Genome sequencing of normal cells reveals developmen processes

Nature 513, 422-425 DOI: 10.1038/nature13448

Citation Report

#	Article	IF	CITATIONS
1	From regenerative dentistry to regenerative medicine: progress, challenges, and potential applications of oral stem cells. Stem Cells and Cloning: Advances and Applications, 2014, 7, 89.	2.3	62
2	Postzygotic single-nucleotide mosaicisms in whole-genome sequences of clinically unremarkable individuals. Cell Research, 2014, 24, 1311-1327.	5.7	54
3	Chromosomale Mosaike in der klinischen Zytogenetik. Medizinische Genetik, 2014, 26, 302-308.	0.1	3
4	Quantitative Single-Cell Approaches to Stem Cell Research. Cell Stem Cell, 2014, 15, 546-558.	5.2	112
5	The Role of Constitutional Copy Number Variants in Breast Cancer. Microarrays (Basel, Switzerland), 2015, 4, 407-423.	1.4	9
6	Analyzing Fluctuating Asymmetry with Geometric Morphometrics: Concepts, Methods, and Applications. Symmetry, 2015, 7, 843-934.	1.1	295
7	Genetic Mosaics and the Germ Line Lineage. Genes, 2015, 6, 216-237.	1.0	28
8	A new conceptual framework for investigating complex genetic disease. Frontiers in Genetics, 2015, 6, 327.	1.1	6
9	High burden and pervasive positive selection of somatic mutations in normal human skin. Science, 2015, 348, 880-886.	6.0	1,431
10	The Technology and Biology of Single-Cell RNA Sequencing. Molecular Cell, 2015, 58, 610-620.	4.5	1,014
11	From Mutational Mechanisms in Single Cells to Mutational Patterns in Cancer Genomes. Cold Spring Harbor Symposia on Quantitative Biology, 2015, 80, 117-137.	2.0	11
12	Stem cells and healthy aging. Science, 2015, 350, 1199-1204.	6.0	268
13	Mitochondrial dysfunction and longevity in animals: Untangling the knot. Science, 2015, 350, 1204-1207.	6.0	213
14	Understanding the origins of human cancer. Science, 2015, 350, 1175-1177.	6.0	32
15	Variation in cancer risk among tissues can be explained by the number of stem cell divisions. Science, 2015, 347, 78-81.	6.0	1,561
16	Do Mutational Dynamics in Stem Cells Explain the Origin of Common Cancers?. Cell Stem Cell, 2015, 16, 111-112.	5.2	7
17	Using tumour phylogenetics to identify the roots of metastasis in humans. Nature Reviews Clinical Oncology, 2015, 12, 258-272.	12.5	122
18	Intrinsic mutagenic properties of 5-chlorocytosine: A mechanistic connection between chronic inflammation and cancer. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4571-80.	3.3	67

#	Article	IF	CITATIONS
19	Inferring Cell Differentiation Processes Based on Phylogenetic Analysis of Genome-Wide Epigenetic Information: Hematopoiesis as a Model Case. Genome Biology and Evolution, 2015, 7, 699-705.	1.1	8
20	Somatic mosaicism: implications for disease and transmission genetics. Trends in Genetics, 2015, 31, 382-392.	2.9	234
21	PhyloWGS: Reconstructing subclonal composition and evolution from whole-genome sequencing of tumors. Genome Biology, 2015, 16, 35.	3.8	351
22	On the identification of low allele frequency mosaic mutations in the brains of Alzheimer's disease patients. Alzheimer's and Dementia, 2015, 11, 1265-1276.	0.4	57
23	Origin of cells and network information. World Journal of Stem Cells, 2015, 7, 535.	1.3	4
24	Each cell counts: Hematopoiesis and immunity research in the era of single cell genomics. Seminars in Immunology, 2015, 27, 67-71.	2.7	35
25	Genetics and genomics of psychiatric disease. Science, 2015, 349, 1489-1494.	6.0	337
26	The origins, determinants, and consequences of human mutations. Science, 2015, 349, 1478-1483.	6.0	143
27	Somatic mutation in cancer and normal cells. Science, 2015, 349, 1483-1489.	6.0	996
28	Somatic mutation in single human neurons tracks developmental and transcriptional history. Science, 2015, 350, 94-98.	6.0	486
29	A tree of the human brain. Science, 2015, 350, 37-37.	6.0	4
30	Modeling mouse and human development using organoid cultures. Development (Cambridge), 2015, 142, 3113-3125.	1.2	386
31	Frequent Somatic Mutation in Adult Intestinal Stem Cells Drives Neoplasia and Genetic Mosaicism during Aging. Cell Stem Cell, 2015, 17, 663-674.	5.2	79
32	A mutational signature in gastric cancer suggests therapeutic strategies. Nature Communications, 2015, 6, 8683.	5.8	146
33	A metabolic perspective of Peto's paradox and cancer. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140223.	1.8	27
34	Lessons from mouse chimaera experiments with a reiterated transgene marker: revised marker criteria and a review of chimaera markers. Transgenic Research, 2015, 24, 665-691.	1.3	3
35	The genome as a record of environmental exposure. Mutagenesis, 2015, 30, gev073.	1.0	174
36	The Aging Prostate Is Never "Normal†Implications from the Genomic Characterization of Multifocal Prostate Cancers. European Urology, 2015, 68, 348-350.	0.9	5

