Richard A Baldock

List of Publications by Year
in descending order

103 papers	6,074 citations	109321 35 h-index	76900 74 g-index
114 all docs	114 docs citations	114 times ranked	10406 citing authors

#	Article	IF	Citations
1	Optical Projection Tomography as a Tool for 3D Microscopy and Gene Expression Studies. Science, 2002, 296, 541-545.	12.6	1,129
2	The BioMart community portal: an innovative alternative to large, centralized data repositories. Nucleic Acids Research, 2015, 43, W589-W598.	14.5	682
3	A High-Resolution Anatomical Atlas of the Transcriptome in the Mouse Embryo. PLoS Biology, 2011, 9, e1000582.	5.6	552
4	Visualization of image data from cells to organisms. Nature Methods, 2010, 7, S26-S41.	19.0	226
5	The GUDMAP database â€“ an online resource for genitourinary research. Development (Cambridge), 2011, 138, 2845-2853.	2.5	226
6	Spatial organization of active and inactive genes and noncoding DNA within chromosome territories. Journal of Cell Biology, 2002, 157, 579-589.	5.2	207
7	The European dimension for the mouse genome mutagenesis program. Nature Genetics, 2004, 36, 925-927.	21.4	195
8	BioMart Central Portal: an open database network for the biological community. Database: the Journal of Biological Databases and Curation, 2011, 2011, bar041-bar041.	3.0	145
9	EMAGE mouse embryo spatial gene expression database: 2014 update. Nucleic Acids Research, 2014, 42, D835-D844.	14.5	126
10	A high-resolution anatomical ontology of the developing murine genitourinary tract. Gene Expression Patterns, 2007, 7, 680-699.	0.8	125
11	The Virtual Fly Brain browser and query interface. Bioinformatics, 2012, 28, 411-415.	4.1	124
12	An internet-accessible database of mouse developmental anatomy based on a systematic nomenclature. Mechanisms of Development, 1998, 74, 111-120.	1.7	123
13	EMAP and EMAGE: A Framework for Understanding Spatially Organized Data. Neuroinformatics, 2003, 1, 309-326.	2.8	109
14	Digital Atlasing and Standardization in the Mouse Brain. PLoS Computational Biology, 2011, 7, e1001065.	3.2	109
15	An illustrated anatomical ontology of the developing mouse lower urogenital tract. Development (Cambridge), 2015, 142, 1893-1908.	2.5	108
16	EMAGE: a spatial database of gene expression patterns during mouse embryo development. Nucleic Acids Research, 2006, 34, D637-D641.	14.5	88
17	EMAGE mouse embryo spatial gene expression database: 2010 update. Nucleic Acids Research, 2010, 38, D703-D709.	14.5	86
18	The IKMC web portal: a central point of entry to data and resources from the International Knockout Mouse Consortium. Nucleic Acids Research, 2011, 39, D849-D855.	14.5	83

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19	3 dimensional modelling of early human brain development using optical projection tomography. BMC Neuroscience, 2004, 5, 27.	1.9	69
20	Deciphering the Mechanisms of Developmental Disorders (DMDD): a new programme for phenotyping embryonic lethal mice. DMM Disease Models and Mechanisms, 2013, 6, 562-6.	2.4	65
21	Bloomsbury report on mouse embryo phenotyping: recommendations from the IMPC workshop on embryonic lethal screening. DMM Disease Models and Mechanisms, 2013, 6, 571-9.	2.4	63
22	A Three-Dimensional Model of the Mouse at Embryonic Day 9. Developmental Biology, 1999, 216, 457-468.	2.0	62
23	Bioinformatics integration and agent technology. Journal of Biomedical Informatics, 2004, 37, 205-219.	4.3	60
24	Bioinformatics beyond sequence: mapping gene function in the embryo. Nature Reviews Genetics, 2001, 2, 409-417.	16.3	59
25	The Mouse Limb Anatomy Atlas: An interactive 3D tool for studying embryonic limb patterning. BMC Developmental Biology, 2008, 8, 83.	2.1	55
26	Robust point correspondence applied to two- and three-dimensional image registration. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2001, 23, 165-179.	13.9	51
27	Integrating technologies for comparing 3D gene expression domains in the developing chick limb. Developmental Biology, 2008, 317, 13-23.	2.0	46
28	EMAP/EMAPA ontology of mouse developmental anatomy: 2013 update. Journal of Biomedical Semantics, 2013, 4, 15.	1.6	46
29	Mouse anatomy ontologies: enhancements and tools for exploring and integrating biomedical data. Mammalian Genome, 2015, 26, 422-430.	2.2	45
30	Automatic reconstruction of serial sections using the finite element method. Bioimaging, 1995, 3, 154-167.	1.3	41
31	Alpha cluster states in 16O. Nuclear Physics A, 1984, 426, 222-252.	1.5	40
32	The HUDSEN Atlas: a threeâ€dimensional (3D) spatial framework for studying gene expression in the developing human brain. Journal of Anatomy, 2010, 217, 289-299.	1.5	40
33	What's New? A real mouse for your computer. BioEssays, 1992, 14, 501-502.	2.5	37
34	An ontology of human developmental anatomy. Journal of Anatomy, 2003, 203, 347-355.	1.5	36
35	Anatomical and gene expression mapping of the ventral pallium in a three-dimensional model of developing human brain. Neuroscience, 2005, 136, 625-632.	2.3	36
36	Formalization of mouse embryo anatomy. Bioinformatics, 2004, 20, 259-267.	4.1	35

