Articles list of STOmics' Stereo-seq (187 research articles, 49 review articles, and 127 cited articles published, 113 preprinted)

No.	Epub	Title	The Journal	Publication Year	DOI	Link	Sample
		Research articles published					
1	2021/8/2	Identification of HSC/MPP expansion units in fetal liver by single-cell spatiotemporal transcriptomics	Cell Research	2021	10.1038/s41422-021-00540-7	https://www.nature.com/articles/s41422-021-	Mouse fetal
2	2022/1/26	Clinical challenges of tissue preparation for spatial transcriptome	Clinical and Translational	2022	10.1002/ctm2.669	https://onlinelibrary.wiley.com/doi/10.1002/ctm2.6	Lung
3	2022/3/9	Spatial Transcriptome Uncovers the Mouse Lung Architectures and Functions	Frontiers in Genetics	2022	10.3389/fgene.2022.858808	https://www.frontiersin.org/articles/10.3389/fgene.	Female
4	2022/3/15	Spatial transcriptome unveils a discontinuous inflammatory pattern in proficient mismatch repair colorectal adenocarcinoma	Fundamental Research	2022	10.1016/j.fmre.2022.01.036	https://www.sciencedirect.com/science/article/pii/S	Colorectal
5	2022/4/1	Deciphering spatial domains from spatially resolved transcriptomics with an adaptive graph attention auto-encoder	Nature Communications	2022	10.1038/s41467-022-29439-6	https://www.nature.com/articles/s41467-022-	Mouse
6	2022/5/4	Spatiotemporal transcriptomic atlas of mouse organogenesis using DNA nanoball-patterned arrays	Cell	2022	10.1016/j.cell.2022.04.003	https://www.cell.com/cell/fulltext/S0092-	Female
7	2022/5/4	Spatiotemporal mapping of gene expression landscapes and developmental trajectories during zebrafish embryogenesis	Developmental Cell	2022	10.1016/j.devcel.2022.04.009	https://www.cell.com/developmental-	Zebrafish
8	2022/5/4	High-resolution 3D spatiotemporal transcriptomic maps of developing Drosophila embryos and larvae	Developmental Cell	2022	10.1016/j.devcel.2022.04.006	https://www.cell.com/developmental-	Drosophila
9	2022/5/4	The single-cell stereo-seq reveals region-specific cell subtypes and transcriptome profiling in Arabidopsis leaves	Developmental Cell	2022	10.1016/j.devcel.2022.04.011	https://www.cell.com/developmental-	Arabidopsis
10	2022/5/17	A Cellular Resolution Spatial Transcriptomic Landscape of the Medial Structures in Postnatal Mouse Brain	Frontiers in Cell and	2022	10.3389/fcell.2022.878346	https://www.frontiersin.org/articles/10.3389/fcell.2	Mouse brain
11	2022/7/23	Spatial transcriptome analysis on peanut tissues shed light on cell heterogeneity of the peg	Plant Biotechnology Journal	2022	10.1111/pbi.13884	https://pubmed.ncbi.nlm.nih.gov/35792883/	Peanut fruit
12	2022/8/19	Single-nucleus RNA sequencing and spatial transcriptomics reveal the immunological microenvironment of cervical squamous cell carcinoma	Advanced Science	2022	10.1002/advs.202203040	https://onlinelibrary.wiley.com/doi/10.1002/advs.2	Cervical
13	2022/9/2	Single-cell Stereo-seq reveals induced progenitor cells involved in axolotl brain regeneration	Science	2022	10.1126/science.abp9444	https://www.science.org/doi/10.1126/science.abp94	Brain
14	2022/9/21	A cellular hierarchy in melanoma uncouples growth and metastasis	Nature	2022	10.1038/s41586-022-05242-7	https://www.nature.com/articles/s41586-022-	Mouse
15	2022/11/8	Spatially resolved gene regulatory and disease-related vulnerability map of the adult Macaque cortex	Nature Communications	2022	10.1038/s41467-022-34413-3	https://www.nature.com/articles/s41467-022-	Cortical
16	2022/12/6	Resolving the gene expression maps of human first-trimester chorionic villi with spatial transcriptome	Frontiers in Cell and	2022	10.3389/fcell.2022.1060298	https://www.frontiersin.org/articles/10.3389/fcell.2	Placental
17	2022/12/10	Spatial-ID: a cell typing method for spatially resolved transcriptomics via transfer learning and spatial embedding	Nature Communications	2022	10.1038/s41467-022-35288-0	https://www.nature.com/articles/s41467-022-	Mouse brain
18	2023/1/9	Implantation underneath the abdominal anterior rectus sheath enables effective and functional engraftment of stem-cell-derived islets	Nature Metabolism	2023	10.1038/s42255-022-00713-7	https://www.nature.com/articles/s42255-022-	Healthy and
19	2023/2/1	Developmental deficits of MGE-derived interneurons in the Cntnap2 knockout mouse model of autism spectrum disorder	Frontiers in Cell and	2023	10.3389/fcell.2023.1112062	https://www.frontiersin.org/articles/10.3389/fcell.2	Cntnap2
20	2023/3/1	Spatially informed clustering, integration, and deconvolution of spatial transcriptomics with GraphST	Nature Communications	2023	10.1038/s41467-023-36796-3	https://www.nature.com/articles/s41467-023-	Human
21	2023/3/16	A single-cell transcriptome atlas profiles early organogenesis in human embryos	Nature Cell Biology	2023	10.1038/s41556-023-01108-w	https://www.nature.com/articles/s41556-023-	Human
22	2023/4/11	VT3D: a visualization toolbox for 3D transcriptomic data	Journal of Genetics and	2023	10.1016/j.jgg.2023.04.001	https://www.sciencedirect.com/science/article/pii/S	
23	2023/4/13	Integrated single-nucleus and spatial transcriptomics captures transitional states in soybean nodule maturation	Nature Plants	2023	10.1038/s41477-023-01387-z	https://www.nature.com/articles/s41477-023-	Root nodule
24	2023/5/6	Microbiota-mediated shaping of mouse spleen structure and immune function characterized by scRNA-seq and stereo-seq	Journal of Genetics and	2023	10.1016/j.jgg.2023.04.012	https://www.sciencedirect.com/science/article/abs/	Germ-free
25	2023/5/24	STellaris: a web server for accurate spatial mapping of single cells based on spatial transcriptomics data	Nucleic Acids Research	2023	10.1093/nar/gkad419	https://doi.org/10.1093/nar/gkad419	Slices of
26	2023/6/19	An invasive zone in human liver cancer identified by Stereo-seq promotes hepatocyte-tumor cell crosstalk, local immunosuppression and tumor progression	Cell Research	2023	10.1038/s41422-023-00831-1	https://www.nature.com/articles/s41422-023-	Tumor
27	2023/6/30	Single-cell and spatiotemporal transcriptomic analyses reveal the effects of microorganisms on immunity and metabolism in the mouse liver	Computational and Structural	2023	10.1016/j.csbj.2023.06.020	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10	Liver
28	2023/7/12	Single-cell spatial transcriptome reveals cell-type organization in the macaque cortex	Cell	2023	10.1016/j.cell.2023.06.009	https://www.cell.com/cell/fulltext/S0092-	Left
29	2023/7/13	Single-cell chromatin accessibility profiling of cell-state-specific gene regulatory programs during mouse organogenesis	Frontiers in neuroscience	2023	10.3389/fnins.2023.1170355	https://doi.org/10.3389/fnins.2023.1170355	Mouse
30	2023/8/8	Partial alignment of multislice spatially resolved transcriptomics data	Genome Research	2023	10.1101/gr.277670.123	https://genome.cshlp.org/content/33/7/1124.long	Drosophila
31	2023/8/26	Clonal dynamics and Stereo-seq resolve origin and phenotypic plasticity of adenosquamous carcinoma	NPJ Precision Oncology	2023	10.1038/s41698-023-00430-8	https://www.nature.com/articles/s41698-023-	Adenocarcin
32	2023/9/11	Spatiotemporal insight into early pregnancy governed by immune-featured stromal cells	Cell	2023	10.1016/j.cell.2023.08.020	https://www.cell.com/cell/fulltext/S0092-	Implantation
33	2023/9/12	Single-cell RNA sequencing reveals cellular and molecular heterogeneity in fibrocartilaginous enthesis formation	Elife	2023	10.7554/eLife.85873	https://doi.org/10.7554/eLife.85873	Rotator cuff
34	2023/9/13	Spatial transcriptomics reveals light-induced chlorenchyma cells involved in promoting shoot regeneration in tomato callus	Proceedings of the National	2023	10.1073/pnas.2310163120	https://www.pnas.org/doi/10.1073/pnas.231016312	Tomato
35	2023/9/15	Cellular atlases of ovarian microenvironment alterations by diet and genetically-induced obesity	Science China-Life Sciences	2023	10.1007/s11427-023-2360-3	https://link.springer.com/article/10.1007/s11427-	Ovarian
36	2023/10/17	Cancer-associated fibroblasts undergoing neoadjuvant chemotherapy suppress rectal cancer revealed by single-cell and spatial transcriptomics	Cell Reports Medicine	2023	10.1016/j.xcrm.2023.101231	https://www.cell.com/cell-reports-	Paired
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	Journal for ImmunoTherapy of	2023	10.1136/jitc-2023-SITC2023.1512	https://jitc.bmj.com/content/11/Suppl_2/A1734	Nasopharyn
38	2023/11/3	Adrenomedullin has a pivotal role in trophoblast differentiation: A promising nanotechnology-based therapeutic target for early-onset preeclampsia	Science Advances	2023	10.1126/sciadv.adi4777	https://www.science.org/doi/10.1126/sciadv.adi477	Human
39	2023/11/6	Chromosome-level genomes of three key Allium crops and their trait evolution	Nature Genetics	2023	10.1038/s41588-023-01546-0	https://www.nature.com/articles/s41588-023-	Scallions,
40	2023/11/9	Spatial-linked alignment tool (SLAT) for aligning heterogenous slices properly	Nature Communications	2023	10.1038/s41467-023-43105-5	https://www.nature.com/articles/s41467-023-	Continuous
41	2023/11/11	STOmicsDB: a comprehensive database for spatial transcriptomics data sharing, analysis and visualization	Nucleic Acids Research	2023	10.1093/nar/gkad933	https://academic.oup.com/nar/advance-	This
42	2023/11/17	Cellular and molecular mechanisms of fibrosis and resolution in bleomycin-induced pulmonary fibrosis mouse model revealed by spatial transcriptome analysis	Heliyon	2023	10.1016/j.heliyon.2023.e22461	DOI:https://doi.org/10.1016/j.heliyon.2023.e22461	Bleomycin-
43	2023/11/21	Multiomic analysis of cervical squamous cell carcinoma identifies cellular ecosystems with biological and clinical relevance	Nature Genetics	2023	10.1038/s41588-023-01570-0	https://doi.org/10.1038/s41588-023-01570-0	Untreated
44	2023/11/28	Dbh^{+} catecholaminergic cardiomyocytes contribute to the structure and function of the cardiac conduction system in murine heart	Nature Communications	2023	10.1038/s41467-023-42658-9	https://www.nature.com/articles/s41467-023-	Mouse
45	2023/12/12	Spatiotemporal transcriptome atlas reveals the regional specification of the developing human brain	Cell	2023	10.1016/j.cell.2023.11.016	https://www.cell.com/cell/fulltext/S0092-	Human
46	2023/12/15	The spatial transcriptomic landscape of human gingiva in health and periodontitis	Science China-Life Sciences	2023	10.1007/s11427-023-2467-1	https://www.sciengine.com/SCLS/doi/10.1007/s11	Gingival
47	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	Clinical and Translational	2023	10.1002/ctm2.1515	https://onlinelibrary.wiley.com/doi/10.1002/ctm2.1	Samples
48	2024/1/2	Presence of onco-fetal neighborhoods in hepatocellular carcinoma is associated with relapse and response to immunotherapy	Nature Cancer	2024	10.1038/s43018-023-00672-2	https://www.nature.com/articles/s43018-023-	Hepatocellul
49	2024/1/3	Single-cell landscape of idiopathic multicentric castleman disease in identical twins	Blood	2024	10.1182/blood.2023021992	https://ashpublications.org/blood/article/doi/10.118	Lymph node
50	2024/1/5	MENDER: fast and scalable tissue structure identification in spatial omics data	Nature Communications	2024	10.1038/s41467-023-44367-9	https://doi.org/10.1038/s41467-023-44367-9	
51	2024/2/2	Whole-brain spatial organization of hippocampal single-neuron projectomes	Science	2024	10.1126/science.adj9198	https://www.science.org/doi/10.1126/science.adj91	Brains of
52	2024/2/6	Region-specific transcriptomic responses to obesity and diabetes in macaque hypothalamus	Cell Metabolism	2024	10.1016/j.cmet.2024.01.003	https://www.cell.com/cell-	Healthy
53	2024/2/12	Spatiotemporal transcriptomic atlas of rhizome formation in *Oryza longistaminata*	Plant Biotechnology Journal	2024	10.1111/pbi.14294	https://onlinelibrary.wiley.com/doi/10.1111/pbi.142	Rhizomes of
54	2024/2/12	High-robustness autofocusing method in the microscope with laser-based arrayed spots	Optics Express	2024	10.1364/OE.510835	https://doi.org/10.1364/OE.510835	

55	2024/2/16	Effects of flora deficiency on the structure and function of the large intestine	iScience	2024	10.1016/j.isci.2024.108941	https://doi.org/10.1016/j.isci.2024.108941	Cecum and
56	2024/2/16	Spatial and single-nucleus transcriptomics decoding the molecular landscape and cellular organization of avian optic tectum	iScience	2024	10.1016/j.isci.2024.109009	https://doi.org/10.1016/j.isci.2024.109009	Optic