	Сітаті	on Report	
#	Article	IF	CITATIONS
37	Clock-like mutational processes in human somatic cells. Nature Genetics, 2015, 47, 1402-1407.	9.4	837
38	Barrett oesophagus: lessons on its origins from the lesion itself. Nature Reviews Gastroenterology and Hepatology, 2015, 12, 50-60.	8.2	72
39	Analysis of tumor template from multiple compartments in a blood sample provides complementary access to peripheral tumor biomarkers. Oncotarget, 2016, 7, 26724-26738.	0.8	16
40	Human Germline Mutation and the Erratic Evolutionary Clock. PLoS Biology, 2016, 14, e2000744.	2.6	70
41	Cell Fusion in the War on Cancer: A Perspective on the Inception of Malignancy. International Journal of Molecular Sciences, 2016, 17, 1118.	1.8	28
42	Retracing embryological fate. Science, 2016, 354, 1109-1109.	6.0	1
43	Whole-organism lineage tracing by combinatorial and cumulative genome editing. Science, 2016, 353, aaf7907.	6.0	570
44	A Colorectal Tumor Organoid Library Demonstrates Progressive Loss of Niche Factor Requirements during Tumorigenesis. Cell Stem Cell, 2016, 18, 827-838.	5.2	593
45	Understanding mutagenesis through delineation of mutational signatures in human cancer. Carcinogenesis, 2016, 37, 531-540.	1.3	90
46	The Complete Genome Sequences, Unique Mutational Spectra, and Developmental Potency of Adult Neurons Revealed by Cloning. Neuron, 2016, 89, 1223-1236.	3.8	85
47	Clonal Analysis of Cells with Cellular Barcoding: When Numbers and Sizes Matter. Methods in Molecular Biology, 2016, 1516, 57-89.	0.4	33
48	Single-cell sequencing in stem cell biology. Genome Biology, 2016, 17, 71.	3.8	144
49	Application of Peptide Nucleic Acid-based Assays Toward Detection of Somatic Mosaicism. Molecular Therapy - Nucleic Acids, 2016, 5, e314.	2.3	6
50	Tissue-specific mutation accumulation in human adult stem cells during life. Nature, 2016, 538, 260-264.	13.7	759
51	Modeling human disease using organotypic cultures. Current Opinion in Cell Biology, 2016, 43, 22-29.	2.6	48
52	Disentangling neural cell diversity using single-cell transcriptomics. Nature Neuroscience, 2016, 19, 1131-1141.	7.1	283
53	Inferring Cell-State Transition Dynamics from Lineage Trees and Endpoint Single-Cell Measurements. Cell Systems, 2016, 3, 419-433.e8.	2.9	79
54	Retracing the <i>in vivo</i> haematopoietic tree using singleâ€cell methods. FEBS Letters, 2016, 590, 4068-4083.	1.3	14

		CITATION REPORT		
# 55	ARTICLE Findings made in gene panel to whole genome sequencing: data, knowledge, ethics – and consequences?. Expert Review of Molecular Diagnostics, 2016, 16, 1259-1270.		IF 1.5	CITATIONS
56	Genetic drift, selection and the evolution of the mutation rate. Nature Reviews Genetics, 201 704-714.	.6, 17,	7.7	648
57	Mutational signatures associated with tobacco smoking in human cancer. Science, 2016, 35	4, 618-622.	6.0	842
58	Dental Stem Cells. Pancreatic Islet Biology, 2016, , .		0.1	2
59	Dental Stem Cells in Oral, Maxillofacial and Craniofacial Regeneration. Pancreatic Islet Biolog , 143-165.	y, 2016,	0.1	4
60	Brief Report: First Identification of Intrafamilial Recurrence of Blau Syndrome due to Gonosor <i>NOD2</i> Mosaicism. Arthritis and Rheumatology, 2016, 68, 1039-1044.	mal	2.9	46
61	Single-cell genome sequencing: current state of the science. Nature Reviews Genetics, 2016,	17, 175-188.	7.7	1,134
62	Organoid Models of Human Gastrointestinal Development andÂDisease. Gastroenterology, 2 1098-1112.	1016, 150,	0.6	211
63	Somatic mosaicism: on the road to cancer. Nature Reviews Cancer, 2016, 16, 43-55.		12.8	113
64	Organoids as Model Systems for Gastrointestinal Diseases: Tissue Engineering Meets Genetic Engineering. Current Pathobiology Reports, 2016, 4, 1-9.	:	1.6	25
65	The landscape of somatic mutations in protein coding genes in apparently benign human tiss carries signatures of relaxed purifying selection. Nucleic Acids Research, 2016, 44, 2075-208	sues 4.	6.5	47
66	Building a lineage from single cells: genetic techniques for cell lineage tracking. Nature Revie Genetics, 2017, 18, 230-244.	ws	7.7	204
67	Changing mutational and adaptive landscapes and the genesis of cancer. Biochimica Et Biopl Reviews on Cancer, 2017, 1867, 84-94.	hysica Acta:	3.3	27
68	Predicting evolution. Nature Ecology and Evolution, 2017, 1, 77.		3.4	272
69	One thousand somatic SNVs per skin fibroblast cell set baseline of mosaic mutational load w patterns that suggest proliferative origin. Genome Research, 2017, 27, 512-523.	ith	2.4	64
70	Culturing human intestinal stem cells for regenerative applications in the treatment of inflam bowel disease. EMBO Molecular Medicine, 2017, 9, 558-570.	imatory	3.3	69
71	A population genetics perspective on the determinants of intra-tumor heterogeneity. Biochir Biophysica Acta: Reviews on Cancer, 2017, 1867, 109-126.	nica Et	3.3	37
73	Enhanced Rate of Acquisition of Point Mutations in Mouse Intestinal Adenomas Compared to Tissue. Cell Reports, 2017, 19, 2185-2192.	o Normal	2.9	18

