatiotemporal transcriptomic atlas of mouse placentation	Cell Discovery	13	10.1038/s41421-024-00740-6	Other Studies
91	2024-11-04	Spatial Transcriptomic Landscape Unveils Immunoglobulin-associated Senescence as a Hallmark of Aging	Cell	45.5	10.1016/j.cell.2024.10.019	Other Studies
92	2024-11-05	172 The application of single-cell resolved spatial transcriptomics to prostate adenocarcinoma reveals tumor microenvironmental signatures that correlate with distinct histological features	Journal for ImmunoTherapy of Cancer	10.6	10.1136/jitc-2024-SITC2024.0172	Disease Research / Malignant Tumors
93	2024-11-05	Combined CAR-M and T cell therapy to remodel TGFbeta-rich solid tumors	Journal for ImmunoTherapy of Cancer	10.6	10.1136/jitc-2024-SITC2024.1144	Disease Research / Malignant Tumors
94	2024-11-05	Clinical Features of Cutaneous T-Cell Lymphoma and the Application of Anti-PD-1 Antibodies in Relapsed /Refractory Patients	Blood	23.1	10.1182/blood-2024-207103	Disease Research / Malignant Tumors
95	2024-11-06	Tracing the evolutionary and genetic footprints of atmospheric tillandsioids transition from land to air	Nature Communications	14.7	10.1038/s41467-024-53756-7	Biological Evolution
96	2024-11-11	Spatiotemporal modeling of molecular holograms	Cell	45.5	10.1016/j.cell.2024.10.011	Bioinformatics Tools
97	2024-11-12	Lamination-based organoid spatially resolved transcriptomics technique for primary lung and liver organoid characterization	PNAS	9.8	10.1073/pnas.2408939121	Spatial Transcriptomics Technology
98	2024-11-12	Local ablation disrupts immune evasion in pancreatic cancer	Cancer Letters	9.1	10.1016/j.canlet.2024.217327	Disease Research / Malignant Tumors
99	2024-11-15	Unveiling intratumoral heterogeneity in high-risk cutaneous squamous cell carcinoma using single-cell spatial enhanced resolution omics-sequencing (Stereo-seq)	Journal of Dermatological Science	3.8	10.1016/j.jdermsci.2024.11.001	Disease Research / Malignant Tumors

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100	2024-11-21	Multitranscriptome analysis revealed that stromal cells in the papillary dermis promote angiogenesis in psoriasis vulgaris	British Journal of Dermatology	11	10.1093/bjd/ljae459	Disease Research / Malignant Tumors
101	2024-11-26	Spatially organized tumor-stroma boundary determines the efficacy of immunotherapy in colorectal cancer patients	Nature Communications	14.7	10.1038/s41467-024-54710-3	Disease Research / Malignant Tumors
102	2024-12-31	Spatial transcriptomics reveals unique metabolic profile and key oncogenic regulators of cervical squamous cell carcinoma	Journal of Translational Medicine	6.1	10.1186/s12967-024-06011-y	Disease Research / Malignant Tumors
103	2025-01-07	Antibody-based delivery of interleukin-2 modulates the immunosuppressive tumor microenvironment and achieves cure in pancreatic ductal adenocarcinoma syngeneic mice	Journal of Experimental & Clinical Cancer Research	11.4	10.1186/s13046-024-03238-x	Disease Research / Malignant Tumors
104	2025-01-08	Stereo-seq of the prefrontal cortex in aging and Alzheimer's disease	Nature Communications	14.7	10.1038/s41467-024-54715-y	Disease Research / Malignant Tumors
105	2025-01-09	Mapping spatially-resolved transcriptomes in systemic sclerosis	Annals of the Rheumatic Diseases	20.6	10.1101/2025.01.14.632962	Disease Research / Non-cancerous Di...
106	2025-01-09	Spatially Resolved Tumor Ecosystems and Cell States in Gastric Adenocarcinoma Progression and Evolution	Cancer Discov	29.7	10.1158/2159-8290.CD-24-0605	Disease Research / Malignant Tumors
107	2025-01-10	Spatial transcriptomic characterization of a Carnegie stage 7 human embryo	Nat Cell Biol	17.3	10.1038/s41556-024-01597-3	Growth and Development
108	2025-01-15	Spatially resolved transcriptomics reveals gene expression characteristics in uveal melanoma	Holistic Integrative Oncology	5.7	10.3389/fimmu.2024.1522582	Disease Research / Malignant Tumors
109	2025-01-21	High cellular plasticity state of medulloblastoma local recurrence and distant dissemination	Cell Reports Medicine	11.7	10.1016/j.xcrm.2024.101914	Disease Research / Malignant Tumors
110	2025-01-21	Comprehensive single-cell atlas of colorectal neuroendocrine tumors with liver metastases: unraveling tumor microenvironment heterogeneity between primary lesions and metastases	Molecular Cancer	27.7	10.1186/s12943-025-02231-y	Disease Research / Malignant Tumors
111	2025-01-28	Stromal architecture and fibroblast subpopulations with opposing effects on outcomes in hepatocellular carcinoma	Cell Discovery	13	10.1038/s41421-024-00747-z	Disease Research / Malignant Tumors
112	2025-01-28	Spatial and Single Cell Analyses Reveal Heterogeneity of DNAM-1 Receptor-Ligand Interactions that Instructs Intratumoral γδT-Cell Activity	Cancer Research	12.5	10.1158/0008-5472.CAN-24-1509	Disease Research / Malignant Tumors
113	2025-02-01	A single-cell and spatial wheat root atlas with cross-species annotations delineates conserved tissue-specific marker genes and regulators	Cell Rep	7.5	10.1016/j.celrep.2025.115240	Other Studies
114	2025-02-03	Inferring cell trajectories of spatial transcriptomics via optimal transport analysis	Cell Systems	9	10.1016/j.cels.2025.101194	Bioinformatics Tools
115	2025-02-03	Cloned airway basal progenitor cells to repair fibrotic lung through re-epithelialization	Nature Communications	14.7	10.1038/s41467-025-56501-w	Disease Research / Non-cancerous Di...
116	2025-02-10	Spatiotemporal transcriptomics elucidates the pathogenesis of fulminant viral myocarditis	Signal Transduction and Targeted Therapy	40.8	10.1038/s41392-025-02143-9	Disease Research / Non-cancerous Di...
117	2025-02-14	Human Pituitary Organoids: Transcriptional Landscape Deciphered by scRNA-Seq and Stereo-Seq, with Insights into SOX3's Role in Pituitary Development	Advanced Science	14.3	10.1002/advs.202414230	Other Studies
118	2025-02-14	Cross-tissue multi-omics analyses reveal the gut microbiota's absence impacts organ morphology, immune homeostasis, bile acid and lipid metabolism	iMeta	23.7	10.1002/imt2.272	Other Studies

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119	2025-02-18	A large-scale integrated transcriptomic atlas for soybean organ development	Molecular Plant	17.1	10.1016/j.molp.2025.02.003	Growth and Development
120	2025-02-27	Single-nucleus profiling decoding the subcortical visual pathway evolution of vertebrates	iScience	4.6	10.1016/j.isci.2025.112128	Biological Evolution
121	2025-03-01	Integrative single-cell and spatial transcriptome analysis reveals heterogeneity of human liver progenitor cells	Hepatology Communications	5.6	10.1097/HC9.0000000000000662	Regenerative Medicine
122	2025-03-17	An atlas of early human mandibular endochondral and osteogenic paracrine signaling regions of Meckel's cartilage	PNAS	9.1	10.1073/pnas.2420466122	Growth and Development
123	2025-03-19	Spatially resolved mapping of cells associated with human complex traits	Nature	50.5	10.1038/s41586-025-08757-x	Bioinformatics Tools
124	2025-03-20	Single-cell profiling of the human endometrium in polycystic ovary syndrome	Nature Medicine	50	10.1038/s41591-025-03592-z	Disease Research / Non-cancerous Di...
125	2025-03-23	Single-cell spatial transcriptomic atlas of the whole mouse brain	Neuron	14.7	10.1016/j.neuron.2025.02.015	Other Studies
126	2025-03-26	Molecular pathways and diagnosis in spatially resolved Alzheimer's hippocampal atlas	Neuron	14.7	10.1016/j.neuron.2025.03.002	Disease Research / Non-cancerous Di...
127	2025-04-01	Developmental innovation of inferior ovaries and flower sex orchestrated by KNOX1 in cucurbits	Nature Plants	15.8	10.1038/s41477-025-01950-w	Growth and Development
128	2025-04-03	Spatial transcriptomics reveals tryptophan metabolism restricting maturation of intratumoral tertiary lymphoid structures	Cancer Cell	48.8	10.1016/j.ccell.2025.03.011	Disease Research / Malignant Tumors
129	2025-04-03	Single-cell spatial transcriptome atlas and whole-brain connectivity of the macaque claustrum	Cell	45.5	10.1016/j.cell.2025.02.037	Other Studies
130	2025-04-03	Morphogenic, molecular and cellular adaptations for unidirectional airflow in the chicken lung	Development	3.7	10.1242/dev.204346	Growth and Development
131	2025-04-06	Comparative spatial transcriptomics reveals root dryland adaptation mechanism in rice and HMGB1 as a key regulator	Molecular Plant	17.1	10.1016/j.molp.2025.04.001	Growth and Development
132	2025-04-08	Single-nucleus and spatial transcriptomics identify brain landscape of gene regulatory networks associated with behavioral maturation in honeybees	Nature Communications	14.7	10.1038/s41467-025-58614-8	Other Studies
133	2025-04-08	Transcriptional conservation and evolutionary divergence of cell types across mammalian hypothalamus development	Developmental Cell	10.7	10.1016/j.devcel.2025.03.009	Biological Evolution
134	2025-04-09	Spatially resolved atlas of breast cancer uncovers intercellular machinery of venular niche governing lymphocyte extravasation	Nature Communications	14.7	10.1038/s41467-025-58511-0	Disease Research / Malignant Tumors
135	2025-04-11	An Arabidopsis single-nucleus atlas decodes leaf senescence and nutrient allocation	Cell	45.5	10.1016/j.cell.2025.03.024	Growth and Development
136	2025-04-21	Spatial patterns of APOBEC mutagenesis in the tumor microenvironment of Asian breast cancer	Cancer Research	16.6	10.1158/1538-7445.AM2025-151	Disease Research / Malignant Tumors
137	2025-04-21	Mapping the tumor microenvironment at single-cell resolution with Stereo-seq v1.3	Cancer Research	16.6	10.1158/1538-7445.AM2025-5302	Disease Research / Malignant Tumors
138	2025-04-16	SpaGRN: investigating spatially informed regulatory paths for spatially resolved transcriptomics data	Cell Systems	9	10.1016/j.cels.2025.101243	Bioinformatics Tools
139	2025-04-17	Fast analysis of Spatial Transcriptomics (FaST): an ultra lightweight and fast pipeline for the analysis of high resolution spatial transcriptomics	NAR Genomics and Bioinformatics	4	10.1093/nargab/lqaf044	Bioinformatics Tools

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140	2025-04-19	An Organ-wide Spatiotemporal Transcriptomic and Cellular Atlas of the Regenerating Zebrafish Heart	Nature Communications	14.7	10.1038/s41467-025-59070-0	Regenerative Medicine
141	2025-04-21	Stereopy: modeling comparative and spatiotemporal cellular heterogeneity via multi-sample spatial transcriptomics	Nature Communications	14.7	10.1038/s41467-025-58079-9	Bioinformatics Tools
142	2025-04-22	Dissecting multilayer cell-cell communications with signaling feedback loops from spatial transcriptomics data	Genome Res	6.2	10.1101/gr.279857.124	Bioinformatics Tools
143	2025-04-23	Single-cell multiome reveals root hair-specific responses to salt stress	New Phytologist	8.3	10.1111/nph.70160	Other Studies
144	2025-04-23	Psychedelic control of neuroimmune interactions governing fear	Nature	48.5	10.1038/s41586-025-08880-9	Disease Research / Non-cancerous Di...
145	2025-04-27	Single-nucleus RNA sequencing and spatial transcriptomics reveal the mechanism by which Xiaozhiling injection treats internal hemorrhoids	World J Gastrointest Surg	1.8	10.4240/wjgs.v17.i4.103494	Disease Research / Non-cancerous Di...
146	2025-04-28	Single-cell spatial transcriptomics of tertiary lymphoid organ-like structures in human atherosclerotic plaques	Nature Cardiovascular Research	9.4	10.1038/s44161-025-00639-9	Disease Research / Non-cancerous Di...
147	2025-04-29	Tri-omic single-cell mapping of the 3D epigenome and transcriptome in whole mouse brains throughout the lifespan	Nature Methods	36.1	10.1038/s41592-025-02658-7	Single-cell technology
148	2025-05-03	Primary cilia in growth plates orchestrate long bone development	Fundamental Research	5.7	10.1016/j.fmre.2025.04.014	Growth and Development
149	2025-05-05	Quasi-spatial single-cell transcriptome based on physical tissue properties defines early aging associated niche in liver	Nature Aging	17	10.1038/s43587-025-00857-7	Other Studies
150	2025-05-08	3D reconstruction of a human Carnegie stage 9 embryo provides a snapshot of early body plan formation	Cell Stem Cell	19.8	10.1016/j.stem.2025.04.007	Growth and Development
151	2025-05-13	Genomic evolution reshapes cell-type diversification in the amniote brain	Developmental Cell	10.7	10.1016/j.devcel.2025.04.014	Biological Evolution
152	2025-05-13	DDX24 spatiotemporally orchestrates VEGF and Wnt signaling during developmental angiogenesis	Proc Natl Acad Sci U S A	9.4	10.1073/pnas.2417445122	Growth and Development
153	2025-05-15	Spatiotemporal Transcriptomic Profiling Reveals the Dynamic Immunological Landscape of Alveolar Echinococcosis	Advanced Science	14.3	10.1002/advs.202405914	Disease Research / Non-cancerous Di...
154	2025-05-19	Spatiotemporal single-cell analysis elucidates the cellular and molecular dynamics of human cornea aging	Genome Medicine	10.4	10.1186/s13073-025-01475-z	Other Studies
155	2025-05-19	Integrating Spatial and Single-Nucleus Transcriptomic Data to Assess the Effects of Intrauterine Hyperglycemia on Fetal Pancreatic Development	Advanced Science	14.3	10.1002/advs.202411126	Disease Research / Non-cancerous Di...
156	2025-05-20	Targeting mitochondrial complex I of CD177+ neutrophils alleviates lung ischemia-reperfusion injury	Cell Reports Medicine	11.7	10.1016/j.xcrm.2025.102140	Other Studies
157	2025-05-22	Spatial multiomics decipher fibroblast-macrophage dynamics in systemic sclerosis	Annals of the Rheumatic Diseases	20.3	10.1016/j.ard.2025.04.025	Disease Research / Non-cancerous Di...
158	2025-05-23	Spatiotemporal transcriptomic maps of mouse intracerebral hemorrhage at single-cell resolution	Neuron	14.7	10.1016/j.neuron.2025.04.026	Disease Research / Non-cancerous Di...
159	2025-05-23	StereoMM: a graph fusion model for integrating spatial transcriptomic data and pathological images	Briefings in Bioinformatics	6.8	10.1093/bib/bbaf210	Bioinformatics Tools
160	2025-05-28	Using longitudinal spatial-omics to demonstrate in-situ Epstein-Barr virus reduction in responders to immunotherapy treated nasopharyngeal cancer	Journal of Clinical Oncology	41.9	10.1200/JCO.2025.43.16_suppl.6025	Disease Research / Malignant Tumors

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161	2025-05-28	Decoding spatial transcriptomics-based heterogeneity of TME in early-stage invasive pulmonary adenocarcinoma	Journal of Clinical Oncology	41.9	10.1200/JCO.2025.43.16_suppl.e20030	Disease Research / Malignant Tumors
162	2025-05-29	High-Resolution Spatial Map of the Human Facial Sebaceous Gland Reveals Marker Genes and Decodes Sebocyte Differentiation	Journal of Investigative Dermatology	5.7	10.1016/j.jid.2025.04.041	Other Studies
163	2025-06-05	Single-Cell and Spatial Transcriptomic Profiling of Penile Squamous Cell Carcinoma Reveals Dynamics of Tumor Differentiation and Immune Microenvironment	Advanced Science	14.3	10.1002/advs.202500216	Disease Research / Malignant Tumors
164	2025-06-10	Spatial Transcriptomics Unveils the Blueprint of Mammalian Lung Development	Genomics Proteomics Bioinformatics	11.5	10.1093/gpbjnl/qzaf053	Growth and Development
165	2025-06-18	Digital reconstruction of full embryos during early mouse organogenesis	Cell	45.5	10.1016/j.cell.2025.05.035	Growth and Development
166	2025-06-26	A Drosophila single-cell 3D spatiotemporal multi-omics atlas unveils panoramic key regulators of cell-type differentiation	Cell	45.5	10.1016/j.cell.2025.05.047	Growth and Development
167	2025-06-27	Reactivation of mammalian regeneration by turning on an evolutionarily disabled genetic switch	Science	44.7	10.1126/science.adp0176	Regenerative Medicine
168	2025-06-27	Single-cell spatial transcriptomics reveals pathogenic mechanism of renal fibrosis in imiquimod-induced lupus nephritis in mice	Biochemistry and Biophysics Reports	2.2	10.1016/j.bbrep.2025.102087	Disease Research / Non-cancerous Di...
169	2025-06-27	Age-dependent accumulation of mitochondrial tRNA mutations in mouse kidneys linked to mitochondrial kidney diseases	Nature Aging	19.4	10.1038/s43587-025-00909-y	Disease Research / Non-cancerous Di...
170	2025-07-22	Integrative Single-Cell Analysis Reveals Iron Overload-Induced Senescence and Metabolic Reprogramming in Ovarian Endometriosis-Associated Infertility	Advanced Science	14.3	10.1002/advs.202417528	Disease Research / Non-cancerous Di...
171	2025-08-14	Globotriaosylceramide Gb3 Influences Wound Healing and Scar Formation by Orchestrating Fibroblast Heterogeneity	Advanced Science	14.3	10.1002/advs.202509733	Other Studies
172	2025-08-19	Charting the spatial transcriptome of the human cerebral cortex at single-cell resolution	Nature Communications	14.7	10.1038/s41467-025-62793-9	Other Studies
173	2025-08-21	Stereo-cell: Spatial enhanced-resolution single-cell sequencing with high-density DNA nanoball-patterned arrays	Science	44.7	10.1126/science.adr0475	Spatiotemporal Technology/Single-Ce...
174	2025-08-23	High-Resolution Spatial Transcriptomics Unveils Spatially Resolved Gene Modules and Fatty Acid Metabolism Dysregulation in Human Skin Aging	Journal of Investigative Dermatology	5.7	10.1016/j.jid.2025.08.011	Other Studies
175	2025-08-28	MS4A6A/Ms4a6d deficiency disrupts neuroprotective microglia functions and promotes inflammation in Alzheimer's disease model	Molecular Neurodegeneration	17.5	10.1186/s13024-025-00887-0	Disease Research / Non-cancerous Di...
176	2025-08-29	Stereo-seq V2: Spatial mapping of total RNA on FFPE sections with high resolution	Cell	45.5	10.1016/i.cell.2025.08.008	Spatiotemporal Technology
177	2025-09-02	A dataset of spatially resolved transcriptomics of post-natal cardiac development in mice	Scientific Data	5.8	10.1038/s41597-025-05838-4	Growth and Development
178	2025-09-04	Spatial Transcriptomics of Developing Wheat Seed Reveals Concentric Gene Expression Zones and Subgenome Biased Expression of Key Genes	Plant Biotechnology Journal	10.5	10.1111/pbi.70351	Growth and Development
179	2025-09-15	Uncovering the genetic architecture of pungency, carotenoids, and flavor in Capsicum chinense via TWAS-mGWAS integration and spatial Transcriptomics	Horticulture Research	8.5	10.1093/hr/uhaf243	Other Studies