57	2024/2/20	SAW: an efficient and accurate data analysis workflow for Stereo-seq spatial transcriptomics	Gigabyte	2024	10.46471/gigabyte.111	https://gigabytejournal.com/articles/111/series/GIG	
58	2024/2/20	Generating single-cell gene expression profiles for high-resolution spatial transcriptomics based on cell boundary images	Gigabyte	2024	10.46471/gigabyte.110	https://gigabytejournal.com/articles/110/series/GIG	Datasets of
59	2024/2/20	Molecular, Metabolic, and Subcellular Mapping of the Tumor Immune Microenvironment via 3D Targeted and Non-Targeted Multiplex Multi-Omics Analyses	Cancers	2024	10.3390/cancers16050846	https://www.mdpi.com/2072-6694/16/5/846	Gynecologic
60	2024/2/21	Single-cell spatial transcriptomic and translatomic profiling of dopaminergic neurons in health, aging, and disease	Cell Reports	2024	10.1016/j.celrep.2024.113784	https://www.cell.com/cell-reports/fulltext/S2211-	Brains of
61	2024/2/26	Single-cell multi-omics analysis of lineage development and spatial organization in the human fetal cerebellum	Cell Discovery	2024	10.1038/s41421-024-00656-1	https://www.nature.com/articles/s41421-024-	Fetal
62	2024/3/29	Spatially resolved single-cell atlas of ascidian endostyle provides insight into the origin of vertebrate pharyngeal organs	Science Advances	2024	10.1126/sciadv.adi9035	https://www.science.org/doi/10.1126/sciadv.adi903	Endostyle
63	2024/4/8	DAIS: a method for identifying spatial domains based on density clustering of spatial omics data	Journal of Genetics and	2024	10.1016/j.jgg.2024.04.002	https://www.sciencedirect.com/science/article/abs/	Renal cell
64	2024/4/15	Spatiotemporal Evolution of Developing Palate in Mice	Journal of Dental Research	2024	10.1177/00220345241232317	https://journals.sagepub.com/doi/abs/10.1177/0022	Palatal
65	2024/4/16	A spatiotemporal atlas of mouse liver homeostasis and regeneration	Nature Genetics	2024	10.1038/s41588-024-01709-7	https://www.nature.com/articles/s41588-024-	Mouse liver
66	2024/4/16	A spatiotemporal atlas of cholestatic injury and repair in mice	Nature Genetics	2024	10.1038/s41588-024-01687-w	https://www.nature.com/articles/s41588-024-	Mouse bile
67	2024/4/23	3D reconstruction of a gastrulating human embryo	Cell	2024	10.1016/j.cell.2024.03.041	https://www.cell.com/cell/abstract/S0092-	62 slices of
68	2024/4/25	Analysis of synthetic cellular barcodes in the genome and transcriptome with BARtab and bartools	Cell reports methods	2024	10.1016/j.crmeth.2024.100763	https://doi.org/10.1016/j.crmeth.2024.100763	
69	2024/5/14	A spatial transcriptome map of the developing maize ear	Nature Plants	2024	10.1038/s41477-024-01683-2	https://www.nature.com/articles/s41477-024-	Maize
70	2024/5/18	Spatially resolved transcriptomic profiling of placental development in dairy cow	Zoological Research	2024	10.24272/j.issn.2095-8137.2023.205	https://www.zoores.ac.cn/en/article/doi/10.24272/j.	Bovine
71	2024/5/25	Benchmarking mapping algorithms for cell-type annotating in mouse brain by integrating single-nucleus RNA-seq and Stereo-seq data	Briefings in Bioinformatics	2024	10.1093/bib/bbae250	https://academic.oup.com/bib/article/25/4/bbae250/	Mouse brain
72	2024/6/6	Spatiotemporal transcriptomic landscape of rice embryonic cells during seed germination	Developmental Cell	2024	10.1016/j.devcel.2024.05.016	https://doi.org/10.1016/j.devcel.2024.05.016	Rice seeds
73	2024/6/19	Multiscale topology classifies cells in subcellular spatial transcriptomics	Nature	2024	10.1038/s41586-024-07563-1	https://doi.org/10.1038/s41586-024-07563-1	Mouse
74	2024/6/21	Deciphering spatial domains from spatial multi-omics with SpatialGlue	Nature Methods	2024	10.1038/s41592-024-02316-4	https://doi.org/10.1038/s41592-024-02316-4	Spatial
75	2024/6/22	Dentate Gyrus Morphogenesis is Regulated by an Autism Risk Gene Trio Function in Granule Cells	Neuroscience Bulletin	2024	10.1007/s12264-024-01241-y	https://link.springer.com/article/10.1007/s12264-	Mouse brain
76	2024/6/25	Microglia-astrocyte crosstalk in the amyloid plaque niche of an Alzheimer's disease mouse model, as revealed by spatial transcriptomics	Cell Reports	2024	10.1016/j.celrep.2024.114216	https://doi.org/10.1016/j.celrep.2024.114216	Brain of
77	2024/7/3	Integrating single-nucleus RNA sequencing and spatial transcriptomics to elucidate a specialized subpopulation of astrocytes, microglia and vascular cells in brains of mouse	Journal of Neuroinflammation	2024	10.1186/s12974-024-03161-0	https://jneuroinflammation.biomedcentral.com/artic	Mouse brain
78	2024/7/13	Astrocytic Neuroligin-3 influences gene expression and social behavior, but is dispensable for synapse number	Molecular Psychiatry	2024	10.1038/s41380-024-02659-6	https://doi.org/10.1038/s41380-024-02659-6	Mouse
79	2024/7/19	spatiAlign: an unsupervised contrastive learning model for data integration of spatially resolved transcriptomics	GigaScience	2024	10.1093/gigascience/giae042	https://doi.org/10.1093/gigascience/giae042	Mouse
80	2024/7/29	Maternal age enhances purifying selection on pathogenic mutations in complex I genes of mammalian mtDNA	Nature aging	2024	10.1038/s43587-024-00672-6	https://doi.org/10.1038/s43587-024-00672-6	Mouse
81	2024/7/29	Mapping the molecular landscape of Lotus japonicus nodule organogenesis through spatiotemporal transcriptomics	Nature Communications	2024	10.1038/s41467-024-50737-8	https://doi.org/10.1038/s41467-024-50737-8	Root
82	2024/8/2	Spatial transcriptome reveals the region-specific genes and pathways regulated by Satb2 in neocortical development	BMC Genomics	2024	10.1186/s12864-024-10672-w	https://doi.org/10.1186/s12864-024-10672-w	Different
83	2024/8/12	CCL19-producing fibroblasts promote tertiary lymphoid structure formation enhancing anti-tumor IgG response in colorectal cancer liver metastasis	Cancer Cell	2024	10.1016/j.ccell.2024.07.006	https://doi.org/10.1016/j.ccell.2024.07.006	Humanized
84	2024/9/5	Cross-Species Insights into Trophoblast Invasion During Placentation Governed by Immune-Featured Trophoblast Cells	Advanced science	2024	10.1002/advs.202407221	https://doi.org/10.1002/advs.202407221	Rats, mice,
85	2024/9/25	Chronic lung inflammation and CK14+ basal cell proliferation induce persistent alveolar-bronchiolization in SARS-CoV-2-infected hamsters	EBioMedicine	2024	10.1016/j.ebiom.2024.105363	https://doi.org/10.1016/j.ebiom.2024.105363	Male
86	2024/9/27	Cross-species single-cell spatial transcriptomic atlases of the cerebellar cortex	Science	2024	10.1126/science.ado3927	https://www.science.org/doi/10.1126/science.ado39	cerebellum
87	2024/10/7	SpotGF: Denoising spatially resolved transcriptomics data using an optimal transport-based gene filtering algorithm	Cell Systems	2024	10.1016/j.cels.2024.09.005	https://doi.org/10.1016/j.cels.2024.09.005	Root tip of
88	2024/10/16	Single-cell spatiotemporal analysis of the lungs reveals Slamf9+ macrophages involved in viral clearance and inflammation resolution	Cell Discovery	2024	10.1038/s41421-024-00734-4	https://doi.org/10.1038/s41421-024-00734-4	Syrian
89	2024/10/16	Single-cell spatiotemporal analysis reveals alveolar dendritic cell–T cell immunity hubs defending against pulmonary infection	Cell Discovery	2024	10.1038/s41421-024-00733-5	https://doi.org/10.1038/s41421-024-00733-5	Syrian
90	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	2024	10.1016/j.gendis.2024.101304	https://doi.org/10.1016/j.gendis.2024.101304	Human eye
91	2024/10/22	A spatiotemporal transcriptomic atlas of mouse placentation	Cell Discovery	2024	10.1038/s41421-024-00740-6	https://doi.org/10.1038/s41421-024-00740-6	Mouse
92	2024/11/4	Spatial Transcriptomic Landscape Unveils Immunoglobin-associated Senescence as a Hallmark of Aging	Cell	2024	10.1016/j.cell.2024.10.019	https://doi.org/10.1016/j.cell.2024.10.019	The heart,
93	2024/11/5	172 The application of single-cell resolved spatial transcriptomics to prostate adenocarcinoma reveals tumor microenvironmental signatures that correlate with distinct	Journal for ImmunoTherapy of	2025	10.1136/jitc-2024-SITC2024.0172	https://doi.org/10.1136/jitc-2024-SITC2024.0172	Prostate
94	2024/11/5	Combined CAR-M and T cell therapy to remodel TGFbeta-rich solid tumors	Journal for ImmunoTherapy of	2025	10.1136/jitc-2024-SITC2024.1144	https://doi.org/10.1136/jitc-2024-SITC2024.1144	Engineered
95	2024/11/5	Clinical Features of Cutaneous T-Cell Lymphoma and the Application of Anti-PD-1 Antibodies in Relapsed /Refractory Patients	Blood	2025	10.1182/blood-2024-207103	https://doi.org/10.1182/blood-2024-207103	FFPE tissue
96	2024/11/6	Tracing the evolutionary and genetic footprints of atmospheric tillandsioids transition from land to air	Nature Communications	2024	10.1038/s41467-024-53756-7	https://doi.org/10.1038/s41467-024-53756-7	The genus
97	2024/11/11	Spatiotemporal modeling of molecular holograms	Cell	2024	10.1016/j.cell.2024.10.011	https://doi.org/10.1016/j.cell.2024.10.011	Mouse
98	2024/11/12	Lamination-based organoid spatially resolved transcriptomics technique for primary lung and liver organoid characterization	PNAS	2024	10.1073/pnas.2408939121	https://doi.org/10.1073/pnas.2408939121	Mouse lung
99	2024/11/12	Local ablation disrupts immune evasion in pancreatic cancer	Cancer Letters	2024	10.1016/j.canlet.2024.217327	https://doi.org/10.1016/j.canlet.2024.217327	Mice
100	2024/11/15	Unveiling intratumoral heterogeneity in high-risk cutaneous squamous cell carcinoma using single-cell spatial enhanced resolution omics-sequencing (Stereo-seq)	J Dermatol Sci	2024	10.1016/j.jdermsci.2024.11.001	https://doi.org/10.1016/j.jdermsci.2024.11.001	High-risk
101	2024/11/21	Multitranscriptome analysis revealed that stromal cells in the papillary dermis promote angiogenesis in psoriasis vulgaris	British Journal of Dermatology	2024	10.1093/bjd/ljae459	https://doi.org/10.1093/bjd/ljae459	A total of 37
102	2024/11/26	Spatially organized tumor-stroma boundary determines the efficacy of immunotherapy in colorectal cancer patients	Nature Communications	2024	10.1038/s41467-024-54710-3	https://doi.org/10.1038/s41467-024-54710-3	Tumor
103	2024/12/31	Spatial transcriptomics reveals unique metabolic profile and key oncogenic regulators of cervical squamous cell carcinoma	J Transl Med	2024	10.1186/s12967-024-06011-y	https://doi.org/10.1186/s12967-024-06011-y	FFPE tumor
104	2025/1/7	Antibody-based delivery of interleukin-2 modulates the immunosuppressive tumor microenvironment and achieves cure in pancreatic ductal adenocarcinoma syngeneic mice	Journal of Experimental &	2025	10.1186/s13046-024-03238-x	https://doi.org/10.1186/s13046-024-03238-x	Mouse
105	2025/1/8	Stereo-seq of the prefrontal cortex in aging and Alzheimer's disease	Nature Communications	2025	10.1038/s41467-024-54715-y	https://doi.org/10.1038/s41467-024-54715-y	Six male
106	2025/1/9	Mapping spatially-resolved transcriptomes in systemic sclerosis	Annals of the Rheumatic Diseases	2025	10.1101/2025.01.14.632962	https://doi.org/10.1101/2025.01.14.632962	Human
107	2025/1/9	Spatially Resolved Tumor Ecosystems and Cell States in Gastric Adenocarcinoma Progression and Evolution	Cancer Discov	2025	10.1158/2159-8290.CD-24-0605	https://doi.org/10.1158/2159-8290.CD-24-0605	121 gastric
108	2025/1/10	Spatial transcriptomic characterization of a Carnegie stage 7 human embryo	Nat Cell Biol	2025	10.1038/s41556-024-01597-3	https://doi.org/10.1038/s41556-024-01597-3	human
109	2025/1/15	Spatially resolved transcriptomics reveals gene expression characteristics in uveal melanoma	Holistic Integrative Oncology	2025	10.3389/fimmu.2024.1522582	https://doi.org/10.1007/s44178-024-00138-0	two Uveal
110	2025/1/21	High cellular plasticity state of medulloblastoma local recurrence and distant dissemination	Cell Reports Medicine	2025	10.1016/j.xcrm.2024.101914	https://doi.org/10.1016/j.xcrm.2024.101914	17
111	2025/1/21	Comprehensive single-cell atlas of colorectal neuroendocrine tumors with liver metastases: unraveling tumor microenvironment heterogeneity between primary lesions and	Molecular Cancer	2025	10.1186/s12943-025-02231-y	https://doi.org/10.1186/s12943-025-02231-y	CRNELM
112	2025/1/28	Stromal architecture and fibroblast subpopulations with opposing effects on outcomes in hepatocellular carcinoma	Cell Discovery	2025	10.1038/s41421-024-00747-z	https://doi.org/10.1038/s41421-024-00747-z	hepatocellul