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37	eMouseAtlas, EMAGE, and the spatial dimension of the transcriptome. Mammalian Genome, 2012, 23, 514-524.	2.2	35
38	A strategy to discover new organizers identifies a putative heart organizer. Nature Communications, 2016, 7, 12656.	12.8	31
39	Functional tissue units and their primary tissue motifs in multi-scale physiology. Journal of Biomedical Semantics, 2013, 4, 22.	1.6	30
40	Plasticity of striatopallidal terminals following unilateral lesion of the dopaminergic nigrostriatal pathway: a morphological study. Experimental Brain Research, 1997, 116, 39-49.	1.5	28
41	Deciphering the mechanisms of developmental disorders: phenotype analysis of embryos from mutant mouse lines. Nucleic Acids Research, 2016, 44, D855-D861.	14.5	27
42	eMouseAtlas: An atlas-based resource for understanding mammalian embryogenesis. Developmental Biology, 2017, 423, 1-11.	2.0	27
43	3D modelling, gene expression mapping and post-mapping image analysis in the developing human brain. Brain Research Bulletin, 2005, 66, 449-453.	3.0	26
44	EMAGEâ€"Edinburgh Mouse Atlas of Gene Expression: 2008 update. Nucleic Acids Research, 2008, 36, D860-D865.	14.5	26
45	The atlas of mouse development eHistology resource. Development (Cambridge), 2015, 142, 1909-1911.	2.5	26
46	Web tools for large-scale 3D biological images and atlases. BMC Bioinformatics, 2012, 13, 122.	2.6	25
47	The Mouse Atlas Database: a community resource for mouse development. Trends in Genetics, 2001, 17, 49-51.	6.7	23
48	Cyberinfrastructure for the digital brain: spatial standards for integrating rodent brain atlases. Frontiers in Neuroinformatics, 2014, 8, 74.	2.5	20
49	Deducing the stage of origin of Wilms' tumours from a developmental series of Wt1 mutants. DMM Disease Models and Mechanisms, 2015, 8, 903-17.	2.4	19
50	Automatic reconstruction of serial sections using the finite element method. Bioimaging, 1995, 3, 154-167.	1.3	18
51	Identification of genes downstream of the Shh signalling in the developing chick wing and syn-expressed with Hoxd13 using microarray and 3D computational analysis. Mechanisms of Development, 2010, 127, 428-441.	1.7	18
52	eMouseAtlas informatics: embryo atlas and gene expression database. Mammalian Genome, 2015, 26, 431-440.	2.2	17
53	Video camera calibration for optical densitometry. Journal of Microscopy, 1993, 172, 49-54.	1.8	15
54	JAtlasView: a Java atlas-viewer for browsing biomedical 3D images and atlases. BMC Bioinformatics, 2005, 6, 47.	2.6	14

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55	Constrained distance transforms for spatial atlas registration. BMC Bioinformatics, 2015, 16, 90.	2.6	14
56	Three-dimensional reconstruction of tetraploid<->diploid chimaeric mouse blastocysts. Journal of Anatomy, 2000, 196, 341-346.	1.5	13
57	A criticality-based framework for task composition in multi-agent bioinformatics integration systems. Bioinformatics, 2005, 21, 3155-3163.	4.1	13
58	Automatically identifying and annotating mouse embryo gene expression patterns. Bioinformatics, 2011, 27, 1101-1107.	4.1	13
59	eChickAtlas: An introduction to the database. Genesis, 2013, 51, 365-371.	1.6	13
60	Bloomsbury report on mouse embryo phenotyping: recommendations from the IMPC workshop on embryonic lethal screening. DMM Disease Models and Mechanisms, 2013, 6, 1049-1049.	2.4	13
61	A 3D molecular atlas of the chick embryonic heart. Developmental Biology, 2019, 456, 40-46.	2.0	13
62	The BioMart interface to the eMouseAtlas gene expression database EMAGE. Database: the Journal of Biological Databases and Curation, 2011, 2011, bar029.	3.0	12
63	Access and Use of the GUDMAP Database of Genitourinary Development. Methods in Molecular Biology, 2012, 886, 185-201.	0.9	12
64	PhenoImageShare: an image annotation and query infrastructure. Journal of Biomedical Semantics, 2016, 7, 35.	1.6	12
65	Elucidating the Genetic Networks of Development: A Bioinformatics Approach. Genome Research, 1998, 8, 859-863.	5.5	11
66	Anatomical ontologies: names and places in biology. Genome Biology, 2005, 6, 108.	9.6	11
67	Mining Spatial Gene Expression Data for Association Rules. Lecture Notes in Computer Science, 2007, , 66-76.	1.3	11
68	EMAGE: Electronic Mouse Atlas of Gene Expression. Methods in Molecular Biology, 2014, 1092, 61-79.	0.9	11
69	Trainable models for the interpretation of biomedical images. Image and Vision Computing, 1992, 10, 444-449.	4.5	9
70	The SOFG Anatomy Entry List (SAEL): An Annotation Tool for Functional Genomics Data. Comparative and Functional Genomics, 2004, 5, 521-527.	2.0	9
71	The Open Physiology workflow: modeling processes over physiology circuitboards of interoperable tissue units. Frontiers in Physiology, 2015, 6, 24.	2.8	9
72	Pleiotropic Effects of Sox2 during the Development of the Zebrafish Epithalamus. PLoS ONE, 2014, 9, e87546.	2.5	8