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180	2025-09-15	Microglial function alterations during healthy ageing and canine cognitive dysfunction revealed by single-nucleus and spatial transcriptomics	National Science Review	17.1	10.1093/nsr/nwaf388	Disease Research / Non-cancerous Di...
181	2025-09-19	The tumor-associated fibroblasts regulate urothelial carcinoma progression	Journal of Molecular Cell Biology	5.3	10.1093/jmcb/mjaf032	Disease Research / Malignant Tumors
182	2025-09-22	Single-cell and spatial transcriptomics reveal intratumor heterogeneity and immune microenvironment interactions in Natural killer/T-cell lymphoma	iScience	4.6	10.1016/j.isci.2025.113626	Disease Research / Malignant Tumors
183	2025-10-10	Single-cell multi-omic and spatial profiling of esophageal squamous cell carcinoma reveals the immunosuppressive role of GPR116+ pericytes in cancer metastasis	Nature Genetics	29	10.1038/s41588-025-02341-9	Disease Research / Malignant Tumors
184	2025-10-15	stTransfer enables transfer of single-cell annotations to spatial transcriptomics with single-cell resolution	Cell Reports Methods	4.5	10.1016/j.crmeth.2025.101205	Bioinformatics Tools
185	2025-10-17	Systematic benchmarking of high-throughput subcellular spatial transcriptomics platforms across human tumors	Nature Communications	14.7	10.1038/s41467-025-64292-3	Other Studies
186	2025-10-19	Single-cell and spatial omics reveal progressive loss of xylem developmental complexity across seed plants	Plant Cell	11.6	10.1093/plcell/koaf253	Growth and Development
187	2025-10-31	Comprehensive Spatial Profiling of Species-agnostic Transcriptomes via Stereo-seq	Cancer Research	16.6	10.3791/68619	Spatial Transcriptomics Technology
188	2025-11-06	Remodeling of T and endothelial cells during total neoadjuvant therapy in rectal cancer	Cancer Cell	48.8	10.1016/j.ccell.2025.10.008	Disease Research / Malignant Tumors
189	2025-11-03	Spatial Multi-omics Profiling of Coronary Microvascular Dysfunction in Hypertrophic Cardiomyopathy	Circulation	38.6	10.1161/circ.152.suppl_3.4369174	Disease Research / Non-cancerous Di...
190	2025-11-03	Whole-brain reconstruction of fiber tracts based on cytoarchitectonic organization	Nature Methods	32.1	10.1038/s41592-025-02865-2	Other Studies
191	2025-12-04	Injury-induced Clusterin+ cardiomyocytes suppress inflammation and promote regeneration in neonatal and adult hearts by reprogramming macrophages	Cell Stem Cell	20.4	10.1016/j.stem.2025.10.008	Regenerative Medicine
192	2025-11-10	Clearance of intracranial debris by ultrasound reduces inflammation and improves outcomes in hemorrhagic stroke models	Nature Biotechnology	41.7	10.1038/s41587-025-02866-8	Disease Research / Non-cancerous Di...
193	2025-11-11	DECIPHERING THE EPIGENETIC LANDSCAPE OF GLIOBLASTOMA THROUGH MULTIOMIC SINGLE-CELL AND SPATIAL PROFILING	Neuro-Oncology	13.4	10.1093/neuonc/noaf201.0047	Disease Research / Malignant Tumors
194	2025-11-12	Single-nucleus and spatial transcriptomics reveal the cell populations of intercalary meristems in bamboo	PNAS	9.1	10.1073/pnas.2511701122	Growth and Development
195	2025-11-17	Spatial Transcriptomic Characteristics of the Aging Human Ovary	Aging Cell	7.1	10.1111/accel.70288	Other Studies
196	2025-11-23	Metabolic reprogramming and mitochondrial dysfunction underlie β gonad arrest and niche cell dysfunction in sterile triploid oysters	Communications Biology	5.1	10.1038/s42003-025-09202-5	Other Studies
197	2025-01-27	Identification and characterization of human retinal stem cells capable of retinal regeneration	Science Translational Medicine	14.6	10.1126/scitranslmed.adp6864	Regenerative Medicine
198	2024-08-19	Nova-ST: Nano-Patterned Ultra-Dense platform for spatial transcriptomics	Cell Reports Methods	4.5	10.1016/j.crmeth.2024.100831	Spatial Transcriptomics Technology
199	2025-02-14	Enhancer-driven cell type comparison reveals similarities between the mammalian and bird pallium	Science	45.8	10.1126/science.adp3957	Biological Evolution

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200	2025-11-17	Amyloid beta glycation leads to neuronal mitochondrial dysfunction and Alzheimers pathogenesis through VDAC1-dependent mtDNA efflux	PNAS	9.1	10.1073/pnas.2505046122	Disease Research / Non-cancerous Di...
201	2025-09-25	Change in brain molecular landscapes following electrical stimulation of the nucleus accumbens	Neuropsychopharmacology	7.1	10.1038/s41386-025-02241-w	Disease Research / Non-cancerous Di...
202	2025-06-23	Spatiotemporal Dynamics of Human Ovarian Cortex Transcriptome Following Vitrification and Thawing: Insights into the FOS/AP-1 Pathway	Human reproduction	6.1	10.1093/humrep/deaf097.686	Other Studies
203	2025-12-09	Revealed the regulatory role of CCN1 to microglia distribution through region-specific cellular interactions	Genes & Diseases	2.8	10.1016/j.gendis.2025.101969	Growth and Development
204	2025-11-26	Cancer cells co-opt an inter-organ neuroimmune circuit to escape immune surveillance	Cell	42.5	10.1016/j.cell.2025.09.029	Disease Research / Malignant Tumors
205	2025-12-08	Single-cell spatial transcriptomics reveals potential molecular mechanisms of Abelmoschus manihot (L.) medic in treating diabetic kidney disease	iMeta	33.2	10.1002/imt2.70099	Disease Research / Non-cancerous Di...
206	2025-12-08	A vast stem-progenitor cell pool, richly vascular system, and hybrid ossification drive the daily centimeter-scale elongation of bony antlers	iMeta	33.2	10.1002/imt2.70097	Regenerative Medicine
207	2025-12-18	Single-cell RNA sequencing profiles age-related transcriptional landscapes in human hair follicle cells	hLife	-	10.1016/j.hlife.2025.10.003	Other Studies
208	2025-12-21	Decrypting spatiotemporal code of human endometrial receptivity	Nature Communications	15.7	10.1038/s41467-025-67492-z	Growth and Development
209	2025-12-26	Deficiency of AP1M2 causes a new autoinflammatory disease with colitis	Arthritis Rheumatol	10.9	10.1002/art.70038	Disease Research / Non-cancerous Di...
210	2026-01-04	Mechanisms of Aristolochic Acid Resistance in Specialist Butterflies and Evolutionary Insights for Potential Protective Pathways	Advanced Science	14.1	10.1002/adv.202518072	Biological Evolution
211	2026-01-06	Host microenvironment in potato-Phytophthora infestans interaction revealed by single-cell spatiotemporal transcriptome	Nature Plants	13.6	10.1038/s41477-025-02181-9	Other Studies
212	2026-01-06	Loss of Twist1 leads to disruption of ciliary length, endocytic vesicle dynamics, and cell-cell junctions during neural tube formation	Developmental Dynamics	1.5	10.1002/dvdy.70109	Growth and Development
213	2026-01-07	Control of airway basal stem cell-mediated lung repair by TGF- β signaling	Science Advances	12.5	10.1126/sciadv.adz1519	Disease Research / Non-cancerous Di...
214	2026-01-08	A peripheral glial niche orchestrates the early stages of skin wound healing	Cell Stem Cell	20.4	10.1016/j.stem.2025.12.015	Regenerative Medicine
215	2026-01-13	Complement-secreting CAFs are associated with better prognosis in pancreatic cancer: single-cell multiomics	Gut	25.8	10.1136/gutjnl-2025-335683	Disease Research / Malignant Tumors
216	2026-01-13	CSRefiner: a lightweight framework for fine-tuning cell segmentation models with small datasets	Briefings in Bioinformatics	7.7	10.1093/bib/bbaf718	Bioinformatics Tools
217	2026-01-15	Subventricular zone radial glial cells maintain inhibitory neuron production in the human brain	Science	45.8	10.1126/science.adw1803	Growth and Development
218	2026-01-27	Prior high fiber intake impinges on the cellular responses of mesenteric adipose and intestinal tissues to subsequent high fat feeding	Cell Reports	6.9	10.1016/j.celrep.2025.116801	Disease Research / Non-cancerous Di...

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219	2026-02-04	Rete ridges form via evolutionarily distinct mechanisms in mammalian skin	Nature	48.5	10.1038/s41586-025-10055-5	Growth and Development
220	2026-02-05	Dissecting the development of bovine testicular tissue using spatial transcriptomics	Journal of Animal Science and Biotechnology	6.5	10.1186/s40104-025-01340-4	Growth and Development
221	2026-02-06	Divergent stem cell mechanisms govern the primary body axis and appendage regeneration in the axolotl	Science Advances	12.5	10.1126/sciadv.adx5697	Regenerative Medicine
222	2026-02-07	Identification of protein precursor for thyroid hormone synthesis in basal chordate ascidian <i>Styela clava</i>	Nature Communications	15.7	10.1038/s41467-026-69290-7	Biological Evolution
223	2026-02-11	M5C-driven stabilization of SERPINB5 promotes cervical cancer progression and chemotherapy resistance	Nature Communications	15.7	10.1038/s41419-026-08453-2	Disease Research / Malignant Tumors
224	2026-02-12	Chemotherapy triggers immune evasion by fostering LEPR+ Kupffer cell differentiation in liver metastases	Cancer Cell	44.5	10.1016/j.ccell.2026.01.010	Disease Research / Malignant Tumors
225	2026-02-17	Integration of NIR-II Imaging and Molecular Profiling Identifies Subtypes of Metastatic Sentinel Lymph Nodes in Breast Cancer	Clinical Cancer Research	10.2	10.1158/1557-3265.SABCS25-PS1-13-28	Disease Research / Malignant Tumors
226	2026-02-23	Single-cell and spatial transcriptomics define 20E-driven developmental reprogramming in silkworm wing disc	Nature Communications	15.7	10.1038/s41467-026-69518-6	Growth and Development
227	2026-02-24	Targeting macrophage-mediated clearance of apoptotic cells overcomes anti-VEGF resistance in chorioidal neovascularization	International Immunopharmacology	4.7	10.1016/j.intimp.2026.116410	Disease Research / Non-cancerous Di...
228	2026-02-26	Single-cell transcriptomics reveals hair growth retardation mediated by aberrant connective tissue sheath contraction in male androgenetic alopecia	Nature Communications	15.7	10.1038/s41467-026-70153-4	Disease Research / Non-cancerous Di...
229	2026-02-27	PANX1-mediated NLRP3 inflammasome activation promotes an adaptive doxorubicin resistance through IL-1 β signaling in breast cancer	Cancer Letters	10.1	10.1016/j.canlet.2026.218387	Disease Research / Malignant Tumors
230	2026-03-02	Mutational Signatures and Clonal Hematopoiesis in Intestinal Metaplasia across Countries with Varying Stomach Cancer Incidence	Cancer Discovery	33.3	10.1158/2159-8290.CD-25-0778	Disease Research / Malignant Tumors
231	2026-03-02	Stereo-cell deciphers the spatial and functional heterogeneity of polyploid hepatocytes	GigaScience	5	10.1093/gigascience/giag023	Other Studies
232	2026-03-03	Identification of cryosensitive niches and a targetable FOS/AP-1 program in the human ovarian cortex by single-cell and spatial transcriptomics	BMC Medicine	8.3	10.1186/s12916-026-04757-4	Other Studies
233	2026-03-04	Intricate chemosymbiosis in a widespread shallow-water thyasirid clam	Science Advances	12.5	10.1126/sciadv.adw8163	Biological Evolution
234	2026-03-06	Epithelial plasticity shapes intratumoral heterogeneity and cell lineages in early-stage lung cancer	Science Advances	12.5	10.1126/sciadv.ady8546	Disease Research / Malignant Tumors
235	2026-03-06	Spatial transcriptomics maps host-gut microbiome biogeography at high resolution	Nature Microbiology	19.4	10.1038/s41564-026-02286-7	Other Studies
236	2026-03-09	Multi-omics analyses of the Alviniconcha holobiont reveal multi-faceted adaptations to deep-sea hydrothermal vents	Science China. Life sciences	9.5	10.1007/s11427-025-3148-0	Biological Evolution
237	2026-03-10	Spatial cartography of human thymus enables the geopositioning of lineage transcription factors in rare mimetic thymic epithelial cells	Nature Communications	15.7	10.1038/s41467-026-68596-w	Growth and Development
238	2026-03-14	Single-cell spatial transcriptomics reveals clonal smooth muscle cell heterogeneity and programs associated with atherosclerotic plaque calcification	Clinical and Experimental Medicine	3.5	10.1007/s10238-026-02090-x	Disease Research / Malignant Tumors

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239	2026-03-17	Spatial transcriptomics uncovers vasculature-centered cellular interactions driving Japanese encephalitis progression in a mouse model	Nature Communications	15.7	10.1038/s41467-026-70047-5	Disease Research / Non-cancerous Di...
240	2026-03-17	Single-cell spatial map of cis-regulatory elements for disease-related genes in the macaque cortex	Nature Communications	15.7	10.1038/s41467-026-70497-x	Disease Research / Non-cancerous Di...
241	2026-03-23	Decoding the spatiotemporal development of the blood-brain barrier in human cortex	Cell Stem Cell	20.4	10.1016/j.stem.2026.02.010	Growth and Development
242	2026-03-25	A conserved ethylene-triggered cell death mechanism may underlie hollow stem formation across plant species	PNAS	9.1	10.1073/pnas.2530957123	Growth and Development
243	2026-03-29	The expression pattern of EXO70 subunits in single-cell stereo-seq of Arabidopsis thaliana leaves using coexistence network analysis	Scientific Reports	3.9	10.1038/s41598-026-44501-9	Other Studies
244	2026-03-31	Human Papillomavirus (HPV) Infected Epithelial Cells and FBLN1+ Fibroreticular Cells Govern the Immunogenic Tumor Microenvironment in HPV-Associated Oropharyngeal Squamous Cell Carcinoma	Clinical and Experimental Otorhinolaryngology	3.4	10.21053/ceo.2025-00282	Disease Research / Malignant Tumors
245	2026-04-06	Cochlear nucleus spatial transcriptomes of normal and hearing loss mice reveal a critical role of Spp1 in bushy cells	Cell Research	25.9	10.1038/s41422-026-01246-4	Disease Research / Non-cancerous Di...
246	2026-04-08	Single-cell spatiotemporal dissection of the human maternal-fetal interface	Nature	48.5	10.1038/s41586-026-10316-x	Disease Research / Non-cancerous Di...
247	2026-04-16	An opposing molecular gradient axis underlies primate cortical organization	Science	45.8	10.1126/science.aea2673	Biological Evolution
248	2026-04-21	Application of spatial transcriptomics across organoids for a high-resolution spatial whole-transcriptome benchmarking dataset	iScience	4.1	10.1016/j.isci.2026.115827	Growth and Development
249	2026-04-22	High altitude-mediated immune remodeling accelerates aging	Science Advances	12.5	10.1126/sciadv.aeb5599	Other Studies
250	2026-04-28	A spatial code governs olfactory receptor choice and aligns sensory maps in the nose and brain	Cell	42.5	10.1016/j.cell.2026.03.051	Other Studies
251	2026-04-30	A conserved re-epithelialization program underlies malignancy in pancreatic ductal adenocarcinoma	Cancer Cell	44.5	10.1016/j.ccell.2026.03.021	Disease Research / Malignant Tumors
252	2026-01-27	Unveiling the early defense response dynamics in grapevines against Plasmopara viticola by single-cell transcriptomics	Genome Biology	9.4	10.1186/s13059-025-03904-z	Other Studies
253	2026-05-01	A spatiotemporal transcriptomic atlas of the mouse placenta reveals glycogen cell-mediated metabolic support essential for fetal viability	Elife	-	10.7554/eLife.111257.1	Growth and Development
254	2026-05-06	Dissecting and steering cell dynamics using spatially informed RNA velocity with veloAgent	olecular Systems Biology	7.7	10.1038/s44320-026-00213-w	Growth and Development
255	2026-05-06	Single-cell Stereo-seq reveals regulatory mechanisms driving regeneration of injured proximal tubules during AKI	Nature Communications	15.7	10.1038/s41467-026-72679-z	Disease Research / Non-cancerous Di...
256	2026-05-07	A three-dimensional spatial transcriptome atlas reconstructs early organogenesis in primate Carnegie stages 9 and 10 embryos	Nature Cell Biology	19.1	10.1038/s41556-026-01956-2	Growth and Development
257	2026-05-10	Integrated Single-Cell and Spatial Analysis Reveals a Metabolic-Immune Axis Driving Aortic Dissection	Advanced Science	14.1	10.1002/adv.75509	Disease Research / Non-cancerous Di...

