Deepak Srivastava

List of Publications by Year
in descending order

149 papers	30,017 citations	9254 74 h-index	12585 132 g-index
234 all docs	234 docs citations	234 times ranked	29621 citing authors

#	Article	IF	Citations
1	Direct Reprogramming of Fibroblasts into Functional Cardiomyocytes by Defined Factors. Cell, 2010, 142, 375-386.	13.5	2,235
2	Serum response factor regulates a muscle-specific microRNA that targets Hand2 during cardiogenesis. Nature, 2005, 436, 214-220.	13.7	1,510
3	miR-126 Regulates Angiogenic Signaling and Vascular Integrity. Developmental Cell, 2008, 15, 272-284.	3.1	1,489
4	miR-145 and miR-143 regulate smooth muscle cell fate and plasticity. Nature, 2009, 460, 705-710.	13.7	1,412
5	Dysregulation of Cardiogenesis, Cardiac Conduction, and Cell Cycle in Mice Lacking miRNA-1-2. Cell, 2007, 129, 303-317.	13.5	1,341
6	Mutations in NOTCH1 cause aortic valve disease. Nature, 2005, 437, 270-274.	13.7	1,274
7	In vivo reprogramming of murine cardiac fibroblasts into induced cardiomyocytes. Nature, 2012, 485, 593-598.	13.7	1,204
8	GATA4 mutations cause human congenital heart defects and reveal an interaction with TBX5. Nature, 2003, 424, 443-447.	13.7	1,086
9	Regulation of cardiac mesodermal and neural crest development by the bHLH transcription factor, dHAND. Nature Genetics, 1997, 16, 154-160.	9.4	670
10	Thymosin Î²4 activates integrin-linked kinase and promotes cardiac cell migration, survival and cardiac repair. Nature, 2004, 432, 466-472.	13.7	645
11	Contribution of rare inherited and de novo variants in 2,871 congenital heart disease probands. Nature Genetics, 2017, 49, 1593-1601.	9.4	624
12	Making or Breaking the Heart: From Lineage Determination to Morphogenesis. Cell, 2006, 126, 1037-1048.	13.5	587
13	MicroRNA Regulation of Cell Lineages in Mouse and Human Embryonic Stem Cells. Cell Stem Cell, 2008, 2, 219-229.	5.2	577
14	A genetic blueprint for cardiac development. Nature, 2000, 407, 221-226.	13.7	568
15	Dynamic and Coordinated Epigenetic Regulation of Developmental Transitions in the Cardiac Lineage. Cell, 2012, 151, 206-220.	13.5	555
16	A developmental view of microRNA function. Trends in Biochemical Sciences, 2007, 32, 189-197.	3.7	532
17	Cardiac Fibroblasts Regulate Myocardial Proliferation through Î²1 Integrin Signaling. Developmental Cell, 2009, 16, 233-244.	3.1	515
18	Regulation of Cell Cycle to Stimulate Adult Cardiomyocyte Proliferation and Cardiac Regeneration. Cell, 2018, 173, 104-116.e12.	13.5	434

