Sean C Bendall

List of Publications by Year
in descending order

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117	18,714	47006 47	33894 99
papers	citations	h-index	g-index

140	140	140	24475
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Single-Cell Mass Cytometry of Differential Immune and Drug Responses Across a Human Hematopoietic Continuum. Science, 2011, 332, 687-696.	12.6	2,097
2	Data-Driven Phenotypic Dissection of AML Reveals Progenitor-like Cells that Correlate with Prognosis. Cell, 2015, 162, 184-197.	28.9	1,791
3	viSNE enables visualization of high dimensional single-cell data and reveals phenotypic heterogeneity of leukemia. Nature Biotechnology, 2013, 31, 545-552.	17.5	1,481
4	Extracting a cellular hierarchy from high-dimensional cytometry data with SPADE. Nature Biotechnology, 2011, 29, 886-891.	17.5	905
5	Multiplexed ion beam imaging of human breast tumors. Nature Medicine, 2014, 20, 436-442.	30.7	881
6	Single-Cell Trajectory Detection Uncovers Progression and Regulatory Coordination in Human B Cell Development. Cell, 2014, 157, 714-725.	28.9	838
7	A Structured Tumor-Immune Microenvironment in Triple Negative Breast Cancer Revealed by Multiplexed Ion Beam Imaging. Cell, 2018, 174, 1373-1387.e19.	28.9	729
8	Systemic Immunity Is Required for Effective Cancer Immunotherapy. Cell, 2017, 168, 487-502.e15.	28.9	708
9	Normalization of mass cytometry data with bead standards. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2013, 83A, 483-494.	1.5	655
10	A deep profiler's guide to cytometry. Trends in Immunology, 2012, 33, 323-332.	6.8	596
11	IGF and FGF cooperatively establish the regulatory stem cell niche of pluripotent human cells in vitro. Nature, 2007, 448, 1015-1021.	27.8	552
12	Cytometry by Time-of-Flight Shows Combinatorial Cytokine Expression and Virus-Specific Cell Niches within a Continuum of CD8+ T Cell Phenotypes. Immunity, 2012, 36, 142-152.	14.3	534
13	Wishbone identifies bifurcating developmental trajectories from single-cell data. Nature Biotechnology, 2016, 34, 637-645.	17.5	523
14	Multiplexed mass cytometry profiling of cellular states perturbed by small-molecule regulators. Nature Biotechnology, 2012, 30, 858-867.	17.5	502
15	A HUPO test sample study reveals common problems in mass spectrometryâ€“based proteomics. Nature Methods, 2009, 6, 423-430.	19.0	316
16	Whole-cell segmentation of tissue images with human-level performance using large-scale data annotation and deep learning. Nature Biotechnology, 2022, 40, 555-565.	17.5	297
17	Clinical recovery from surgery correlates with single-cell immune signatures. Science Translational Medicine, 2014, 6, 255ra131.	12.4	285
18	The transcriptional landscape of Î±Î² T cell differentiation. Nature Immunology, 2013, 14, 619-632.	14.5	256