113	2025/1/28	Spatial and Single Cell Analyses Reveal Heterogeneity of DNAM-1 Receptor-Ligand Interactions that Instructs Intratumoral γδT-Cell Activity	Cancer Research	2025	10.1158/0008-5472.CAN-24-1509	https://doi.org/10.1158/0008-5472.CAN-24-1509	Patient's

114	2025/2/1	A single-cell and spatial wheat root atlas with cross-species annotations delineates conserved tissue-specific marker genes and regulators	Cell Rep	2025	10.1016/j.celrep.2025.115240	https://doi.org/10.1016/j.celrep.2025.115240	wheat roots
115	2025/2/3	Inferring cell trajectories of spatial transcriptomics via optimal transport analysis	Cell Systems	2025	10.1016/j.cels.2025.101194	https://doi.org/10.1016/j.cels.2025.101194	axolotl
116	2025/2/3	Cloned airway basal progenitor cells to repair fibrotic lung through re-epithelialization	Nature Communications	2025	10.1038/s41467-025-56501-w	https://doi.org/10.1038/s41467-025-56501-w	Mouse lung
117	2025/2/10	Spatiotemporal transcriptomics elucidates the patho genesis of fulminant viral myocarditis	Signal Transduction and	2025	10.1038/s41392-025-02143-9	https://doi.org/10.1038/s41392-025-02143-9	Coxsackievi
118	2025/2/14	Human Pituitary Organoids: Transcriptional Landscape Deciphered by scRNA-Seq and Stereo-Seq, with Insights into SOX3's Role in Pituitary Development	Advanced science	2025	10.1002/advs.202414230	https://doi.org/10.1002/advs.202414230	human
119	2025/2/14	Cross-tissue multi-omics analyses reveal the gut microbiota'sabsence impacts organ morphology, immune homeostasis,bile acid and lipid metabolism	iMeta	2025	10.1002/imt2.272	https://doi.org/10.1002/imt2.272	mouse
120	2025/2/18	A large-scale integrated transcriptomic atlas for soybean organ development	Molecular Plant	2025	10.1016/j.molp.2025.02.003	https://doi.org/10.1016/j.molp.2025.02.003	Root、
121	2025/2/27	Single-nucleus profiling decoding the subcortical visual pathway evolution of vertebrates	iScience	2025	10.1016/j.isci.2025.112128	https://doi.org/10.1016/j.isci.2025.112128	Samples of
122	2025/3/1	Integrative single-cell and spatial transcriptome analysis reveals heterogeneity of human liver progenitor cells	Hepatology Communications	2025	10.1097/HC9.0000000000000662	https://doi.org/10.1097/HC9.0000000000000662	Human liver
123	2025/3/17	An atlas of early human mandibular endochondral and osteogenic paracrine signaling regions of Meckel’s cartilage	PNAS	2025	10.1073/pnas.2420466122	https://doi.org/10.1073/pnas.2420466122	Human
124	2025/3/19	Spatially resolved mapping of cells associated with human complex traits	Nature	2025	10.1038/s41586-025-08757-x	https://doi.org/10.1038/s41586-025-08757-x	Mouse,
125	2025/3/20	Single-cell profiling of the human endometrium in polycystic ovary syndrome	Nature Medicine	2025	10.1038/s41591-025-03592-z	https://doi.org/10.1038/s41591-025-03592-z	The
126	2025/3/23	Single-cell spatial transcriptomic atlas of the whole mouse brain	Neuron	2025	10.1016/j.neuron.2025.02.015	https://doi.org/10.1016/j.neuron.2025.02.015	Mouse brain
127	2025/3/26	Molecular pathways and diagnosis in spatially resolved Alzheimer's hippocampal atlas	Neuron	2025	10.1016/j.neuron.2025.03.002	https://doi.org/10.1016/j.neuron.2025.03.002	Normal and
128	2025/4/1	Developmental innovation of inferior ovaries and flower sex orchestrated by KNOX1 in cucurbits	Nature Plants	2025	10.1038/s41477-025-01950-w	https://doi.org/10.1038/s41477-025-01950-w	
129	2025/4/3	Spatial transcriptomics reveals tryptophan metabolism restricting maturation of intratumoral tertiary lymphoid structures	Cancer Cell	2025	10.1016/j.ccell.2025.03.011	https://doi.org/10.1016/j.ccell.2025.03.011	Human and
130	2025/4/3	Single-cell spatial transcriptome atlas and whole-brain connectivity of the macaque claustrum	Cell	2025	10.1016/j.cell.2025.02.037	https://doi.org/10.1016/j.cell.2025.02.037	Macaque
131	2025/4/3	Morphogenic, molecular and cellular adaptations for unidirectional airflow in the chicken lung	Development	2025	10.1242/dev.204346	https://doi.org/10.1242/dev.204346	Chicken
132	2025/4/6	Comparative spatial transcriptomics reveals root dryland adaptation mechanism in rice and HMGB1 as a key regulator	Molecular Plant	2025	10.1016/j.molp.2025.04.001	https://doi.org/10.1016/j.molp.2025.04.001	Root tissues
133	2025/4/8	Single-nucleus and spatial transcriptomics identify brain landscape of gene regulatory networks associated with behavioral maturation in honeybees	Nature Communications	2025	10.1038/s41467-025-58614-8	https://doi.org/10.1038/s41467-025-58614-8	Brain tissue
134	2025/4/8	Transcriptional conservation and evolutionary divergence of cell types across mammalian hypothalamus development	Developmental Cell	2025	10.1016/j.devcel.2025.03.009	https://doi.org/10.1016/j.devcel.2025.03.009	Human and
135	2025/4/9	Spatially resolved atlas of breast cancer uncovers intercellular machinery of venular niche governing lymphocyte extravasation	Nature Communications	2025	10.1038/s41467-025-58511-0	https://doi.org/10.1038/s41467-025-58511-0	30 primary
136	2025/4/11	An Arabidopsis single-nucleus atlas decodes leaf senescence and nutrient allocation	Cell	2025	10.1016/j.cell.2025.03.024	https://doi.org/10.1016/j.cell.2025.03.024	Twenty
137	2025/4/21	Spatial patterns of APOBEC mutagenesis in the tumor microenvironment of Asian breast cancer	Cancer Research	2025	10.1158/1538-7445.AM2025-151	https://doi.org/10.1158/1538-7445.AM2025-151	Human
138	2025/4/21	Mapping the tumor microenvironment at single-cell resolution with Stereo-seq v1.3	Cancer Research	2025	10.1158/1538-7445.AM2025-5302	https://doi.org/10.1158/1538-7445.AM2025-5302	Colorectal
139	2025/4/16	SpaGRN: investigating spatially informed regulatory paths for spatially resolved transcriptomics data	Cell Systems	2025	10.1016/j.cels.2025.101243	https://doi.org/10.1016/j.cels.2025.101243	Complex
140	2025/4/17	Fast analysis of Spatial Transcriptomics (FaST): an ultra lightweight and fast pipeline for the analysis of high resolution spatial transcriptomics	NAR Genomics and	2025	10.1093/nargab/lqaf044	https://doi.org/10.1093/nargab/lqaf044	
141	2025/4/19	An Organ-wide Spatiotemporal Transcriptomic and Cellular Atlas of the Regenerating Zebrafish Heart	Nature Communications	2025	10.1038/s41467-025-59070-0	https://doi.org/10.1038/s41467-025-59070-0	Zebrafish
142	2025/4/21	Stereopy: modeling comparative and spatiotemporal cellular heterogeneity via multi-sample spatial transcriptomics	Nature Communications	2025	10.1038/s41467-025-58079-9	https://doi.org/10.1038/s41467-025-58079-9	
143	2025/4/22	Dissecting multilayer cell-cell communications with signaling feedback loops from spatial transcriptomics data	Genome Res	2025	10.1101/gr.279857.124	https://doi.org/10.1101/gr.279857.124	COVID-19-
144	2025/4/23	Single-cell multiome reveals root hair-specific responses to salt stress	New Phytologist	2025	10.1111/nph.70160	https://doi.org/10.1111/nph.70160	Root tips in
145	2025/4/23	Psychedelic control of neuroimmune interactions governing fear	Nature	2025	10.1038/s41586-025-08880-9	https://doi.org/10.1038/s41586-025-08880-9	Mouse brain
146	2025/4/27	Single-nucleus RNA sequencing and spatial transcriptomics reveal the mechanism by which Xiaozhiling injection treats internal hemorrhoids	World J Gastrointest Surg	2025	10.4240/wjgs.v17.i4.103494	https://doi.org/10.4240/wjgs.v17.i4.103494	Relevant
147	2025/4/28	Single-cell spatial transcriptomics of tertiary lymphoid organ-like structures in human atherosclerotic plaques	Nature Cardiovascular Research	2025	10.1038/s44161-025-00639-9	https://doi.org/10.1038/s44161-025-00639-9	Mouse
148	2025/4/29	Tri-omic single-cell mapping of the 3D epigenome and transcriptome in whole mouse brains throughout the lifespan	Nature Methods	2025	10.1038/s41592-025-02658-7	https://doi.org/10.1038/s41592-025-02658-7	Whole
149	2025/5/3	Primary cilia in growth plates orchestrate long bone development	Fundamental Research	2025	10.1016/j.fmre.2025.04.014	https://doi.org/10.1016/j.fmre.2025.04.014	Mouse
150	2025/5/5	Quasi-spatial single-cell transcriptome based on physical tissue properties defines early aging associated niche in liver	Nature Aging	2025	10.1038/s43587-025-00857-7	https://doi.org/10.1038/s43587-025-00857-7	Young and
151	2025/5/8	3D reconstruction of a human Carnegie stage 9 embryo provides a snapshot of early body plan formation	Cell Stem Cell	2025	10.1016/j.stem.2025.04.007	https://doi.org/10.1016/j.stem.2025.04.007	Human
152	2025/5/13	Genomic evolution reshapes cell-type diversification in the amniote brain	Developmental Cell	2025	10.1016/j.devcel.2025.04.014	https://doi.org/10.1016/j.devcel.2025.04.014	Telencephal
153	2025/5/13	DDX24 spatiotemporally orchestrates VEGF and Wnt signaling during developmental angiogenesis	Proc Natl Acad Sci U S A	2025	10.1073/pnas.2417445122	https://doi.org/10.1073/pnas.2417445122	embryonic
154	2025/5/15	Spatiotemporal Transcriptomic Profiling Reveals the Dynamic Immunological Landscape of Alveolar Echinococcosis	Advanced Science	2025	10.1002/advs.202405914	https://doi.org/10.1002/advs.202405914	Mouse liver
155	2025/5/19	Spatiotemporal single-cell analysis elucidates the cellular and molecular dynamics of human cornea aging	Genome Medicine	2025	10.1186/s13073-025-01475-z	https://doi.org/10.1186/s13073-025-01475-z	The human
156	2025/5/19	Integrating Spatial and Single-Nucleus Transcriptomic Data to Assess the Effects of Intrauterine Hyperglycemia on Fetal Pancreatic Development	Advanced Science	2025	10.1002/advs.202411126	https://doi.org/10.1002/advs.202411126	Fetal
157	2025/5/20	Targeting mitochondrial complex I of CD177^{+} neutrophils alleviates lung ischemia-reperfusion injury	Cell Reports Medicine	2025	10.1016/j.xcrm.2025.102140	https://doi.org/10.1016/j.xcrm.2025.102140	Mouse lung
158	2025/5/22	Spatial multiomics decipher fibroblast-macrophage dynamics in systemic sclerosis	Annals of the Rheumatic Diseases	2025	10.1016/j.ard.2025.04.025	https://doi.org/10.1016/j.ard.2025.04.025	Skin
159	2025/5/23	Spatiotemporal transcriptomic maps of mouse intracerebral hemorrhage at single-cell resolution	Neuron	2025	10.1016/j.neuron.2025.04.026	https://doi.org/10.1016/j.neuron.2025.04.026	Mouse brain
160	2025/5/23	StereoMM: a graph fusion model for integrating spatial tra nscriptomic data and pathological images	Briefings in Bioinformatics	2025	10.1093/bib/bbaf210	https://doi.org/10.1093/bib/bbaf210	Colorectal
161	2025/5/28	Using longitudinal spatial-omics to demonstrate in-situ Epstein-Barr virus reduction in responders to immunotherapy treated nasopharyngeal cancer	Journal of Clinical Oncology	2025	10.1200/JCO.2025.43.16_suppl.6025	https://doi.org/10.1200/JCO.2025.43.16_suppl.602	Analysis of
162	2025/5/28	Decoding spatial transcriptomics-based heterogeneity of TME in early-stage invasive pulmonary adenocarcinoma	Journal of Clinical Oncology	2025	10.1200/JCO.2025.43.16_suppl.e20030	https://doi.org/10.1200/JCO.2025.43.16_suppl.e20	Patients
163	2025/5/29	High-Resolution Spatial Map of the Human Facial Sebaceous Gland Reveals Marker Genes and Decodes Sebocyte Differentiation	Journal of Investigative	2025	10.1016/j.jid.2025.04.041	https://doi.org/10.1016/j.jid.2025.04.041	Human
164	2025/6/5	Single-Cell and Spatial Transcriptomic Profiling of Penile Squamous Cell Carcinoma Reveals Dynamics of Tumor Differentiation and Immune Microenvironment	Advanced Science	2025	10.1002/advs.202500216	https://doi.org/10.1002/advs.202500216	Patient
165	2025/6/10	Spatial Transcriptomics Unveils the Blueprint of Mammalian Lung Development	Genomics Proteomics	2025	10.1093/gpbjnl/qzaf053	https://doi.org/10.1093/gpbjnl/qzaf053	C57BL/6
166	2025/6/18	Digital reconstruction of full embryos during early mouse organogenesis	Cell	2025	10.1016/j.cell.2025.05.035	https://doi.org/10.1016/j.cell.2025.05.035	Mouse
167	2025/6/26	A Drosophila single-cell 3D spatiotemporal multi-omics atlas unveils panoramic key regulators of cell-type differentiation	Cell	2025	10.1016/j.cell.2025.05.047	https://doi.org/10.1016/j.cell.2025.05.047	Drosophila
168	2025/6/27	Reactivation of mammalian regeneration by turning on an evolutionarily disabled genetic switch	Science	2025	10.1126/science.adp0176	https://doi.org/10.1126/science.adp0176	Mouse
169	2025/6/27	Single-cell spatial transcriptomics reveals pathogenic mechanism of renal fibrosis in imiquimod-induced lupus nephritis in mice	Biochemistry and Biophysics	2025	10.1016/j.bbrep.2025.102087	https://doi.org/10.1016/j.bbrep.2025.102087	Mouse
