

Clair Baldock

List of Publications by Year in descending order

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Version: 2024-02-01

97
papers

4,316
citations

109137

35
h-index

118652

62
g-index

102
all docs

102
docs citations

102
times ranked

4806
citing authors

#	ARTICLE	IF	CITATIONS
1	Collagens at a glance. <i>Journal of Cell Science</i> , 2007, 120, 1955-1958.	1.2	653
2	Shape of tropoelastin, the highly extensible protein that controls human tissue elasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 4322-4327.	3.3	170
3	The Supramolecular Organization of Fibrillin-Rich Microfibrils. <i>Journal of Cell Biology</i> , 2001, 152, 1045-1056.	2.3	146
4	Assembly of fibrillin microfibrils governs extracellular deposition of latent TGF β 2. <i>Journal of Cell Science</i> , 2010, 123, 3006-3018.	1.2	146
5	Fibrillin Microfibrils are Stiff Reinforcing Fibres in Compliant Tissues. <i>Journal of Molecular Biology</i> , 2003, 332, 183-193.	2.0	134
6	Fibrillin Microfibrils. <i>Advances in Protein Chemistry</i> , 2005, 70, 405-436.	4.4	118
7	X-Ray Crystallographic Studies on Butyryl-ACP Reveal Flexibility of the Structure around a Putative Acyl Chain Binding Site. <i>Structure</i> , 2002, 10, 825-835.	1.6	114
8	Common themes in redox chemistry emerge from the X-ray structure of oilseed rape (<i>Brassica napus</i>) enoyl acyl carrier protein reductase. <i>Structure</i> , 1995, 3, 927-938.	1.6	110
9	The Angiogenic Inhibitor Long Pentraxin PTX3 Forms an Asymmetric Octamer with Two Binding Sites for FGF2. <i>Journal of Biological Chemistry</i> , 2010, 285, 17681-17692.	1.6	106
10	Fibrillin: from microfibril assembly to biomechanical function. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2002, 357, 207-217.	1.8	102
11	Fibrillin microfibrils and elastic fibre proteins: Functional interactions and extracellular regulation of growth factors. <i>Seminars in Cell and Developmental Biology</i> , 2019, 89, 109-117.	2.3	100
12	Differential Regulation of Elastic Fiber Formation by Fibulin-4 and -5. <i>Journal of Biological Chemistry</i> , 2009, 284, 24553-24567.	1.6	98
13	The Supramolecular Organization of Collagen VI Microfibrils. <i>Journal of Molecular Biology</i> , 2003, 330, 297-307.	2.0	96
14	The role of fibrillin and microfibril binding proteins in elastin and elastic fibre assembly. <i>Matrix Biology</i> , 2019, 84, 17-30.	1.5	89
15	Fibrillin-1 Interactions with Heparin. <i>Journal of Biological Chemistry</i> , 2005, 280, 30526-30537.	1.6	88
16	Assembly of the Respiratory Mucin MUC5B. <i>Journal of Biological Chemistry</i> , 2014, 289, 16409-16420.	1.6	76
17	Missense mutations that cause Van der Woude syndrome and popliteal pterygium syndrome affect the DNA-binding and transcriptional activation functions of IRF6. <i>Human Molecular Genetics</i> , 2009, 18, 535-545.	1.4	75
18	Extracellular Regulation of Bone Morphogenetic Protein Activity by the Microfibril Component Fibrillin-1. <i>Journal of Biological Chemistry</i> , 2016, 291, 12732-12746.	1.6	72