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19	MIBI-TOF: A multiplexed imaging platform relates cellular phenotypes and tissue structure. Science Advances, 2019, 5, eaax5851.	10.3	252
20	An interactive reference framework for modeling a dynamic immune system. Science, 2015, 349, 1259425.	12.6	214
21	From single cells to deep phenotypes in cancer. Nature Biotechnology, 2012, 30, 639-647.	17.5	197
22	Singleâ€cell mass cytometry adapted to measurements of the cell cycle. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2012, 81A, 552-566.	1.5	196
23	Conditional density-based analysis of T cell signaling in single-cell data. Science, 2014, 346, 1250689.	12.6	188
24	Single-cell metabolic profiling of human cytotoxic T cells. Nature Biotechnology, 2021, 39, 186-197.	17.5	187
25	Prevention of Amino Acid Conversion in SILAC Experiments with Embryonic Stem Cells. Molecular and Cellular Proteomics, 2008, 7, 1587-1597.	3.8	172
26	Metal-isotope-tagged monoclonal antibodies for high-dimensional mass cytometry. Nature Protocols, 2018, 13, 2121-2148.	12.0	171
27	Mutant IDH1 Downregulates ATM and Alters DNA Repair and Sensitivity to DNA Damage Independent of TET2. Cancer Cell, 2016, 30, 337-348.	16.8	166
28	Mapping lung cancer epithelial-mesenchymal transition states and trajectories with single-cell resolution. Nature Communications, 2019, 10, 5587.	12.8	162
29	An Integrated Multi-omic Single-Cell Atlas of Human B Cell Identity. Immunity, 2020, 53, 217-232.e5.	14.3	161
30	Transition to invasive breast cancer is associated with progressive changes in the structure and composition of tumor stroma. Cell, 2022, 185, 299-310.e18.	28.9	161
31	Clonal isolation of hESCs reveals heterogeneity within the pluripotent stem cell compartment. Nature Methods, 2006, 3, 807-815.	19.0	155
32	Immune monitoring usingÂmass cytometry and related high-dimensional imaging approaches. Nature Reviews Rheumatology, 2020, 16, 87-99.	8.0	131
33	Single-cell developmental classification of B cell precursor acute lymphoblastic leukemia at diagnosis reveals predictors of relapse. Nature Medicine, 2018, 24, 474-483.	30.7	112
34	The immunoregulatory landscape of human tuberculosis granulomas. Nature Immunology, 2022, 23, 318-329.	14.5	110
35	High-resolution myogenic lineage mapping by single-cell mass cytometry. Nature Cell Biology, 2017, 19, 558-567.	10.3	108
36	Visualization and cellular hierarchy inference of single-cell data using SPADE. Nature Protocols, 2016, 11, 1264-1279.	12.0	99

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37	Glucose Metabolism Drives Histone Acetylation Landscape Transitions that Dictate Muscle Stem Cell Function. Cell Reports, 2019, 27, 3939-3955.e6.	6.4	94
38	Comprehensive Immune Monitoring of Clinical Trials to Advance Human Immunotherapy. Cell Reports, 2019, 28, 819-831.e4.	6.4	91
39	Single-Cell Mass Cytometry Analysis of Human Tonsil T Cell Remodeling by Varicella Zoster Virus. Cell Reports, 2014, 8, 633-645.	6.4	82
40	An Enhanced Mass Spectrometry Approach Reveals Human Embryonic Stem Cell Growth Factors in Culture. Molecular and Cellular Proteomics, 2009, 8, 421-432.	3.8	80
41	A Universal Live Cell Barcoding-Platform for Multiplexed Human Single Cell Analysis. Scientific Reports, 2018, 8, 10770.	3.3	75
42	Immune-stimulating antibody conjugates elicit robust myeloid activation and durable antitumor immunity. Nature Cancer, 2021, 2, 18-33.	13.2	74
43	The basis of cellular and regional vulnerability in Alzheimerâ€™s disease. Acta Neuropathologica, 2019, 138, 729-749.	7.7	73
44	Assessing basophil activation by using flow cytometry and mass cytometry in blood stored 24Âhours before analysis. Journal of Allergy and Clinical Immunology, 2017, 139, 889-899.e11.	2.9	71
45	Macrophages are metabolically heterogeneous within the tumor microenvironment. Cell Reports, 2021, 37, 110171.	6.4	69
46	Single-cell systems-level analysis of human Toll-like receptor activation defines a chemokine signature in patients with systemic lupus erythematosus. Journal of Allergy and Clinical Immunology, 2015, 136, 1326-1336.	2.9	66
47	Deconstructing human embryonic stem cell cultures: niche regulation of self-renewal and pluripotency. Journal of Molecular Medicine, 2008, 86, 875-886.	3.9	58
48	Integration of mechanistic immunological knowledge into a machine learning pipeline improves predictions. Nature Machine Intelligence, 2020, 2, 619-628.	16.0	52
49	Single-cell mass cytometry reveals cross-talk between inflammation-dampening and inflammation-amplifying cells in osteoarthritic cartilage. Science Advances, 2020, 6, eaay5352.	10.3	52
50	Single-cell mass cytometry of TCR signaling: Amplification of small initial differences results in low ERK activation in NOD mice. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16466-16471.	7.1	50
51	Proliferation tracing with single-cell mass cytometry optimizes generation of stem cell memory-like T cells. Nature Biotechnology, 2019, 37, 259-266.	17.5	49
52	DRUG-NEM: Optimizing drug combinations using single-cell perturbation response to account for intratumoral heterogeneity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4294-E4303.	7.1	42
53	Synthetically Modified Viral Capsids as Versatile Carriers for Use in Antibody-Based Cell Targeting. Bioconjugate Chemistry, 2015, 26, 1590-1596.	3.6	36
54	Distinct signaling programs control human hematopoietic stem cell survival and proliferation. Blood, 2017, 129, 307-318.	1.4	35