170	2025/6/27	Age-dependent accumulation of mitochondrial tRNA mutations in mouse kidneys linked to mitochondrial kidney diseases	Nature Aging	2025	10.1038/s43587-025-00909-y	https://doi.org/10.1038/s43587-025-00909-y	50-week-old
171	2025/7/22	Integrative Single-Cell Analysis Reveals Iron Overload-Induced Senescence and Metabolic Reprogramming in Ovarian Endometriosis-Associated Infertility	Advanced Science	2025	10.1002/advs.202417528	https://doi.org/10.1002/advs.202417528	Mouse
172	2025/8/14	Globotriaosylceramide Gb3 Influences Wound Healing and Scar Formation by Orchestrating Fibroblast Heterogeneity	Advanced Science	2025	10.1002/advs.202509733	https://doi.org/10.1002/advs.202509733	Skin tissues

173	2025/8/19	Charting the spatial transcriptome of the human cerebral cortex at single-cell resolution	Nature Communications	2025	10.1038/s41467-025-62793-9	https://doi.org/10.1038/s41467-025-62793-9	Human
174	2025/8/21	Stereo-cell: Spatial enhanced-resolution single-cell sequencing with high-density DNA nanoball-patterned arrays	Science	2025	10.1126/science.adr0475	https://doi.org/10.1126/science.adr0475	Human
175	2025/8/23	High-Resolution Spatial Transcriptomics Unveils Spatially Resolved Gene Modules and Fatty Acid Metabolism Dysregulation in Human Skin Aging	Journal of Investigative [illegible]	2025	10.1016/j.jid.2025.08.011	https://doi.org/10.1016/j.jid.2025.08.011	Human
176	2025/8/28	MS4A6A/Ms4a6d deficiency disrupts neuroprotective microglia functions and promotes inflammation in Alzheimer's disease model	Molecular Neurodegeneration	2025	10.1186/s13024-025-00887-0	https://doi.org/10.1186/s13024-025-00887-0	Human
177	2025/8/29	Stereo-seqV2: Spatial mapping of total RNA on FFPEsections with high resolution	Cell	2025	10.1016/i.cell.2025.08.008	https://doi.org/10.1016/i.cell.2025.08.008	Mouse
178	2025/9/2	A dataset of spatially resolved transcriptomics of post-natal cardiac development in mice	Scientific Data	2025	10.1038/s41597-025-05838-4	https://doi.org/10.1038/s41597-025-05838-4	Murine
179	2025/9/4	Spatial Transcriptomics of Developing Wheat Seed Reveals Concentric Gene Expression Zones and Subgenome Biased Expression of Key Genes	Plant Biotechnology Journal	2025	10.1111/pbi.70351	https://doi.org/10.1111/pbi.70351	wheat
180	2025/9/15	Uncovering the genetic architecture of pungency, carotenoids, and flavor in Capsicum chinense via TWAS-mGWAS integration and spatial Transcriptomics	Horticulture Research	2025	10.1093/hr/uhaf243	https://doi.org/10.1093/hr/uhaf243	Capsicum
181	2025/9/15	Microglial function alterations during healthy ageing and canine cognitive dysfunction revealed by single-nucleus and spatial transcriptomics	National Science Review	2025	10.1093/nsr/nwaf388	https://doi.org/10.1093/nsr/nwaf388	Canine brain
182	2025/9/19	The tumor-associated fibroblasts regulate urothelial carcinoma progression	Journal of Molecular Cell [illegible]	2025	10.1093/jmcb/mjaf032	https://doi.org/10.1093/jmcb/mjaf032	Human
183	2025/9/22	Single-cell and spatial transcriptomics reveal intratumor heterogeneity and immune microenvironment interactions in Natural killer/T-cell lymphoma	iScience	2025	10.1016/j.isci.2025.113626	https://doi.org/10.1016/j.isci.2025.113626	Freshly
184	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	2025	10.1038/s41588-025-02341-9	https://doi.org/10.1038/s41588-025-02341-9	Primary
185	2025/10/15	stTransfer enables transfer of single-cell annotations to spatial transcriptomics with single-cell resolution	Cell Reports Methods	2025	10.1016/j.crmeth.2025.101205	https://doi.org/10.1016/j.crmeth.2025.101205	zebra finch
186	2025/10/17	Systematic benchmarking of high-throughput subcellular spatial transcriptomics platforms across human tumors	Nature Communications	2025	10.1038/s41467-025-64292-3	https://doi.org/10.1038/s41467-025-64292-3	Colon
187	2025/10/19	Single-cell and spatial omics reveal progressive loss of xylem developmental complexity across seed plants	Plant Cell	2025	10.1093/plcell/koaf253	https://doi.org/10.1093/plcell/koaf253	Xylem

No.	Epub	Title	The Journal	Publication	DOI	Link
		Review articles published				
1	2022/4/1	Clinical and translational values of spatial transcriptomics	Signal Transduction and Targeted	2022	10.1038/s41392-022-00960-w	https://www.nature.com/articles/s41392-022-
2	2022/5/23	New adventures in spatial transcriptomics	Developmental Cell	2022	10.1016/j.devcel.2022.04.021	https://doi.org/10.1016/j.devcel.2022.04.021
3	2022/11/14	Spatiotemporal Omics-Refining the landscape of precision medicine	Life Medicine	2022	10.1093/lifemedi/lnac053	https://journal.hep.com.cn/lifemed/EN/10.1093/life
4	2022/12/21	Single-cell and spatial multi-omics in the plant sciences: Technical advances, applications, and perspectives	Plant communications	2022	10.1016/j.xplc.2022.100508	https://doi.org/10.1016/j.xplc.2022.100508
5	2023/3/27	Spatially resolved transcriptomics: a comprehensive review of their technological advances, applications, and challenges	Journal of Genetics and	2023	10.1016/j.jgg.2023.03.011	https://www.sciencedirect.com/science/article/pii/S
6	2023/5/31	Spatial transcriptomics in cancer research: Opportunities and challenges	The Innovation Life	2023	10.59717/j.xinn-life.2023.100006/	http://www.the-
7	2023/6/23	Dissecting mammalian reproduction with spatial transcriptomics	Human Reproduction Update	2023	10.1093/humupd/dmad017	https://doi.org/10.1093/humupd/dmad017
8	2023/7/6	Spatial Omics Sequencing Based on Microfluidic Array Chips	Biosensors	2023	10.3390/bios13070712	https://doi.org/10.3390/bios13070712
9	2023/7/7	Spatial transcriptomics in cancer research: opportunities and challenges	The Innovation Life	2023	10.59717/j.xinn-life.2023.100006	https://doi.org/10.59717/j.xinn-life.2023.100006
10	2023/7/24	Unveiling the hidden battlefield: dissecting the invasive zone in liver cancer	Cell Research	2023	10.1038/s41422-023-00855-7	https://doi.org/10.1038/s41422-023-00855-7
11	2023/7/27	Significance of stereologically spatiotemporal cells in molecular medicine	Clinical and Translational	2023	10.1002/ctm2.70470	https://doi.org/10.1002/ctd2.70077
12	2023/8/4	The dawn of spatial omics	Science	2023	10.1126/science.abq4964	https://www.science.org/doi/10.1126/science.abq49
13	2023/8/16	Spatial transcriptomics in human biomedical research and clinical application	Current Medicine	2023	10.1007/s44194-023-00023-4	https://link.springer.com/article/10.1007/s44194-
14	2023/8/17	Spatial transcriptomics: recent developments and insights in respiratory research	Military Medical Research	2023	10.1186/s40779-023-00471-x	https://doi.org/10.1186/s40779-023-00471-x
15	2023/8/31	Spatial transcriptomics drives a new era in plant research	Plant Journal	2023	10.1111/tpj.16437	https://onlinelibrary.wiley.com/doi/10.1111/tpj.164
16	2023/9/1	Spatial transcriptomics: Technologies, applications and experimental considerations	Genomics	2023	10.1016/j.ygeno.2023.110671	https://doi.org/10.1016/j.ygeno.2023.110671
17	2023/10/1	Spatial transcriptomics in neuroscience	Experimental and Molecular	2023	10.1038/s12276-023-01093-y	https://doi.org/10.1038/s12276-023-01093-y
18	2023/10/9	Spatial transcriptomics in development and disease	Molecular biomedicine	2023	10.1186/s43556-023-00144-0	https://doi.org/10.1186/s43556-023-00144-0
19	2023/10/31	Introducing single cell stereo-sequencing technology to transform the plant transcriptome landscape	Trends in Plant Science	2023	10.1016/j.tplants.2023.10.002	https://doi.org/10.1016/j.tplants.2023.10.002
20	2024/3/15	Opportunities and Challenges in Advancing Plant Research with Single-cell Omics	Genomics, Proteomics &	2024	10.1093/gpbjnl/qzae026	https://doi.org/10.1093/gpbjnl/qzae026
21	2024/4/15	Next-Generation Sequencing-Based Spatial Transcriptomics: A Perspective from Barcoding Chemistry	JACS Au	2024	10.1021/jacsau.4c00118	https://pubs.acs.org/doi/10.1021/jacsau.4c00118
22	2024/5/27	Spatiotemporal multi-omics: exploring molecular landscapes in aging and regenerative medicine	Military Medical Research	2024	10.1186/s40779-024-00537-4	https://doi.org/10.1186/s40779-024-00537-4
23	2024/6/8	Spatial transcriptomics in cancer research and potential clinical impact: a narrative review	Journal of Cancer Research and	2024	10.1007/s00432-024-05816-0	https://doi.org/10.1007/s00432-024-05816-0
24	2024/6/20	Advances in spatial transcriptomics and its applications in cancer research	Molecular Cancer	2024	10.1186/s12943-024-02040-9	https://molecular-
25	2024/7/10	Unraveling plant–microbe symbioses using single-cell and spatial transcriptomics	Trends in Plant Science	2024	10.1016/j.tplants.2024.06.00	https://doi.org/10.1016/j.tplants.2024.06.008
26	2024/8/22	Spatiotemporal omics for biology and medicine	Cell	2024	10.1016/j.cell.2024.07.040	https://doi.org/10.1016/j.cell.2024.07.040
27	2024/10/6	Next-generation spatial transcriptomics: unleashing the power to gear up translational oncology	Med Comm	2024	10.1002/mco2.765	https://doi.org/10.1002/mco2.765
28	2024/11/27	Spatial Omics: Navigating Neuroscience Research into the New Era	Systems Neuroscience	2024	10.1007/978-3-031-69188-1_6	https://doi.org/10.1007/978-3-031-69188-1_6
29	2024/12/20	Advances and applications in single-cell and spatial genomics	Science China Life Sciences	2024	10.1007/s11427-024-2770-x	https://doi.org/10.1007/s11427-024-2770-x
30	2025/1/20	A practical guide for choosing an optimal spatial transcriptomics technology from seven major commercially available options	BMC Genomics	2025	10.1186/s12864-025-11235-3	https://doi.org/10.1186/s12864-025-11235-3
31	2025/1/24	Spatial Transcriptomics in Human Cardiac Tissue	International Journal of	2025	10.3390/ijms26030995	https://doi.org/10.3390/ijms26030995
32	2025/1/31	Decoding the blueprints of embryo development with single-cell and spatial omics	Seminars in Cell &	2025	10.1016/j.semcdb.2025.01.002	https://doi.org/10.1016/j.semcdb.2025.01.002
33	2025/3/3	From morphology to single-cell molecules: high-resolution 3D histology in biomedicine	Mol Cancer	2025	10.1186/s12943-025-02240-x	https://doi.org/10.1186/s12943-025-02240-x
34	2025/4/3	Recent progress in single-cell transcriptomic studies in plants	Plant Biotechnology Reports	2025	10.1007/s11816-025-00967-z	https://doi.org/10.1007/s11816-025-00967-z
35	2025/6/2	Spatial omics enters the microscopic realm: opportunities and challenges	Trends in Genetics	2025	10.1016/j.tig.2025.05.002	https://doi.org/10.1016/j.tig.2025.05.002
36	2025/6/25	What spatial omics is teaching us about field cancerisation in prostate and bladder cancer	BJU International	2025	10.1111/bju.16830	https://doi.org/10.1111/bju.16830
37	2025/7/17	Cancer therapy resistance from a spatial-omics perspective	Clinical and Translational	2025	10.1002/ctm2.70396	https://doi.org/10.1002/ctm2.70396
38	2025/7/19	A systematic review of single-cell RNA sequencing applications and insights in Oryza sativa response to environmental stresses	Molecular Biology Reports	2025	10.1007/s11033-025-10836-1	https://doi.org/10.1007/s11033-025-10836-1
39	2025/7/23	New insights into liver injury and regeneration from single-cell transcriptomics	eGastroenterology	2025	10.1136/egastro-2025-100202	https://doi.org/10.1136/egastro-2025-100202
40	2025/8/5	Spatial single-cell omics: new insights into liver diseases	Gut	2025	10.1136/gutjnl-2024-332105	https://doi.org/10.1136/gutjnl-2024-332105
41	2025/8/11	Capturing ovarian dynamics through spatial profiling of the mechano-microenvironment	Seminars in Cell and	2025	10.1016/j.semcdb.2025.103642	https://doi.org/10.1016/j.semcdb.2025.103642
42	2025/8/19	Spatiotemporal Dynamics of Central Nervous System Diseases: Advancing Translational Neuropathology via Single-Cell and Spatial Multiomics	Medcomm	2025	10.1002/mco2.70328	https://doi.org/10.1002/mco2.70328
43	2025/8/28	Charting the cardiac landscape: Advances in spatial transcriptomics for heart biology	Seminars in Cell and	2025	10.1016/j.semcdb.2025.103648	https://doi.org/10.1016/j.semcdb.2025.103648
44	2025/9/4	Spatially Resolved Transcriptomics: Revealing Tumor Microenvironment Heterogeneity to Advance Cancer Immunotherapy	Small methods	2025	10.1002/smtd.202500770	https://doi.org/10.1002/smtd.202500770
45	2025/9/18	Stereo-cell: A planar DNA nanoball-array route to ultrahigh-throughput, imaging-integrated single-cell profiling	BMEMat	2025	10.1002/bmm2.70035	https://doi.org/10.1002/bmm2.70035