#	Article	IF	CITATIONS
74	Myxoid fibroadenomas differ from conventional fibroadenomas: a hypothesisâ€generating study. Histopathology, 2017, 71, 626-634.	1.6	26
75	Systematic comparison of two whole-genome amplification methods for targeted next-generation sequencing using frozen and FFPE normal and cancer tissues. Scientific Reports, 2017, 7, 4055.	1.6	6
76	Whole-genome analysis reveals unexpected dynamics of mutant subclone development in a patient with JAK2-V617F-positive chronic myeloid leukemia. Experimental Hematology, 2017, 53, 48-58.	0.2	15
78	CTCs and ctDNA: Two Tales of a Complex Biology. Cancer Drug Discovery and Development, 2017, , 119-137.	0.2	1
79	Translational applications of adult stem cell-derived organoids. Development (Cambridge), 2017, 144, 968-975.	1.2	103
80	Accurate identification of single-nucleotide variants in whole-genome-amplified single cells. Nature Methods, 2017, 14, 491-493.	9.0	191
81	Somatic mutations reveal asymmetric cellular dynamics in the early human embryo. Nature, 2017, 543, 714-718.	13.7	229
82	A Quiescent Bcl11b High Stem Cell Population Is Required for Maintenance of the Mammary Gland. Cell Stem Cell, 2017, 20, 247-260.e5.	5.2	86
83	Aging: Somatic Mutations, Epigenetic Drift and Gene Dosage Imbalance. Trends in Cell Biology, 2017, 27, 299-310.	3.6	27
85	Genome instability and aging: Cause or effect?. Translational Medicine of Aging, 2017, 1, 5-11.	0.6	22
86	The potential of liquid biopsies for the early detection of cancer. Npj Precision Oncology, 2017, 1, 36.	2.3	126
87	A somatic mutation in erythro-myeloid progenitors causes neurodegenerative disease. Nature, 2017, 549, 389-393.	13.7	144
88	Principles and Approaches for Discovery and Validation of Somatic Mosaicism in the Human Brain. Neuromethods, 2017, , 3-24.	0.2	1
89	Use of CRISPR-modified human stem cell organoids to study the origin of mutational signatures in cancer. Science, 2017, 358, 234-238.	6.0	337
90	Contrasting Determinants of Mutation Rates in Germline and Soma. Genetics, 2017, 207, 255-267.	1.2	24
91	A high-fidelity method for genomic sequencing of single somatic cells reveals a very high mutational burden. Experimental Biology and Medicine, 2017, 242, 1318-1324.	1.1	6
92	Tumor Organoids as a Pre-clinical Cancer Model for Drug Discovery. Cell Chemical Biology, 2017, 24, 1092-1100.	2.5	388
93	Quo vadis: tracing the fate of neural crest cells. Current Opinion in Neurobiology, 2017, 47, 16-23.	2.0	13