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55	The Split Virus Influenza Vaccine rapidly activates immune cells through FcÎ³ receptors. Vaccine, 2014, 32, 5989-5997.	3.8	34
56	Scalable Conjugation and Characterization of Immunoglobulins with Stable Mass Isotope Reporters for Single-Cell Mass Cytometry Analysis. Methods in Molecular Biology, 2019, 1989, 55-81.	0.9	32
57	Multiplexed single-cell morphometry for hematopathology diagnostics. Nature Medicine, 2020, 26, 408-417.	30.7	32
58	Parallel analysis of tri-molecular biosynthesis with cell identity and function in single cells. Nature Communications, 2019, 10, 1185.	12.8	29
59	Antigen-Dependent Integration of Opposing Proximal TCR-Signaling Cascades Determines the Functional Fate of T Lymphocytes. Journal of Immunology, 2014, 192, 2109-2119.	0.8	27
60	Human IL-10-producing B cells have diverse states that are induced from multiple B cell subsets. Cell Reports, 2022, 39, 110728.	6.4	27
61	Human embryonic stem cells: lessons from stem cell niches <i>inÂvivo</i>. Regenerative Medicine, 2008, 3, 365-376.	1.7	26
62	Mass synaptometry: High-dimensional multi parametric assay for single synapses. Journal of Neuroscience Methods, 2019, 312, 73-83.	2.5	26
63	Clonal tracking of hESCs reveals differential contribution to functional assays. Nature Methods, 2010, 7, 917-922.	19.0	24
64	NRAS G12V oncogene facilitates self-renewal in a murine model of acute myelogenous leukemia. Blood, 2014, 124, 3274-3283.	1.4	24
65	High-Parameter Immune Profiling with CyTOF. Methods in Molecular Biology, 2020, 2055, 351-368.	0.9	23
66	Complement targeting of nonhuman sialic acid does not mediate cell death of human embryonic stem cells. Nature Medicine, 2006, 12, 1113-1114.	30.7	20
67	GateFinder: projection-based gating strategy optimization for flow and mass cytometry. Bioinformatics, 2018, 34, 4131-4133.	4.1	20
68	Mass Cytometry Phenotyping of Human Granulocytes Reveals Novel Basophil Functional Heterogeneity. IScience, 2020, 23, 101724.	4.1	19
69	A topological view of human CD34+ cell state trajectories from integrated single-cell output and proteomic data. Blood, 2019, 133, 927-939.	1.4	17
70	Multiplexed Ion Beam Imaging: Insights into Pathobiology. Annual Review of Pathology: Mechanisms of Disease, 2022, 17, 403-423.	22.4	16
71	Reproducible, high-dimensional imaging in archival human tissue by multiplexed ion beam imaging by time-of-flight (MIBI-TOF). Laboratory Investigation, 2022, 102, 762-770.	3.7	16
72	Serial transplantation reveals a critical role for endoglin in hematopoietic stem cell quiescence. Blood, 2019, 133, 688-696.	1.4	15