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19	MicroRNA1 influences cardiac differentiation in Drosophila and regulates Notch signaling. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18986-18991.	3.3	411
20	MicroRNAs as Regulators of Differentiation and Cell Fate Decisions. Cell Stem Cell, 2010, 7, 36-41.	5.2	408
21	Contractility of single cardiomyocytes differentiated from pluripotent stem cells depends on physiological shape and substrate stiffness. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12705-12710.	3.3	398
22	Direct Reprogramming of Human Fibroblasts toward a Cardiomyocyte-like State. Stem Cell Reports, 2013, 1, 235-247.	2.3	351
23	Heart and extra-embryonic mesodermal defects in mouse embryos lacking the bHLH transcription factor Hand1. Nature Genetics, 1998, 18, 266-270.	9.4	345
24	Conversion of human fibroblasts into functional cardiomyocytes by small molecules. Science, 2016, 352, 1216-1220.	6.0	316
25	The Hand1 and Hand2 transcription factors regulate expansion of the embryonic cardiac ventricles in a gene dosage-dependent manner. Development (Cambridge), 2005, 132, 189-201.	1.2	298
26	Bop encodes a muscle-restricted protein containing MYND and SET domains and is essential for cardiac differentiation and morphogenesis. Nature Genetics, 2002, 31, 25-32.	9.4	293
27	miR-24 inhibits apoptosis and represses Bim in mouse cardiomyocytes. Journal of Experimental Medicine, 2011, 208, 549-560.	4.2	293
28	MicroRNA Regulation of Cardiovascular Development. Circulation Research, 2009, 104, 724-732.	2.0	286
29	Tbx1, a DiGeorge Syndrome Candidate Gene, Is Regulated by Sonic Hedgehog during Pharyngeal Arch Development. Developmental Biology, 2001, 235, 62-73.	0.9	282
30	HRT1, HRT2, and HRT3: A New Subclass of bHLH Transcription Factors Marking Specific Cardiac, Somitic, and Pharyngeal Arch Segments. Developmental Biology, 1999, 216, 72-84.	0.9	261
31	Canonical Wnt signaling is a positive regulator of mammalian cardiac progenitors. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10894-10899.	3.3	258
32	InÂVivo Cellular Reprogramming: The Next Generation. Cell, 2016, 166, 1386-1396.	13.5	234
33	The Homeodomain Transcription Factor Irx5 Establishes the Mouse Cardiac Ventricular Repolarization Gradient. Cell, 2005, 123, 347-358.	13.5	233
34	Tbx1 is regulated by tissue-specific forkhead proteins through a common Sonic hedgehog-responsive enhancer. Genes and Development, 2003, 17, 269-281.	2.7	232
35	Tbx1 regulates fibroblast growth factors in the anterior heart field through a reinforcing autoregulatory loop involving forkhead transcription factors. Development (Cambridge), 2004, 131, 5491-5502.	1.2	222
36	Spectrum of heart disease associated with murine and human GATA4 mutation. Journal of Molecular and Cellular Cardiology, 2007, 43, 677-685.	0.9	218

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37	A regulatory pathway involving Notch1/Î²-catenin/Isl1 determines cardiac progenitor cell fate.. Nature Cell Biology, 2009, 11, 951-957.	4.6	215
38	microRNA-138 modulates cardiac patterning during embryonic development. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17830-17835.	3.3	214
39	BET bromodomain inhibition suppresses innate inflammatory and profibrotic transcriptional networks in heart failure. Science Translational Medicine, 2017, 9, .	5.8	203
40	The let-7/LIN-41 Pathway Regulates Reprogramming to Human Induced Pluripotent Stem Cells by Controlling Expression of Prodifferentiation Genes. Cell Stem Cell, 2014, 14, 40-52.	5.2	200
41	Single-cell analysis of cardiogenesis reveals basis for organ-level developmental defects. Nature, 2019, 572, 120-124.	13.7	197
42	Disease Model of GATA4 Mutation Reveals Transcription Factor Cooperativity in Human Cardiogenesis. Cell, 2016, 167, 1734-1749.e22.	13.5	195
43	Chemical Enhancement of In Vitro and In Vivo Direct Cardiac Reprogramming. Circulation, 2017, 135, 978-995.	1.6	193
44	Miniaturized iPS-Cell-Derived Cardiac Muscles for Physiologically Relevant Drug Response Analyses. Scientific Reports, 2016, 6, 24726.	1.6	191
45	Generalized Chemical Reactivity of Curved Surfaces:â€‰ Carbon Nanotubes. Nano Letters, 2003, 3, 1273-1277.	4.5	190
46	microRNAs as Developmental Regulators. Cold Spring Harbor Perspectives in Biology, 2015, 7, a008144.	2.3	176
47	Human Disease Modeling Reveals Integrated Transcriptional and Epigenetic Mechanisms of NOTCH1 Haploinsufficiency. Cell, 2015, 160, 1072-1086.	13.5	173
48	The Combinatorial Activities of Nkx2.5 and dHAND Are Essential for Cardiac Ventricle Formation. Developmental Biology, 2001, 239, 190-203.	0.9	168
49	Interaction of Gata4 and Gata6 with Tbx5 is critical for normal cardiac development. Developmental Biology, 2009, 326, 368-377.	0.9	168
50	Small Molecules Enable Cardiac Reprogramming of Mouse Fibroblasts with a Single Factor, Oct4. Cell Reports, 2014, 6, 951-960.	2.9	149
51	Potential of stem-cell-based therapies for heart disease. Nature, 2006, 441, 1097-1099.	13.7	143
52	MicroRNAs: Opening a New Vein in Angiogenesis Research. Science Signaling, 2009, 2, pe1.	1.6	142
53	Oligogenic inheritance of a human heart disease involving a genetic modifier. Science, 2019, 364, 865-870.	6.0	142
54	Thymosin Î²4 mediated PKC activation is essential to initiate the embryonic coronary developmental program and epicardial progenitor cell activation in adult mice in vivo. Journal of Molecular and Cellular Cardiology, 2009, 46, 728-738.	0.9	128