#	Article	IF	CITATIONS
94	Connecting Cancer to Its Causes Requires Incorporation of Effects on Tissue Microenvironments. Cancer Research, 2017, 77, 6065-6068.	0.4	45
95	How Single-Cell Genomics Is Changing Evolutionary and Developmental Biology. Annual Review of Cell and Developmental Biology, 2017, 33, 537-553.	4.0	82
96	Low number of fixed somatic mutations in a long-lived oak tree. Nature Plants, 2017, 3, 926-929.	4.7	120
97	Methods for lineage tracing on the organism-wide level. Current Opinion in Cell Biology, 2017, 49, 16-21.	2.6	31
98	Synthetic recording and in situ readout of lineage information in single cells. Nature, 2017, 541, 107-111.	13.7	348
100	Genome instability: a conserved mechanism of ageing?. Essays in Biochemistry, 2017, 61, 305-315.	2.1	37
101	The Human Cell Atlas. ELife, 2017, 6, .	2.8	1,547
102	MosaicHunter: accurate detection of postzygotic single-nucleotide mosaicism through next-generation sequencing of unpaired, trio, and paired samples. Nucleic Acids Research, 2017, 45, e76-e76.	6.5	51
103	When Should Genetic Testing be Performed in Epilepsy Patients?. Epilepsy Currents, 2017, 17, 16-22.	0.4	32
104	Somatic mutagenesis in satellite cells associates with human skeletal muscle aging. Nature Communications, 2018, 9, 800.	5.8	94
105	Organoids in cancer research. Nature Reviews Cancer, 2018, 18, 407-418.	12.8	1,096
106	Intra-tumour diversification in colorectal cancer at the single-cell level. Nature, 2018, 556, 457-462.	13.7	406
107	Human-cell-derived organoids as a new ex vivo model for drug assays in oncology. Drug Discovery Today, 2018, 23, 857-863.	3.2	26
108	Tracing single-cell histories. Science, 2018, 359, 521-522.	6.0	3
109	Mapping human development at single-cell resolution. Development (Cambridge), 2018, 145, .	1.2	30
110	From haematopoietic stem cells to complex differentiation landscapes. Nature, 2018, 553, 418-426.	13.7	549
111	Opportunities for organoids as new models of aging. Journal of Cell Biology, 2018, 217, 39-50.	2.3	44
112	Identification of somatic mutations in postmortem human brains by whole genome sequencing and their implications for psychiatric disorders. Psychiatry and Clinical Neurosciences, 2018, 72, 280-294.	1.0	9

#	Article	IF	CITATIONS
113	Alcohol and endogenous aldehydes damage chromosomes and mutate stem cells. Nature, 2018, 553, 171-177.	13.7	284
114	Detecting Somatic Mutations in Normal Cells. Trends in Genetics, 2018, 34, 545-557.	2.9	92
115	Validating the concept of mutational signatures with isogenic cell models. Nature Communications, 2018, 9, 1744.	5.8	128
116	Whole-organism clone tracing using single-cell sequencing. Nature, 2018, 556, 108-112.	13.7	345
117	Cultivation and quantitative single ell analysis of <i>Saccharomyces cerevisiae</i> on a multifunctional microfluidic device. Electrophoresis, 2018, 39, 540-547.	1.3	14
118	Constructing cell lineages from single-cell transcriptomes. Molecular Aspects of Medicine, 2018, 59, 95-113.	2.7	27
119	Measuring mutation accumulation in single human adult stem cells by whole-genome sequencing of organoid cultures. Nature Protocols, 2018, 13, 59-78.	5.5	52
120	Somatic Mutations Reveal Lineage Relationships and Age-Related Mutagenesis in Human Hematopoiesis. Cell Reports, 2018, 25, 2308-2316.e4.	2.9	170
121	Distinctive types of postzygotic single-nucleotide mosaicisms in healthy individuals revealed by genome-wide profiling of multiple organs. PLoS Genetics, 2018, 14, e1007395.	1.5	31
122	A Bioinformatic Profile of Gene Expression of Colorectal Carcinoma Derived Organoids. BioMed Research International, 2018, 2018, 1-12.	0.9	3
123	Population dynamics of normal human blood inferred from somatic mutations. Nature, 2018, 561, 473-478.	13.7	427
124	Somatic Mutagenesis in Mammals and Its Implications for Human Disease and Aging. Annual Review of Genetics, 2018, 52, 397-419.	3.2	83
125	Somatic mutation load and spectra: A record of DNA damage and repair in healthy human cells. Environmental and Molecular Mutagenesis, 2018, 59, 672-686.	0.9	19
126	Four-dimensional, dynamic mosaicism is a hallmark of normal human skin that permits mapping of the organization and patterning of human epidermis during terminal differentiation. PLoS ONE, 2018, 13, e0198011.	1.1	3
127	Autologous reference types can confound the detection of somatic mutation in solid cancers. DNA Repair, 2018, 69, 6-13.	1.3	0
128	Tracing the origin of heterogeneity and symmetry breaking in the early mammalian embryo. Nature Communications, 2018, 9, 1819.	5.8	72
129	Nuclear Genomic Instability and Aging. Annual Review of Biochemistry, 2018, 87, 295-322.	5.0	178
130	Aging and the rise of somatic cancer-associated mutations in normal tissues. PLoS Genetics, 2018, 14, e1007108.	1.5	162