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258	2026-05-11	Super-resolution multimodal spatial transcriptomics reveals an ovoid stem-cell niche structuring de novo shoot regeneration	Molecular Plant	24.1	10.1016/j.molp.2026.05.008	Growth and Development
259	2026-05-11	Spatial characterization of skin lesions in discoid and systemic lupus erythematosus	Nature Communications	15.7	10.1038/s41467-026-72720-1	Disease Research / Non-cancerous Di...
260	2026-05-14	Unraveling lncRNA diversity at a single cell resolution and in a spatial context across different cancer types	Nature Methods	32.1	10.1038/s41592-026-03071-4	Disease Research / Malignant Tumors
261	2026-05-15	Human PSC-derived sinoatrial node-cardiac plexus assembloids model innervation-associated maturation of pacemaker systems	Cell Stem Cell	20.4	10.1016/j.stem.2026.04.018	Growth and Development
262	2026-05-18	Decoding spatial transcriptomics across multicellular and subcellular resolutions	Nature Communications	15.7	10.1038/s41467-026-72872-0	Bioinformatics Tools
263	2026-05-21	Endocytic evasion confers resistance to antibodydrug conjugates therapy in cancer	Cancer Cell	44.5	10.1016/j.ccell.2026.04.010	Disease Research / Malignant Tumors
264	2026-05-26	AF9-KLF2 gene regulatory circuit links histone lactylation to metabolic reprogramming and breast cancer progression	Cell Reports	10.6	10.1016/j.celrep.2026.117429	Disease Research / Malignant Tumors
265	2026-05-26	Uncovering spatially resolved functional genomics with CRISPR screen sequencing	Cell	42.5	10.1016/j.cell.2026.04.049	Spatial Transcriptomics Technology
266	2026-05-27	Spatiotemporal transcriptome atlas of human embryos after gastrulation	Nature	48.5	10.1038/s41586-026-10545-0	Growth and Development
267	2026-05-28	Convergent mitochondrial impairment and apoptosis driven by simultaneous down-regulation of multiple genes at 11p11.2 in Alzheimer's disease	Molecular Psychiatry	10.1	10.1038/s41380-026-03664-7	Disease Research / Non-cancerous Di...
268	2026-05-28	Stereo-cell coupled with single-cell transcriptomics identifies a transitional metabolic state in maturing skeletal muscle myofibers	Frontiers in Genetics	3	10.3389/fgene.2026.1846707	Other Studies
269	2026-06-01	Segmental specification of the human female fetal reproductive tract revealed by spatiotemporal dynamics	Nature Cell Biology	19.1	10.1038/s41556-026-01962-4	Growth and Development
270	2026-06-01	Single-Cell Annotation and Localization via Integrating Spatial Transcriptomics Maps the Mouse Ocular Atlas and RAO Dynamics	Advanced Science	14.1	10.1002/advs.75857	Disease Research / Non-cancerous Di...
271	2026-06-02	A wearable non-invasive sonogenetic pacemaker	Nature biomedical engineering	26.6	10.1038/s41551-026-01673-z	Other Studies
272	2026-06-03	Single-cell identifies and validates human circulating Treg subtype/state Tregfc1 in non-small cell lung cancer	Signal Transduction and Targeted Therapy	52.7	10.1038/s41392-026-02677-6	Disease Research / Malignant Tumors
273	2026-06-09	Microglial states associate with lesion dynamics in multiple sclerosis	Cell Reports	10.6	10.1016/j.celrep.2026.117538	Disease Research / Non-cancerous Di...
274	2026-06-15	A temporal map of B cell diversification mechanisms in mice	Nature Immunology	27.6	10.1038/s41590-026-02563-x	Disease Research / Non-cancerous Di...
275	2026-06-17	Spatial transcriptomics identifies distinct domains regulating yield-component traits of the wheat ear	Science Advances	12.5	10.1126/sciadv.aed1407	Other Studies
276	2026-06-18	Lamprey 3D single-cell transcriptomics reveals ancestral and specialized features of the vertebrate brain	Science	45.8	10.1126/science.aea2535	Biological Evolution
277	2026-06-24	Epiblast diversification and blood formation in a human pregastrula	Nature	56.1	10.1038/s41586-026-10698-y	Growth and Development
278	2026-06-27	A unified spatial transcriptome profiling of ten mouse organs	Scientific Data	7.2	10.1038/s41597-026-07752-9	Spatial Transcriptomics Technology

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279	2026-07-16	PD-1 Blockade Unleashes Local Hepatitis B Virus-Related B Cell Response Inhibiting Hepatocellular Carcinoma	Cancer Cell	56.1	10.1016/j.ccell.2026.06.010	Disease Research / Non-cancerous Di...
280	2026-07-19	Integrating cytological images and spatial transcriptomics for cell segmentation with DISSECT	Nature Computational Science	20.3	10.1038/s43588-026-01020-x	Bioinformatics Tools
281	2026-07-23	Spatially resolved single-cell atlas reveals the macroevolutionary trajectory of animal hearts	Science	47.3	10.1126/science.adw0855	Biological Evolution
282	2026-07-24	Full-length single-cell spatial transcriptomics reveals spatial and cell-type-specific transcript isoforms in the primate brain	Nature Methods	28.3	10.1038/s41592-026-03174-y	Other Studies
283	2026-07-27	Integrated Single-Nucleus Multi-Omics Atlases Reveal Lineage Plasticity and Regulatory Networks of Luminal Epithelial Cells During Mammary Gland Lactation and Involution	Advanced Science	14.1	10.1002/advs.76753	Growth and Development
284	2026-07-28	Adipocyte-derived LTB4 programs human NKG2A+ $\gamma\delta$ T cells as cytotoxic sentinels at the adipose-tumor interface in breast cancer	Journal for ImmunoTherapy of Cancer	11.7	10.1136/jitc-2026-015147	Disease Research / Malignant Tumors
285	2026-07-31	Spatiotemporal multiomics uncover tumor ecosystem dynamics during metastatic colonization	Science	47.3	10.1126/science.adz7928	Disease Research / Malignant Tumors
286	2026-08-03	Uncovering ectopic GC-like niches for tumor reactive lymphocyte priming in lung adenocarcinoma using Stereo-XCR-seq	Nature Communications	18.1	10.1038/s41467-026-75405-x	Spatial Transcriptomics Technology
287	2026-08-06	Limosilactobacillus reuteri enhances ovarian function and female fertility	iMeta	33.2	10.1002/imt2.70164	Other Studies
288	2026-08-11	Human heart valve-like tissues from pluripotent stem cells with enhanced maturation recapitulate inflammatory valve disease	Cell Stem Cell	23.3	10.1016/j.stem.2026.07.010	Regenerative Medicine
289	2026-08-17	Tumor-driven arginine depletion induces T-cell metabolism reprogramming to suppress atherosclerosis in colorectal cancer	Acta Pharmacologica Sinica	10.4	10.1038/s41401-026-01899-2	Disease Research / Malignant Tumors
290	2026-08-18	EGFR inhibition promotes functional engraftment and graft survival via donor-derived CHI3L1 in fetal RPE suspension transplantation	Cell Reports Medicine	14	10.1016/j.xcrm.2026.102963	Disease Research / Non-cancerous Di...
291	2026-08-18	A cross-vertebrate single-cell and spatial atlas reveals evolutionary trajectories of gastrointestinal cellular innovation	Cell Genomics		10.1016/j.xgen.2026.101335	Biological Evolution
292	2026-08-20	Spatial multi-omics unveils sphingolipid metabolic reprogramming within the retinal pathological niche	iMeta	33.2	10.1002/imt2.70163	Disease Research / Non-cancerous Di...
293	2026-08-21	Macrophages diverge into profibrotic SAMs and proresolving ReM2 cells to regulate liver fibrosis	Proceedings of the National Academy of Sciences	9.5	10.1073/pnas.2611441123	Disease Research / Non-cancerous Di...
294	2026-08-03	Impaired Metabolic Remodeling Characterizes Injured Niches during Post-ischemic Kidney Repair	Journal of the American Society of Nephrology	9.7	10.1681/ASN.0000001216	Disease Research / Non-cancerous Di...
295	2022-07-14	Identifying multicellular spatiotemporal organization of cells with SpaceFlow	Nature Communications	14.7	10.1038/s41467-022-31739-w	Bioinformatics Tools
296	2022-08-26	Accurate inference of genome-wide spatial expression with iSpatial	Science Advances	11.7	10.1126/sciadv.abq0990	Bioinformatics Tools
297	2022-10-17	DeepST: identifying spatial domains in spatial transcriptomics by deep learning	Nucleic Acids Research	16.6	10.1093/nar/gkac901	Bioinformatics Tools
298	2022-11-11	Polony gels enable amplifiable DNA stamping and spatial transcriptomics of chronic pain	Cell	45.5	10.1016/j.cell.2022.10.021	Spatial Transcriptomics Technology
299	2022-11-21	Benchmarking cell-type clustering methods for spatially resolved transcriptomics data	Briefings in Bioinformatics	6.8	10.1093/bib/bbac475	Bioinformatics Tools

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300	2023-01-18	DIST: spatial transcriptomics enhancement using deep learning	Briefings in Bioinformatics	9.5	10.1093/bib/bbad013	Bioinformatics Tools
301	2023-01-21	Single-cell and spatial analyses reveal the association between gene expression of glutamine synthetase with the immunosuppressive phenotype of APOE+ CTSZ+ TAM in cancers	Molecular Oncology	5	10.1002/1878-0261.13373	Disease Research / Malignant Tumors
302	2023-02-13	SINFONIA: Scalable Identification of Spatially Variable Genes for Deciphering Spatial Domains	Cells	5.1	10.3390/cells12040604	Bioinformatics Tools
303	2023-03-21	A comprehensive benchmarking with practical guidelines for cellular deconvolution of spatial transcriptomics	Nature Communications	14.7	10.1038/s41467-023-37168-7	Bioinformatics Tools
304	2023-07-10	SCS: cell segmentation for high-resolution spatial transcriptomics	Nature Methods	36.1	10.1038/s41592-023-01939-3	Bioinformatics Tools
305	2023-07-18	Spatial-MGCN: a novel multi-view graph convolutional network for identifying spatial domains with attention mechanism	Briefings in Bioinformatics	9.5	10.1093/bib/bbad262	Bioinformatics Tools
306	2023-07-27	The spatiotemporal dynamics of spatially variable genes in developing mouse brain revealed by a novel computational scheme	Cell Death Discov	6.1	10.1038/s41420-023-01569-w	Growth and Development
307	2023-07-31	Three-dimensional molecular architecture of mouse organogenesis	Nature Communications	14.7	10.1038/s41467-023-40155-7	Bioinformatics Tools
308	2023-08-07	Identifying spatial domains of spatially resolved transcriptomics via multi-view graph convolutional networks	Briefings in Bioinformatics	9.5	10.1093/bib/bbad278	Bioinformatics Tools
309	2023-10-09	STAMarker: determining spatial domain-specific variable genes with saliency maps in deep learning	Nucleic Acids Research	16.6	10.1093/nar/gkad801	Bioinformatics Tools
310	2023-10-17	NeST: nested hierarchical structure identification in spatial transcriptomic data	Nature Communications	14.7	10.1038/s41467-023-42343-x	Bioinformatics Tools
311	2023-10-19	Construction of a 3D whole organism spatial atlas by joint modelling of multiple slices with deep neural networks	Nature Machine Intelligence	23.7	10.1038/s42256-023-00734-1	Bioinformatics Tools
312	2023-10-20	SPIRAL: integrating and aligning spatially resolved transcriptomics data across different experiments, conditions, and technologies	Genome Biology	10.1	10.1186/s13059-023-03078-6	Bioinformatics Tools
313	2023-10-20	stVAE deconvolves cell-type composition in large-scale cellular resolution spatial transcriptomics	Bioinformatics	4.4	10.1093/bioinformatics/btad642	Bioinformatics Tools
314	2023-11-09	Spatial-linked alignment tool (SLAT) for aligning heterogenous slices	Nature Communications	14.7	10.1038/s41467-023-43105-5	Bioinformatics Tools
315	2023-11-15	Single-cell, whole-embryo phenotyping of mammalian developmental disorders	Nature	50.5	10.1038/s41586-023-06548-w	Growth and Development
316	2023-11-22	SPACEL: deep learning-based characterization of spatial transcriptome architectures	Nature Communications	14.7	10.1038/s41467-023-43220-3	Bioinformatics Tools
317	2023-12-13	GNTD: reconstructing spatial transcriptomes with graph-guided neural tensor decomposition informed by spatial and functional relations	Nature Communications	14.7	10.1038/s41467-023-44017-0	Bioinformatics Tools
318	2024-01-03	SGCAST: symmetric graph convolutional auto-encoder for scalable and accurate study of spatial transcriptomics	Brief Bioinform	6.8	10.1093/bib/bbad490	Bioinformatics Tools
319	2024-01-06	stAA: adversarial graph autoencoder for spatial clustering task of spatially resolved transcriptomics	Brief Bioinform	6.8	10.1093/bib/bbad500	Bioinformatics Tools
320	2024-01-13	BIDCell: Biologically-informed self-supervised learning for segmentation of subcellular spatial transcriptomics data	Nature Communications	14.7	10.1038/s41467-023-44560-w	Bioinformatics Tools

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321	2024-01-15	Evaluating spatially variable gene detection methods for spatial transcriptomics data	Genome Biology	10.1	10.1186/s13059-023-03145-y	Bioinformatics Tools
322	2024-01-16	Decoder-seq enhances mRNA capture efficiency in spatial RNA sequencing	Nature Biotechnology	33.1	10.1038/s41587-023-02086-y	Spatial Transcriptomics Technology
323	2024-01-18	PROST: quantitative identification of spatially variable genes and domain detection in spatial transcriptomics	Nature Communications	14.7	10.1038/s41467-024-44835-w	Bioinformatics Tools
324	2024-02-20	EAGS: efficient and adaptive Gaussian smoothing applied to high-resolved spatial transcriptomics	GigaScience	11.8	10.1093/gigascience/giad097	Bioinformatics Tools
325	2024-02-20	Deciphering spatial domains from spatially resolved transcriptomics with Siamese graph autoencoder	GigaScience	11.8	10.1093/gigascience/giae003	Bioinformatics Tools
326	2024-02-20	BatchEval Pipeline: batch effect evaluation workflow for multiple datasets joint analysis	Gigabyte	1.2	10.46471/gigabyte.108	Bioinformatics Tools
327	2024-02-20	A novel variable neighborhood search approach for cell clustering for spatial transcriptomics	Gigabyte	1.2	10.46471/gigabyte.109	Bioinformatics Tools
328	2024-02-20	STGIC: A graph and image convolution-based method for spatial transcriptomic clustering	PLoS Computational Biology	3.8	10.1371/journal.pcbi.1011935	Bioinformatics Tools
329	2024-03-02	Innovative super-resolution in spatial transcriptomics: a transformer model exploiting histology images and spatial gene expression	Briefings in Bioinformatics	6.8	10.1093/bib/bbae052	Bioinformatics Tools
330	2024-03-15	Spaco: A comprehensive tool for coloring spatial data at single-cell resolution	Patterns	6.7	10.1016/j.patter.2023.100915	Bioinformatics Tools
331	2024-03-31	SpatialCoGCN: deconvolution and spatial information-aware simulation of spatial transcriptomics data via deep graph co-embedding	Briefings in Bioinformatics	6.8	10.1093/bib/bbae130	Bioinformatics Tools
332	2024-04-02	Pianno: a probabilistic framework automating semantic annotation for spatial transcriptomics	Nature Communications	14.7	10.1038/s41467-024-47152-4	Bioinformatics Tools
333	2024-04-16	Attention-guided variational graph autoencoders reveal heterogeneity in spatial transcriptomics	Briefings in Bioinformatics	6.8	10.1093/bib/bbae173	Bioinformatics Tools
334	2024-04-18	The heterogeneity of tumour-associated macrophages contributes to the clinical outcomes and indications for immune checkpoint blockade in colorectal cancer patients	Immunobiology	2.8	10.1016/j.imbio.2024.152805	Disease Research / Malignant Tumors
335	2024-04-24	Emx2 underlies the development and evolution of marsupial gliding membranes	Nature	50.5	10.1038/s41586-024-07305-3	Biological Evolution
336	2024-05-15	An immunohistochemical atlas of necroptotic pathway expression	EMBO Molecular Medicine	9	10.1038/s44321-024-00074-6	Disease Research / Non-cancerous Di...
337	2024-05-22	Complete spatially resolved gene expression is not necessary for identifying spatial domains	Cell Genomics	11.1	10.1016/j.xgen.2024.100565	Bioinformatics Tools
338	2024-05-27	A multi-view graph contrastive learning framework for deciphering spatially resolved transcriptomics data	Briefings in Bioinformatics	6.8	10.1093/bib/bbae255	Bioinformatics Tools
339	2024-05-29	SpaNCMG: improving spatial domains identification of spatial transcriptomics using neighborhood-complementary mixed-view graph convolutional network	Briefings in Bioinformatics	6.8	10.1093/bib/bbae259	Bioinformatics Tools
340	2024-05-29	Dissecting Spatiotemporal Structures in Spatial Transcriptomics via Diffusion-Based Adversarial Learning	Research	8.5	10.34133/research.0390	Bioinformatics Tools
341	2024-05-31	Multi-modal domain adaptation for revealing spatial functional landscape from spatially resolved transcriptomics	Brief Bioinform	6.8	10.1093/bib/bbae257	Bioinformatics Tools