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55	Elevated miR-499 Levels Blunt the Cardiac Stress Response. PLoS ONE, 2011, 6, e19481.	1.1	128
56	Unraveling the genetic and developmental mysteries of 22q11 deletion syndrome. Trends in Molecular Medicine, 2003, 9, 383-389.	3.5	124
57	Expandable Cardiovascular Progenitor Cells Reprogrammed from Fibroblasts. Cell Stem Cell, 2016, 18, 368-381.	5.2	115
58	Left-right asymmetry and cardiac looping: Implications for cardiac development and congenital heart disease. American Journal of Medical Genetics Part A, 2000, 97, 271-279.	2.4	111
59	The Psychiatric Cell Map Initiative: A Convergent Systems Biological Approach to Illuminating Key Molecular Pathways in Neuropsychiatric Disorders. Cell, 2018, 174, 505-520.	13.5	108
60	Ephrin-B2 reverse signaling is required for axon pathfinding and cardiac valve formation but not early vascular development. Developmental Biology, 2004, 271, 263-271.	0.9	107
61	Serum response factor orchestrates nascent sarcomerogenesis and silences the biomineralization gene program in the heart. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17824-17829.	3.3	107
62	Hand2 function in second heart field progenitors is essential for cardiogenesis. Developmental Biology, 2011, 351, 62-69.	0.9	107
63	Identification of GATA6 Sequence Variants in Patients With Congenital Heart Defects. Pediatric Research, 2010, 68, 281-285.	1.1	105
64	Dynamic Chromatin Targeting of BRD4 Stimulates Cardiac Fibroblast Activation. Circulation Research, 2019, 125, 662-677.	2.0	105
65	Essential roles of the bHLH transcription factor Hrt2 in repression of atrial gene expression and maintenance of postnatal cardiac function. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7975-7980.	3.3	102
66	A transcriptional switch governs fibroblast activation in heart disease. Nature, 2021, 595, 438-443.	13.7	100
67	Limited Gene Expression Variation in Human Embryonic Stem Cell and Induced Pluripotent Stem Cell-Derived Endothelial Cells. Stem Cells, 2013, 31, 92-103.	1.4	99
68	Genomic analyses implicate noncoding de novo variants in congenital heart disease. Nature Genetics, 2020, 52, 769-777.	9.4	97
69	microRNA-1 regulates sarcomere formation and suppresses smooth muscle gene expression in the mammalian heart. ELife, 2013, 2, e01323.	2.8	97
70	RNA Sequencing of Mouse Sinoatrial Node Reveals an Upstream Regulatory Role for Islet-1 in Cardiac Pacemaker Cells. Circulation Research, 2015, 116, 797-803.	2.0	95
71	Multi-Imaging Method to Assay the Contractile Mechanical Output of Micropatterned Human iPSC-Derived Cardiac Myocytes. Circulation Research, 2017, 120, 1572-1583.	2.0	95
72	Reprogramming of mouse fibroblasts into cardiomyocyte-like cells in vitro. Nature Protocols, 2013, 8, 1204-1215.	5.5	93