46	2025/9/29	Microglia networks within the tapestry of alzheimer's disease through spatial transcriptomics	Molecular Neurodegeneration	2025	10.1186/s13024-025-00897-y	https://doi.org/10.1186/s13024-025-00897-y
47	2025/10/23	Fibroblasts in the tumor microenvironment: heterogeneity and dynamic interactions in tumor progression revealed by spatial transcriptomics	Cellular Oncology	2025	10.1007/s13402-025-01108-y	https://doi.org/10.1007/s13402-025-01108-y
48	2025/10/28	From identity to function: unveiling the cellular complexity of hypothalamic feeding circuits	Reviews in Endocrine and	2025	10.1007/s11154-025-10004-7	https://doi.org/10.1007/s11154-025-10004-7
49	2025/10/27	Advances in plant spatial multi-omics data analysis	Trends in Plant Science	2025	10.1016/j.tplants.2025.10.005	https://doi.org/10.1016/j.tplants.2025.10.005

No.	Epub	Title	The Journal	Publication	DOI	Link
		Filtered a portion of the cited article				
1	2022/7/14	Identifying multicellular spatiotemporal organization of cells with SpaceFlow	Nature Communications	2022	10.1038/s41467-022-31739-w	https://www.nature.com/articles/s41467-022-
2	2022/8/26	Accurate inference of genome-wide spatial expression with iSpatial	Science advances	2022	10.1126/sciadv.abq0990	https://www.science.org/doi/10.1126/sciadv.abq09
3	2022/10/17	DeepST: identifying spatial domains in spatial transcriptomics by deep learning	Nucleic Acids Research	2022	10.1093/nar/gkac901	https://doi.org/10.1093/nar/gkac901
4	2022/11/11	Polony gels enable amplifiable DNA stamping and spatial transcriptomics of chronic pain	Cell	2022	10.1016/j.cell.2022.10.021	https://doi.org/10.1016/j.cell.2022.10.021
5	2022/11/21	Benchmarking cell-type clustering methods for spatially resolved transcriptomics data	Brief Bioinform	2022	10.1093/bib/bbac475	https://doi.org/10.1093/bib/bbac475
6	2023/1/18	DIST: spatial transcriptomics enhancement using deep learning	Briefings in Bioinformatics	2023	10.1093/bib/bbad013	https://doi.org/10.1093/bib/bbad013
7	2023/1/21	Single-cell and spatial analyses reveal the association between gene expression of glutamine synthetase with the immunosuppressive phenotype of APOE+ CTSZ+ TAM in	Molecular Oncology	2023	10.1002/1878-0261.13373	https://doi.org/10.1002/1878-0261.13373
8	2023/2/13	SINFONIA: Scalable Identification of Spatially Variable Genes for Deciphering Spatial Domains	Cells	2023	10.3390/cells12040604	https://doi.org/10.3390/cells12040604
9	2023/3/21	A comprehensive benchmarking with practical guidelines for cellular deconvolution of spatial transcriptomics	Nature Communications	2023	10.1038/s41467-023-37168-7	https://doi.org/10.1038/s41467-023-37168-7
10	2023/7/10	SCS: cell segmentation for high-resolution spatial transcriptomics	Nature Methods	2023	10.1038/s41592-023-01939-3	https://doi.org/10.1038/s41592-023-01939-3
11	2023/7/18	Spatial-MGCN: a novel multi-view graph convolutional network for identifying spatial domains with attention mechanism	Briefings in Bioinformatics	2023	10.1093/bib/bbad262	https://doi.org/10.1093/bib/bbad262
12	2023/7/27	The spatiotemporal dynamics of spatially variable genes in developing mouse brain revealed by a novel computational scheme	Cell Death Discov	2023	10.1038/s41420-023-01569-w	https://doi.org/10.1038/s41420-023-01569-w
13	2023/7/31	Three-dimensional molecular architecture of mouse organogenesis	Nature Communications	2023	10.1038/s41467-023-40155-7	https://doi.org/10.1038/s41467-023-40155-7
14	2023/8/7	Identifying spatial domains of spatially resolved transcriptomics via multi-view graph convolutional networks	Briefings in Bioinformatics	2023	10.1093/bib/bbad278	https://doi.org/10.1093/bib/bbad278
15	2023/10/9	STAMarker: determining spatial domain-specific variable genes with saliency maps in deep learning	Nucleic Acids Research	2023	10.1093/nar/gkad801	https://doi.org/10.1093/nar/gkad801
16	2023/10/17	NeST: nested hierarchical structure identification in spatial transcriptomic data	Nature Communications	2023	10.1038/s41467-023-42343-x	https://doi.org/10.1038/s41467-023-42343-x
17	2023/10/19	Construction of a 3D whole organism spatial atlas by joint modelling of multiple slices with deep neural networks	nature machine intelligence	2025	10.1038/s42256-023-00734-1	https://doi.org/10.1038/s42256-023-00734-1
18	2023/10/20	SPIRAL: integrating and aligning spatially resolved transcriptomics data across different experiments, conditions, and technologies	Genome biology	2023	10.1186/s13059-023-03078-6	https://doi.org/10.1186/s13059-023-03078-6
19	2023/10/20	stVAE deconvolves cell-type composition in large-scale cellular resolution spatial transcriptomics	Bioinformatics	2023	10.1093/bioinformatics/btad642	https://doi.org/10.1093/bioinformatics/btad642
20	2023/11/9	Spatial-linked alignment tool (SLAT) for aligning heterogenous slices	Nature Communications	2023	10.1038/s41467-023-43105-5	https://doi.org/10.1038/s41467-023-43105-5
21	2023/11/15	Single-cell, whole-embryo phenotyping of mammalian developmental disorders	Nature	2023	10.1038/s41586-023-06548-w	https://www.nature.com/articles/s41586-023-
22	2023/11/22	SPACEL: deep learning-based characterization of spatial transcriptome architectures	Nature Communications	2023	10.1038/s41467-023-43220-3	https://doi.org/10.1038/s41467-023-43220-3
23	2023/11/30	A comprehensive overview of graph neural network-based approaches to clustering for spatial transcriptomics T	Computational and Structural	2023	10.1016/j.csbj.2023.11.055	https://doi.org/10.1016/j.csbj.2023.11.055
24	2023/12/13	GNTD: reconstructing spatial transcriptomes with graph-guided neural tensor decomposition informed by spatial and functional relations	Nature Communications	2023	10.1038/s41467-023-44017-0	https://doi.org/10.1038/s41467-023-44017-0
25	2024/1/3	SGCAST: symmetric graph convolutional auto-encoder for scalable and accurate study of spatial transcriptomics	Brief Bioinform	2024	10.1093/bib/bbad490	https://doi.org/10.1093/bib/bbad490
26	2024/1/6	stAA: adversarial graph autoencoder for spatial clustering task of spatially resolved transcriptomics	Brief Bioinform	2024	10.1093/bib/bbad500	https://doi.org/10.1093/bib/bbad500
27	2024/1/13	BIDCell: Biologically-informed self-supervised learning for segmentation of subcellular spatial transcriptomics data	Nature Communications	2024	10.1038/s41467-023-44560-w	https://doi.org/10.1038/s41467-023-44560-w
28	2024/1/15	Evaluating spatially variable gene detection methods for spatial transcriptomics data	Genome biology	2024	10.1186/s13059-023-03145-y	https://doi.org/10.1186/s13059-023-03145-y
29	2024/1/16	Decoder-seq enhances mRNA capture efficiency in spatial RNA sequencing	Nature Biotechnology	2024	10.1038/s41587-023-02086-y	https://doi.org/10.1038/s41587-023-02086-y
30	2024/1/18	PROST: quantitative identification of spatially variable genes and domain detection in spatial transcriptomics	Nature Communications	2024	10.1038/s41467-024-44835-w	https://doi.org/10.1038/s41467-024-44835-w
31	2024/2/20	EAGS: efficient and adaptive Gaussian smoothing applied to high-resolved spatial transcriptomics	Gigascience	2024	10.1093/gigascience/giad097	https://doi.org/10.1093/gigascience/giad097
32	2024/2/20	Deciphering spatial domains from spatially resolved transcriptomics with Siamese graph autoencoder	Gigascience	2024	10.1093/gigascience/giae003	https://doi.org/10.1093/gigascience/giae003
33	2024/2/20	BatchEval Pipeline: batch effect evaluation workflow for multiple datasets joint analysis	GigaByte	2024	10.46471/gigabyte.108	https://doi.org/10.1101/2023.10.08.561465
34	2024/2/20	A novel variable neighborhood search approach for cell clustering for spatial transcriptomics	GigaByte	2024	10.46471/gigabyte.109	https://doi.org/10.32388/0Z3EG4
35	2024/2/20	STGIC: A graph and image convolution-based method for spatial transcriptomic clustering	PLoS Computational Biology	2024	10.1371/journal.pcbi.1011935	https://doi.org/10.1371/journal.pcbi.1011935
36	2024/3/2	Innovative super-resolution in spatial transcriptomics: a transformer model exploiting histology images and spatial gene expression	Brief Bioinform	2024	10.1093/bib/bbae052	https://doi.org/10.1093/bib/bbae052
37	2024/3/15	Spaco: A comprehensive tool for coloring spatial data at single-cell resolution	Patterns	2024	10.1016/j.patter.2023.100915	https://doi.org/10.1016/j.patter.2023.100915
38	2024/3/31	SpatialcoGCN: deconvolution and spatial information-aware simulation of spatial transcriptomics data via deep graph co-embedding	Brief Bioinform	2024	10.1093/bib/bbae130	https://doi.org/10.1093/bib/bbae130
39	2024/4/2	Pianno: a probabilistic framework automating semantic annotation for spatial transcriptomics	Nature Communications	2024	10.1038/s41467-024-47152-4	https://doi.org/10.1038/s41467-024-47152-4
40	2024/4/16	Attention-guided variational graph autoencoders reveal heterogeneity in spatial transcriptomics	Brief Bioinform	2024	10.1093/bib/bbae173	https://doi.org/10.1093/bib/bbae173
41	2024/4/18	The heterogeneity of tumour-associated macrophages contributes to the clinical outcomes and indications for immune checkpoint blockade in colorectal cancer patients	Immunobiology	2024	10.1016/j.imbio.2024.152805	https://doi.org/10.1016/j.imbio.2024.152805
42	2024/4/24	Emx2 underlies the development and evolution of marsupial gliding membranes	Nature	2024	10.1038/s41586-024-07305-3	https://doi.org/10.1038/s41586-024-07305-3
43	2024/5/15	An immunohistochemical atlas of necroptotic pathway expression	EMBO Molecular Medicine	2024	10.1038/s44321-024-00074-6	https://doi.org/10.1038/s44321-024-00074-6
44	2024/5/22	Complete spatially resolved gene expression is not necessary for identifying spatial domains	Cell Genomics	2024	10.1016/j.xgen.2024.100565	https://doi.org/10.1016/j.xgen.2024.100565
45	2024/5/27	A multi-view graph contrastive learning framework for deciphering spatially resolved transcriptomics data	Brief Bioinform	2024	10.1093/bib/bbae255	https://doi.org/10.1093/bib/bbae255
46	2024/5/29	SpaNCMG: improving spatial domains identification of spatial transcriptomics using neighborhood-complementary mixed-view graph convolutional network	Brief Bioinform	2024	10.1093/bib/bbae259	https://doi.org/10.1093/bib/bbae259
47	2024/5/29	Dissecting Spatiotemporal Structures in Spatial Transcriptomics via Diffusion-Based Adversarial Learning	Research	2024	10.34133/research.0390	https://spj.science.org/doi/10.34133/research.0390#
48	2024/5/31	Multi-modal domain adaptation for revealing spatial functional landscape from spatially resolved transcriptomics	Brief Bioinform	2024	10.1093/bib/bbae257	https://doi.org/10.1093/bib/bbae257
49	2024/6/5	HyperGCN: an effective deep representation learning framework for the integrative analysis of spatial transcriptomics data	BMC GENOMICS	2024	10.1186/s12864-024-10469-x	https://doi.org/10.1186/s12864-024-10469-x
50	2024/6/6	Accurate and efficient integrative reference-informed spatial domain detection for spatial transcriptomics	Nature methods	2024	10.1038/s41592-024-02284-9	https://doi.org/10.1038/s41592-024-02284-9
51	2024/6/8	CAbiNet: joint clustering and visualization of cells and genes for single-cell transcriptomic	Nucleic Acids Research	2024	10.1093/nar/gkae480	https://doi.org/10.1093/nar/gkae480
52	2024/6/9	Accurate Identification of Spatial Domain by Incorporating Global Spatial Proximity and Local Expression Proximity	Biomolecules	2024	10.3390/biom14060674	https://doi.org/10.3390/biom14060674
53	2024/6/24	Open-ST: High-resolution spatial transcriptomics in 3D	Cell	2024	10.1016/j.cell.2024.05.055	https://doi.org/10.1016/j.cell.2024.05.055
54	2024/6/28	GraphCompass: Spatial metrics for differential analyses of cell organization across conditions	Bioinformatics	2024	10.1093/bioinformatics/btae242	https://doi.org/10.1093/bioinformatics/btae242
55	2024/6/28	A count-based model for delineating cell–cell interactions in spatial transcriptomics data	Bioinformatics	2024	10.1093/bioinformatics/btae219	https://doi.org/10.1093/bioinformatics/btae219
56	2024/6/28	Deciphering high-order structures in spatial transcriptomes with graph-guided Tucker decomposition	Bioinformatics	2024	10.1093/bioinformatics/btae245	https://doi.org/10.1093/bioinformatics/btae245
57	2024/7/4	Systematic comparison of sequencing-based spatial transcriptomic methods	Nature Methods	2024	10.1038/s41592-024-02325-3	https://doi.org/10.1038/s41592-024-02325-3