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342	2024-06-05	HyperGCN: an effective deep representation learning framework for the integrative analysis of spatial transcriptomics data	BMC Genomics	3.5	10.1186/s12864-024-10469-x	Bioinformatics Tools
343	2024-06-06	Accurate and efficient integrative reference-informed spatial domain detection for spatial transcriptomics	Nature Methods	36.1	10.1038/s41592-024-02284-9	Bioinformatics Tools
344	2024-06-08	CABiNet: joint clustering and visualization of cells and genes for single-cell transcriptomic	Nucleic Acids Research	16.6	10.1093/nar/gkae480	Bioinformatics Tools
345	2024-06-09	Accurate Identification of Spatial Domain by Incorporating Global Spatial Proximity and Local Expression Proximity	Biomolecules	4.8	10.3390/biom14060674	Bioinformatics Tools
346	2024-06-24	Open-ST: High-resolution spatial transcriptomics in 3D	Cell	45.5	10.1016/j.cell.2024.05.055	Bioinformatics Tools
347	2024-06-28	GraphCompass: Spatial metrics for differential analyses of cell organization across conditions	Bioinformatics	4.4	10.1093/bioinformatics/btae242	Bioinformatics Tools
348	2024-06-28	A count-based model for delineating cell-cell interactions in spatial transcriptomics data	Bioinformatics	4.4	10.1093/bioinformatics/btae219	Bioinformatics Tools
349	2024-06-28	Deciphering high-order structures in spatial transcriptomes with graph-guided Tucker decomposition	Bioinformatics	4.4	10.1093/bioinformatics/btae245	Bioinformatics Tools
350	2024-07-04	Systematic comparison of sequencing-based spatial transcriptomic methods	Nature Methods	36.1	10.1038/s41592-024-02325-3	Other Studies
351	2024-07-08	Accurately deciphering spatial domains for spatially resolved transcriptomics with stCluster	Briefings in Bioinformatics	9.5	10.1093/bib/bbae329	Bioinformatics Tools
352	2024-07-18	Single-cell and spatial multiomic inference of gene regulatory networks using SCRIPPro	Bioinformatics	4.4	10.1093/bioinformatics/btae466	Bioinformatics Tools
353	2024-07-30	Whole brain alignment of spatial transcriptomics between humans and mice with BrainAlign	Nature Communications	14.7	10.1038/s41467-024-50608-2	Bioinformatics Tools
354	2024-08-09	Benchmarking clustering, alignment, and integration methods for spatial transcriptomics	Genome Biology	10.1	10.1186/s13059-024-03361-0	Bioinformatics Tools
355	2024-08-09	Spatial pattern and differential expression analysis with spatial transcriptomic data	Nucleic Acids Research	13.1	10.1093/nar/gkae962	Bioinformatics Tools
356	2024-08-19	STAIG: Spatial Transcriptomics Analysis via Image-Aided Graph Contrastive Learning for Domain Exploration and Alignment-Free Integration	Nature Communications	15.7	10.1038/s41467-025-56276-0	Bioinformatics Tools
357	2024-08-26	Inferring pattern-driving intercellular flows from single-cell and spatial transcriptomics	Nature Methods	36.1	10.1038/s41592-024-02380-w	Bioinformatics Tools
358	2024-09-06	CellContrast: Reconstructing Spatial Relationships in Single-Cell RNA Sequencing Data via Deep Contrastive Learning	Patterns	7.4	10.1016/j.patter.2024.101022	Bioinformatics Tools
359	2024-09-11	AFSC: A self-supervised augmentation-free spatial clustering method based on contrastive learning for identifying spatial domains	Computational and Structural Biotechnology Journal	4.4	10.1016/j.csbj.2024.09.005	Bioinformatics Tools
360	2024-09-12	FICTURE: scalable segmentation-free analysis of submicron-resolution spatial transcriptomics	Nature Methods	36.1	10.1038/s41592-024-02415-2	Bioinformatics Tools
361	2024-09-12	A graph self-supervised residual learning framework for domain identification and data integration of spatial transcriptomics	Communications Biology	5.2	10.1038/s42003-024-06814-1	Bioinformatics Tools
362	2024-09-18	Search and match across spatial omics samples at single-cell resolution	Nature Methods	36.1	10.1038/s41592-024-02410-7	Bioinformatics Tools

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363	2024-10-09	Spatially Informed Graph Structure Learning Extracts Insights from Spatial Transcriptomics	Advanced Science	14.3	10.1002/adv.202403572	Bioinformatics Tools
364	2024-10-11	stBERT: A Pretrained Model for Spatial Domain Identification of Spatial Transcriptomics	IEEE Access	3.4	10.1109/ACCESS.2024.3479153	Bioinformatics Tools
365	2024-10-15	Interpretable spatially aware dimension reduction of spatial transcriptomics with STAMP	Nature Methods	36.1	10.1038/s41592-024-02463-8	Bioinformatics Tools
366	2024-10-17	A multi-modality and multi-granularity collaborative learning framework for identifying spatial domains and spatially variable genes	Bioinformatics	4.4	10.1093/bioinformatics/btae607	Bioinformatics Tools
367	2024-10-18	Graph attention automatic encoder based on contrastive learning for domain recognition of spatial transcriptomics	Communications Biology	5.2	10.1038/s42003-024-07037-0	Bioinformatics Tools
368	2024-10-29	Mapping cells through time and space with moscot	Nature	48.5	10.1038/s41586-024-08453-2	Bioinformatics Tools
369	2024-11-12	Sainsc: A Computational Tool for Segmentation-Free Analysis of In Situ Capture Data	Small Methods	10.7	10.1002/smt.202401123	Bioinformatics Tools
370	2024-11-15	A signal-diffusion-based unsupervised contrastive representation learning for spatial transcriptomics analysis	Bioinformatics	4.4	10.1093/bioinformatics/btae663	Bioinformatics Tools
371	2024-11-16	Chrysalis: decoding tissue compartments in spatial transcriptomics with archetypal analysis	Communications Biology	5.2	10.1038/s42003-024-07165-7	Bioinformatics Tools
372	2024-11-22	MCGAE: unraveling tumor invasion through integrated multimodal spatial transcriptomics	Briefings in Bioinformatics	6.8	10.1093/bib/bbae608	Bioinformatics Tools
373	2024-11-28	Accurate Spatial Heterogeneity Dissection and Gene Regulation Interpretation for Spatial Transcriptomics using Dual Graph Contrastive Learning	Advanced Science	14.3	10.1002/adv.202410081	Bioinformatics Tools
374	2024-11-29	Deciphering spatial domains from spatially resolved transcriptomics through spatially regularized deep graph networks	BMC Genomics	4.4	10.1186/s12864-024-11072-w	Bioinformatics Tools
375	2024-12-01	Deep clustering representation of spatially resolved transcriptomics data using multi-view variational graph auto-encoders with consensus clustering	Computational and Structural Biotechnology Journal	4.4	10.1016/j.csbj.2024.11.041	Bioinformatics Tools
376	2024-12-03	Detecting global and local hierarchical structures in cell-cell communication using CrossChat	Nature Communications	14.7	10.1038/s41467-024-54821-x	Bioinformatics Tools
377	2024-12-06	Spatial domains identification in spatial transcriptomics using modality-aware and subspace-enhanced graph contrastive learning	Computational and Structural Biotechnology Journal	4.1	10.1016/j.csbj.2024.10.029	Bioinformatics Tools
378	2024-12-16	SpatialCVGAE: Consensus Clustering Improves Spatial Domain Identification of Spatial Transcriptomics Using VGAE	Interdisciplinary Sciences-Computational Life Sciences	3.9	10.1007/s12539-024-00676-1	Bioinformatics Tools
379	2024-12-16	Graph learning of disentangled representation for accurately aligning multiple spatial slices	Association for Computing Machinery (ACM)	14.3	10.1145/3698587.3701381	Bioinformatics Tools
380	2024-12-18	Spall: accurate and robust unveiling cellular landscapes from spatially resolved transcriptomics data using a decomposition network	BMC Bioinformatics	2.9	10.1186/s12859-024-06003-1	Bioinformatics Tools
381	2025-01-02	Cooperative integration of spatially resolved multi-omics data with COSMOS	Nature Communications	14.7	10.1038/s41467-024-55204-y	Bioinformatics Tools

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382	2025-01-06	Unveiling patterns in spatial transcriptomics data: a novel approach utilizing graph attention autoencoder and multiscale deep subspace clustering network	GigaScience	11.8	10.1093/gigascience/giae103	Bioinformatics Tools
383	2025-01-06	Marsilea: an intuitive generalized paradigm for composable visualizations	Genome Biol	10.1	10.1186/s13059-024-03469-3	Bioinformatics Tools
384	2025-01-07	UCS: A Unified Approach to Cell Segmentation for Subcellular Spatial Transcriptomics	Small Methods	10.7	10.1002/smt.202400975	Bioinformatics Tools
385	2025-01-23	Mapping the topography of spatial gene expression with interpretable deep learning	Nature Methods	32.1	10.1038/s41592-024-02503-3	Bioinformatics Tools
386	2025-01-28	DSCT: A Novel Deep Learning Framework for Rapid and Accurate Spatial Transcriptomic Cell Typing	National Science Review	16.3	10.1093/nsr/nwaf030	Bioinformatics Tools
387	2025-02-25	Multiscale Dissection of Spatial Heterogeneity by Integrating Multi-Slice Spatial and Single-Cell Transcriptomics	Advanced Science	14.3	10.1002/adv.202413124	Bioinformatics Tools
388	2025-03-03	STModule: identifying tissue modules to uncover spatial components and characteristics of transcriptomic landscapes	Genome Medicine	10.4	10.1186/s13073-025-01441-9	Bioinformatics Tools
389	2025-03-04	MAEST: accurately spatial domain detection in spatial transcriptomics with graph masked autoencoder	Brief Bioinform	6.8	10.1093/bib/bbaf086	Bioinformatics Tools
390	2025-03-09	Robust Spatial Cell-Type Deconvolution with Qualitative Reference for Spatial Transcriptomics	Small Methods	10.7	10.1002/smt.202401145	Bioinformatics Tools
391	2025-03-10	Cardiovascular Mettl3 Deficiency Causes Congenital Cardiac Defects and Postnatal Lethality in Mice	Int J Biol Sci	8.2	10.7150/ijbs.100941	Growth and Development
392	2025-03-26	Benchmarking algorithms for spatially variable gene identification in spatial transcriptomics	Bioinformatics	5.4	10.1093/bioinformatics/btaf131	Bioinformatics Tools
393	2025-04-03	SpaMask: Dual masking graph autoencoder with contrastive learning for spatial transcriptomics	PLoS Comput Biol	3.8	10.1371/journal.pcbi.1012881	Bioinformatics Tools
394	2025-04-03	Integrating multiple spatial transcriptomics data using community-enhanced graph contrastive learning	PLoS Comput Biol	3.8	10.1371/journal.pcbi.1012948	Bioinformatics Tools
395	2025-04-04	Flexible integration of spatial and expression information for precise spot embedding via ZINB-based graph-enhanced autoencoder	Communications Biology	5.2	10.1038/s42003-025-07965-5	Bioinformatics Tools
396	2025-04-06	Spatially informed graph transformers for spatially resolved transcriptomics	Communications Biology	5.2	10.1038/s42003-025-08015-w	Bioinformatics Tools
397	2025-04-30	Exploring the Latent Information in Spatial Transcriptomics Data via Multi-View Graph Convolutional Network Based on Implicit Contrastive Learning	Advanced Science	14.3	10.1002/adv.202413545	Bioinformatics Tools
398	2025-05-08	ONTraC characterizes spatially continuous variations of tissue microenvironment through niche trajectory analysis	Genome Biol	10.1	10.1186/s13059-025-03588-5	Bioinformatics Tools
399	2025-05-12	stMHCG: High-confidence multi-view clustering for identification of spatial domains from spatially resolved transcriptomics	Neurocomputing	5.5	10.1016/j.neucom.2025.130362	Bioinformatics Tools
400	2025-05-20	STP: single-cell partition for subcellular spatially-resolved transcriptomics	Nature Communications	14.7	10.1038/s41467-025-59782-3	Bioinformatics Tools
401	2025-05-26	Giotto Suite: a multi-scale and technology-agnostic spatial multi-omics analysis ecosystem	Nature Methods	32.1	10.1038/s41592-025-02817-w	Bioinformatics Tools
402	2025-06-03	DeepGFT: identifying spatial domains in spatial transcriptomics of complex and 3D tissue using deep learning and graph Fourier transform	Genome Biology	10.1	10.1186/s13059-025-03631-5	Bioinformatics Tools

No.	Epub	Title	Journal	IF	DOI	App. Area
403	2025-06-10	spaMGCN: a graph convolutional network with autoencoder for spatial domain identification using multi-scale adaptation	Genome Biology	10.1	10.1186/s13059-025-03637-z	Bioinformatics Tools
404	2025-06-16	stClinic dissects clinically relevant niches by integrating spatial multi-slice multi-omics data in dynamic graphs	Nature Communications	14.7	10.1038/s41467-025-60575-x	Bioinformatics Tools
405	2025-06-23	spCLUE: a contrastive learning approach to unified spatial transcriptomics analysis across single-slice and multi-slice data	Genome Biology	10.1	10.1186/s13059-025-03636-0	Bioinformatics Tools
406	2025-06-23	Hierarchical Interpretation of Out-of-Distribution Cells Using Bottlenecked Transformer	Genome Biology	9.4	10.1186/s13059-025-03638-y	Bioinformatics Tools
407	2025-07-01	stGRL: spatial domain identification, denoising, and imputation algorithm for spatial transcriptome data based on multi-task graph contrastive representation learning	BMC Biology	4.4	10.1186/s12915-025-02290-z	Bioinformatics Tools
408	2025-07-02	Automated integration of multi-slice spatial transcriptomics data in 2D and 3D using VR-Omics	Genome Biology	10.1	10.1186/s13059-025-03630-6	Bioinformatics Tools
409	2025-07-02	Prioritizing perturbation-responsive gene patterns using interpretable deep learning	Nature Communications	14.7	10.1038/s41467-025-61476-9	Bioinformatics Tools
410	2025-07-10	TriCLFF: a multi-modal feature fusion framework using contrastive learning for spatial domain identification	Briefings in Bioinformatics	6.8	10.1093/bib/bbaf316	Bioinformatics Tools
411	2025-07-16	Topological velocity inference from spatial transcriptomic data	Nature Biotechnology	33.1	10.1038/s41587-025-02688-8	Bioinformatics Tools
412	2025-07-23	Melanocytes and photosensory organs share a common ancestry that illuminates the origins of the neural crest	Communications Biology	5.2	10.1038/s42003-025-08502-0	Biological Evolution
413	2025-07-29	SpaSEG: unsupervised deep learning for multi-task analysis of spatially resolved transcriptomics	Genome Biology	10.1	10.1186/s13059-025-03697-1	Bioinformatics Tools
414	2025-07-29	A spatial imaging-transcriptomics paradigm for deciphering the molecular basis of microscopic MRI in the normal brain and Alzheimer's disease	Cell Reports	7.5	10.1016/j.celrep.2025.116073	Disease Research / Non-cancerous Di...
415	2025-08-05	Thor: a platform for cell-level investigation of spatial transcriptomics and histology	Nature Communications	14.7	10.1038/s41467-025-62593-1	Bioinformatics Tools
416	2025-08-14	Efficient integration of spatial omics data for joint domain detection, matching, and alignment with stMSA	Genome Research	6.2	10.1101/gr.280584.125	Bioinformatics Tools
417	2025-08-21	Finding spatially variable ligand-receptor interactions with functional support from downstream genes	Nature Communications	14.7	10.1038/s41467-025-62988-0	Bioinformatics Tools
418	2025-08-21	Improving cell-type composition inference in spatial transcriptomics with SpaDAMA	PLoS Comput Biol	3.8	10.1371/journal.pcbi.1013354	Bioinformatics Tools
419	2025-09-08	TissueMosaic: Self-supervised learning of tissue representations enables differential spatial transcriptomics across samples	Cell Systems	7.7	10.1016/j.cels.2025.101394	Bioinformatics Tools
420	2025-09-15	SpaBatch: Deep Learning-Based Cross-Slice Integration and 3D Spatial Domain Identification in Spatial Transcriptomics	Advanced Science	14.3	10.1002/advs.202509090	Bioinformatics Tools
421	2025-09-22	Polyomino reconstructs spatial transcriptomic profiles with single-cell resolution via a region-allocation method	Genome Research	5.5	10.1101/gr.280532.125	Bioinformatics Tools
422	2025-09-30	SpaCross deciphers spatial structures and corrects batch effects in multi-slice spatially resolved transcriptomics	Communications Biology	5.1	10.1038/s42003-025-08810-5	Bioinformatics Tools
423	2025-10-01	scBSP: A fast and accurate tool for identifying spatially variable genes from spatial transcriptomic data	Bioinformatics	5.4	10.1093/bioinformatics/btaf554	Bioinformatics Tools