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73	A unified test of linkage analysis and rare-variant association for analysis of pedigree sequence data. Nature Biotechnology, 2014, 32, 663-669.	9.4	93
74	Context-Specific Transcription Factor Functions Regulate Epigenomic and Transcriptional Dynamics during Cardiac Reprogramming. Cell Stem Cell, 2019, 25, 87-102.e9.	5.2	89
75	MicroRNA-10 Regulates the Angiogenic Behavior of Zebrafish and Human Endothelial Cells by Promoting Vascular Endothelial Growth Factor Signaling. Circulation Research, 2012, 111, 1421-1433.	2.0	84
76	Tbx1 is regulated by forkhead proteins in the secondary heart field. Developmental Dynamics, 2006, 235, 701-710.	0.8	81
77	A BAG3 chaperone complex maintains cardiomyocyte function during proteotoxic stress. JCI Insight, 2017, 2, .	2.3	81
78	Congenital Heart Diseaseâ€"Causing Gata4 Mutation Displays Functional Deficits In Vivo. PLoS Genetics, 2012, 8, e1002690.	1.5	77
79	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
80	skNAC, a Smyd1-interacting transcription factor, is involved in cardiac development and skeletal muscle growth and regeneration. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20750-20755.	3.3	73
81	GENETIC REGULATION OF CARDIOGENESIS AND CONGENITAL HEART DISEASE. Annual Review of Pathology: Mechanisms of Disease, 2006, 1, 199-213.	9.6	70
82	The RNA-binding Protein TDP-43 Selectively Disrupts MicroRNA-1/206 Incorporation into the RNA-induced Silencing Complex. Journal of Biological Chemistry, 2014, 289, 14263-14271.	1.6	69
83	The chemokine receptor CXCR7 functions to regulate cardiac valve remodeling. Developmental Dynamics, 2011, 240, 384-393.	0.8	68
84	Fibronectin mediates mesendodermal cell fate decisions. Development (Cambridge), 2013, 140, 2587-2596.	1.2	68
85	The neural crest-enriched microRNA miR-452 regulates epithelial-mesenchymal signaling in the first pharyngeal arch. Development (Cambridge), 2010, 137, 4307-4316.	1.2	64
86	Critical Factors for Cardiac Reprogramming. Circulation Research, 2012, 111, 5-8.	2.0	64
87	Effect of biophysical cues on reprogramming to cardiomyocytes. Biomaterials, 2016, 103, 1-11.	5.7	62
88	Hairy-related Transcription Factors Inhibit GATA-dependent Cardiac Gene Expression through a Signal-responsive Mechanism. Journal of Biological Chemistry, 2004, 279, 54937-54943.	1.6	60
89	The genetics of cardiac birth defects. Seminars in Cell and Developmental Biology, 2007, 18, 132-139.	2.3	58
90	The ACVR1 R206H mutation found in fibrodysplasia ossificans progressiva increases human induced pluripotent stem cell-derived endothelial cell formation and collagen production through BMP-mediated SMAD1/5/8 signaling. Stem Cell Research and Therapy, 2016, 7, 115.	2.4	57