58	2024/7/8	Accurately deciphering spatial domains for spatially resolved transcriptomics with stCluster	Briefings in Bioinformatics	2024	10.1093/bib/bbae329	https://doi.org/10.1093/bib/bbae329
59	2024/7/18	Single-cell and spatial multiomic inference of gene regulatory networks using SCRIPro	Bioinformatics	2024	10.1093/bioinformatics/btae466	https://doi.org/10.1093/bioinformatics/btae466
60	2024/7/30	Whole brain alignment of spatial transcriptomics between humans and mice with BrainAlign	Nature Communications	2024	10.1038/s41467-024-50608-2	https://doi.org/10.1038/s41467-024-50608-2
61	2024/8/9	Benchmarking clustering, alignment, and integration methods for spatial transcriptomics	Genome biology	2024	10.1186/s13059-024-03361-0	https://doi.org/10.1186/s13059-024-03361-0
62	2024/8/26	Inferring pattern-driving intercellular flows from single-cell and spatial transcriptomics	Nature Methods	2024	10.1038/s41592-024-02380-w	https://doi.org/10.1038/s41592-024-02380-w
63	2024/9/11	AFSC: A self-supervised augmentation-free spatial clustering method based on contrastive learning for identifying spatial domains	Computational and Structural [illegible]	2024	10.1016/j.csbj.2024.09.005	https://doi.org/10.1016/j.csbj.2024.09.005
64	2024/9/12	FICTURE: scalable segmentation-free analysis of submicron-resolution spatial transcriptomics	Nature Methods	2024	10.1038/s41592-024-02415-2	https://doi.org/10.1038/s41592-024-02415-2
65	2024/9/12	A graph self-supervised residual learning framework for domain identification and data integration of spatial transcriptomics	Communications Biology	2024	10.1038/s42003-024-06814-1	https://doi.org/10.1038/s42003-024-06814-1
66	2024/9/18	Search and match across spatial omics samples at single-cell resolution	nature methods	2024	10.1038/s41592-024-02410-7	https://doi.org/10.1038/s41592-024-02410-7
67	2024/10/9	Spatially Informed Graph Structure Learning Extracts Insights from Spatial Transcriptomics	Advanced science	2024	10.1002/advs.202403572	https://doi.org/10.1002/advs.202403572
68	2024/10/11	stBERT: A Pretrained Model for Spatial Domain Identification of Spatial Transcriptomics	IEEE Access	2024	10.1109/ACCESS.2024.3479153	https://ieeexplore.ieee.org/document/10714455
69	2024/10/15	Interpretable spatially aware dimension reduction of spatial transcriptomics with STAMP	Nature Methods	2024	10.1038/s41592-024-02463-8	https://doi.org/10.1038/s41592-024-02463-8
70	2024/10/17	A multi-modality and multi-granularity collaborative learning framework for identifying spatial domains and spatially variable genes	Bioinformatics	2024	10.1093/bioinformatics/btae607	https://doi.org/10.1093/bioinformatics/btae607
71	2024/10/18	Graph attention automatic encoder based on contrastive learning for domain recognition of spatial transcriptomics	Communications Biology	2024	10.1038/s42003-024-07037-0	https://doi.org/10.1038/s42003-024-07037-0
72	2024/11/12	Sainsc: A Computational Tool for Segmentation-Free Analysis of In Situ Capture Data	Small Methods	2024	10.1002/smtd.202401123	https://doi.org/10.1002/smtd.202401123
73	2024/11/15	A signal-diffusion-based unsupervised contrastive representation learning for spatial transcriptomics analysis	Bioinformatics	2024	10.1093/bioinformatics/btae663	https://doi.org/10.1093/bioinformatics/btae663
74	2024/11/16	Chrysalis: decoding tissue compartments in spatial transcriptomics with archetypal analysis	Communications Biology	2024	10.1038/s42003-024-07165-7	https://doi.org/10.1038/s42003-024-07165-7
75	2024/11/22	MCGAE: unraveling tumor invasion through integrated multimodal spatial transcriptomics	Briefings in Bioinformatics	2024	10.1093/bib/bbae608	https://doi.org/10.1093/bib/bbae608
76	2024/11/28	Accurate Spatial Heterogeneity Dissection and Gene Regulation Interpretation for Spatial Transcriptomics using Dual Graph Contrastive Learning	Advanced science	2024	10.1002/advs.202410081	https://doi.org/10.1002/advs.202410081
77	2024/11/29	Deciphering spatial domains from spatially resolved transcriptomics through spatially regularized deep graph networks	BMC Genomics	2024	10.1186/s12864-024-11072-w	https://doi.org/10.1186/s12864-024-11072-w
78	2024/12/1	Deep clustering representation of spatially resolved transcriptomics data using multi-view variational graph auto-encoders with consensus clustering	Computational and Structural [illegible]	2024	10.1016/j.csbj.2024.11.041	https://doi.org/10.1016/j.csbj.2024.11.041
79	2024/12/3	Detecting global and local hierarchical structures in cell-cell communication using CrossChat	Nature Communications	2024	10.1038/s41467-024-54821-x	https://doi.org/10.1038/s41467-024-54821-x
80	2024/12/16	SpatialCVGAE: Consensus Clustering Improves Spatial Domain Identification of Spatial Transcriptomics Using VGAE	Interdisciplinary Sciences-[illegible]	2024	10.1007/s12539-024-00676-1	https://doi.org/10.1007/s12539-024-00676-1
81	2024/12/16	Graph learning of disentangled representation for accurately aligning multiple spatial slices	Association for Computing [illegible]	2025	10.1145/3698587.3701381	https://doi.org/10.1145/3698587.3701381
82	2024/12/18	Spall: accurate and robust unveiling cellular landscapes from spatially resolved transcriptomics data using a decomposition network	BMC Bioinformatics	2024	10.1186/s12859-024-06003-1	https://doi.org/10.1186/s12859-024-06003-1
83	2025/1/2	Cooperative integration of spatially resolved multi-omics data with COSMOS	nature communications	2025	10.1038/s41467-024-55204-y	https://doi.org/10.1038/s41467-024-55204-y
84	2025/1/6	Unveiling patterns in spatial transcriptomics data: a novel approach utilizing graph attention autoencoder and multiscale deep subspace clustering network	GigaScience	2025	10.1093/gigascience/giae103	https://doi.org/10.1093/gigascience/giae103
85	2025/1/6	Marsilea: an intuitive generalized paradigm for composable visualizations	Genome Biol	2025	10.1186/s13059-024-03469-3	https://doi.org/10.1186/s13059-024-03469-3
86	2025/1/7	UCS: A Unified Approach to Cell Segmentation for Subcellular Spatial Transcriptomics	Small Methods	2025	10.1002/smtd.202400975	https://doi.org/10.1002/smtd.202400975
87	2025/1/23	Mapping the topography of spatial gene expression with interpretable deep learning	nature methods	2025	10.1038/s41592-024-02503-3	https://doi.org/10.1038/s41592-024-02503-3
88	2025/1/28	DSCT: A Novel Deep Learning Framework for Rapid and Accurate Spatial Transcriptomic Cell Typing	National Science Review	2025	10.1093/nsr/nwaf030	https://doi.org/10.1093/nsr/nwaf030
89	2025/2/25	Multiscale Dissection of Spatial Heterogeneity by Integrating Multi-Slice Spatial and Single-Cell Transcriptomics	Advanced science	2025	10.1002/advs.202413124	https://doi.org/10.1002/advs.202413124
90	2025/3/3	STModule: identifying tissue modules to uncover spatial components and characteristics of transcriptomic landscapes	Genome Medicine	2025	10.1186/s13073-025-01441-9	https://doi.org/10.1186/s13073-025-01441-9
91	2025/3/4	MAEST: accurately spatial domain detection in spatial transcriptomics with graph masked autoencoder	Brief Bioinform	2025	10.1093/bib/bbaf086	https://doi.org/10.1093/bib/bbaf086
92	2025/3/9	Robust Spatial Cell-Type Deconvolution with Qualitative Reference for Spatial Transcriptomics	Small Methods	2025	10.1002/smtd.202401145	https://doi.org/10.1002/smtd.202401145
93	2025/3/10	Cardiovascular Mettl3 Deficiency Causes Congenital Cardiac Defects and Postnatal Lethality in Mice	Int J Biol Sci	2025	10.7150/ijbs.100941	https://doi.org/10.7150/ijbs.100941
94	2025/4/3	SpaMask: Dual masking graph autoencoder with contrastive learning for spatial transcriptomics	PLoS Comput Biol	2025	10.1371/journal.pcbi.1012881	https://doi.org/10.1371/journal.pcbi.1012881
95	2025/4/3	Integrating multiple spatial transcriptomics data using community-enhanced graph contrastive learning	PLoS Comput Biol	2025	10.1371/journal.pcbi.1012948	https://doi.org/10.1371/journal.pcbi.1012948
96	2025/4/4	Flexible integration of spatial and expression information for precise spot embedding via ZINB-based graph-enhanced autoencoder	Communications Biology	2025	10.1038/s42003-025-07965-5	https://doi.org/10.1038/s42003-025-07965-5
97	2025/4/6	Spatially informed graph transformers for spatially resolved transcriptomics	Communications Biology	2025	10.1038/s42003-025-08015-w	https://doi.org/10.1371/10.1038/s42003-025-[illegible]
98	2025/4/30	Exploring the Latent Information in Spatial Transcriptomics Data via Multi-View Graph Convolutional Network Based on Implicit Contrastive Learning	Advanced Science	2025	10.1002/advs.202413545	https://doi.org/10.1002/advs.202413545
99	2025/5/8	ONTraC characterizes spatially continuous variations of tissue microenvironment through niche trajectory analysis	Genome Biol	2025	10.1186/s13059-025-03588-5	https://doi.org/10.1186/s13059-025-03588-5
100	2025/5/12	stMHCG: High-confidence multi-view clustering for identification of spatial domains from spatially resolved transcriptomics	Neurocomputing	2025	10.1016/j.neucom.2025.130362	https://doi.org/10.1016/j.neucom.2025.130362
101	2025/5/20	STP: single-cell partition for subcellular spatially-resolved transcriptomics	Nature Communications	2025	10.1038/s41467-025-59782-3	https://doi.org/10.1038/s41467-025-59782-3
102	2025/6/3	DeepGFT: identifying spatial domains in spatial transcriptomics of complex and 3D tissue using deep learning and graph Fourier transform	Genome Biology	2025	10.1186/s13059-025-03631-5	https://doi.org/10.1186/s13059-025-03631-5
103	2025/6/10	spaMGCN: a graph convolutional network with autoencoder for spatial domain identification using multi-scale adaptation	Genome Biology	2025	10.1186/s13059-025-03637-z	https://doi.org/10.1186/s13059-025-03637-z
104	2025/6/16	stClinic dissects clinically relevant niches by integrating spatial multi-slice multi-omics data in dynamic graphs	Nature Communications	2025	10.1038/s41467-025-60575-x	https://doi.org/10.1038/s41467-025-60575-x
105	2025/6/23	spCLUE: a contrastive learning approach to unified spatial transcriptomics analysis across single-slice and multi-slice data	Genome Biology	2025	10.1186/s13059-025-03636-0	https://doi.org/10.1186/s13059-025-03636-0
106	2025/6/26	A comprehensive review of spatial transcriptomics data alignment and integration	Nucleic Acids Res	2025	10.1093/nar/gkaf536	https://doi.org/10.1093/nar/gkaf536
107	2025/7/1	stGRL: spatial domain identification, denoising, and imputation algorithm for spatial transcriptome data based on multi-task graph contrastive representation learning	BMC Biology	2025	10.1186/s12915-025-02290-z	https://doi.org/10.1186/s12915-025-02290-z
108	2025/7/2	Automated integration of multi-slice spatial transcriptomics data in 2D and 3D using VR-Omics	Genome Biology	2025	10.1186/s13059-025-03630-6	https://doi.org/10.1186/s13059-025-03630-6
109	2025/7/2	Prioritizing perturbation-responsive gene patterns using interpretable deep learning	Nature Communications	2025	10.1038/s41467-025-61476-9	https://doi.org/10.1038/s41467-025-61476-9
110	2025/7/10	TriCLFF: a multi-modal feature fusion framework using contrastive learning for spatial domain identification	Briefings in Bioinformatics	2025	10.1093/bib/bbaf316	https://doi.org/10.1093/bib/bbaf316
111	2025/7/16	Topological velocity inference from spatial transcriptomic data	Nature Biotechnology	2025	10.1038/s41587-025-02688-8	https://doi.org/10.1038/s41587-025-02688-8
112	2025/7/23	Melanocytes and photosensory organs share a common ancestry that illuminates the origins of the neural crest	Communications Biology	2025	10.1038/s42003-025-08502-0	https://doi.org/10.1038/s42003-025-08502-0
113	2025/7/29	SpaSEG: unsupervised deep learning for multi-task analysis of spatially resolved transcriptomics	Genome Biology	2025	10.1186/s13059-025-03697-1	https://doi.org/10.1186/s13059-025-03697-1
114	2025/7/29	A spatial imaging-transcriptomics paradigm for deciphering the molecular basis of microscopic MRI in the normal brain and Alzheimer's disease	Cell Reports	2025	10.1016/j.celrep.2025.116073	https://doi.org/10.1016/j.celrep.2025.116073
115	2025/8/5	Thor: a platform for cell-level investigation of spatial transcriptomics and histology	Nature Communications	2025	10.1038/s41467-025-62593-1	https://doi.org/10.1038/s41467-025-62593-1
116	2025/8/14	Efficient integration of spatial omics data for joint domain detection, matching, and alignment with stMSA	Genome Research	2025	10.1101/gr.280584.125	https://doi.org/10.1101/gr.280584.125