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424	2025-10-01	ST-GEARS: Advancing 3D Downstream Research through Accurate Spatial Information Recovery	Nature Communications	15.7	10.1038/s41467-024-51935-0	Bioinformatics Tools
425	2025-10-08	HKANLP: Link Prediction With Hyperspherical Embeddings and Kolmogorov-Arnold Networks	IEEE Trans Neural Netw Learn Syst	8.9	10.1109/TNNLS.2025.3614341	Bioinformatics Tools
426	2025-10-09	A comprehensive benchmarking for spatially resolved transcriptomics clustering methods across variable technologies, organs, and replicates	iMeta	33.2	10.1002/imt2.70084	Bioinformatics Tools
427	2025-10-17	Spatial domain identification method based on multi-view graph convolutional network and contrastive learning	PLoS Computational Biology	3.6	10.1371/journal.pcbi.1013369	Bioinformatics Tools
428	2025-10-28	TemporalVAE: atlas-assisted temporal mapping of time-series single-cell transcriptomes during embryogenesis	Nature Cell Biology	19.9	10.1038/s41556-025-01787-7	Bioinformatics Tools
429	2025-11-03	STORIES: learning cell fate landscapes from spatial transcriptomics using optimal transport	Nature Methods	32.1	10.1038/s41592-025-02855-4	Bioinformatics Tools
430	2025-11-03	SLGCA: spatial cross-level graph contrastive autoencoder for multislice spatial domain identification and microenvironment exploration	Briefings in Bioinformatics	7.7	10.1093/bib/bbaf574	Bioinformatics Tools
431	2025-11-11	ELLA: Modeling Subcellular Spatial Variation of Gene Expression within Cells in High-Resolution Spatial Transcriptomics	Nature Communications	15.7	10.1038/s41467-025-64867-0	Bioinformatics Tools
432	2025-11-12	SpaMWGDA: Identifying spatial domains of spatial transcriptomes using multi-view weighted fusion graph convolutional network and data augmentation	PLoS Computational Biology	3.6	10.1371/journal.pcbi.1013667	Bioinformatics Tools
433	2025-11-12	A unified framework for identification of cell-type-specific spatially variable genes in spatial transcriptomic studies	PNAS	9.1	10.1073/pnas.2503952122	Bioinformatics Tools
434	2025-11-17	Spatial GWAS Atlas: a knowledgebase for decoding the genetic architecture of complex traits in spatial resolution	Nucleic Acids Research	13.1	10.1093/nar/gkaf1103	Bioinformatics Tools
435	2025-11-17	scBrainScope: cross-species multidimensional brain atlas	Nucleic Acids Research	13.1	10.1093/nar/gkaf1092	Bioinformatics Tools
436	2025-11-19	Vector-guided graph learning for spatial multi-slice multi-omics alignment	Cell Reports Methods	4.5	10.1016/j.crmeth.2025.101241	Bioinformatics Tools
437	2025-11-21	Osr1 orchestrates posterior second heart field cell migration for outflow tract formation	Communications Biology	5.1	10.1038/s42003-025-09118-0	Growth and Development
438	2025-11-22	stPipe: A flexible and streamlined R/Bioconductor pipeline for preprocessing sequencing-based spatial transcriptomics data	NAR Genomics and Bioinformatics	2.8	10.1093/nargab/lqaf167	Bioinformatics Tools
439	2025-11-27	Deep Learning-Based Quality Control Using Subcellular RNA Spatial Distribution Patterns for Cell Segmentation in Spatial Transcriptomics Data	Small Methods	9.1	10.1002/smt.202500885	Bioinformatics Tools
440	2025-12-10	STIFT: spatiotemporal transcriptomics integration through spatially informed multi-timepoint bridging	Briefings in Bioinformatics	7.7	10.1093/bib/bbaf644	Bioinformatics Tools
441	2025-12-10	SEPAR enables spatial metagene discovery and associated molecular pattern characterization in spatial transcriptomics and multi-omics datasets	Communications Biology	5.1	10.1038/s42003-025-09340-w	Bioinformatics Tools
442	2025-12-15	Spatial transcriptomic alignment, integration, and 3D reconstruction by STAIR	Genome Biology	9.4	10.1186/s13059-025-03895-x	Bioinformatics Tools
443	2025-12-19	TOGAR: Token-gated generative refinement for high-fidelity spatial transcriptomics and robust spatial domain clustering	Genomics	3	10.1016/j.ygeno.2025.111179	Bioinformatics Tools

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444	2025-12-22	Probabilistic-graph-based spatial context-aware framework for interpretable spatial omics denoising and augmentation	Briefings in Bioinformatics	7.7	10.1093/bib/bbaf674	Bioinformatics Tools
445	2025-12-23	HiStaR: identifying spatial domains with hierarchical spatial transcriptomics variational autoencoder	Journal of Translational Medicine	7.5	10.1186/s12967-025-07404-3	Bioinformatics Tools
446	2026-01-05	Decoding cell state transitions driven by dynamic cell-cell communication in spatial transcriptomics	Nature Computational Science	18.3	10.1038/s43588-025-00934-2	Bioinformatics Tools
447	2026-01-05	MMSpa is a deep learning-based tool that enhances the identification of spatial domains in spatial transcriptomics studies	PLoS Biology	7.2	10.1371/journal.pbio.3003580	Bioinformatics Tools
448	2026-01-06	The interpretable multimodal dimension reduction framework SpaHdmap enhances resolution in spatial transcriptomics	Nature Cell Biology	19.1	10.1038/s41556-025-01838-z	Bioinformatics Tools
449	2026-01-07	Advancing spatial cellular communication inference with ligand diffusion and transport model	Communications Biology	5.1	10.1038/s42003-025-09413-w	Bioinformatics Tools
450	2026-01-13	CellMap: precision mapping of cellular landscape in spatial transcriptomics	Nucleic Acids Research	13.1	10.1093/nar/gkaf1484	Bioinformatics Tools
451	2026-01-13	Network models for bridging denoising and identifying spatial domains of spatially resolved transcriptomics	PLoS Computational Biology	3.6	10.1371/journal.pcbi.1013867	Bioinformatics Tools
452	2026-01-13	AugGCL: Multimodal graph learning for spatial transcriptomics analysis with enhanced gene and morphological data	PLoS Computational Biology	3.6	10.1371/journal.pcbi.1013912	Bioinformatics Tools
453	2026-01-17	Robust characterization and interpretation of rare pathogenic cell populations from spatial omics using GARDEN	Nature Communications	15.7	10.1038/s41467-026-68500-6	Bioinformatics Tools
454	2026-01-20	S3RL: Enhancing Spatial Single-Cell Transcriptomics With Separable Representation Learning	Advanced Science	14.1	10.1002/advs.202516178	Bioinformatics Tools
455	2026-01-24	FAST: Scalable Factor Analysis for Spatial Dimension Reduction of Multi-section Spatial Transcriptomics	Genomics, Proteomics & Bioinformatics	7.9	10.1093/gpbjnl/qzag006	Bioinformatics Tools
456	2026-01-28	Convergent transcriptomic and connectomic controllers of information integration and its anaesthetic breakdown across mammalian brains	Nature Human Behaviour	15.9	10.1038/s41562-025-02381-5	Bioinformatics Tools
457	2026-01-21	Multi-ancestry GWAS of age-related hearing loss identifies 140 loci and key cellular mechanisms	Nature Communications	15.7	10.1038/s41467-026-69894-z	Disease Research / Non-cancerous Di...
458	2026-02-02	Bayesian Hyperspherical Graph Mixture-of-Experts Deciphers Cell-Cell Interaction in Spatial Transcriptomics	IEEE	3.5	10.1109/TCBBIO.2026.3660060	Bioinformatics Tools
459	2026-02-17	STCF: Multi-View Clustering for Spatial Transcriptomics Based on Cross-View Fusion	IEEE	3.5	10.1109/TPAMI.2026.3665779	Bioinformatics Tools
460	2026-01-24	Cell interactions inference for single-cell spatial transcriptomes with GraphCIM	Expert Systems with Applications	7.5	10.1016/j.eswa.2026.131799	Disease Research / Non-cancerous Di...
461	2026-02-10	Seq-Scope-eXpanded: spatial omics beyond optical resolution	Nature Communications	15.7	10.1038/s41467-026-69346-8	Spatial Transcriptomics Technology
462	2026-02-21	Spatial perturb-seq: single-cell functional genomics within intact tissue architecture	Nature Communications	15.7	10.1038/s41467-026-69677-6	Spatial Transcriptomics Technology
463	2026-02-05	Integrating single-nucleus barcoding with spatial transcriptomics via Stamp-seq to reveal immunotherapy response-enhancing functional modules in NSCLC	Cell Discovery	12.5	10.1038/s41421-025-00861-6	Bioinformatics Tools
464	2026-02-28	HRCHY-CytoCommunity identifies hierarchical tissue organization in cell-type spatial maps	Nature Communications	15.7	10.1038/s41467-026-70069-z	Bioinformatics Tools

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465	2026-03-06	SpatioFreq: A Deep Learning Framework for Decoding Cellular and Tissue Landscapes Across Organisms Using Spatial Transcriptomics	Interdisciplinary Sciences: Computational Life Sciences	-	10.1007/s12539-025-00811-6	Bioinformatics Tools
466	2026-03-07	Leveraging Spot-Gene Heterogeneous Graphs for Unified Spatially Resolved Transcriptomics Domain Detection on Single-Slice and Multi-Slice Data	Genes	2.8	10.3390/genes17030310	Bioinformatics Tools
467	2026-03-09	Gene expression dynamics of human and mouse craniofacial development at the single-cell level	Nature Communications	15.7	10.1038/s41467-026-70232-6	Bioinformatics Tools
468	2026-03-11	Genetic basis of canine separation-related behavior: putative enhancer-dependent regulation of SLC32A1 and conservation in human psychiatric disorders	Journal of Genetics and Genomics	7.1	10.1016/j.jgg.2026.03.003	Bioinformatics Tools
469	2026-03-11	Competitive interactions shape mammalian brain network dynamics and computation	Nature Neuroscience	20	10.1038/s41593-026-02205-3	Bioinformatics Tools
470	2026-03-14	SSL-CST: Cell Segmentation for Single-Cell Spatial Transcriptome Based on Self-Supervised Learning	AAAI Conference on Artificial Intelligence (AAAI)	25.6	10.1609/aaai.v40i21.38804	Bioinformatics Tools
471	2026-03-24	SMIntegration: A Web Tool for Comprehensive Spatial Metabolomics and Transcriptomics Integrated Analysis and Visualization	GigaScience	3.9	10.1093/gigascience/giag033	Bioinformatics Tools
472	2026-03-26	Smoothie: efficient inference and integration of spatial co-expression networks from denoised spatial transcriptomics data	Communications Biology	5.1	10.1038/s42003-026-09898-z	Bioinformatics Tools
473	2026-03-26	SPTeD-seq enables parallel optics-free newborn cell tracking and spatial total transcriptional dynamics in intact microenvironments	Cell Stem Cell	20.4	10.1016/j.stem.2026.03.001	Bioinformatics Tools
474	2026-03-27	HarveST uses a heterogeneous graph learning framework to reveal spatial transcriptomics patterns	Communications Biology	5.1	10.1038/s42003-026-09841-2	Bioinformatics Tools
475	2026-03-27	3d-OT: a deep geometry-aware framework for heterogeneous slices alignment of spatial multi-omics	Nature Methods	32.1	10.1038/s41592-026-03034-9	Bioinformatics Tools
476	2026-03-27	SMART: spatial multi-omic aggregation using graph neural networks and metric learning	Nature Communications	15.7	10.1038/s41467-026-70821-5	Bioinformatics Tools
477	2026-03-30	Composition-Aware Cross-Sectional Integration for Spatial Transcriptomics	Advanced Intelligent Discovery	-	10.1002/aidi.202500226	Bioinformatics Tools
478	2026-04-01	Scalable discovery of spatial multicellular patterns via neighborhood-to-sequence transformation	Communications Biology	5.1	10.1038/s42003-026-09923-1	Bioinformatics Tools
479	2026-04-02	Alignment of spatial transcriptomics slices across diseases, platforms and conditions	Genome Medicine	11.2	10.1186/s13073-026-01634-w	Bioinformatics Tools
480	2026-04-03	Benchmarking alignment methods for spatial transcriptomics data	Nature Computational Science	18.3	10.1038/s43588-026-00977-z	Bioinformatics Tools
481	2026-04-08	Engineered immunosuppressive dendritic cells protect against cardiac remodelling	Nature	48.5	10.1038/s41586-026-10346-5	Disease Research / Non-cancerous Di...
482	2026-04-08	Benchmarking tools for deciphering cellular crosstalk in spatially-resolved transcriptomics	Genome Biology	9.4	10.1186/s13059-026-04063-5	Bioinformatics Tools
483	2026-04-08	DGAE: Dynamic Graph Convolutional Network for Multi-Slice Spatial Transcriptomics Alignment and Enhancement	IEEE Transactions on Computational Biology and Bioinformatic...	3.4	10.1109/TCBBIO.2026.3682296	Bioinformatics Tools
484	2026-04-13	Mapping the zygote-to-adult developmental cell phylogeny in Arabidopsis thaliana reveals a three-cell rule of branching	Nature Plants	13.6	10.1038/s41477-026-02264-1	Bioinformatics Tools

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485	2026-04-20	Topography-aware optimal transport for alignment of spatial omics data	Cell Reports Methods	4.5	10.1016/j.crmeth.2026.101373	Bioinformatics Tools
486	2026-04-20	Subcellular mRNA localization patterns across tissues resolved with spatial transcriptomics	Nature Communications	15.7	10.1038/s41467-026-72156-7	Spatial Transcriptomics Technology
487	2026-04-30	Reinvigorating COTL1high NK cells via G1TR signalling overcomes immune checkpoint blockade resistance in tsMHC-I-impaired tumours	Nature Cell Biology	19.1	10.1038/s41556-026-01925-9	Disease Research / Malignant Tumors
488	2026-05-13	Trainable Clustering Framework for Spatial Transcriptomics	Bioinformatics Advances	2.7	10.1093/bioadv/vbag133	Bioinformatics Tools
489	2026-04-22	CellNiche represents cellular microenvironments in atlas-scale spatial omics data with contrastive learning	Nature Communications	15.7	10.1038/s41467-026-71759-4	Bioinformatics Tools
490	2026-04-24	Mosaic integration of spatial multi-omics with SpaMosaic	Nature Genetics	29	10.1038/s41588-026-02573-3	Bioinformatics Tools
491	2026-05-15	YTHDF1 impacts cardiomyocyte differentiation by regulating the TET2 mRNA	PloS one	2.6	10.1371/journal.pone.0349040	Disease Research / Non-cancerous Di...
492	2026-05-19	ConMGIN: Interpretable multilayer GIN-Bayesian framework for spatial domain analysis	Neural Networks	6.3	10.1016/j.neunet.2026.109155	Disease Research / Non-cancerous Di...
493	2026-05-20	Accurate, scalable and cross-platform cell identification for high-resolution spatial transcriptomics	Nature Genetics	29	10.1038/s41588-026-02610-1	Bioinformatics Tools
494	2026-05-21	An Integrated and Robust Deep Learning Framework for Denoising and Analyzing Single-Cell Spatial Transcriptomics	Advanced Intelligent Systems	6.1	10.1002/aisy.70429	Bioinformatics Tools
495	2026-05-21	SpaMGCL: Neighborhood-Aware Masked Graph Contrastive Learning for Spatial Transcriptomics Analysis	Expert Systems with Applications	7.5	10.1016/j.eswa.2026.132911	Bioinformatics Tools
496	2026-05-22	A masked generative graph representation learning framework empowering precise spatial domain identification	Bioinformatics	5.4	10.1093/bioinformatics/btag333	Bioinformatics Tools
497	2026-05-28	PathwayEmbed: A Computational Tool to Quantify Intracellular Signaling Transduction States from Transcriptomic Data	Bioinformatics	5.4	10.1093/bioinformatics/btag346	Bioinformatics Tools
498	2026-05-29	Decoding the spatiotemporal development of human meninges	Cell	42.5	10.1016/j.cell.2026.04.040	Growth and Development
499	2026-06-01	Spatiotemporal Profiling Defines the Epithelial and Mesenchymal Transition Window in Embryonic Lung Morphogenesis	Journal of developmental biology	2.4	10.3390/jdb14020025	Bioinformatics Tools
500	2026-06-05	StPedf: Cell trajectory inference of spatial transcriptomics via spatial proximity embedding and spatial density-adaptive fusion	PLoS Computational Biology	3.6	10.1371/journal.pcbi.1014346	Bioinformatics Tools
501	2026-06-10	CytoSignal detects locations and dynamics of ligand-receptor signaling at cellular resolution from spatial transcriptomic data	Nature Genetics	25.5	10.1038/s41588-026-02624-9	Bioinformatics Tools
502	2026-06-12	Φ-Space ST: A platform-agnostic method to identify cell states in spatial transcriptomics studies	Cell Reports Methods	5.8	10.1016/j.crmeth.2026.101483	Bioinformatics Tools
503	2026-06-12	GenOT: generative optimal transport enables spatiotemporal interpolation and generation in cross-platform spatial transcriptomics	Genome Biology	9.2	10.1186/s13059-026-04166-z	Bioinformatics Tools
504	2026-06-13	A collaborative graph-transformer network for spatial transcriptomics data clustering with semantic graph induction	Engineering Applications of Artificial Intelligence	9	10.1016/j.engappai.2026.115097	Bioinformatics Tools
505	2026-06-15	SECTOR: structural entropy-based learning of spatiotemporal organisation in spatial transcriptomic	Bioinformatics	5.4	10.1093/bioinformatics/btag367	Bioinformatics Tools
506	2026-06-20	EMD-HVG: a normalization-independent method for highly variable gene selection based on Earth mover's distance	BMC Bioinformatics	4.4	10.1186/s12859-026-06527-8	Bioinformatics Tools