#	Article	IF	CITATIONS
131	Characterizing Mutational Load and Clonal Composition of Human Blood. Journal of Visualized Experiments, 2019, , .	0.2	5
132	Recording development with single cell dynamic lineage tracing. Development (Cambridge), 2019, 146, .	1.2	115
133	Cell competition: the winners and losers of fitness selection. Development (Cambridge), 2019, 146, .	1.2	116
134	Biomarkers of Human Aging. Healthy Ageing and Longevity, 2019, , .	0.2	11
135	Genome aging: somatic mutation in the brain links age-related decline with disease and nominates pathogenic mechanisms. Human Molecular Genetics, 2019, 28, R197-R206.	1.4	37
136	Application of Prostate Cancer Models for Preclinical Study: Advantages and Limitations of Cell Lines, Patient-Derived Xenografts, and Three-Dimensional Culture of Patient-Derived Cells. Cells, 2019, 8, 74.	1.8	113
137	DNA barcodes evolve for high-resolution cell lineage tracing. Current Opinion in Chemical Biology, 2019, 52, 63-71.	2.8	20
138	Deficiency of nucleotide excision repair is associated with mutational signature observed in cancer. Genome Research, 2019, 29, 1067-1077.	2.4	66
139	SureTypeSC—a Random Forest and Gaussian mixture predictor of high confidence genotypes in single-cell data. Bioinformatics, 2019, 35, 5055-5062.	1.8	4
140	Using Cre-recombinase-driven Polylox barcoding for in vivo fate mapping in mice. Nature Protocols, 2019, 14, 1820-1840.	5.5	21
141	State of the Art and Future Direction for the Analysis of Cell-Free Circulating DNA. , 2019, , 133-188.		2
142	Healthy skeletal muscle aging: The role of satellite cells, somatic mutations and exercise. International Review of Cell and Molecular Biology, 2019, 346, 157-200.	1.6	10
143	Single-Cell Omics Analyses Enabled by Microchip Technologies. Annual Review of Biomedical Engineering, 2019, 21, 365-393.	5.7	49
144	Ultra-High-Frequency Reprogramming of Individual Long-Term Hematopoietic Stem Cells Yields Low Somatic Variant Induced Pluripotent Stem Cells. Cell Reports, 2019, 26, 2580-2592.e7.	2.9	14
145	Experimental and pan-cancer genome analyses reveal widespread contribution of acrylamide exposure to carcinogenesis in humans. Genome Research, 2019, 29, 521-531.	2.4	57
146	Tumor organoids: From inception to future in cancer research. Cancer Letters, 2019, 454, 120-133.	3.2	39
147	A Compendium of Mutational Signatures of Environmental Agents. Cell, 2019, 177, 821-836.e16.	13.5	437
148	The architecture of intra-organism mutation rate variation in plants. PLoS Biology, 2019, 17, e3000191.	2.6	89

# 149	ARTICLE Organoids — Preclinical Models of Human Disease. New England Journal of Medicine, 2019, 380, 569-579.	IF 13.9	CITATIONS 212
150	Emerging Principles in Myelopoiesis at Homeostasis and during Infection and Inflammation. Immunity, 2019, 50, 288-301.	6.6	106
151	Single cell transcriptomics: moving towards multi-omics. Analyst, The, 2019, 144, 3172-3189.	1.7	34
152	FERMI: A Novel Method for Sensitive Detection of Rare Mutations in Somatic Tissue. G3: Genes, Genomes, Genetics, 2019, 9, 2977-2987.	0.8	8
153	Embryonal precursors of Wilms tumor. Science, 2019, 366, 1247-1251.	6.0	101
154	The landscape of somatic mutation in normal colorectal epithelial cells. Nature, 2019, 574, 532-537.	13.7	468
155	Modeling Human Digestive Diseases With CRISPR-Cas9–Modified Organoids. Gastroenterology, 2019, 156, 562-576.	0.6	104
156	Current and future perspectives ofÂliquid biopsies in genomics-driven oncology. Nature Reviews Genetics, 2019, 20, 71-88.	7.7	912
157	DSMNC: a database of somatic mutations in normal cells. Nucleic Acids Research, 2019, 47, D971-D975.	6.5	13
158	Donor-to-Donor Heterogeneity in the Clonal Dynamics of Transplanted Human†Cord Blood Stem Cells†in Murine Xenografts. Biology of Blood and Marrow Transplantation, 2020, 26, 16-25.	2.0	21
159	Genetic and epigenetic Muller's ratchet as a mechanism of frailty and morbidity during aging: a demographic genetic model. Human Genetics, 2020, 139, 409-420.	1.8	6
160	A promising iPS-based single-cell cloning strategy revealing signatures of somatic mutations in heterogeneous normal cells. Computational and Structural Biotechnology Journal, 2020, 18, 2326-2335.	1.9	0
161	The genomic landscapes of individual melanocytes from human skin. Nature, 2020, 586, 600-605.	13.7	79
162	Tracking hematopoietic stem cells and their progeny using whole-genome sequencing. Experimental Hematology, 2020, 83, 12-24.	0.2	19
163	Genomic variability. , 2020, , 63-75.		0
164	Experimental investigations of carcinogen-induced mutation spectra: Innovation, challenges and future directions. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2020, 853, 503195.	0.9	1
165	First-line treatment selection with organoids of an EGFRm + TP53m stage IA1 patient with early metastatic recurrence after radical surgery and follow-up. Journal of Thoracic Disease, 2020, 12, 3764-3773.	0.6	8
166	Deep whole-genome sequencing of multiple proband tissues and parental blood reveals the complex genetic etiology of congenital diaphragmatic hernias. Human Genetics and Genomics Advances, 2020, 1, 100008.	1.0	5