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73	Biomedical Atlases: Systematics, Informatics and Analysis. Advances in Experimental Medicine and Biology, 2012, 736, 655-677.	1.6	7
74	Automating Gene Expression Annotation for Mouse Embryo. Lecture Notes in Computer Science, 2009, , 469-478.	1.3	7
75	Integrating partonomic hierarchies in anatomy ontologies. BMC Bioinformatics, 2004, 5, 184.	2.6	6
76	Developing the eHistology Atlas. Database: the Journal of Biological Databases and Curation, 2015, 2015, bav105.	3.0	5
77	eHistology image and annotation data from the Kaufman Atlas of Mouse Development. GigaScience, 2018, 7, .	6.4	5
78	The Edinburgh Mouse Atlas. Computational Biology, 2008, , 249-265.	0.2	5
79	Woolz IIP: A Tiled On-the-Fly Sectioning Server for 3D Volumetric Atlases. Lecture Notes in Computer Science, 2009, , 924-933.	1.3	5
80	From spatial-data to 3D models of the developing human brain. Methods, 2010, 50, 96-104.	3.8	4
81	Automatic data reuse for accelerating data intensive applications in the Cloud. , 2013, , .		4
82	A Multi-agent Bioinformatics Integration System with Adjustable Autonomy. Lecture Notes in Computer Science, 2002, , 492-501.	1.3	3
83	A Scalable Mediator Approach to Process Large Biomedical 3-D Images. IEEE Transactions on Information Technology in Biomedicine, 2004, 8, 354-359.	3.2	3
84	Enhancing Parallelism of Data-Intensive Bioinformatics Applications. , 2013, , .		3
85	The Edinburgh Mouse Atlas: Basic Structure and Informatics. , 2002, , 129-140.		3
86	Integrated analysis of Wnt signalling system component gene expression. Development (Cambridge), 2022, 149, .	2.5	3
87	Bringing the grid to the biomedical workbench. , 0, , .		2
88	An E-infrastructure to Support Collaborative Embryo Research. , 2009, , .		2
89	Augmented Petri Net Cost Model for Optimisation of Large Bioinformatics Workflows Using Cloud. , 2013, , .		2
90	Automatic data reuse for accelerating data intensive applications in the Cloud. , 2013, , .		2

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91	Anatomical Ontologies: Linking Names to Places in Biology. Computational Biology, 2008, , 197-211.	0.2	2
92	Gene Expression Databases. , 1997, , 247-268.		2
93	A multi-agent bioinformatics integration system with adjustable autonomy. , 2002, , .		1
94	Integrating volumetric biomedical data in the virtual physiological human. , 2011, , .		1
95	The â€˜straight mouseâ€™: defining anatomical axes in 3D embryo models. Database: the Journal of Biological Databases and Curation, 2017, 2017, .	3.0	1
96	Distributed Processing of Large BioMedical 3D Images. Lecture Notes in Computer Science, 2005, , 142-155.	1.3	1
97	The Edinburgh Mouse Atlas Project: Data Mapping and Spatial Organisation. FASEB Journal, 2007, 21, A201.	0.5	1
98	Matching Spatial Regions with Combinations of Interacting Gene Expression Patterns. Communications in Computer and Information Science, 2008, , 347-361.	0.5	1
99	Deducing the stage of origin of Wilms' tumours from a developmental series of Wt1-mutant mice. Development (Cambridge), 2015, 142, e1.2-e1.2.	2.5	1
100	Image Warping through Geometric Model Decomposition. , 2002, , .		0
101	Computational Methods and Bioinformatic Tools. , 0, , 769-904.		0
102	Coronal Sections. , 2016, , 3-49.		0
103	Management of Spatially Organized Biological Data using EMAGE. , 2009, , 469-484.		0