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91	Tbx1 regulates oral epithelial adhesion and palatal development. Human Molecular Genetics, 2012, 21, 2524-2537.	1.4	53
92	Network-based screen in iPSC-derived cells reveals therapeutic candidate for heart valve disease. Science, 2021, 371, .	6.0	53
93	Direct Reprogramming of Fibroblasts into Cardiomyocytes for Cardiac Regenerative Medicine. Circulation Journal, 2015, 79, 245-254.	0.7	49
94	BRD4 orchestrates genome folding to promote neural crest differentiation. Nature Genetics, 2021, 53, 1480-1492.	9.4	48
95	Smyd1 Facilitates Heart Development by Antagonizing Oxidative and ER Stress Responses. PLoS ONE, 2015, 10, e0121765.	1.1	47
96	NOTCH1 regulates matrix gla protein and calcification gene networks in human valve endothelium. Journal of Molecular and Cellular Cardiology, 2015, 84, 13-23.	0.9	44
97	Thymosin Î²4 Is Cardioprotective after Myocardial Infarction. Annals of the New York Academy of Sciences, 2007, 1112, 161-170.	1.8	42
98	Long telomeres protect against age-dependent cardiac disease caused by NOTCH1 haploinsufficiency. Journal of Clinical Investigation, 2017, 127, 1683-1688.	3.9	42
99	Direct Cardiac Reprogramming. Circulation Research, 2013, 113, 915-921.	2.0	41
100	Human eHAND, but not dHAND, is Down-regulated in Cardiomyopathies. Journal of Molecular and Cellular Cardiology, 2001, 33, 1607-1614.	0.9	40
101	Transcription factor protein interactomes reveal genetic determinants in heart disease. Cell, 2022, 185, 794-814.e30.	13.5	39
102	MicroRNAs in Cardiac Development. Pediatric Cardiology, 2010, 31, 349-356.	0.6	37
103	Spatiotemporal regulation of an Hcn4 enhancer defines a role for Mef2c and HDACs in cardiac electrical patterning. Developmental Biology, 2013, 373, 149-162.	0.9	34
104	Hrt and Hes negatively regulate Notch signaling through interactions with RBP-JÎº. Biochemical and Biophysical Research Communications, 2006, 345, 446-452.	1.0	31
105	Cardiac repair with thymosin Î²4 and cardiac reprogramming factors. Annals of the New York Academy of Sciences, 2012, 1270, 66-72.	1.8	31
106	BRD4 (Bromodomain-Containing Protein 4) Interacts with GATA4 (GATA Binding Protein 4) to Govern Mitochondrial Homeostasis in Adult Cardiomyocytes. Circulation, 2020, 142, 2338-2355.	1.6	31
107	GATA6 mutations in hiPSCs inform mechanisms for maldevelopment of the heart, pancreas, and diaphragm. ELife, 2020, 9, .	2.8	31
108	Left, rightâ€¦ which way to turn?. Nature Genetics, 1997, 17, 252-254.	9.4	27

