Benoit G Bruneau

List of Publications by Year in descending order

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126 20,453 64 121 papers citations h-index g-index

149 149 149 22561 all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Brahma safeguards canalization of cardiac mesoderm differentiation. Nature, 2022, 602, 129-134.	13.7	22
2	Transcription factor protein interactomes reveal genetic determinants in heart disease. Cell, 2022, 185, 794-814.e30.	13.5	39
3	Modeling congenital heart disease: lessons from mice, hPSC-based models, and organoids. Genes and Development, 2022, 36, 652-663.	2.7	6
4	Modeling Human TBX5 Haploinsufficiency Predicts Regulatory Networks for Congenital Heart Disease. Developmental Cell, 2021, 56, 292-309.e9.	3.1	63
5	WAPL maintains a cohesin loading cycle to preserve cell-type-specific distal gene regulation. Nature Genetics, 2021, 53, 100-109.	9.4	101
6	Dissecting CTCF site function in a tense HoxD locus. Genes and Development, 2021, 35, 1401-1402.	2.7	1
7	Co-emergence of cardiac and gut tissues promotes cardiomyocyte maturation within human iPSC-derived organoids. Cell Stem Cell, 2021, 28, 2137-2152.e6.	5.2	73
8	Regulation of single-cell genome organization into TADs and chromatin nanodomains. Nature Genetics, 2020, 52, 1151-1157.	9.4	127
9	The developing heart: from <i>The Wizard of Oz</i> to congenital heart disease. Development (Cambridge), 2020, 147, .	1.2	11
10	Molecular basis of CTCF binding polarity in genome folding. Nature Communications, 2020, 11, 5612.	5.8	102
11	Defining the relative and combined contribution of CTCF and CTCFL to genomic regulation. Genome Biology, 2020, 21, 108.	3.8	37
12	Transcriptional profiling and therapeutic targeting of oxidative stress in neuroinflammation. Nature Immunology, 2020, 21, 513-524.	7.0	118
13	Cardiac natriuretic peptides. Nature Reviews Cardiology, 2020, 17, 698-717.	6.1	262
14	Salt-inducible kinase 1 maintains HDAC7 stability to promote pathologic cardiac remodeling. Journal of Clinical Investigation, 2020, 130, 2966-2977.	3.9	29
15	Genome of the Komodo dragon reveals adaptations in the cardiovascular and chemosensory systems of monitor lizards. Nature Ecology and Evolution, 2019, 3, 1241-1252.	3.4	67
16	Chromatin and epigenetics in development: a Special Issue. Development (Cambridge), 2019, 146, .	1.2	5
17	A De Novo Shape Motif Discovery Algorithm Reveals Preferences of Transcription Factors for DNA Shape Beyond Sequence Motifs. Cell Systems, 2019, 8, 27-42.e6.	2.9	54
18	RNA Interactions Are Essential for CTCF-Mediated Genome Organization. Molecular Cell, 2019, 76, 412-422.e5.	4.5	183