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507	2026-06-24	Genetic and epigenetic underpinnings of biological aging: a multi-omics study integrating Mendelian randomization, spatial transcriptomics, and drug target discovery	Clinical Epigenetics	5.7	10.1186/s13148-026-02184-z	Other Studies
508	2026-06-25	Integrative cross-sample alignment and spatially differential gene analysis for spatial transcriptomics	Nature Communications	18.1	10.1038/s41467-026-72862-2	Bioinformatics Tools
509	2026-06-27	GMSA: A Graph Matching and Point Cloud Registration-Based Method for Spatial Transcriptomics Data Alignment	Journal of Computational Biology	1.3	10.1177/15578666261462952	Bioinformatics Tools
510	2026-06-29	Trimodal, uncertainty-guided whole-slide framework for genome-scale spatial expression and image-only virtual perturbation in cancer cohorts	Genome Medicine	10.8	10.1186/s13073-026-01713-y	Bioinformatics Tools
511	2026-07-03	Divergent Spatiotemporal Expression Patterns of Histone Deacetylases During Mouse Embryonic Tongue, Palate, and Mandible Development	Genesis	2.8	10.1002/dvg.70065	Growth and Development
512	2026-07-06	A multi-scale graph frequency network for structural and functional region analysis in spatial transcriptomics	Functional & Integrative Genomics	4	10.1007/s10142-026-01960-7	Bioinformatics Tools
513	2026-07-07	Riemannian metric learning for alignment of spatial multiomics	Bioinformatics	5.5	10.1093/bioinformatics/btag220	Bioinformatics Tools
514	2026-07-11	Geometric-aware deep learning for deciphering tissue structure from spatially resolved transcriptomics	Communications Biology	5.8	10.1038/s42003-026-10667-1	Bioinformatics Tools
515	2026-07-16	Brain injury reactivates a developmental program driving genesis and integration of transient LGE-class interneurons	Stem Cell Reports	5.6	10.1016/j.stemcr.2026.103015	Other Studies
516	2026-07-22	Deciphering spatial heterogeneity by multimodal spatial transcriptomics modelling with SpatialModal	Bioinformatics	5.5	10.1093/bioinformatics/btag540	Bioinformatics Tools
517	2026-07-23	PRISM: Prior-enhanced Inference for Spatial Transcriptomic Cell Type Mapping	Bioinformatics	5.5	10.1093/bioinformatics/btag515	Bioinformatics Tools
518	2026-08-06	GatorTrio: Topology-Refined Tri-View Graph Learning for Spatial Domain Identification in Spatial Transcriptomics	KDD 2026 (ACM)	-	10.1145/3770855.3818918	Bioinformatics Tools
519	2026-08-06	Towards Universal Spatial Transcriptomics Super-Resolution: A Generalist Physically Consistent Flow Matching Framework	KDD 2026 (ACM)	-	10.1145/3770855.3818973	Bioinformatics Tools
520	2026-08-06	ENGTT: An Edge-Node Guided Graph Transformer for Spatial Domain Parsing with Accurate Boundaries	KDD 2026 (ACM)	-	10.1145/3770855.3818969	Bioinformatics Tools
521	2026-08-06	SpaCellAgent: A Self-Evolving LLM-Based Multi-Agent Framework for Trajectory Analysis	KDD 2026 (ACM)	-	10.1145/3770855.3818914	Bioinformatics Tools
522	2026-08-17	Highly Sensitive Spatial Host-Microbiome Transcriptomics in FFPE Tissues via Iterative Hydrogel Expansion	Advanced Science	14.3	10.1002/advs.77219	Bioinformatics Tools
523	2026-08-18	Multimodal brain cell atlas across the adult macaque lifespan	Cell	45.1	10.1016/j.cell.2026.07.045	Other Studies
524	2026-08-18	TuckerHKN: multi-source hypergraph-guided Tucker co-learning for unraveling high-order structures in spatial transcriptomics	Expert Systems with Applications	9.4	10.1016/j.eswa.2026.133827	Bioinformatics Tools
525	2026-08-19	STWave: Fine-Scale Spatial Structure Discovery in Microscopic-Resolution Spatial Transcriptomics via Patchwise Wavelet Graphs	Advanced Science	14.1	10.1002/advs.77240	Bioinformatics Tools
526	2026-08-24	Beyond benchmarking: an expert-guided consensus approach to spatially aware clustering	Nature Methods	28.3	10.1016/j.eswa.2026.133827	Bioinformatics Tools
527	2026-08-25	Integrative spatial profiling of 3D genome organization and gene expression in tissue	Cell	45.1	10.1016/j.cell.2026.07.039	Other Studies

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528	2022-11-10	PAST: latent feature extraction with a prior-based self-attention framework for spatial transcriptomics	bioRxiv	-	10.1101/2022.11.09.515447	Bioinformatics Tools
529	2022-11-17	Analysis of spatial transcriptomics at varying resolution levels using the unified framework of SpaSEG	bioRxiv	-	10.1101/2022.11.16.516728	Bioinformatics Tools
530	2022-12-08	STomics-GenX: CRISPR based approach to improve cell identity specific gene detection from spatially resolved transcriptomics	bioRxiv	-	10.1101/2022.12.08.519589	Spatial Transcriptomics Technology
531	2022-12-31	StereoSiTE: A framework to spatially and quantitatively profile the cellular neighborhood organized iTME	bioRxiv	-	10.1101/2022.12.31.522366	Bioinformatics Tools
532	2023-01-08	PASTE2: Partial Alignment of Multi-slice Spatially Resolved Transcriptomics Data	bioRxiv	-	10.1101/2023.01.08.523162	Bioinformatics Tools
533	2023-02-03	Construction of a 3D whole organism spatial atlas by joint modeling of multiple slices modeling of multiple slices	bioRxiv	-	10.1101/2023.02.02.526814	Bioinformatics Tools
534	2023-03-01	StereoCell enables high accuracy single cell segmentation for spatial transcriptomic dataset	bioRxiv	-	10.1101/2023.02.28.530414	Bioinformatics Tools
535	2023-04-28	Integrated Spatial Transcriptomic and Proteomic Analysis of Fresh Frozen Tissue Based on Stereo-seq	bioRxiv	-	10.1101/2023.04.28.538364	Spatial Transcriptomics Technology
536	2023-05-07	Integrative mapping of spatial transcriptomic and amyloid pathology in Alzheimer's disease at single-cell resolution	bioRxiv	-	10.1101/2023.05.07.539389	Disease Research / Non-cancerous Di...
537	2023-05-08	Efficient reliability analysis of spatially resolved transcriptomics at varying resolutions using SpaSEG	bioRxiv	-	10.1101/2022.11.16.516728	Bioinformatics Tools
538	2023-05-30	Applying high-resolution spatial transcriptomics to characterise the amyloid plaque cell niche in Alzheimer's Disease	bioRxiv	-	10.1016/j.celrep.2024.114216	Disease Research / Non-cancerous Di...
539	2023-05-30	Spatiotemporally resolved transcriptome atlas of developing mouse placenta reveals mechanisms of embryonic lethality	bioRxiv	-	10.1101/2024.05.28.596242	Growth and Development
540	2023-06-29	Dendrimeric DNA Coordinate Barcoding Design for Spatial RNA Sequencing	bioRxiv	-	10.1101/2023.06.26.546618	Spatial Transcriptomics Technology
541	2023-07-12	ProFAST: a fast and scalable factor analysis for spatially aware dimension reduction of multi-section spatial transcriptomics data	bioRxiv	-	10.1101/2023.07.11.548486	Bioinformatics Tools
542	2023-08-02	FIST-n D: A tool for n-dimensional spatial transcriptomics data imputation via graph-regularized tensor completion	bioRxiv	-	10.1101/2022.10.12.511928	Bioinformatics Tools
543	2023-10-30	Cell segmentation and gene imputation for imaging-based spatial transcriptomics	bioRxiv	-	10.1101/2023.10.26.564185	Bioinformatics Tools
544	2023-11-22	BARTab & bartools: an integrated Nextflow pipeline and R package for the analysis of synthetic cellular barcodes in the genome and transcriptome	bioRxiv	-	10.1101/2023.11.21.568179	Bioinformatics Tools
545	2023-12-05	Spatially resolved molecular and cellular atlas of the mouse brain	bioRxiv	-	10.1101/2023.12.03.569501	Other Studies
546	2023-12-11	stGCL: A versatile cross-modality fusion method based on multi-modal graph contrastive learning for spatial transcriptomics	bioRxiv	-	10.1101/2023.12.10.571025	Bioinformatics Tools
547	2024-01-01	High-Resolution Spatiotemporal Transcriptomic Atlas Reveals Ly6a+ Peritoneal Stem Cell Population and FGF7 Signaling are Critical for Tendon Formation	Research Square	-	10.2139/ssrn.5058431	Growth and Development
548	2024-02-09	Spatial Transcriptomic Alignment, Integration, and de novo 3D Reconstruction by STAIR	Research Square	-	10.21203/rs.3.rs-3939678/v1	Bioinformatics Tools

No.	Epub	Title	Journal	IF	DOI	App. Area
549	2024-02-25	MaskGraphene: Advancing joint embedding, clustering, and batch correction for spatial transcriptomics using graph-based self-supervised learning	bioRxiv	-	10.1101/2024.02.21.581387	Bioinformatics Tools
550	2024-03-13	CytoSignal Detects Locations and Dynamics of Ligand-Receptor Signaling at Cellular Resolution from Spatial Transcriptomic Data	bioRxiv	-	10.1101/2024.03.08.584153	Bioinformatics Tools
551	2024-05-05	Tri-omic mapping revealed concerted dynamics of 3D epigenome and transcriptome in brain cells	bioRxiv	-	10.1101/2024.05.03.592322	Spatial Transcriptomics Technology
552	2024-05-21	SCIITensor: A tensor decomposition based algorithm to construct actionable TME modules with spatially resolved intercellular communications	bioRxiv	-	10.1101/2024.05.21.595103	Bioinformatics Tools
553	2024-05-22	Spatial Dissection of the Distinct Cellular Responses to Normal Aging and Alzheimer's Disease in Human Prefrontal Cortex at Single-Nucleus Resolution	medRxiv	-	10.1101/2024.05.21.24306783	Disease Research / Non-cancerous Di...
554	2024-06-01	Towards a universal spatial molecular atlas of the mouse brain	bioRxiv	-	10.1101/2024.05.27.594872	Other Studies
555	2024-06-02	Precise cell recovery by cell nucleus united transcript (CellCUT) for enhanced spatial transcriptomics	bioRxiv	-	10.1101/2024.05.28.596350	Bioinformatics Tools
556	2024-06-03	stVCR: Reconstructing spatio-temporal dynamics of cell development using optimal transport	bioRxiv	-	10.1101/2024.06.02.596937	Bioinformatics Tools
557	2024-06-16	Inferring metabolite states from spatial transcriptomes using multiple graph neural network	bioRxiv	-	10.1101/2024.06.12.598759	Bioinformatics Tools
558	2024-06-18	CoDi: Contrastive distance cell type annotation for spatially resolved transcriptomics	Research Square	-	10.21203/rs.3.rs-4495419/v1	Bioinformatics Tools
559	2024-06-19	CellBin: a highly accurate single-cell gene expression processing pipeline for high-resolution spatial transcriptomics	bioRxiv	-	10.1101/2023.02.28.530414	Bioinformatics Tools
560	2024-07-03	Unravelling the progression of the zebrafish primary body axis with reconstructed spatiotemporal transcriptomics	bioRxiv	-	10.1101/2024.07.01.601472	Growth and Development
561	2024-09-22	Interpretable high-resolution dimension reduction of spatial 2 transcriptomics data by SpaHDmap	bioRxiv	-	10.1101/2024.09.12.612666	Bioinformatics Tools
562	2024-10-17	Benchmarking alternative polyadenylation detection in single-cell and spatial transcriptomes	bioRxiv	-	10.1101/2024.10.15.618405	Bioinformatics Tools
563	2024-10-24	A spatially resolved whole-layers landscape of bladder cancer deciphers dynamic invasive progression	Research Square	-	10.21203/rs.3.rs-5284291/v1	Disease Research / Malignant Tumors
564	2024-11-11	Integrative cell bin segmentation on spatial transcriptomics by Voronoi	ResearchGate	-	10.1101/2024.11.07.622434	Bioinformatics Tools
565	2024-11-11	Integration of Imaging-based and Sequencing-based Spatial Omics Mapping on the Same Tissue Section via DBITplus	bioRxiv	-	10.1101/2024.11.07.622523	Spatial Transcriptomics Technology
566	2024-11-17	Unbiased profiling of multipotency landscapes reveals spatial modulators of clonal fate biases	bioRxiv	-	10.1101/2024.11.15.623687	Growth and Development
567	2024-12-24	Randomized Spatial PCA (RASP): a computationally efficient method for dimensionality reduction of high-resolution spatial transcriptomics data	bioRxiv	-	10.1101/2024.12.20.629785	Bioinformatics Tools
568	2025-01-02	Multiscale Cell-Cell Interactive Spatial Transcriptomics Analysis	Research Square	-	10.21203/rs.3.rs-5743704/v1	Bioinformatics Tools
569	2025-01-18	Sequencing-based Spatial Transcriptomics with scRNA-seq Sensitivity	bioRxiv	-	10.1101/2025.01.15.633111	Spatial Transcriptomics Technology

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570	2025-01-19	Single cell resolved spatial immune repertoire unveils spatial heterogeneity of lymphoid aggregates in human immune disorders	bioRxiv	-	10.1101/2025.01.16.630222	Spatial Transcriptomics Technology
571	2025-01-22	Single-cell spatial transcriptome reveals pathological features of human hippocampus with sclerosis	bioRxiv	-	10.1101/2025.01.21.633854	Disease Research / Non-cancerous Di...
572	2025-01-25	ST-FFPE-mIF: Integrating Spatial Transcriptomics and MultiplexImmunofluorescence in Formalin-Fixed Paraffin-Embedded Tissues Using Stereo-seq	bioRxiv	-	10.1101/2025.01.24.634655	Spatial Transcriptomics Technology
573	2025-01-29	Zmap: an intelligent region-allocation method to map single-cell into spatial data	bioRxiv	-	10.1101/2025.01.27.635178	Bioinformatics Tools
574	2025-02-19	Learning Latent Trajectories in Developmental Time Series with Hidden-Markov Optimal Transport	bioRxiv	-	10.1101/2025.02.14.638351	Bioinformatics Tools
575	2025-03-02	Smoothie: Efficient Inference of Spatial Co-expression Networks from Denoised Spatial Transcriptomics Data	bioRxiv	-	10.1101/2025.02.26.640406	Bioinformatics Tools
576	2025-03-07	Spatial transcriptomics elucidates the central role of cerebral vasculatures in the progression of Japanese encephalitis	bioRxiv	-	10.1101/2025.03.06.637776	Disease Research / Non-cancerous Di...
577	2025-03-15	DisConST: Deciphering Spatial Domains Using Distribution-aware Contrastive Learning for Spatial Transcriptomics	bioRxiv	-	10.1101/2025.03.13.642300	Bioinformatics Tools
578	2025-03-17	Single-cell Spatial Transcriptomics Reveals Disease-specific Microenvironmental Niches in Neurodegeneration and COVID-19	bioRxiv	-	10.1101/2025.03.15.643484	Disease Research / Non-cancerous Di...
579	2025-04-09	Spatial Metagene Discovery and Associated Molecular Pattern Characterization in Spatial Transcriptomics and Multi-Omics using SEPAR	bioRxiv	-	10.1101/2025.04.05.647412	Bioinformatics Tools
580	2025-04-12	SpatioCell: A Deep Learning Algorithm for High-resolution Single-cell Mapping through Deep Integration of Histology Image and Sequencing Data	bioRxiv	-	10.1101/2025.04.07.647590	Bioinformatics Tools
581	2025-04-20	Topography Aware Optimal Transport for Alignment of Spatial Omics Data	bioRxiv	-	10.1101/2025.04.15.648894	Bioinformatics Tools
582	2025-05-07	Separable Spatial Single-cell Transcriptome Representation Learning via Graph Transformer and Hyperspherical Prototype Clustering	bioRxiv	-	10.1101/2025.05.01.651634	Bioinformatics Tools
583	2025-05-09	Application of spatial transcriptomics across organoids: a high-resolution spatial whole-transcriptome benchmarking dataset	bioRxiv	-	10.1101/2025.05.04.651803	Bioinformatics Tools
584	2025-05-15	Spatial geometry-aware deep learning for deciphering tissue structure from spatially resolved transcriptomics	bioRxiv	-	10.1101/2025.05.11.652625	Bioinformatics Tools
585	2025-05-15	A Multimodal Graph Learning Framework for Versatile Spatial Transcriptomics Analysis with SpatialModal	bioRxiv	-	10.1101/2025.05.11.653070	Bioinformatics Tools
586	2025-05-30	Structural innovations and neurogenic continuity define avian brain development and evolution	bioRxiv	-	10.1101/2025.05.30.654767	Biological Evolution
587	2025-06-01	Spatial metabolomics reveals persistent localized niche-specific metabolic failure in kidneys following ischemia-reperfusion injury	bioRxiv	-	10.1101/2025.05.27.656326	Disease Research / Non-cancerous Di...
588	2025-06-08	Spatial transcriptomic atlas of murine neurotoxocariasis reveals region-specific host responses and dysfunction in the brain	Research Square	-	10.21203/rs.3.rs-6743037/v1	Disease Research / Non-cancerous Di...