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73	Single-synapse analyses of Alzheimerâ€™s disease implicate pathologic tau, DJ1, CD47, and ApoE. Science Advances, 2021, 7, eabk0473.	10.3	14
74	Network for Biomarker Immunoprofiling for Cancer Immunotherapy: Cancer Immune Monitoring and Analysis Centers and Cancer Immunologic Data Commons (CIMAC-CIDC). Clinical Cancer Research, 2021, 27, 5038-5048.	7.0	13
75	TRAIL-induced variation of cell signaling states provides nonheritable resistance to apoptosis. Life Science Alliance, 2019, 2, e201900554.	2.8	11
76	Multiplexed Ion Beam Imaging Readout of Single-Cell Immunoblotting. Analytical Chemistry, 2021, 93, 8517-8525.	6.5	9
77	Multiplexed imaging reveals an IFN-Î³-driven inflammatory state in nivolumab-associated gastritis. Cell Reports Medicine, 2021, 2, 100419.	6.5	9
78	Mass Cytometry Analysis Of Myelofibrosis and Secondary Acute Myeloid Leukemia Reveals Constitutive and Cytokine Induced Signaling Abnormalities With Differential Sensitivities To Ruxolitinib. Blood, 2013, 122, 1610-1610.	1.4	9
79	Integrating transcription-factor abundance with chromatin accessibility in human erythroid lineage commitment. Cell Reports Methods, 2022, 2, 100188.	2.9	9
80	Immune Profiling Mass Cytometry Assay Harmonization: Multicenter Experience from CIMAC-CIDC. Clinical Cancer Research, 2021, 27, 5062-5071.	7.0	8
81	CytofIn enables integrated analysis of public mass cytometry datasets using generalized anchors. Nature Communications, 2022, 13, 934.	12.8	8
82	Supervised dimensionality reduction for exploration of single-cell data by HSS-LDA. Patterns, 2022, 3, 100536.	5.9	8
83	Diamonds in the doublets. Nature Biotechnology, 2020, 38, 559-561.	17.5	7
84	Massâ€tag barcoding for multiplexed analysis of human synaptosomes and other anuclear events. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2021, 99, 939-945.	1.5	7
85	Identification of Two CAR T-Cell Populations Associated with Complete Response or Progressive Disease in Adult Lymphoma Patients Treated with Axi-Cel. Blood, 2019, 134, 779-779.	1.4	6
86	Natural Killer Cell Receptors and Ligands Are Associated With Markers of HIV-1 Persistence in Chronically Infected ART Suppressed Patients. Frontiers in Cellular and Infection Microbiology, 2022, 12, 757846.	3.9	5
87	Ikaros Mediates Antigen Escape Following CD19 CAR T Cell Therapy in r/r B-ALL. Blood, 2021, 138, 613-613.	1.4	4
88	Mass Synaptometry: Applying Mass Cytometry to Single Synapse Analysis. Methods in Molecular Biology, 2022, 2417, 69-88.	0.9	4
89	Variation of Immune Cell Responses in Humans Reveals Sex-Specific Coordinated Signaling Across Cell Types. Frontiers in Immunology, 2022, 13, 867016.	4.8	4
90	OR40 Applying single-cell mass cytometry to investigate the immune system of highly sensitized patients who undergo intravenous immunoglobulin desensitization treatment. Human Immunology, 2017, 78, 37-38.	2.4	3