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19	Dynamic BAF chromatin remodeling complex subunit inclusion promotes temporally distinct gene expression programs in cardiogenesis. Development (Cambridge), 2019, 146, .	1.2	39
20	Minimal <i>in vivo</i> requirements for developmentally regulated cardiac long intergenic non-coding RNAs. Development (Cambridge), 2019, 146, .	1.2	19
21	Identifying cis Elements for Spatiotemporal Control of Mammalian DNA Replication. Cell, 2019, 176, 816-830.e18.	13.5	144
22	CTCF confers local nucleosome resiliency after DNA replication and during mitosis. ELife, 2019, 8, .	2.8	61
23	Cardiac-enriched BAF chromatin-remodeling complex subunit Baf60c regulates gene expression programs essential for heart development and function. Biology Open, 2018, 7, .	0.6	33
24	Heart enhancers with deeply conserved regulatory activity are established early in zebrafish development. Nature Communications, 2018, 9, 4977.	5.8	42
25	Chromatin Domains Go on Repeat in Disease. Cell, 2018, 175, 38-40.	13.5	8
26	Cooperative activation of cardiac transcription through myocardin bridging of paired MEF2 sites. Development (Cambridge), 2017, 144, 1235-1241.	1.2	12
27	Targeted Degradation of CTCF Decouples Local Insulation of Chromosome Domains from Genomic Compartmentalization. Cell, 2017, 169, 930-944.e22.	13.5	1,374
28	Expandable Cardiovascular Progenitor Cells Reprogrammed from Fibroblasts. Cell Stem Cell, 2016, 18, 368-381.	5. 2	115
29	ATP-dependent chromatin remodeling during mammalian development. Development (Cambridge), 2016, 143, 2882-2897.	1.2	194
30	Single-Cell Resolution of Temporal Gene Expression during Heart Development. Developmental Cell, 2016, 39, 480-490.	3.1	361
31	Loss of Iroquois homeobox transcription factors 3 and 5 in osteoblasts disrupts cranial mineralization. Bone Reports, 2016, 5, 86-95.	0.2	21
32	Complex Interdependence Regulates Heterotypic Transcription Factor Distribution and Coordinates Cardiogenesis. Cell, 2016, 164, 999-1014.	13.5	179
33	KMT2D regulates specific programs in heart development via histone H3 lysine 4 di-methylation. Development (Cambridge), 2016, 143, 810-821.	1.2	100
34	Accelerated Evolution of Enhancer Hotspots in the Mammal Ancestor. Molecular Biology and Evolution, 2016, 33, 1008-1018.	3.5	23
35	Investigating the Transcriptional Control of Cardiovascular Development. Circulation Research, 2015, 116, 700-714.	2.0	77
36	Human Disease Modeling Reveals Integrated Transcriptional and Epigenetic Mechanisms of NOTCH1 Haploinsufficiency. Cell, 2015, 160, 1072-1086.	13.5	173

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37	Polycomb Regulates Mesoderm Cell Fate-Specification in Embryonic Stem Cells through Activation and Repression Mechanisms. Cell Stem Cell, 2015, 17, 300-315.	5.2	124
38	Brg1 modulates enhancer activation in mesoderm lineage commitment. Development (Cambridge), 2015, 142, 1418-30.	1.2	81
39	Ezh2-mediated repression of a transcriptional pathway upstream of <i>Mmp9</i> maintains integrity of the developing vasculature. Development (Cambridge), 2014, 141, 4610-4617.	1.2	47
40	Function-based identification of mammalian enhancers using site-specific integration. Nature Methods, 2014, 11, 566-571.	9.0	71
41	Congenital Heart Disease. Circulation Research, 2014, 114, 598-599.	2.0	27
42	HDAC-regulated myomiRs control BAF60 variant exchange and direct the functional phenotype of fibro-adipogenic progenitors in dystrophic muscles. Genes and Development, 2014, 28, 841-857.	2.7	132
43	Early patterning and specification of cardiac progenitors in gastrulating mesoderm. ELife, 2014, 3, .	2.8	202
44	Finding a niche for cardiac precursors. ELife, 2014, 3, e02993.	2.8	2
45	Direct Reprogramming of Human Fibroblasts toward a Cardiomyocyte-like State. Stem Cell Reports, 2013, 1, 235-247.	2.3	351
46	Acetylation of RNA Polymerase II Regulates Growth-Factor-Induced Gene Transcription in Mammalian Cells. Molecular Cell, 2013, 52, 314-324.	4.5	103
47	Chromatin modulators as facilitating factors in cellular reprogramming. Current Opinion in Genetics and Development, 2013, 23, 556-561.	1.5	20
48	ETS Factors Regulate Vegf-Dependent Arterial Specification. Developmental Cell, 2013, 26, 45-58.	3.1	124
49	Signaling and Transcriptional Networks in Heart Development and Regeneration. Cold Spring Harbor Perspectives in Biology, 2013, 5, a008292-a008292.	2.3	213
50	Preface. Current Topics in Developmental Biology, 2012, 100, xv-xvi.	1.0	0
51	Cooperative and antagonistic roles for Irx3 and Irx5 in cardiac morphogenesis and postnatal physiology. Development (Cambridge), 2012, 139, 4007-4019.	1.2	66
52	<i>Iroquois</i> Homeodomain Transcription Factors in Heart Development and Function. Circulation Research, 2012, 110, 1513-1524.	2.0	63
53	Direct Reprogramming for Cardiac Regeneration. Circulation Research, 2012, 110, 1392-1394.	2.0	8
54	Epigenetics and Cardiovascular Development. Annual Review of Physiology, 2012, 74, 41-68.	5.6	187