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109	A Genome-Wide Screen Reveals a Role for microRNA-1 in Modulating Cardiac Cell Polarity. Developmental Cell, 2011, 20, 497-510.	3.1	27
110	Congenital Heart Disease. Circulation Research, 2014, 114, 598-599.	2.0	27
111	Loss of Tbx1 induces bone phenotypes similar to cleidocranial dysplasia. Human Molecular Genetics, 2015, 24, 424-435.	1.4	27
112	Transient Cell Cycle Induction in Cardiomyocytes to Treat Subacute Ischemic Heart Failure. Circulation, 2022, 145, 1339-1355.	1.6	27
113	Recent advances in direct cardiac reprogramming. Current Opinion in Genetics and Development, 2015, 34, 77-81.	1.5	19
114	The E3 ubiquitin ligase Nedd4/Nedd4L is directly regulated by microRNA 1. Development (Cambridge), 2017, 144, 866-875.	1.2	18
115	Specification of the mouse cardiac conduction system in the absence of Endothelin signaling. Developmental Biology, 2014, 393, 245-254.	0.9	17
116	Stretching to meet needs: integrin-linked kinase and the cardiac pump. Genes and Development, 2006, 20, 2327-2331.	2.7	16
117	A Rare Human Sequence Variant Reveals Myocardin Autoinhibition. Journal of Biological Chemistry, 2008, 283, 35845-35852.	1.6	15
118	An ongoing genetic battle?. Nature, 2004, 429, 819-822.	13.7	13
119	Cardiac reprogramming: from mouse toward man. Current Opinion in Genetics and Development, 2013, 23, 574-578.	1.5	12
120	Small Solutions to Big Problems. Circulation Research, 2013, 112, 1412-1414.	2.0	12
121	Premature MicroRNA-1 Expression Causes Hypoplasia of the Cardiac Ventricular Conduction System. Frontiers in Physiology, 2019, 10, 235.	1.3	10
122	Building a heart: Implications for congenital heart disease. Journal of Nuclear Cardiology, 2003, 10, 63-70.	1.4	8
123	Heart disease modelling adds a Notch to its belt. Nature Cell Biology, 2016, 18, 3-5.	4.6	7
124	Modeling Human Cardiac Chambers with Organoids. New England Journal of Medicine, 2021, 385, 847-849.	13.9	7
125	Monkeying around with cardiac progenitors: hope for the future. Journal of Clinical Investigation, 2010, 120, 1034-1036.	3.9	7
126	Oxygen. Circulation Research, 2014, 115, 824-825.	2.0	5

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127	Ebsteinâ€™s Anomaly. JACC: Clinical Electrophysiology, 2021, 7, 1198-1206.	1.3	5
128	Fending for a Braveheart. EMBO Journal, 2013, 32, 1211-1213.	3.5	3
129	Robust identification of deletions in exome and genome sequence data based on clustering of Mendelian errors. Human Mutation, 2018, 39, 870-881.	1.1	3
130	A History and Interaction of Outflow Progenitor Cells Implicated in â€œTakao Syndromeâ€• , 2016, , 201-209.		3
131	Sarcomeres and Cardiac Growth: Tension in the Relationship. Trends in Molecular Medicine, 2016, 22, 530-533.	3.5	1
132	Mouse gastruloids take heart. Nature Reviews Cardiology, 2021, 18, 233-234.	6.1	1
133	Reprogramming Approaches to Cardiovascular Disease: From Developmental Biology to Regenerative Medicine. , 2016, , 3-10.		1
134	Cellular cross-talk in heart repair. Science, 2022, 376, 1271-1272.	6.0	1
135	Role of the Transcription Factors dHAND and eHAND in Cardiac Morphogenesis. Pediatric Cardiology, 1998, 19, 160-160.	0.6	0
136	Formation of Endocardial Cushions and Valves. , 2007, , 53-54.		0
137	Formation of Outflow Tracts. , 2007, , 153-153.		0
138	Teratogenic Effects of Bisdiamine on the Developing Myocardium. , 2007, , 44-46.		0
139	Imaging Techniques. , 2007, , 161-161.		0
140	Formation of Specialized Conduction Tissues. , 2007, , 89-90.		0
141	Models of Congenital Cardiovascular Malformations. , 2007, , 119-120.		0
142	Segment and Chamber Specification. , 2007, , 73-74.		0
143	Cardiovascular Anomalies in Patients with Deletion 22q11.2: A Multicenter Study in Korea. , 2007, , 242-243.		0
144	Coronary Artery Development. , 2007, , 107-107.		0

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145	Signaling Pathways Involved in Cardiogenesis. , 2010, , 2601-2609.		0
146	MicroRNA Regulation of Cardiac Development and Disease. , 2010, , 729-740.		0
147	Cardiovascular Physiology During Development. , 0, , 167-168.		0
148	microRNA regulation of cardiac cell fate, morphogenesis and function. FASEB Journal, 2012, 26, 336.2.	0.2	0
149	The E3 ubiquitin ligase Nedd4/Nedd4L is directly regulated by microRNA 1. Journal of Cell Science, 2017, 130, e1.2-e1.2.	1.2	0