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589	2025-06-13	SemanticST: Spatially Informed Semantic Graph Learning for Clustering, Integration, and Scalable Analysis of Spatial Transcriptomics	arXiv	-	10.48550/arXiv.2506.11491	Bioinformatics Tools
590	2025-07-22	A single-cell transcriptomic atlas maps cerebellar astrocyte diversity and uncovers the transcriptional code underlying their maturation trajectories	bioRxiv	-	10.1101/2025.07.17.665323	Other Studies
591	2025-08-02	spOT-NMF: Optimal Transport-Based Matrix Factorization for Accurate Deconvolution of Spatial Transcriptomics	bioRxiv	-	10.1101/2025.08.02.668292	Bioinformatics Tools
592	2025-08-20	Three-dimensional spatial transcriptomics at isotropic resolution enabled by generative deep learning	bioRxiv	-	10.1101/2025.08.15.670472	Bioinformatics Tools
593	2025-08-20	HarveST: Heterogeneous Graph Learning Framework for Revealing Spatial Transcriptomics Patterns	Research Square	-	10.21203/rs.3.rs-7283360/v1	Bioinformatics Tools
594	2025-09-03	Sequencing-based Spatial Transcriptomics with High Sensitivity	Research Square	-	10.21203/rs.3.rs-7337510/v1	Spatial Transcriptomics Technology
595	2025-09-04	STADiffuser: high-fidelity simulation and full-view 3D modeling of spatial transcriptomics	bioRxiv	-	10.1101/2025.08.30.673245	Bioinformatics Tools
596	2025-09-05	Uncovering directionally and temporally variable genes with STAVAG	bioRxiv	-	10.1101/2025.09.02.673732	Bioinformatics Tools
597	2025-09-16	Decoder-FFPE-seq enables sensitive, genome-wide spatial transcriptomics of archival tissues at single-cell resolution	bioRxiv	-	10.1101/2025.09.12.675967	Spatial Transcriptomics Technology
598	2025-09-17	SpatialFuser: A Unified Deep Learning Framework for Spatial Multi-Omics Data Integrative Analysis	bioRxiv	-	10.1101/2025.09.14.676067	Bioinformatics Tools
599	2025-09-18	jsPCA: fast, scalable, and interpretable identification of spatial domains and variable genes across multi-slice and multi-sample spatial transcriptomics data	bioRxiv	-	10.1101/2025.09.16.676466	Bioinformatics Tools
600	2025-09-25	Mapping disease critical spatially variable gene programs by integrating spatial transcriptomics with human genetics	bioRxiv	-	10.1101/2025.09.24.678397	Bioinformatics Tools
601	2025-10-03	ContextFlow: Context-Aware Flow Matching For Trajectory Inference From Spatial Omics Data	arXiv	-	10.48550/arXiv.2510.02952	Bioinformatics Tools
602	2025-10-03	SpacGPA: annotating spatial transcriptomes through de novo interpretable gene programs	bioRxiv	-	10.1101/2025.10.01.679918	Bioinformatics Tools
603	2025-10-05	Comparative transcriptomics reveals shifts in cortical architecture at the metatherian/eutherian transition	bioRxiv	-	10.1101/2025.10.03.680397	Biological Evolution
604	2025-10-05	Optimal transport modeling uncovers spatial domain dynamics in spatiotemporal transcriptomics studies	bioRxiv	-	10.1101/2025.10.06.680672	Bioinformatics Tools
605	2025-10-14	A Population-scale Single-cell Spatial Transcriptomic Atlas of the Human Cortex	bioRxiv	-	10.1101/2025.10.13.681959	Other Studies
606	2025-10-17	Dissection of context-dependent RNA colocalization landscapes from subcellular spatial transcriptomics data	Research Square	-	10.21203/rs.3.rs-7463836/v1	Other Studies
607	2025-10-25	CellBin:a generalist framework to process spatial omics data to cell level	bioRxiv	-	10.1101/2025.10.23.683357	Bioinformatics Tools
608	2025-10-29	JADE: Joint Alignment and Deep Embedding for Multi-Slice Spatial Transcriptomics	OpenReview	-	10.1101/2025.11.21.689823	Bioinformatics Tools
609	2025-11-16	CellStream: Dynamical Optimal Transport Informed Embeddings for Reconstructing Cellular Trajectories from Snapshots Data	arXiv	-	10.48550/arXiv.2511.13786	Bioinformatics Tools

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610	2025-11-21	SpaTRACE: Spatiotemporal recurrent auto-encoder for reconstructing signaling and regulatory networks from spatiotemporal transcriptomics data	bioRxiv	-	10.1101/2025.11.20.689569	Bioinformatics Tools
611	2025-11-26	STODE: A Deep Generative Framework for Continuous Spatiotemporal Dynamics in Spatial Transcriptomics	bioRxiv	-	10.1101/2025.11.24.690134	Bioinformatics Tools
612	2025-11-28	LARIS enables accurate and efficient ligand and receptor interaction analysis in spatial transcriptomics	bioRxiv	-	10.1101/2025.11.26.690796	Bioinformatics Tools
613	2025-12-03	Cognitive cartography of mammalian brains using meta-analysis of AI experts	bioRxiv	-	10.64898/2025.12.01.691701	Bioinformatics Tools
614	2025-12-04	Image-guided alignment of consecutive multi-modal tissue slides	bioRxiv	-	10.64898/2025.12.02.690676	Bioinformatics Tools
615	2025-12-05	Multiscale Spatial Transcriptomic Atlas of Human Basal Ganglia Cell-Type and Cellular Community Organization	bioRxiv	-	10.64898/2025.12.02.691876	Other Studies
616	2025-12-09	Spatial Modeling of Tissues for Morphogenic Field Analysis	bioRxiv	-	10.64898/2025.12.06.692715	Bioinformatics Tools
617	2025-12-10	Super-CUT&Tag;: A Sensitive, Spatially Resolved Approach for Epigenomic Profiling in Tissue Sections	bioRxiv	-	10.64898/2025.12.08.692886	Spatial Transcriptomics Technology
618	2025-12-10	STARK denoises spatial transcriptomics images via adaptive regularization	arXiv	-	10.48550/arXiv.2512.10994	Bioinformatics Tools
619	2025-12-11	Refinement Contrastive Learning of Cell-Gene Associations for Unsupervised Cell Type Identification	arXiv	-	10.48550/arXiv.2512.10640	Bioinformatics Tools
620	2025-12-17	STUltra: scalable and accurate integration for subcellular-level spatial omics data	bioRxiv	-	10.64898/2025.12.15.694341	Bioinformatics Tools
621	2025-12-18	DOMINO: diffusion-optimised graph learning identifies domain structures with enhanced accuracy and scalability	bioRxiv	-	10.64898/2025.12.15.694536	Bioinformatics Tools
622	2025-12-25	A Foundational Generative Model for Cross-platform Unified Enhancement of Spatial Transcriptomics	bioRxiv	-	10.64898/2025.12.23.696267	Bioinformatics Tools
623	2026-01-22	SUMC reveals conserved and context-specific tumor microenvironment architectures across heterogeneous spatial datasets	Research Square	-	10.21203/rs.3.rs-8197716/v1	Bioinformatics Tools
624	2026-02-01	Semantic-Guided Spatial Representation Learning for Spatial Domain Identification	bioRxiv	-	10.64898/2026.01.28.700742	Bioinformatics Tools
625	2026-02-03	YAP disrupts bile acid homeostasis to drive cancer-associated cachexia	bioRxiv	-	10.64898/2026.02.01.702698	Disease Research / Malignant Tumors
626	2026-02-04	SPCoral: diagonal integration of spatial multi-omics across diverse modalities and technologies	bioRxiv	-	10.64898/2026.02.02.703207	Bioinformatics Tools
627	2026-02-07	Scalable Mean-Field Variational Inference via Preconditioned Primal-Dual Optimization	arXiv	-	10.48550/arXiv.2602.07632	Bioinformatics Tools
628	2026-02-10	DUCK-Net: Automated deep learning segmentation of Ductular Reactions in murine liver injury captures multicellular niche dynamics from H&E; morphology	bioRxiv	-	10.64898/2026.02.09.704844	Bioinformatics Tools
629	2026-02-13	Uncovering spatial tissue domains and cell types in spatial omics through cross-scale profiling of cellular and genomic interactions	arXiv	-	10.48550/arXiv.2602.12651	Bioinformatics Tools
630	2026-02-13	CASTLE: Cell-type Aware SpaTial domain detection via contrastive Learning Embedding	bioRxiv	-	10.64898/2026.02.12.705478	Bioinformatics Tools

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631	2026-02-16	SMECT: a framework for benchmarking post-GWAS methods for spatial mapping of cells associated with human complex traits	bioRxiv	-	10.64898/2026.02.14.705903	Bioinformatics Tools
632	2026-02-19	4D Single-Cell Spatial Transcriptomics Reveals Dynamic Morphogenetic Gradients and Regenerative Domains in Planarians	bioRxiv	-	10.64898/2026.02.18.706529	Regenerative Medicine
633	2026-02-19	Spartan: Spatial Activation Aware Transcriptomic Analysis Network	bioRxiv	-	10.64898/2026.02.18.706570	Bioinformatics Tools
634	2026-02-20	Cell Type Architecture and Positional Gene Gradients in an Adult Animal at Subcellular Resolution	bioRxiv	-	10.64898/2026.02.19.705280	Regenerative Medicine
635	2026-02-20	OT-knn: a neighborhood-aware optimal transport framework for aligning spatial transcriptomics data	bioRxiv	-	10.64898/2026.02.19.706743	Bioinformatics Tools
636	2026-03-06	SpatialMAGIC: A Hybrid Framework Integrating Graph Diffusion and Spatial Attention for Spatial Transcriptomics Imputation	arXiv	-	10.48550/arXiv.2603.06780	Bioinformatics Tools
637	2026-03-02	STCS: A Platform-Agnostic Framework for Cell-Level Reconstruction in Sequencing-Based Spatial Transcriptomics	bioRxiv	-	10.64898/2026.02.26.708370	Bioinformatics Tools
638	2026-03-02	Benchmarking niche identification via domain segmentation for spatial transcriptomics data	bioRxiv	-	10.64898/2026.02.27.708202	Bioinformatics Tools
639	2026-03-03	RankMap: Rank-based reference mapping for fast and robust cell type annotation in spatial and single-cell transcriptomics	bioRxiv	-	10.64898/2026.03.01.708931	Bioinformatics Tools
640	2026-03-09	Multi-omics and functional analysis of a bioengineered vascularized pancreatic cancer model reveal an immunosuppressive and therapy-resistant niche	bioRxiv	-	10.64898/2026.03.05.709702	Disease Research / Malignant Tumors
641	2026-03-13	Single-cell transcriptomic atlas of mouse oocyte development from growth to ovulation	bioRxiv	-	10.64898/2026.03.11.710939	Spatial Transcriptomics Technology
642	2026-03-18	Reconstituting Mouse Embryogenesis Ex Utero from Gastrulation to Fetal Development Reveals Maternally Independent Metabolic Programs	bioRxiv	-	10.64898/2026.03.17.710314	Growth and Development
643	2026-04-03	CellWHISPER disentangles direct cell-cell communication from structural proximity	bioRxiv	-	10.64898/2026.01.07.697982	Bioinformatics Tools
644	2026-01-21	Single-cell and spatial transcriptomics unveils key regulators governing cell differentiation for Schistosoma sexual development	bioRxiv	-	10.64898/2026.01.20.700708	Disease Research / Non-cancerous Di...
645	2026-04-29	Adult regenerative defects arise from discordant scaling of signal dependent growth and patterning	bioRxiv	-	10.64898/2026.04.28.721472	Growth and Development
646	2026-05-09	Comprehensive Lineage Tracing Maps the Landscape of Cell Fate Decisions in Mouse Embryogenesis	bioRxiv	-	10.64898/2026.05.07.722278	Growth and Development
647	2026-05-13	A Comprehensive Benchmarking of Spatial Deconvolution and Domain Detection Methods across Diverse Tissues and Spatial Transcriptomic Technologies	bioRxiv	-	10.64898/2026.05.11.724248	Bioinformatics Tools
648	2026-05-14	DeSpotX: Identifiability-Based Decontamination for Spatial Transcriptomics	bioRxiv	-	10.64898/2026.05.12.724704	Bioinformatics Tools
649	2026-05-18	HESTIA: Scalable Multimodal Integration of Histology and High-Resolution Spatial Transcriptomics for Robust Spatial Domain Identification	bioRxiv	-	10.64898/2026.05.14.723098	Bioinformatics Tools
650	2026-05-20	Deciphering interaction syntax via decoupling intrinsic lineages and niche pressure	bioRxiv	-	10.64898/2026.05.18.725889	Bioinformatics Tools

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651	2026-05-29	HESTA: a curated and reusable database for the human early organogenesis spatiotemporal transcriptome atlas	bioRxiv	-	10.64898/2026.05.28.728391	Bioinformatics Tools
652	2026-06-03	Integrating Histology with Spatial Molecular Programs Using a Multimodal Foundation Model	bioRxiv	-	10.64898/2026.06.01.729028	Bioinformatics Tools
653	2026-06-04	Cross-linked volumetric DNA microscopy for dense molecular-network phenotyping in intact tissue	bioRxiv	-	10.64898/2026.06.01.729154	Bioinformatics Tools
654	2026-06-04	Spatial Gene Set Enrichment Analysis with Applications to Spatially Resolved Transcriptomic Data	bioRxiv	-	10.64898/2026.06.01.729158	Bioinformatics Tools
655	2026-06-05	Single-cell spatial transcriptomics and snRNA-seq decoding the organizational principles of functional modules in the mouse amygdala	bioRxiv	-	10.64898/2026.06.04.730249	Bioinformatics Tools
656	2026-06-06	Decoding Hierarchical Cell-Cell Communication in Spatial Multi-Omics with CellSTIC	bioRxiv	-	10.64898/2026.05.27.728114	Bioinformatics Tools
657	2026-06-06	STITCH: Spatial Transcriptomics Imputation via Flow Matching with Internal Learning	bioRxiv	-	10.64898/2026.06.03.729557	Bioinformatics Tools
658	2026-06-10	Benchmarking AI Agents for Addressing Scientific Challenges Across Scales	arXiv	-	10.48550/arXiv.2606.12736	Bioinformatics Tools
659	2026-06-18	Deciphering shared and divergent tissue architectures from cross-species spatial transcriptomics	bioRxiv	-	10.64898/2026.06.16.732760	Bioinformatics Tools
660	2026-06-17	Same-section spatial metabolo-transcriptomics using Stereo-meta-seq reveals DHA-driven kidney maturation	bioRxiv	-	10.64898/2026.06.16.732541	Bioinformatics Tools
661	2026-06-28	Spatial co-expression and cell-cell communication inference from spatially resolved transcriptomics with CONCISE	bioRxiv	-	10.64898/2026.06.22.733860	Bioinformatics Tools
662	2026-07-03	Accessible spatial host-microbe profiling in tumour tissues	bioRxiv	-	10.64898/2026.07.02.735997	Disease Research / Malignant Tumors
663	2026-07-10	New genes play a prominent role in evolution of new sperm classes of Drosophila	bioRxiv	-	10.64898/2026.07.10.737682	Biological Evolution
664	2026-07-11	Spatial transcriptomic programs relate to spectrolaminar rhythms across macaque cortex	bioRxiv	-	10.64898/2026.07.08.737187	Bioinformatics Tools
665	2026-07-14	An integrative single-cell and spatial transcriptomics atlas highlights candidate regulatory factors in the development of gerbera capitulum	bioRxiv	-	10.64898/2026.07.05.736605	Bioinformatics Tools
666	2026-07-14	Diversity in transcriptomics without cell types	bioRxiv	-	10.64898/2026.07.13.73579	Bioinformatics Tools
667	2026-07-29	Ultra-efficient High Resolution 3D Reconstruction of Spatial Omics Data with Neural Transcriptomic Field	Research Square	-	10.21203/rs.3.rs-10286734/v1	Bioinformatics Tools
668	2026-08-10	The cellular and genetic basis of inflorescence divergence between maize and teosinte	bioRxiv	-	10.64898/2026.08.10.743805	Growth and Development
669	2026-08-14	Autonomous Spatial Transcriptomics Analysis (ASTA): Demonstrating Performance Improvements through Clustering, Biological Annotation, and AI-Driven Discovery	bioRxiv	-	10.64898/2026.08.10.743848	Bioinformatics Tools
670	2026-08-15	dbverse scales spatial omics analysis with embedded analytical databases	bioRxiv	-	10.64898/2026.08.09.743742	Bioinformatics Tools
671	2026-08-18	A Generative Virtual Tissue Model Enables Computational Design of Therapeutic Perturbation Strategies	bioRxiv	-	10.64898/2026.08.12.743536	Bioinformatics Tools

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672	2022-04-01	Clinical and translational values of spatial transcriptomics	Signal Transduction and Targeted Therapy	40.8	10.1038/s41392-022-00960-w	
673	2022-05-23	New adventures in spatial transcriptomics	Developmental Cell	10.7	10.1016/j.devcel.2022.04.021	
674	2022-11-14	Spatiotemporal Omics-Refining the landscape of precision medicine	Life Medicine	1.6	10.1093/lifemedi/lnac053	
675	2022-12-21	Single-cell and spatial multi-omics in the plant sciences: Technical advances, applications, and perspectives	Plant Communications	9.4	10.1016/j.xplc.2022.100508	
676	2023-03-27	Spatially resolved transcriptomics: a comprehensive review of their technological advances, applications, and challenges	Journal of Genetics and Genomics	6.6	10.1016/j.jgg.2023.03.011	
677	2023-05-31	Spatial transcriptomics in cancer research: Opportunities and challenges	The Innovation Life	4.5	10.59717/j.xinn-life.2023.100006/	
678	2023-06-23	Dissecting mammalian reproduction with spatial transcriptomics	Human Reproduction Update	14.8	10.1093/humupd/dmad017	
679	2023-07-06	Spatial Omics Sequencing Based on Microfluidic Array Chips	Biosensors	5.4	10.3390/bios13070712	
680	2023-07-24	Unveiling the hidden battlefield: dissecting the invasive zone in liver cancer	Cell Research	28.1	10.1038/s41422-023-00855-7	
681	2023-07-27	Significance of stereologically spatiotemporal cells in molecular medicine	Clinical and Translational Medicine	6.8	10.1002/ctm2.70470	
682	2023-08-04	The dawn of spatial omics	Science	45.8	10.1126/science.abq4964	
683	2023-08-16	Spatial transcriptomics in human biomedical research and clinical application	Current Medicine	-	10.1007/s44194-023-00023-4	
684	2023-08-17	Spatial transcriptomics: recent developments and insights in respiratory research	Military Medical Research	16.7	10.1186/s40779-023-00471-x	
685	2023-08-31	Spatial transcriptomics drives a new era in plant research	Plant Journal	6.2	10.1111/tpj.16437	
686	2023-09-01	Spatial transcriptomics: Technologies, applications and experimental considerations	Genomics	3.4	10.1016/j.ygeno.2023.110671	
687	2023-10-01	Spatial transcriptomics in neuroscience	Experimental and Molecular Medicine	9.5	10.1038/s12276-023-01093-y	
688	2023-10-09	Spatial transcriptomics in development and disease	Molecular biomedicine	6.3	10.1186/s43556-023-00144-0	
689	2023-10-31	Introducing single cell stereo-sequencing technology to transform the plant transcriptome landscape	Trends in Plant Science	17.3	10.1016/j.tplants.2023.10.002	
690	2024-03-15	Opportunities and Challenges in Advancing Plant Research with Single-cell Omics	Genomics, Proteomics & Bioinformatics	11.5	10.1093/gpbjnl/qzae026	
691	2024-04-15	Next-Generation Sequencing-Based Spatial Transcriptomics: A Perspective from Barcoding Chemistry	JACS Au	8.5	10.1021/jacsau.4c00118	
692	2024-05-27	Spatiotemporal multi-omics: exploring molecular landscapes in aging and regenerative medicine	Military Medical Research	16.7	10.1186/s40779-024-00537-4	
693	2024-06-08	Spatial transcriptomics in cancer research and potential clinical impact: a narrative review	Journal of Cancer Research and Clinical Oncology	2.7	10.1007/s00432-024-05816-0	
694	2024-06-20	Advances in spatial transcriptomics and its applications in cancer research	Molecular Cancer	27.7	10.1186/s12943-024-02040-9	