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55	Epigenetic repression of cardiac progenitor gene expression by Ezh2 is required for postnatal cardiac homeostasis. Nature Genetics, 2012, 44, 343-347.	9.4	230
56	Dynamic and Coordinated Epigenetic Regulation of Developmental Transitions in the Cardiac Lineage. Cell, 2012, 151, 206-220.	13.5	555
57	Regulation of retinal interneuron subtype identity by the <i>lroquois</i> homeobox gene <i>lrx6</i> . Development (Cambridge), 2012, 139, 4644-4655.	1.2	32
58	Cardiac Myocyte Specification and Differentiation. , 2012, , 25-34.		0
59	Atrial natriuretic factor in the developing heart: a signpost for cardiac morphogenesis. Canadian Journal of Physiology and Pharmacology, 2011, 89, 533-537.	0.7	8
60	Chromatin remodelling complex dosage modulates transcription factor function in heart development. Nature Communications, 2011, 2, 187.	5.8	175
61	A Slit/miR-218/Robo regulatory loop is required during heart tube formation in zebrafish. Development (Cambridge), 2011, 138, 1409-1419.	1.2	142
62	Tinman/Nkx2-5 acts via miR-1 and upstream of Cdc42 to regulate heart function across species. Journal of Cell Biology, 2011, 193, 1181-1196.	2.3	74
63	Ezh2 regulates anteroposterior axis specification and proximodistal axis elongation in the developing limb. Development (Cambridge), 2011, 138, 3759-3767.	1.2	60
64	<i>Iroquois homeobox gene 3</i> establishes fast conduction in the cardiac His–Purkinje network. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13576-13581.	3.3	109
65	CTCF Promotes Muscle Differentiation by Modulating the Activity of Myogenic Regulatory Factors. Journal of Biological Chemistry, 2011, 286, 12483-12494.	1.6	48
66	Tinman/Nkx2-5 acts via miR-1 and upstream of Cdc42 to regulate heart function across species. Journal of Experimental Medicine, 2011, 208, i20-i20.	4.2	0
67	Chromatin Modification and Remodeling in Heart Development. , 2010, , 703-714.		0
68	Epigenetic Regulation of the Cardiovascular System. Circulation Research, 2010, 107, 324-326.	2.0	21
69	The Ubiquitin Ligase Nedd4-1 Is Required for Heart Development and Is a Suppressor of Thrombospondin-1. Journal of Biological Chemistry, 2010, 285, 6770-6780.	1.6	65
70	Extensive enteric nervous system abnormalities in mice transgenic for artificial chromosomes containing Parkinson disease-associated α-synuclein gene mutations precede central nervous system changes. Human Molecular Genetics, 2010, 19, 1633-1650.	1.4	237
71	An endocardial pathway involving Tbx5, Gata4, and Nos3 required for atrial septum formation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19356-19361.	3.3	59
72	Shox2 mediates Tbx5 activity by regulating Bmp4 in the pacemaker region of the developing heart. Human Molecular Genetics, 2010, 19, 4625-4633.	1.4	106