#	Article	IF	CITATIONS
167	Mutation accumulation and developmental lineages in normal and Down syndrome human fetal haematopoiesis. Scientific Reports, 2020, 10, 12991.	1.6	19
168	Unraveling Hematopoiesis through the Lens of Genomics. Cell, 2020, 182, 1384-1400.	13.5	96
169	Detection of genome-wide low-frequency mutations with Paired-End and Complementary Consensus Sequencing (PECC-Seq) revealed end-repair-derived artifacts as residual errors. Archives of Toxicology, 2020, 94, 3475-3485.	1.9	14
170	Applications of organoids for cancer biology and precision medicine. Nature Cancer, 2020, 1, 761-773.	5.7	93
171	Somatic genetic drift and multilevel selection in a clonal seagrass. Nature Ecology and Evolution, 2020, 4, 952-962.	3.4	86
172	Tools and Concepts for Interrogating and Defining Cellular Identity. Cell Stem Cell, 2020, 26, 632-656.	5.2	24
173	Cell Lineage Tracing and Cellular Diversity in Humans. Annual Review of Genomics and Human Genetics, 2020, 21, 101-116.	2.5	10
174	Comparing phylogenetic approaches to reconstructing cell lineage from microsatellites with missing data. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2020, 18, 1-1.	1.9	Ο
175	Long-term expansion, genomic stability and in vivo safety of adult human pancreas organoids. BMC Developmental Biology, 2020, 20, 4.	2.1	67
176	Emerging Frontiers in the Study of Molecular Evolution. Journal of Molecular Evolution, 2020, 88, 211-226.	0.8	8
177	A slipped-CAG DNA-binding small molecule induces trinucleotide-repeat contractions in vivo. Nature Genetics, 2020, 52, 146-159.	9.4	110
178	Stem Cell DNA Damage and Genome Mutation in the Context of Aging and Cancer Initiation. Cold Spring Harbor Perspectives in Biology, 2020, 12, a036210.	2.3	25
179	Clinically Relevant Tissue Scale Responses as New Readouts from Organs-on-a-Chip for Precision Medicine. Annual Review of Analytical Chemistry, 2020, 13, 111-133.	2.8	11
180	Cancer research using organoid technology. Journal of Molecular Medicine, 2021, 99, 501-515.	1.7	49
181	Why Tumor Genetic Heterogeneity May Require Rethinking Cancer Genesis and Treatment. Trends in Cancer, 2021, 7, 400-409.	3.8	8
184	Clonal expansion in non-cancer tissues. Nature Reviews Cancer, 2021, 21, 239-256.	12.8	133
185	The Role of Organoids as a Novel Platform for Modeling of Inflammatory Bowel Disease. Frontiers in Pediatrics, 2021, 9, 624045.	0.9	10
186	Potential of Drug Efficacy Evaluation in Lung and Kidney Cancer Models Using Organ-on-a-Chip Technology. Micromachines, 2021, 12, 215.	1.4	12