117	2025/8/21	Finding spatially variable ligand-receptor interactions with functional support from downstream genes	Nature Communications	2025	10.1038/s41467-025-62988-0	https://doi.org/10.1038/s41467-025-62988-0
118	2025/8/21	Improving cell-type composition inference in spatial transcriptomics with SpaDAMA	PLoS Comput Biol	2025	10.1371/journal.pcbi.1013354	https://doi.org/10.1371/journal.pcbi.1013354
119	2025/9/8	TissueMosaic: Self-supervised learning of tissue representations enables differential spatial transcriptomics across samples	Cell Systems	2025	10.1016/j.cels.2025.101394	https://doi.org/10.1016/j.cels.2025.101394
120	2025/9/15	SpaBatch: Deep Learning-Based Cross-Slice Integration and 3D Spatial Domain Identification in Spatial Transcriptomics	Advanced Science	2025	10.1002/advs.202509090	https://doi.org/10.1002/advs.202509090
121	2025/9/22	Polyomino reconstructs spatial transcriptomic profiles with single-cell resolution via a region-allocation method	Genome Research	2025	10.1101/gr.280532.125	https://www.genome.org/cgi/doi/10.1101/gr.28053
122	2025/9/25	Detection of Spatially Variable Genes: A Benchmark Study	-	2025	-	https://hdl.handle.net/20.500.12608/91827
123	2025/9/30	SpaCross deciphers spatial structures and corrects batch effects in multi-slice spatially resolved transcriptomics	Communications Biology	2025	10.1038/s42003-025-08810-5	https://doi.org/10.1038/s42003-025-08810-5
124	2025/10/8	HKANLP: Link Prediction With Hyperspherical Embeddings and Kolmogorov–Arnold Networks	IEEE Trans Neural Netw Learn	2025	10.1109/TNNLS.2025.3614341	https://ieeexplore.ieee.org/document/11196981
125	2025/10/9	A comprehensive benchmarking for spatially resolved transcriptomics clustering methods across variable technologies, organs, and replicates	iMeta	2025	10.1002/imt2.70084	https://doi.org/10.1002/imt2.70084
126	2025/10/17	Spatial domain identification method based on multi-view graph convolutional network and contrastive learning	PLoS Computational Biology	2025	10.1371/journal.pcbi.1013369	https://doi.org/10.1371/journal.pcbi.1013369
127	2025/10/28	TemporalVAE: atlas-assisted temporal mapping of time-series single-cell transcriptomes during embryogenesis	Nature Cell Biology	2025	10.1038/s41556-025-01787-7	https://doi.org/10.1038/s41556-025-01787-7

		Preprinted				
1	2022/11/4	Integrated transcriptome and lineage analyses reveal novel catecholaminergic cardiomyocytes contributing to the cardiac conduction system in murine heart	bioRxiv	2022	10.1101/2022.11.04.515095	https://doi.org10.1101/2022.11.04.515095
2	2022/11/10	PAST: latent feature extraction with a prior-based self-attention framework for spatial transcriptomics	bioRxiv	2022	10.1101/2022.11.09.515447	https://doi.org10.1101/2022.11.09.515447
3	2022/11/12	Spateo: multidimensional spatiotemporal modeling of single-cell spatial transcriptomics	bioRxiv	2022	10.1101/2022.12.07.519417	https://doi.org10.1101/2022.12.07.519417
4	2022/11/17	Analysis of spatial transcriptomics at varying resolution levels using the unified framework of SpaSEG	bioRxiv	2022	10.1101/2022.11.16.516728	https://doi.org10.1101/2022.11.16.516728
5	2022/12/8	STOmics-GenX: CRISPR based approach to improve cell identity specific gene detection from spatially resolved transcriptomics	bioRxiv	2022	10.1101/2022.12.08.519589	https://doi.org10.1101/2022.12.08.519589
6	2022/12/31	StereoSiTE: A framework to spatially and quantitatively profile the cellular neighborhood organized iTME	bioRxiv	2022	10.1101/2022.12.31.522366	https://doi.org10.1101/2022.12.31.522366
7	2023/1/8	PASTE2: Partial Alignment of Multi-slice Spatially Resolved Transcriptomics Data	bioRxiv	2023	10.1101/2023.01.08.523162	https://pubmed.ncbi.nlm.nih.gov/36711750/
8	2023/2/3	Construction of a 3D whole organism spatial atlas by joint modeling of multiple slices modeling of multiple slices	bioRxiv	2023	10.1101/2023.02.02.526814	https://doi.org10.1101/2023.02.02.526814
9	2023/3/1	StereoCell enables high accuracy single cell segmentation for spatial transcriptomic dataset	bioRxiv	2023	10.1101/2023.02.28.530414	https://doi.org/10.1101/2023.02.28.530414
10	2023/4/22	Spatiotemporal transcriptome atlas of human embryos after gastrulation	bioRxiv	2023	10.1101/2023.04.22.537909	https://doi.org10.1101/2023.04.22.537909
11	2023/4/28	Integrated Spatial Transcriptomic and Proteomic Analysis of Fresh Frozen Tissue Based on Stereo-seq	bioRxiv	2023	10.1101/2023.04.28.538364	https://doi.org10.1101/2023.04.28.538364
12	2023/5/5	Spatially-resolved single-cell atlas of ascidian endostyle provides insights into the origin of vertebrate pharyngeal organs	bioRxiv	2023	10.1101/2023.05.03.539335	https://doi.org10.1101/2023.05.03.539335
13	2023/5/7	Integrative mapping of spatial transcriptomic and amyloid pathology in Alzheimer's disease at single-cell resolution	bioRxiv	2023	10.1101/2023.05.07.539389	https://doi.org10.1101/2023.05.07.539389
14	2023/5/8	Efficient reliability analysis of spatially resolved transcriptomics at varying resolutions using SpaSEG	bioRxiv	2022	10.1101/2022.11.16.516728	https://doi.org10.1101/2022.11.16.516728
15	2023/5/11	Mapping cells through time and space with moscot	bioRxiv	2023	10.1101/2023.05.11.540374	https://doi.org10.1101/2023.05.11.540374
16	2023/5/30	Applying high-resolution spatial transcriptomics to characterise the amyloid plaque cell niche in Alzheimer's Disease	bioRxiv	2023	10.1016/j.celrep.2024.114216	https://doi.org/10.1016/j.celrep.2024.114216
17	2023/5/30	Spatiotemporally resolved transcriptome atlas of developing mouse placenta reveals mechanisms of embryonic lethality	bioRxiv	2024	10.1101/2024.05.28.596242	https://doi.org10.1101/2024.05.28.596242
18	2023/6/29	Dendrimeric DNA Coordinate Barcoding Design for Spatial RNA Sequencing	bioRxiv	2023	10.1101/2023.06.26.546618	https://doi.org10.1101/2023.06.26.546618
19	2023/7/9	Spatial pattern and differential expression analysis with spatial transcriptomic data	bioRxiv	2023	10.1101/2023.12.18.572279	https://doi.org10.1101/2023.12.18.572279
20	2023/7/12	ProFAST: a fast and scalable factor analysis for spatially aware dimension reduction of multi-section spatial transcriptomics data	bioRxiv	2023	10.1101/2023.07.11.548486	https://www.biorxiv.org/content10.1101/2023.07.1
21	2023/8/2	FIST-n D: A tool for n-dimensional spatial transcriptomics data imputation via graph-regularized tensor completion	bioRxiv	2022	10.1101/2022.10.12.511928	https://doi.org10.1101/2022.10.12.511928
22	2023/10/17	CellContrast: Reconstructing Spatial Relationships in Single-Cell RNA Sequencing Data via Deep Contrastive Learning	bioRxiv	2023	10.1101/2023.10.12.562026	https://doi.org10.1101/2023.10.12.562026
23	2023/10/30	Cell segmentation and gene imputation for imaging-based spatial transcriptomics	bioRxiv	2023	10.1101/2023.10.26.564185	https://doi.org/10.1101/2023.10.26.564185
24	2023/11/5	FICTURE: Scalable segmentation-free analysis of submicron resolution spatial transcriptomics	bioRxiv	2023	10.1101/2023.11.04.565621	https://doi.org10.1101/2023.11.04.56562
25	2023/11/12	ST-GEARS: Advancing 3D Downstream Research through Accurate Spatial Information Recovery	bioRxiv	2023	10.1101/2023.12.09.570320	https://www.biorxiv.org/content10.1101/2023.12.0
26	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	2023	10.1101/2023.11.21.568179	https://doi.org10.1101/2023.11.21.568179
27	2023/11/27	Giotto Suite: a multi-scale and technology-agnostic spatial multi-omics analysis ecosystem	bioRxiv	2023	10.1101/2023.11.26.568752	https://doi.org10.1101/2023.11.26.568752
28	2023/12/5	Spatially resolved molecular and cellular atlas of the mouse brain	bioRxiv	2023	10.1101/2023.12.03.569501	https://www.biorxiv.org/content10.1101/2023.12.0
29	2023/12/11	stGCL: A versatile cross-modality fusion method based on multi-modal graph contrastive learning for spatial transcriptomics	bioRxiv	2023	10.1101/2023.12.10.571025	https://doi.org10.1101/2023.12.10.571025
30	2023/12/15	Identification and characterization of human retinal stem cells capable of retinal regeneration	bioRxiv	2023	10.21203/rs.3.rs-3714208/v1	https://assets.researchsquare.com/files/rs-
31	2023/12/19	STAIG: Spatial Transcriptomics Analysis via Image-Aided Graph Contrastive Learning for Domain Exploration and Alignment-Free Integration	bioRxiv	2023	10.1101/2023.12.18.572279	https://doi.org10.1101/2023.12.18.572279
32	2024/1/1	High-Resolution Spatiotemporal Transcriptomic Atlas Reveals Ly6a+ Peritenon Stem Cell Population and FGF7 Signaling are Critical for Tendon Formation	Research Square	Research	10.2139/ssrn.5058431	https://www.researchgate.net/publication/38715
33	2024/2/6	A single-cell 3D spatiotemporal multi-omics atlas from Drosophila embryogenesis to metamorphosis	bioRxiv	Research	10.1101/2024.02.06.577903	https://doi.org10.1101/2024.02.06.577903
34	2024/2/9	Spatial Transcriptomic Alignment, Integration, and de novo 3D Reconstruction by STAIR	Research Square	2024	10.21203/rs.3.rs-3939678/v1	https://doi.org/10.21203/rs.3.rs-3939678/v1
35	2024/2/14	Mapping Cell Fate Transition in Space and Time	bioRxiv	2024	10.1101/2024.02.12.579941	https://doi.org/10.1101/2024.02.12.579941
36	2024/2/24	Nova-ST: Nano-Patterned Ultra-Dense platform for spatial transcriptomics	bioRxiv	2024	10.1101/2024.02.22.581576	https://doi.org10.1101/2024.02.22.581576
37	2024/2/25	MaskGraphene: Advancing joint embedding, clustering, and batch correction for spatial transcriptomics using graph-based self-supervised learning	bioRxiv	2024	10.1101/2024.02.21.581387	https://doi.org10.1101/2024.02.21.581387
38	2024/3/13	CytoSignal Detects Locations and Dynamics of Ligand-Receptor Signaling at Cellular Resolution from Spatial Transcriptomic Data	bioRxiv	2024	10.1101/2024.03.08.584153	https://doi.org10.1101/2024.03.08.584153
39	2024/4/18	Enhancer-driven cell type comparison reveals similarities between the mammalian and bird pallium	bioRxiv	2024	10.1101/2024.04.17.589795	https://doi.org10.1101/2024.04.17.589795
40	2024/5/5	Tri-omic mapping revealed concerted dynamics of 3D epigenome and transcriptome in brain cells	bioRxiv	2024	10.1101/2024.05.03.592322	https://doi.org10.1101/2024.05.03.592322
41	2024/5/8	scBSP: A fast and accurate tool for identifying spatially variable genes from spatial transcriptomic data	bioRxiv	2024	10.1101/2024.05.06.59285	https://doi.org10.1101/2024.05.06.59285
42	2024/5/10	Spatial domains identification in spatial transcriptomics by domain knowledge-aware and subspace-enhanced graph contrastive learning	bioRxiv	2024	10.1101/2024.05.09.593192	https://doi.org10.1101/2024.05.09.593192
43	2024/5/14	Amyloid beta glycation leads to neuronal mitochondrial dysfunction and Alzheimers pathogenesis through VDAC1-dependent mtDNA efflux	bioRxiv	2024	10.1101/2024.05.14.594173	https://doi.org10.1101/2024.05.14.594173
44	2024/5/21	SCIITensor: A tensor decomposition based algorithm to construct actionable TME modules with spatially resolved intercellular communications	bioRxiv	2024	10.1101/2024.05.21.595103	https://doi.org10.1101/2024.05.21.595103
45	2024/5/22	Spatial Dissection of the Distinct Cellular Responses to Normal Aging and Alzheimer's Disease in Human Prefrontal Cortex at Single-Nucleus Resolution	medRxiv	2024	10.1101/2024.05.21.24306783	https://doi.org/10.1101/2024.05.21.24306783
46	2024/6/1	Towards a universal spatial molecular atlas of the mouse brain	bioRxiv	2024	10.1101/2024.05.27.594872	https://doi.org10.1101/2024.05.27.594872
47	2024/6/2	Precise cell recovery by cell nucleus united transcript (CellCUT) for enhanced spatial transcriptomics	bioRxiv	2024	10.1101/2024.05.28.596350	https://doi.org10.1101/2024.05.28.596350
48	2024/6/3	stVCR: Reconstructing spatio-temporal dynamics of cell development using optimal transport	bioRxiv	2024	10.1101/2024.06.02.596937	https://doi.org10.1101/2024.06.02.596937
49	2024/6/16	Inferring metabolite states from spatial transcriptomes using multiple graph neural network	bioRxiv	2024	10.1101/2024.06.12.598759	https://doi.org10.1101/2024.06.12.598759
50	2024/6/18	CoDi: Contrastive distance cell type annotation for spatially resolved transcriptomics	Research Square	2024	10.21203/rs.3.rs-4495419/v1	https://orcid.org/0000-0002-9843-6261
51	2024/6/19	CellBin: a highly accurate single-cell gene expression processing pipeline for high-resolution spatial transcriptomics	bioRxiv	2024	10.1101/2023.02.28.530414	https://doi.org10.1101/2023.02.28.530414