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73	Lessons for cardiac regeneration and repair through development. Trends in Molecular Medicine, 2010, 16, 426-434.	3.5	30
74	Chromatin remodeling in heart development. Current Opinion in Genetics and Development, 2010, 20, 505-511.	1.5	43
75	Direct Reprogramming of Fibroblasts into Functional Cardiomyocytes by Defined Factors. Cell, 2010, 142, 375-386.	13.5	2,235
76	Aetiology of Congenital Cardiac Disease. , 2010, , 161-171.		1
77	Directed transdifferentiation of mouse mesoderm to heart tissue by defined factors. Nature, 2009, 459, 708-711.	13.7	498
78	Reptilian heart development and the molecular basis of cardiac chamber evolution. Nature, 2009, 461, 95-98.	13.7	135
79	Alternative Induced Pluripotent Stem Cell Characterization Criteria for In Vitro Applications. Cell Stem Cell, 2009, 4, 198-199.	5.2	64
80	NKX2-5 Regulates the Expression of \hat{l}^2 -Catenin and GATA4 in Ventricular Myocytes. PLoS ONE, 2009, 4, e5698.	1.1	41
81	Origin and Identity of the Right Heart. , 2009, , 3-8.		0
82	The developmental genetics of congenital heart disease. Nature, 2008, 451, 943-948.	13.7	673
83	miR-126 Regulates Angiogenic Signaling and Vascular Integrity. Developmental Cell, 2008, 15, 272-284.	3.1	1,489
84	Tbx5-dependent pathway regulating diastolic function in congenital heart disease. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5519-5524.	3.3	59
85	Baf60c is a nuclear Notch signaling component required for the establishment of left–right asymmetry. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 846-851.	3.3	108
86	Transcriptional Control of the Cardiac Conduction System. Advances in Developmental Biology (Amsterdam, Netherlands), 2007, 18, 219-258.	0.4	1
87	4D cardiac MRI in the mouse. NMR in Biomedicine, 2007, 20, 360-365.	1.6	27
88	Irxl1, a divergent Iroquois homeobox family transcription factor gene. Gene Expression Patterns, 2007, 7, 51-56.	0.3	13
89	Tbx5-dependent rheostatic control of cardiac gene expression and morphogenesis. Developmental Biology, 2006, 297, 566-586.	0.9	164
90	Chromatin Modification and Remodeling in Heart Development. Scientific World Journal, The, 2006, 6, 1851-1861.	0.8	3

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91	Cooperative and antagonistic interactions between Sall4 and Tbx5 pattern the mouse limb and heart. Nature Genetics, 2006, 38, 175-183.	9.4	156
92	Chromatin Modification and Remodeling in Heart Development. TSW Development & Embryology, 2006, 1, 37-47.	0.2	0
93	Genome-wide analysis of mouse transcripts using exon microarrays and factor graphs. Nature Genetics, 2005, 37, 991-996.	9.4	38
94	Tiny brakes for a growing heart. Nature, 2005, 436, 181-182.	13.7	19
95	Abnormal cardiac inflow patterns during postnatal development in a mouse model of Holt-Oram syndrome. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H992-H1001.	1.5	45
96	Serum Response Factor, an Enriched Cardiac Mesoderm Obligatory Factor, Is a Downstream Gene Target for Tbx Genes. Journal of Biological Chemistry, 2005, 280, 11816-11828.	1.6	48
97	Connexin 40, a Target of Transcription Factor Tbx5, Patterns Wrist, Digits, and Sternum. Molecular and Cellular Biology, 2005, 25, 5073-5083.	1.1	41
98	A Gja1 missense mutation in a mouse model of oculodentodigital dysplasia. Development (Cambridge), 2005, 132, 4375-4386.	1.2	211
99	Tbx20 dose-dependently regulates transcription factor networks required for mouse heart and motoneuron development. Development (Cambridge), 2005, 132, 2463-2474.	1.2	205
100	The Homeodomain Transcription Factor Irx5 Establishes the Mouse Cardiac Ventricular Repolarization Gradient. Cell, 2005, 123, 347-358.	13.5	233
101	The Iroquois homeobox gene, Irx5, is required for retinal cone bipolar cell development. Developmental Biology, 2005, 287, 48-60.	0.9	90
102	Tbx1 has a dual role in the morphogenesis of the cardiac outflow tract. Development (Cambridge), 2004, 131, 3217-3227.	1.2	348
103	Lats2/Kpm is required for embryonic development, proliferation control and genomic integrity. EMBO Journal, 2004, 23, 3677-3688.	3.5	179
104	Baf60c is essential for function of BAF chromatin remodelling complexes in heart development. Nature, 2004, 432, 107-112.	13.7	478
105	The functional landscape of mouse gene expression. Journal of Biology, 2004, 3, 21.	2.7	259
106	The T-Box transcription factor Tbx5 is required for the patterning and maturation of the murine cardiac conduction system. Development (Cambridge), 2004, 131, 4107-4116.	1.2	188
107	TBX5 mutations and congenital heart disease: Holt-Oram syndrome revealed. Current Opinion in Cardiology, 2004, 19, 211-215.	0.8	152
108	The developing heart and congenital heart defects: a make or break situation. Clinical Genetics, 2003, 63, 252-261.	1.0	48