#	Article	IF	Citations
187	3D organotypic cell structures for drug development and Microorganism-Host interaction research. Research Results in Pharmacology, 2021, 7, 47-64.	0.1	0
188	Development, maturation, and maintenance of human prostate inferred from somatic mutations. Cell Stem Cell, 2021, 28, 1262-1274.e5.	5.2	29
189	Mitotic gene conversion can be as important as meiotic conversion in driving genetic variability in plants and other species without early germline segregation. PLoS Biology, 2021, 19, e3001164.	2.6	5
190	Lineage barcoding in mice with homing CRISPR. Nature Protocols, 2021, 16, 2088-2108.	5.5	15
191	Inherent mosaicism and extensive mutation of human placentas. Nature, 2021, 592, 80-85.	13.7	126
192	Origins, Biology, and Diseases of Tissue Macrophages. Annual Review of Immunology, 2021, 39, 313-344.	9.5	88
194	Recent advances in organoid development and applications in disease modeling. Biochimica Et Biophysica Acta: Reviews on Cancer, 2021, 1875, 188527.	3.3	35
195	Imaging cell lineage with a synthetic digital recording system. Science, 2021, 372, .	6.0	78
196	The Intestinal Epithelium – Fluid Fate and Rigid Structure From Crypt Bottom to Villus Tip. Frontiers in Cell and Developmental Biology, 2021, 9, 661931.	1.8	27
197	Stability across the Whole Nuclear Genome in the Presence and Absence of DNA Mismatch Repair. Cells, 2021, 10, 1224.	1.8	8
198	Organoids and Colorectal Cancer. Cancers, 2021, 13, 2657.	1.7	26
199	Genome diversity and instability in human germ cells and preimplantation embryos. Seminars in Cell and Developmental Biology, 2021, 113, 132-147.	2.3	14
200	Organoid Technology and Clinical Applications in Digestive System Cancer. Engineering, 2022, 9, 123-130.	3.2	0
201	The genomes of precision edited cloned calves show no evidence for off-target events or increased de novo mutagenesis. BMC Genomics, 2021, 22, 457.	1.2	6
202	Mutational signatures in Tâ€lymphocytes of rats treated with <i>N</i> <scp>â€propylâ€</scp> <i>N</i> â€nitrosourea and procarbazine. Environmental and Molecular Mutagenesis, 2021, 62, 350-363.	0.9	2
203	Clinical relevance of postzygotic mosaicism in Cornelia de Lange syndrome and purifying selection of NIPBL variants in blood. Scientific Reports, 2021, 11, 15459.	1.6	11
204	Retrospective cell lineage reconstruction in humans by using short tandem repeats. Cell Reports Methods, 2021, 1, 100054.	1.4	9
205	Somatic Mutations and Autoimmunity. Cells, 2021, 10, 2056.	1.8	7

			2
#	ARTICLE	IF.	CITATIONS
206	A probabilistic framework for cellular lineage reconstruction using integrated single-cell 5-hydroxymethylcytosine and genomic DNA sequencing. Cell Reports Methods, 2021, 1, 100060.	1.4	3
209	Extensive phylogenies of human development inferred from somatic mutations. Nature, 2021, 597, 387-392.	13.7	87
210	Application of Ovarian Cancer Organoids in Precision Medicine: Key Challenges and Current Opportunities. Frontiers in Cell and Developmental Biology, 2021, 9, 701429.	1.8	16
211	Benchmarked approaches for reconstruction of inÂvitro cell lineages and in silico models of C. elegans and M. musculus developmental trees. Cell Systems, 2021, 12, 810-826.e4.	2.9	36
212	Clonal dynamics in early human embryogenesis inferred from somatic mutation. Nature, 2021, 597, 393-397.	13.7	70
213	Antiviral treatment causes a unique mutational signature in cancers of transplantation recipients. Cell Stem Cell, 2021, 28, 1726-1739.e6.	5.2	28
214	Increased somatic mutation burdens in normal human cells due to defective DNA polymerases. Nature Genetics, 2021, 53, 1434-1442.	9.4	85
215	Genome maintenance during embryogenesis. DNA Repair, 2021, 106, 103195.	1.3	8
218	Approaches and Methods for Variant Analysis in the Genome of a Single Cell. Healthy Ageing and Longevity, 2019, , 203-228.	0.2	1
219	Potential Use of Human Stem Cell-Derived Intestinal Organoids to Study Inflammatory Bowel Diseases. Inflammatory Bowel Diseases, 2018, 24, 2501-2509.	0.9	24
236	Accuracy of Answers to Cell Lineage Questions Depends on Single-Cell Genomics Data Quality and Quantity. PLoS Computational Biology, 2016, 12, e1004983.	1.5	5
237	The Impact of Environmental and Endogenous Damage on Somatic Mutation Load in Human Skin Fibroblasts. PLoS Genetics, 2016, 12, e1006385.	1.5	82
238	Differences in the rare variant spectrum among human populations. PLoS Genetics, 2017, 13, e1006581.	1.5	88
239	Fate plasticity in the intestine: The devil is in the detail. World Journal of Gastroenterology, 2019, 25, 3116-3122.	1.4	8
240	Intestinal enteroids/organoids: A novel platform for drug discovery in inflammatory bowel diseases. World Journal of Gastroenterology, 2019, 25, 4125-4147.	1.4	47
241	Dissecting single-cell genomes through the clonal organoid technique. Experimental and Molecular Medicine, 2021, 53, 1503-1511.	3.2	9
242	Common Postzygotic Mutational Signatures in Healthy Adult Tissues Related to Embryonic Hypoxia. Genomics, Proteomics and Bioinformatics, 2022, 20, 177-191.	3.0	1
251	Analysis of Cell and Nucleus Genome byÂNext-Generation Sequencing. , 2020, , 35-65.		0