52	2024/7/3	Unravelling the progression of the zebrafish primary body axis with reconstructed spatiotemporal transcriptomics	bioRxiv	2024	10.1101/2024.07.01.601472	https://doi.org10.1101/2024.07.01.601472
53	2024/7/7	Benchmarking algorithms for spatially variable gene identification in spatial transcriptomics	bioRxiv	2024	10.1101/2024.07.04.602147	https://doi.org10.1101/2024.07.04.602147
54	2024/9/22	Interpretable high-resolution dimension reduction of spatial 2 transcriptomics data by SpaHDmap	bioRxiv	2024	10.1101/2024.09.12.612666	https://doi.org/10.1101/2024.09.12.612666
55	2024/9/25	ELLA: Modeling Subcellular Spatial Variation of Gene Expression within Cells in High-Resolution Spatial Transcriptomics	bioRxiv	2024	10.1101/2024.09.23.614515	https://doi.org/10.1101/2024.09.23.614515
56	2024/9/30	Change in brain molecular landscapes following electrical stimulation of the nucleus accumbens	bioRxiv	2024	10.1101/2024.09.30.615737	https://doi.org/10.1101/2024.09.30.615737
57	2024/10/17	Benchmarking alternative polyadenylation detection in single-cell and spatial transcriptomes	bioRxiv	2024	10.1101/2024.10.15.618405	https://doi.org/10.1101/2024.10.15.618405
58	2024/10/24	A spatially resolved whole-layers landscape of bladder cancer deciphers dynamic invasive progression	Research Square	2024	10.21203/rs.3.rs-5284291/v1	https://doi.org/10.21203/rs.3.rs-5284291/v1

59	2024/11/11	Integrative cell bin segmentation on spatial transcriptomics by Voronoi	ResearchGate	2024	10.1101/2024.11.07.622434	https://doi.org/10.1101/2024.11.07.622434
60	2024/11/11	Integration of Imaging-based and Sequencing-based Spatial	bioRxiv	2024	10.1101/2024.11.07.622523	https://doi.org/10.1101/2024.11.07.622523
61	2024/11/17	Unbiased profiling of multipotency landscapes reveals spatial modulators of clonal fate biases	bioRxiv	2024	10.1101/2024.11.15.623687	https://doi.org/10.1101/2024.11.15.623687
62	2024/12/11	Integration of Imaging-based and Sequencing-based Spatial Omics Mapping on the Same Tissue Section via DBiTplus	Research Square	2024	10.21203/rs.3.rs-5398491/v1	https://doi.org/10.21203/rs.3.rs-5398491/v1
63	2024/12/20	Hierarchical Interpretation of Out-of-Distribution Cells Using Bottlenecked Transformer	bioRxiv	2024	10.1101/2024.12.17.628533	https://doi.org/10.1101/2024.12.17.628533
64	2024/12/24	Randomized Spatial PCA (RASP): a computationally efficient method for dimensionality reduction of high-resolution spatial transcriptomics data	bioRxiv	2024	10.1101/2024.12.20.629785	https://doi.org/10.1101/2024.12.20.629785
65	2025/1/2	Multiscale Cell-Cell Interactive Spatial Transcriptomics Analysis	Research Square	2025	10.21203/rs.3.rs-5743704/v1	https://doi.org/10.21203/rs.3.rs-5743704/v1
66	2025/1/18	Sequencing-based Spatial Transcriptomics with scRNA-seq Sensitivity	bioRxiv	2025	10.1101/2025.01.15.633111	https://doi.org/10.1101/2025.01.15.633111
67	2025/1/19	Single cell resolved spatial immune repertoire unveils spatial heterogeneity of lymphoid aggregates in human immune disorders	bioRxiv	2025	10.1101/2025.01.16.630222	https://doi.org/10.1101/2025.01.16.630222
68	2025/1/22	Single-cell spatial transcriptome reveals pathological features of human hippocampus with sclerosis	bioRxiv	2025	10.1101/2025.01.21.633854	https://doi.org/10.1101/2025.01.21.633854
69	2025/1/25	ST-FFPE-mIF: Integrating Spatial Transcriptomics and MultiplexImmunofluorescence in Formalin-Fixed Paraffin-Embedded Tissues Using Stereo-seq	bioRxiv	2025	10.1101/2025.01.24.634655	https://doi.org/10.1101/2025.01.24.634655
70	2025/1/29	Zmap: an intelligent region-allocation method to map single-cell into spatial data	bioRxiv	2025	10.1101/2025.01.27.635178	https://doi.org/10.1101/2025.01.27.635178
71	2025/2/8	Φ-Space ST: a platform-agnostic method to identify cell states in	bioRxiv	2025	10.1101/2025.02.05.636735	https://doi.org/10.1101/2025.02.05.636735
72	2025/2/19	Learning Latent Trajectories in Developmental Time Series with Hidden-Markov Optimal Transport	bioRxiv	2025	10.1101/2025.02.14.638351	https://doi.org/10.1101/2025.02.14.638351
73	2025/3/2	Smoothie: Efficient Inference of Spatial Co-expression Networks from Denoised Spatial Transcriptomics Data	bioRxiv	2025	10.1101/2025.02.26.640406	https://doi.org/10.1101/2025.02.26.640406
74	2025/3/7	Spatial transcriptomics elucidates the central role of cerebral vasculatures in the progression of Japanese encephalitis	bioRxiv	2025	10.1101/2025.03.06.637776	https://doi.org/10.1101/2025.03.06.637776
75	2025/3/15	DisConST: Deciphering Spatial Domains Using Distribution-aware Contrastive Learning for Spatial Transcriptomics	bioRxiv	2025	10.1101/2025.03.13.642300	https://doi.org/10.1101/2025.03.13.642300
76	2025/3/17	Single-cell Spatial Transcriptomics Reveals Disease-specific Microenvironmental Niches in Neurodegeneration and COVID-19	bioRxiv	2025	10.1101/2025.03.15.643484	https://doi.org/10.1101/2025.03.15.643484
77	2025/4/4	Spatiotemporal Dynamics of Human Ovarian Cortex Transcriptome Following Vitrification and Thawing: Insights into the FOS/AP-1 Pathway	Research Square	2025	10.21203/rs.3.rs-6312954/v1	https://doi.org/10.21203/rs.3.rs-6312954/v1
78	2025/4/9	Spatial Metagene Discovery and Associated Molecular Pattern Characterization in Spatial Transcriptomics and Multi-Omics using SEPAR	bioRxiv	2025	10.1101/2025.04.05.647412	https://doi.org/10.1101/2025.04.05.647412
79	2025/4/12	SpatioCell: A Deep Learning Algorithm for High-resolution Single-cell Mapping through Deep Integration of Histology Image and Sequencing Data	bioRxiv	2025	10.1101/2025.04.07.647590	https://doi.org/10.1101/2025.04.07.647590
80	2025/4/17	stPipe: A flexible and streamlined R/Bioconductor pipeline for preprocessing sequencing-based spatial transcriptomics data	bioRxiv	2025	10.1101/2025.04.16.649254	https://doi.org/10.1101/2025.04.16.649254
81	2025/4/17	SPELL: Spatial Prompting with Chain-of-Thought for Zero-Shot Learning in Spatial Transcriptomics	Research Square	2025	-	https://www.researchgate.net/publication/39216153
82	2025/4/18	Decrypting spatiotemporal code of human endometrial receptivity	Research Square	2025	10.21203/rs.3.rs-6349644/v1	https://doi.org/10.21203/rs.3.rs-6349644/v1
83	2025/4/20	Topography Aware Optimal Transport for Alignment of Spatial Omics Data	bioRxiv	2025	10.1101/2025.04.15.648894	https://doi.org/10.1101/2025.04.15.648894
84	2025/5/7	Separable Spatial Single-cell Transcriptome Representation Learning via Graph Transformer and Hyperspherical Prototype Clustering	bioRxiv	2025	10.1101/2025.05.01.651634	https://doi.org/10.1101/2025.05.01.651634
85	2025/5/9	Application of spatial transcriptomics across organoids: a high-resolution spatial whole-transcriptome benchmarking dataset	bioRxiv	2025	10.1101/2025.05.04.651803	https://doi.org/10.1101/2025.05.04.651803
86	2025/5/15	Spatial geometry-aware deep learning for deciphering tissue structure from spatially resolved transcriptomics	bioRxiv	2025	10.1101/2025.05.11.652625	https://doi.org/10.1101/2025.05.11.652625
87	2025/5/15	A Multimodal Graph Learning Framework for Versatile Spatial Transcriptomics Analysis with SpatialModal	bioRxiv	2025	10.1101/2025.05.11.653070	https://doi.org/10.1101/2025.05.11.653070
88	2025/5/30	Structural innovations and neurogenic continuity define avian brain development and evolution	bioRxiv	2025	10.1101/2025.05.30.654767	https://doi.org/10.1101/2025.05.30.654767
89	2025/6/1	Spatial metabolomics reveals persistent localized niche-specific metabolic	bioRxiv	2025	10.1101/2025.05.27.656326	https://doi.org/10.1101/2025.05.27.656326
90	2025/6/8	Spatial transcriptomics of developing wheat seed reveals	bioRxiv	2025	10.1101/2025.06.08.658529	https://doi.org/10.1101/2025.06.08.658529
91	2025/6/8	Spatial transcriptomic atlas of murine neurotoxocariasis reveals region-specific host responses and dysfunction in the brain	Research Square	2025	10.21203/rs.3.rs-6743037/v1	https://doi.org/10.21203/rs.3.rs-6743037/v1
92	2025/6/13	SemanticST: Spatially Informed Semantic Graph Learning for Clustering, Integration, and Scalable Analysis of Spatial Transcriptomics	arXiv	2025	10.48550/arXiv.2506.11491	https://doi.org/10.48550/arXiv.2506.11491
93	2025/7/22	A single-cell transcriptomic atlas maps cerebellar astrocyte diversity and uncovers the transcriptional code underlying their maturation trajectories	bioRxiv	2025	10.1101/2025.07.17.665323	https://doi.org/10.1101/2025.07.17.665323
94	2025/8/2	spOT-NMF: Optimal Transport-Based Matrix Factorization for Accurate Deconvolution of Spatial Transcriptomics	bioRxiv	2025	10.1101/2025.08.02.668292	https://doi.org/10.1101/2025.08.02.668292
95	2025/8/7	Spatiotemporal Omics: Integrating Multi-Omics Data for Translational Research and Drug Development	Research Square	2025	10.46799/ajesh.v4i3.561	https://doi.org/10.46799/ajesh.v4i3.561
96	2025/8/20	Three-dimensional spatial transcriptomics at isotropic resolution enabled by generative deep learning	bioRxiv	2025	10.1101/2025.08.15.670472	https://doi.org/10.1101/2025.08.15.670472
97	2025/8/20	HarveST: Heterogeneous Graph Learning Framework for Revealing Spatial Transcriptomics Patterns	Research Square	2025	10.21203/rs.3.rs-7283360/v1	https://doi.org/10.21203/rs.3.rs-7283360/v1
98	2025/9/3	Sequencing-based Spatial Transcriptomics with High Sensitivity	Research Square	2025	10.21203/rs.3.rs-7337510/v1	https://doi.org/10.21203/rs.3.rs-7337510/v1
99	2025/9/4	STADiffuser: high-fidelity simulation and full-view 3D modeling of spatial transcriptomics	bioRxiv	2025	10.1101/2025.08.30.673245	https://doi.org/10.1101/2025.08.30.673245
100	2025/9/5	Uncovering directionally and temporally variable genes with STAVAG	bioRxiv	2025	10.1101/2025.09.02.673732	https://doi.org/10.1101/2025.09.02.673732
101	2025/9/9	Subcellular mRNA localization patterns across tissues resolved with spatial transcriptomics	bioRxiv	2025	10.1101/2025.09.07.674688	https://doi.org/10.1101/2025.09.07.674688
102	2025/9/16	Unleashing the power of computational insights in revealing the complexity of biological systems in the new era of spatial multi-omics	arXiv	2025	10.48550/arXiv.2509.13376	https://doi.org/10.48550/arXiv.2509.13376
103	2025/9/16	Decoder-FFPE-seq enables sensitive, genome-wide spatial transcriptomics of archival tissues at single-cell resolution	bioRxiv	2025	10.1101/2025.09.12.675967	https://doi.org/10.1101/2025.09.12.675967
104	2025/9/17	SpatialFuser: A Unified Deep Learning Framework for Spatial Multi-Omics Data Integrative Analysis	bioRxiv	2025	10.1101/2025.09.14.676067	https://doi.org/10.1101/2025.09.14.676067
105	2025/9/18	jsPCA: fast, scalable, and interpretable identification of spatial domains and variable genes across multi-slice and multi-sample spatial transcriptomics data	bioRxiv	2025	10.1101/2025.09.16.676466	https://doi.org/10.1101/2025.09.16.676466
106	2025/9/25	Mapping disease critical spatially variable gene programs by integrating spatial	bioRxiv	2025	10.1101/2025.09.24.678397	https://doi.org/10.1101/2025.09.24.678397
107	2025/10/3	ContextFlow: Context-Aware Flow Matching For Trajectory Inference From Spatial Omics Data	arXiv	2025	10.48550/arXiv.2510.02952	
108	2025/10/3	SpacGPA: annotating spatial transcriptomes through de novo	bioRxiv	2025	10.1101/2025.10.01.679918	https://doi.org/10.1101/2025.10.01.679918
109	2025/10/5	Comparative transcriptomics reveals shifts in cortical architecture at the metatherian/eutherian transition	bioRxiv	2025	10.1101/2025.10.03.680397	https://doi.org/10.1101/2025.10.03.680397
110	2025/10/5	Optimal transport modeling uncovers spatial domain dynamics in spatiotemporal transcriptomics studies	bioRxiv	2025	10.1101/2025.10.06.680672	https://doi.org/10.1101/2025.10.06.680672
111	2025/10/14	A Population-scale Single-cell Spatial Transcriptomic Atlas of the Human Cortex	bioRxiv	2025	10.1101/2025.10.13.681959	https://doi.org/10.1101/2025.10.13.681959
112	2025/10/17	Dissection of context-dependent RNA colocalization landscapes from subcellular spatial transcriptomics data	Research Square	2025	10.21203/rs.3.rs-7463836/v1	https://doi.org/10.21203/rs.3.rs-7463836/v1
113	2025/10/25	CellBin:a generalist framework to process spatial omics data to cell level	bioRxiv	2025	10.1101/2025.10.23.683357	https://doi.org/10.1101/2025.10.23.683357

Notes:
1. The info above is organized based on public and internal information. If you have any further inquiries, please feel free to contact bgi-ST-Marketing@genomics.cn or zhaofang1@genomics.cn.
2. Updated date: July.31,2025.