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109	Cardiac T-box factor Tbx20 directly interacts with Nkx2-5, GATA4, and GATA5 in regulation of gene expression in the developing heart. Developmental Biology, 2003, 262, 206-224.	0.9	260
110	Tbx5 is essential for forelimb bud initiation following patterning of the limb field in the mouse embryo. Development (Cambridge), 2003, 130, 623-633.	1.2	253
111	Tbx5 is required for forelimb bud formation and continued outgrowth. Development (Cambridge), 2003, 130, 2741-2751.	1.2	204
112	The Iroquois Homeobox Gene Irx2 Is Not Essential for Normal Development of the Heart and Midbrain-Hindbrain Boundary in Mice. Molecular and Cellular Biology, 2003, 23, 8216-8225.	1.1	49
113	Mouse models of cardiac chamber formation and congenital heart disease. Trends in Genetics, 2002, 18, S15-S20.	2.9	7
114	Transcriptional Regulation of Vertebrate Cardiac Morphogenesis. Circulation Research, 2002, 90, 509-519.	2.0	234
115	A Murine Model of Holt-Oram Syndrome Defines Roles of the T-Box Transcription Factor Tbx5 in Cardiogenesis and Disease. Cell, 2001, 106, 709-721.	13.5	957
116	Cardiomyopathy in Irx4 -Deficient Mice Is Preceded by Abnormal Ventricular Gene Expression. Molecular and Cellular Biology, 2001, 21, 1730-1736.	1.1	150
117	Cardiac Expression of the Ventricle-Specific Homeobox Gene Irx4 Is Modulated by Nkx2-5 and dHand. Developmental Biology, 2000, 217, 266-277.	0.9	183
118	Characterization of natriuretic peptide production by adult heart atria. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 276, H1977-H1986.	1.5	33
119	Regulation of Chamber-Specific Gene Expression in the Developing Heart by Irx4. Science, 1999, 283, 1161-1164.	6.0	232
120	Chamber-Specific Cardiac Expression of Tbx5 and Heart Defects in Holt–Oram Syndrome. Developmental Biology, 1999, 211, 100-108.	0.9	453
121	BNP gene expression is specifically modulated by stretch and ET-1 in a new model of isolated rat atria. American Journal of Physiology - Heart and Circulatory Physiology, 1997, 273, H2678-H2686.	1.5	41
122	Mutations in human TBX3 alter limb, apocrine and genital development in ulnar-mammary syndrome. Nature Genetics, 1997, 16, 311-315.	9.4	511
123	Mechanical and neuroendocrine regulation of the endocrine heart. Cardiovascular Research, 1996, 31, 7-18.	1.8	262
124	Evidence for Load-Dependent and Load-Independent Determinants of Cardiac Natriuretic Peptide Production. Circulation, 1996, 93, 2059-2067.	1.6	102
125	Dissociation of cardiac hypertrophy, myosin heavy chain isoform expression, and natriuretic peptide production in DOCA-salt rats. American Journal of Hypertension, 1995, 8, 301-310.	1.0	66
126	Selective changes in natriuretic peptide and early response gene expression in isolated rat atria following stimulation by stretch or endothelin-1. Cardiovascular Research, 1994, 28, 1519-1525.	1.8	66