#	Article	IF	CITATIONS
254	The Mutagenic Impact of Environmental Exposures in Human Cells and Cancer: Imprints Through Time. Frontiers in Genetics, 2021, 12, 760039.	1.1	12
255	Organoid models of glioblastoma: advances, applications and challenges. American Journal of Cancer Research, 2020, 10, 2242-2257.	1.4	8
256	Tumor-treating fields (TTFields)-based cocktail therapy: a novel blueprint for glioblastoma treatment. American Journal of Cancer Research, 2021, 11, 1069-1086.	1.4	0
257	LINEAGE: Label-free identification of endogenous informative single-cell mitochondrial RNA mutation for lineage analysis. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	8
258	Recent advances in single-cell sequencing technologies. Precision Clinical Medicine, 2022, 5, .	1.3	44
259	Identification of Somatic Mutations From Bulk and Single-Cell Sequencing Data. Frontiers in Aging, 2022, 2, .	1.2	3
260	Human induced pluripotent stem cells display a similar mutation burden as embryonic pluripotent cells inÂvivo. IScience, 2022, 25, 103736.	1.9	5
263	Engineering Brain Organoids: Toward Mature Neural Circuitry with an Intact Cytoarchitecture. International Journal of Stem Cells, 2022, 15, 41-59.	0.8	11
264	Single-cell transcriptomics reveals a distinct developmental state of KMT2A-rearranged infant B-cell acute lymphoblastic leukemia. Nature Medicine, 2022, 28, 743-751.	15.2	35
265	3D and organoid culture in research: physiology, hereditary genetic diseases and cancer. Cell and Bioscience, 2022, 12, 39.	2.1	23
266	Tracing and Targeting the Origins of Childhood Cancer. Annual Review of Cancer Biology, 2022, 6, 35-47.	2.3	1
268	The Dynamics of Somatic Mutagenesis During Life in Humans. Frontiers in Aging, 2021, 2, .	1.2	17
269	Organoids and epithelial ovarian cancer †a future tool for personalized treatment decisions?. Molecular and Clinical Oncology, 2021, 16, 29.	0.4	2
270	Cancer-Causative Mutations Occurring in Early Embryogenesis. Cancer Discovery, 2022, 12, 949-957.	7.7	21
271	Mapping single-cell-resolution cell phylogeny reveals cell population dynamics during organ development. Nature Methods, 2021, 18, 1506-1514.	9.0	20
272	Somatic mutation rates scale with lifespan across mammals. Nature, 2022, 604, 517-524.	13.7	211
273	Asymmetric Contribution of Blastomere Lineages of First Division of the Zygote to Entire Human Body Using Post-Zygotic Variants. Tissue Engineering and Regenerative Medicine, 2022, , 1.	1.6	0
274	Simultaneous brain cell type and lineage determined by scRNA-seq reveals stereotyped cortical development. Cell Systems, 2022, 13, 438-453.e5.	2.9	2

#	Article	IF	CITATIONS
276	Early embryonic mutations reveal dynamics of somatic and germ cell lineages in mice. Genome Research, 2022, 32, 945-955.	2.4	2
278	Specification of hematopoietic stem cells in mammalian embryos: A rare or frequent event?. Blood, 0, , .	0.6	1
279	Elevated Mutational Age in Blood of Children Treated for Cancer Contributes to Therapy-Related Myeloid Neoplasms. Cancer Discovery, 0, , OF1-OF14.	7.7	5
280	Cell-by-Cell: Unlocking Lung Cancer Pathogenesis. Cancers, 2022, 14, 3424.	1.7	3
281	The Adaptive Potential of Nonheritable Somatic Mutations. American Naturalist, 2022, 200, 755-772.	1.0	2
283	Clonal diversification and histogenesis of malignant germ cell tumours. Nature Communications, 2022, 13, .	5.8	6
284	Analysis of low-level somatic mosaicism reveals stage and tissue-specific mutational features in human development. PLoS Genetics, 2022, 18, e1010404.	1.5	1
285	Individual Genetic Heterogeneity. Genes, 2022, 13, 1626.	1.0	3
288	Methylation Profiling in Diffuse Gliomas: Diagnostic Value and Considerations. Cancers, 2022, 14, 5679.	1.7	7
291	Grave-to-cradle: human embryonic lineage tracing from the postmortem body. Experimental and Molecular Medicine, 0, , .	3.2	0
292	Toward Inclusivity in Preclinical Drug Development: A Proposition to Start with Intestinal Organoids. Advanced Biology, 2023, 7, .	1.4	1
293	Organoids in high-throughput and high-content screenings. Frontiers in Chemical Engineering, 0, 5, .	1.3	1
294	Spectra and characteristics of somatic mutations induced by ionizing radiation in hematopoietic stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	3.3	1
295	Atypical teratoid/rhabdoid tumoroids reveal subgroup-specific drug vulnerabilities. Oncogene, 2023, 42, 1661-1671.	2.6	5
296	The origins and functional effects of postzygotic mutations throughout the human life span. Science, 2023, 380, .	6.0	6
303	Use of Organoids in Cancer: A New Therapeutic and Research Approach. , 2022, , 1-24.		0
313	Single-cell lineage tracing with endogenous markers. Biophysical Reviews, 2024, 16, 125-139.	1.5	2