No.	Epub	Title	Journal	IF	DOI	App. Area
695	2024-07-10	Unraveling plant-microbe symbioses using single-cell and spatial transcriptomics	Trends in Plant Science	17.3	10.1016/j.tplants.2024.06.00	
696	2024-08-22	Spatiotemporal omics for biology and medicine	Cell	45.5	10.1016/j.cell.2024.07.040	
697	2024-10-06	Next-generation spatial transcriptomics: unleashing the power to gear up translational oncology	Med Comm	10.7	10.1002/mco2.765	
698	2024-11-27	Spatial Omics: Navigating Neuroscience Research into the New Era	Systems Neuroscience	3.1	10.1007/978-3-031-69188-1_6	
699	2024-12-20	Advances and applications in single-cell and spatial genomics	Science China Life Sciences	8	10.1007/s11427-024-2770-x	
700	2025-01-20	A practical guide for choosing an optimal spatial transcriptomics technology from seven major commercially available options	BMC Genomics	3.5	10.1186/s12864-025-11235-3	
701	2025-01-24	Spatial Transcriptomics in Human Cardiac Tissue	International journal of molecular sciences	4.9	10.3390/ijms26030995	
702	2025-01-31	Decoding the blueprints of embryo development with single-cell and spatial omics	Seminars in Cell & Developmental Biology	6.2	10.1016/j.semcdb.2025.01.002	
703	2025-03-03	From morphology to single-cell molecules: high-resolution 3D histology in biomedicine	Mol Cancer	27.7	10.1186/s12943-025-02240-x	
704	2025-04-03	Recent progress in single-cell transcriptomic studies in plants	Plant Biotechnology Reports	1.7	10.1007/s11816-025-00967-z	
705	2025-06-02	Spatial omics enters the microscopic realm: opportunities and challenges	Trends in Genetics	16.3	10.1016/j.tig.2025.05.002	
706	2025-06-25	What spatial omics is teaching us about field cancerisation in prostate and bladder cancer	BJU International	3.7	10.1111/bju.16830	
707	2025-07-17	Cancer therapy resistance from a spatial-omics perspective	Clinical and Translational Medicine	6.8	10.1002/ctm2.70396	
708	2025-07-19	A systematic review of single-cell RNA sequencing applications and insights in Oryza sativa response to environmental stresses	Molecular Biology Reports	2.6	10.1007/s11033-025-10836-1	
709	2025-07-23	New insights into liver injury and regeneration from single-cell transcriptomics	eGastroenterology	-	10.1136/egastro-2025-100202	
710	2025-08-05	Spatial single-cell omics: new insights into liver diseases	Gut	23	10.1136/gutjnl-2024-332105	
711	2025-08-11	Capturing ovarian dynamics through spatial profiling of the mechano-microenvironment	Seminars in Cell and Developmental Biology	6	10.1016/j.semcdb.2025.103642	
712	2025-08-28	Charting the cardiac landscape: Advances in spatial transcriptomics for heart biology	Seminars in Cell and Developmental Biology	6	10.1016/j.semcdb.2025.103648	
713	2025-09-04	Spatially Resolved Transcriptomics: Revealing Tumor Microenvironment Heterogeneity to Advance Cancer Immunotherapy	Small Methods	9.1	10.1002/smt.202500770	
714	2025-09-18	Stereo-cell: A planar DNA nanoball-array route to ultrahigh-throughput, imaging-integrated single-cell profiling	BMEMat	15.5	10.1002/bmm2.70035	
715	2026-05-28	Charting human organogenesis across the Carnegie stages from a whole-embryo perspective	GigaScience	5	10.1093/gigascience/giag063	
716	2025-09-29	Microglia networks within the tapestry of alzheimer's disease through spatial transcriptomics	Molecular Neurodegeneration	17.5	10.1186/s13024-025-00897-y	
717	2025-10-23	Fibroblasts in the tumor microenvironment: heterogeneity and dynamic interactions in tumor progression revealed by spatial transcriptomics	Cellular Oncology	4.8	10.1007/s13402-025-01108-y	

No.	Epub	Title	Journal	IF	DOI	App. Area
718	2025-10-28	From identity to function: unveiling the cellular complexity of hypothalamic feeding circuits	Reviews in Endocrine and Metabolic Disorders	8	10.1007/s11154-025-10004-7	
719	2025-10-27	Advances in plant spatial multi-omics data analysis	Trends in Plant Science	20.8	10.1016/j.tplants.2025.10.005	
720	2025-04-14	An important step to translate single-cell measurement into clinical practice: Stereoscopic cells	Clinical and Translational Medicine	6.8	10.1002/ctm2.70304	
721	2025-11-07	Artificial Intelligence-driven spatial transcriptomics in OSCC: Mapping the tumor microenvironment and personalizing therapy	Journal of Oral Biology and Craniofacial Research	-	10.1016/j.jobcr.2025.10.015	
722	2025-11-02	Multi-Omics Approaches in Plant Biology: Decoding Agronomic Traits for Sustainable Agriculture	Plant Stress	6.9	10.1016/j.stress.2025.101118	
723	2025-11-07	Connectogenomics: edges-first spatial biology	Trends in Biotechnology	14.9	10.1016/j.tibtech.2025.10.012	
724	2025-11-16	Enhancing RNA Capture Efficiency in Spatial Transcriptomics: A Review of Innovative Technologies and Strategies	International Journal of Molecular Sciences	4.9	10.3390/ijms262211076	
725	2025-11-21	Spatial transcriptomics: challenges and future directions in musculoskeletal diseases	Current Opinion in Rheumatology	4.3	10.1097/BOR.0000000000001140	
726	2025-11-21	Single-Cell Insights Into Macrophage Subtypes in Pulmonary Infections	Advanced Science	14.1	10.1002/advs.202510758	
727	2025-11-21	A Single-Cell Omics Technical Guide for Advancing Neuropsychiatric Research	Genes	2.8	10.3390/genes16121394	
728	2025-11-28	Single-Cell Profiling: Any Scale, Any Size, All at Once	Advanced Science	14.1	10.1002/advs.202518479	
729	2023-11-30	A comprehensive overview of graph neural network-based approaches to clustering for spatial transcriptomics T	Computational and Structural Biotechnology Journal	4.4	10.1016/j.csbj.2023.11.055	
730	2025-06-26	A comprehensive review of spatial transcriptomics data alignment and integration	Nucleic Acids Res	16.6	10.1093/nar/gkaf536	
731	2025-12-02	Spatial omics: applications and utility in profiling the tumor microenvironment	Cancer and Metastasis Reviews	8.7	10.1007/s10555-025-10304-z	
732	2025-12-19	Exploring specialized metabolic pathways in medicinal plants with single-cell and spatial omics	Acta Pharmaceutica Sinica B	14.6	10.1016/j.apsb.2025.12.023	
733	2025-12-22	Spatially Resolved Profiling of Compartmentalized Muscle and Brain Inflammation	European Journal of Immunology	3.7	10.1002/eji.70119	
734	2025-12-07	Why “Where” Matters as Much as “How Much”: Single-Cell and Spatial Transcriptomics in Plants	International Journal of Molecular Sciences	4.9	10.3390/ijms262411819	
735	2025-11-28	Stereo cell: A new approach to the next generation of clinical precision medicine	Clinical and Translational Medicine	6.8	10.1002/ctm2.70537	
736	2025-12-16	Spatial Transcriptomics Techniques and Its New Advances in Plant Research	Chinese Bulletin of Botany	2.2	10.11983/CBB25196	
737	2025-12-31	Spatial omics at the forefront: emerging technologies, analytical innovations, and clinical applications	Cancer Cell	44.5	10.1016/j.ccell.2025.12.009	
738	2026-01-02	Advancing Cardiovascular Research With Single-Cell and Spatial Transcriptomics	Circulation Research	18	10.1161/CIRCRESAHA.125.325795	
739	2026-01-09	Advances in the application of spatial transcriptomics in understanding development and disease	Molecular and Cellular Biochemistr	3.7	10.1007/s11010-025-05470-1	

No.	Epub	Title	Journal	IF	DOI	App. Area
740	2026-01-20	Mapping biology in space: from spatial transcriptomics platforms to analytical tools and databases	Science Bulletin	21.1	10.1016/j.scib.2026.01.034	
741	2026-01-21	Computational methods for spatial multi-omics integration	Biotechnology Advances	12.5	10.1016/j.biotechadv.2026.108807	
742	2026-01-29	Three-dimensional phenotyping: Technological advances and applications in genomics-assisted crop breeding	Plant Communications	11.6	10.1016/j.xplc.2026.101747	
743	2026-01-30	The Evolution of Spatial Omics Technologies Introduces A Novel Avenue for Lung Cancer Research	Genomics, Proteomics & Bioinformatics	7.9	10.1093/gpbjnl/qzag010	
744	2026-01-31	Applications of Spatial Transcriptomics in Ischemic Stroke Research	The American Journal of Pathology	3.6	10.1016/j.ajpath.2026.01.008	
745	2026-02-07	Advances in Spatial Transcriptomics for Infectious Disease Research: Insight for Vaccine Development	Vaccines	3.4	10.3390/vaccines14020158	
746	2026-02-14	From genomes to precision medicine: 25 years of breakthroughs in genetics and genomics	Nucleus	4.5	10.1007/s13237-025-00632-4	
747	2026-02-15	Decoding spatial heterogeneity in plants: Advances and challenges in spatial transcriptomics for stress responses and crop resilience	Plant Stress	6.9	10.1016/j.stress.2026.101300	
748	2026-02-23	A Guide for Spatial Omics Technologies: Innovation, Evaluation, and Application	Advanced Science	14.1	10.1002/adv.202520806	
749	2026-02-28	Spatiotemporal Decoding of Skin Biology: Development, Aging, Disease, and Regeneration	Burns & Trauma	9.6	10.1093/burnst/tkag019	
750	2026-03-02	Decoding plant complexity through spatially resolved multi-omics approaches	Discover Plants	-	10.1007/s44372-026-00512-4	
751	2026-03-26	Towards predictive virtual embryos with genomics and AI	Nature Methods	32.1	10.1038/s41592-026-03055-4	
752	2026-04-01	The potential of wheat spatial omics	Nature Genetics	29	10.1038/s41588-026-02542-w	
753	2026-04-06	Single-Cell and Spatial Omics: Methods and Applications	MedComm	10.7	10.1002/mco2.70713	
754	2026-04-09	Mapping plant cell-type-specific responses to environmental stresses	Trends in Plant Science	20.8	10.1016/j.tplants.2026.03.003	
755	2026-04-10	The rise of spatial TCR profiling: Emerging technologies and open challenges	Science Immunology	16.3	10.1126/sciimmunol.aeg7517	
756	2026-04-13	Spatial omics for profiling the dynamic tumor microenvironment	Clinical & translational immunology	3.8	10.1007/s00292-026-01551-0	
757	2026-04-14	Ein halbes Jahrhundert Genexpressionsanalyse	Die Pathologie	-	10.1007/s00292-026-01551-0	
758	2026-04-22	Dysfunction of the neurovascular unit as a temporal driver in Alzheimer's pathogenesis	Translational Neurodegeneration	15.2	10.1186/s40035-026-00548-2	
759	2026-05-01	Bone morphogenetic protein signaling drives rete ridge morphogenesis: a distinct epidermal appendage program	Signal Transduction and Targeted Therapy	52.7	10.1038/s41392-026-02726-0	
760	2026-04-27	Decoding Cardiac Homeostasis and Injury: The Evolving Landscape of Spatial Transcriptomics	Frontiers in Cell and Developmental Biology	4.3	10.3389/fcell.2026.1772507	
761	2026-05-15	Computational workflows and data infrastructures for spatial omics analysis	EXO - Beyond the Cell	-	10.70401/EXO.2026.0010	
762	2026-05-26	Progress in the Application of Machine Learning in the Field of Single-Cell and Spatial Transcriptomics	Genes	3.2	10.3390/genes17060604	

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763	2026-05-28	Single-cell and spatial RNA sequencing in prostate cancer	Nature reviews. Urology	13.6	10.1038/s41585-026-01149-4	
764	2026-05-29	Evolving strategies for lineage tracing: Genetic markers, synthetic barcodes, and natural variants	Cell Stem Cell	23.3	10.1016/j.stem.2026.05.001	
765	2026-06-07	Spatial Transcriptomics Open a New Era of Pan-Cancer Analysis	Cancer Investigation	2.2	10.1080/07357907.2026.2681845	
766	2026-06-12	Spatial Profiling of the Head and Neck Squamous Cell Carcinoma Microenvironment: Reshaping Our Understanding and Therapeutic Opportunities	GenoMed Connect	-	10.69709/GenomC.2026.155654	
767	2026-06-15	3D multi-omics tumour atlases: from technology to biology and clinical translation	Nature reviews. Cancer	60.7	10.1038/s41568-026-00940-0	
768	2026-06-16	Spatial transcriptomics in Alzheimer's disease: technologies, challenges and discoveries	Molecular Neurodegeneration	19.6	10.1186/s44477-026-00036-x	
769	2026-06-19	Spatial omics illuminates tumor heterogeneity	Cell Reports Methods	5.8	10.1016/j.crmeth.2026.101504	
770	2026-06-23	From the Brain Cell Atlas to Precision Neurology: A review of the application of AI-driven multi-omics in brain science	GigaScience	5	10.1093/gigascience/giag075	
771	2026-06-24	Intra-Tumor Heterogeneity of Pancreatic Ductal Adenocarcinoma (PDAC)—Microenvironmental Interaction and Precision Immunotherapy Strategies: A Multi-Omics-Based Integrated Perspective	International Journal of Molecular Sciences	5.6	10.3390/ijms27135682	
772	2026-06-22	Molecular heterogeneity in systemic sclerosis skin: insights from single-cell and spatial omics, and implications for disease stratification and cutaneous assessment	The British journal of dermatology	8.2	10.1093/bjd/ljag258	
773	2026-06-22	Advancing clinical precision medicine via peripheral blood immune single-cell omics	Clinical and Translational Medicine	7.9	10.1002/ctm2.70727	
774	2026-06-26	Spatial and Multiple Omics in Horticultural Plants: Advances and Prospects	Plant Spatial Biology	-	10.1079/9781836994572.0011	
775	2026-06-29	Brain Spatial Genomics Atlases	Genes	3.1	10.3390/genes17070745	
776	2026-07-01	Spatial-Niche Perspective on the Heterogeneity and Functional Reprogramming of Tumor-Associated Macrophages in Digestive System Tumors	Cells	6	10.3390/cells15131198	
777	2026-07-02	Spatial Transcriptomics in Ovarian Biology Technologies, Computational Challenges, and Biological Insights.	Reproduction (Cambridge, England)	3.4	10.1093/reprod/xaag079	
778	2026-07-03	Spatial Transcriptomics in Breast Cancer: Advances and Applications	Biology	4.3	10.3390/biology15131061	
779	2026-07-06	Spatial omics in the AI era: Technologies, algorithmic ecosystems, biological applications, and large model perspectives	iMeta	44.4	10.1002/imt2.70146	
780	2026-07-09	Spatial Transcriptomics for Dissecting Cellular and Molecular Heterogeneity in the Aging and Diseased Brain	International Journal of Molecular Sciences	5.6	10.3390/ijms27146149	
781	2026-07-09	Spatial Transcriptomics for Molecular Dissecting of the Tumor Immune Microenvironment: Comparison of Commercially Available Platforms	Molecular Biology	1.3	10.1134/S0026893325604963	
782	2026-07-08	Dissecting human organ development using spatial technologies	Developmental Cell	9.2	10.1016/j.devcel.2026.05.004	
783	2026-07-07	Omics-Level Approaches to Studying Gammaherpesvirus Infection	Pathogens	3.8	10.3390/pathogens15070713	

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784	2026-07-09	Beyond gene expression: Single-cell transcriptomics at isoform resolution	Trends in Genetics	12.9	10.1016/j.tig.2026.05.013	
785	2026-07-07	Mapping brain-wide monosynaptic inputs to single neurons with ROInet-seq	Cell Reports Methods	5.8	10.1016/j.crmeth.2026.101512	
786	2026-07-13	Next-generation kidney tissue analysis — spatial omics and digital pathology	Nature Reviews Nephrology	46.7	10.1038/s41581-026-01102-z	
787	2026-07-14	Advances in the Comprehensive Tree Shrew Brain Atlas	Biomolecules	5.6	10.3390/biom16071027	
788	2026-07-30	Decoding Cardiac Development and Maturation at Single-Cell and Spatial Transcriptomic Resolution	Circulation Research	16.2	10.1161/circresaha.125.327473	
789	2026-08-01	Advances in single-cell and spatial multi-omics for plant development and stress responses	Plant Diversity	4.9	10.1016/j.pld.2026.07.015	
790	2026-08-08	Spatial Immune Coding in Tumor-Draining Lymph Nodes: Functional Compartmentalization of Immune Activation and Immunosuppression	International Journal of Molecular Sciences	4.9	10.3390/ijms27167113	
791	2026-08-08	Single-Cell and Spatial Omics Technologies in Rice Abiotic Stress Biology: A Methodological Review	International Journal of Molecular Sciences	4.9	10.3390/ijms27167114	
792	2026-08-11	Spatial Transcriptomics in Plants: From Cellular Maps to Mechanistic Insight	Plant Communications	13.7	10.1016/j.xplc.2026.102070	
793	2026-08-18	Structural Variation and Its Roles in Plant Genomes	Plants	4.6	10.3390/plants15162498	
794	2025-09-16	Unleashing the power of computational insights in revealing the complexity of biological systems in the new era of spatial multi-omics	arXiv	-	10.48550/arXiv.2509.13376	
795	2025-08-07	Spatiotemporal Omics: Integrating Multi-Omics Data for Translational Research and Drug Development	Research Square	-	10.46799/ajesh.v4i3.561	
796	2026-02-11	Advances in Spatial Multi-Omics in Gastric Cancer	Preprints	-	10.20944/preprints202602.0909.v1	
797	2026-07-12	SpaGRD deciphers signaling architectures in spatial transcriptomics using graph reaction-diffusion systems	bioRxiv	-	10.64898/2026.06.28.735031	

Notes: The info above is organized based on public and internal information. Statistics current as of Aug.27, 2026. For inquiries, please contact bgi-ST-Marketing@genomics.cn or zhaofang1@genomics.cn.