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91	Single Cell Trajectory Detection Orders Hallmarks of Early Human B Cell Development. Blood, 2012, 120, 1044-1044.	1.4	3
92	Proteomic Analysis of Pluripotent Stem Cells. , 2007, Chapter 1, Unit 1B.1.		2
93	An optimized protocol for phenotyping human granulocytes by mass cytometry. STAR Protocols, 2022, 3, 101280.	1.2	2
94	Revealing new biology from multiplexed, metal-isotope-tagged, single-cell readouts. Trends in Cell Biology, 2022, 32, 501-512.	7.9	2
95	The Interaction of SWI/SNF with the Ribosome Regulates Translation and Confers Sensitivity to Translation Pathway Inhibitors in Cancers with Complex Perturbations. Cancer Research, 2022, 82, 2829-2837.	0.9	2
96	Single-Cell Developmental Classification of B-Cell Precursor Acute Lymphoblastic Leukemia at Diagnosis Reveals Predictors of Relapse. Experimental Hematology, 2018, 64, S33-S34.	0.4	1
97	Single Cell Mass Cytometry of Dysregulated Signaling Networks in Myeloproliferative Neoplasms and Secondary Acute Myeloid Leukemia. Blood, 2012, 120, 703-703.	1.4	1
98	Comprehensive Immune Monitoring of Clinical Trials to Advance Human Immunotherapy. SSRN Electronic Journal, 0, , .	0.4	1
99	CIMAC-CIDC CyTOF harmonization.. Journal of Clinical Oncology, 2020, 38, e15242-e15242.	1.6	1
100	Abstract CT142: GD2.Ox40.CD28.z CAR T cell trial in neuroblastoma and osteosarcoma. Cancer Research, 2022, 82, CT142-CT142.	0.9	1
101	SESSION INTRODUCTION. , 2017, 22, 557-563.		0
102	Assessing basophil activation by flow cytometry and mass cytometry in blood stored 24 hours before analysis. Journal of Allergy and Clinical Immunology, 2017, 139, AB124.	2.9	0
103	High-Dimensional Analysis of Intracellular Signaling and Dasatinib Inhibition In High-Risk Pediatric Leukemia by 31-Parameter Mass Cytometry. Blood, 2010, 116, 2761-2761.	1.4	0
104	Oncogene Withdrawal Selectively Alters Phosphoprotein States and Shifts Differentiation Status In Myeloid Leukemia Subpopulations. Blood, 2010, 116, 3160-3160.	1.4	0
105	Application of Mass Cytometry to Measure Proliferation During Normal and Malignant Hematopoietic Differentiation. Blood, 2011, 118, 4782-4782.	1.4	0
106	Mass Cytometry Organizes the Heterogeneity of Pediatric B Cell Acute Lymphoblastic Leukemia. Blood, 2011, 118, 753-753.	1.4	0
107	Signaling and Immunophenotypic Diversity in Pediatric Acute Myeloid Leukemia As Defined by 31-Parameter Single-Cell Mass Cytometry. Blood, 2011, 118, 2565-2565.	1.4	0
108	Activated NRAS Mediates Self-Renewal Capacity in AML by Facilitating the Mll/AF9-Specified Gene Expression Signature. Blood, 2012, 120, 5116-5116.	1.4	0

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109	Dimensionality Reduction Reveals Distinct Shapes of Normal and Malignant Hematopoietic Cell Populations. Blood, 2012, 120, 1451-1451.	1.4	0
110	Short Term Signalling Responses of the Most Primitive Subsets of Human Hematopoietic Cells Stimulated in Vitro Correlate with Their Subsequent Self-Renewal Behaviour.. Blood, 2012, 120, 2341-2341.	1.4	0
111	Network-Based Discovery of Prognostic Markers in Pediatric AML by Multi-Dimensional Single Cell Mass Cytometry. Blood, 2012, 120, 1411-1411.	1.4	0
112	Ras-Pathway Inhibition With Targeted Therapies Abrogates Self-Renewal In Acute Myelogenous Leukemia. Blood, 2013, 122, 819-819.	1.4	0
113	Abstract B15: NRASG12V oncogene mediates self-renewal in a murine model of acute myelogenous leukemia. , 2014, , .		0
114	Single Cell Developmental Classification of B Cell Precursor Acute Lymphoblastic Leukemia (BCP ALL) Reveals Link Between Phenotype, Signaling, and Drug Response. Blood, 2014, 124, 488-488.	1.4	0
115	Inhibition of Pre-BCR Signaling Mediates a Metabolic Switch in B-Cell Progenitor Acute Lymphoblastic Leukemia. Blood, 2021, 138, 615-615.	1.4	0
116	Chromatin Content Capture Reveals Acute Leukaemia Oncogenic Vulnerability Point in Human B Cell Development. Blood, 2021, 138, 673-673.	1.4	0
117	3011 â€“ SINGLE CELL PROTEOMIC MAP OF PHENOTYPIC IDENTITY AND MOLECULAR REGULATORS TO REDEFINE HUMAN HEMATOPOIETIC PROGENITORS. Experimental Hematology, 2021, 100, S48.	0.4	0