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19	Homotypic Fibrillin-1 Interactions in Microfibril Assembly. <i>Journal of Biological Chemistry</i> , 2005, 280, 5013-5021.	1.6	71
20	Tropoelastin and Elastin Assembly. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 643110.	2.0	71
21	A study of the structure-activity relationship for diazaborine inhibition of Escherichia coli enoyl-ACP reductase. <i>Journal of Molecular Biology</i> , 2001, 309, 171-180.	2.0	65
22	Nanostructure of fibrillin-1 reveals compact conformation of EGF arrays and mechanism for extensibility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 11922-11927.	3.3	56
23	Fibrillin-1 Mutations Causing Weill-Marchesani Syndrome and Acromicric and Geleophysic Dysplasias Disrupt Heparan Sulfate Interactions. <i>PLoS ONE</i> , 2012, 7, e48634.	1.1	54
24	Structural and compositional diversity of fibrillin microfibrils in human tissues. <i>Journal of Biological Chemistry</i> , 2018, 293, 5117-5133.	1.6	54
25	Lysyl oxidase-like 2 (LOXL2)-mediated crosslinking of tropoelastin. <i>FASEB Journal</i> , 2019, 33, 5468-5481.	0.2	53
26	Cooperative folding of intrinsically disordered domains drives assembly of a strong elongated protein. <i>Nature Communications</i> , 2015, 6, 7271.	5.8	52
27	The X-ray structure of Escherichia coli enoyl reductase with bound NAD + at 2.1 Å... resolution 1 Edited by R. Huber. <i>Journal of Molecular Biology</i> , 1998, 284, 1529-1546.	2.0	51
28	Tropoelastin bridge region positions the cell-interactive C terminus and contributes to elastic fiber assembly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 2878-2883.	3.3	51
29	ADAMTS10-mediated tissue disruption in Weill-Marchesani syndrome. <i>Human Molecular Genetics</i> , 2018, 27, 3675-3687.	1.4	46
30	A potential role for endogenous proteins as sacrificial sunscreens and antioxidants in human tissues. <i>Redox Biology</i> , 2015, 5, 101-113.	3.9	45
31	Subtle balance of tropoelastin molecular shape and flexibility regulates dynamics and hierarchical assembly. <i>Science Advances</i> , 2016, 2, e1501145.	4.7	43
32	Role of dimerization and substrate exclusion in the regulation of bone morphogenetic protein-1 and mammalian tolloid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 8561-8566.	3.3	40
33	Nanoscale structure of the BMP antagonist chordin supports cooperative BMP binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 13063-13068.	3.3	40
34	Cadherin flexibility provides a key difference between desmosomes and adherens junctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5395-5400.	3.3	37
35	Fibrillin Microfibrils: A Key Role for the Interbead Region in Elasticity. <i>Journal of Molecular Biology</i> , 2009, 388, 168-179.	2.0	36
36	The Role of the C1 and C2 A-domains in Type VI Collagen Assembly. <i>Journal of Biological Chemistry</i> , 2001, 276, 7422-7430.	1.6	35

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37	Structural correlation between collagen VI microfibrils and collagen VI banded aggregates. <i>Journal of Structural Biology</i> , 2006, 154, 312-326.	1.3	35
38	Molecular model of human tropoelastin and implications of associated mutations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 7338-7343.	3.3	35
39	Independent multimerization of Latent TGF β 2 Binding Protein-1 stabilized by cross-linking and enhanced by heparan sulfate. <i>Scientific Reports</i> , 2016, 6, 34347.	1.6	34
40	Coarse-Grained Modeling of Antibodies from Small-Angle Scattering Profiles. <i>Journal of Physical Chemistry B</i> , 2017, 121, 8276-8290.	1.2	30
41	Tropoelastin Implants That Accelerate Wound Repair. <i>Advanced Healthcare Materials</i> , 2018, 7, e1701206.	3.9	29
42	Defining Elastic Fiber Interactions by Molecular Fishing. <i>Molecular and Cellular Proteomics</i> , 2009, 8, 2715-2732.	2.5	27
43	Raman Microscopy and X-ray Diffraction, a Combined Study of Fibrillin-rich Microfibrillar Elasticity. <i>Journal of Biological Chemistry</i> , 2003, 278, 41189-41197.	1.6	26
44	Subunit Arrangement in GpsB, a Regulator of Cell Wall Biosynthesis. <i>Microbial Drug Resistance</i> , 2016, 22, 446-460.	0.9	26
45	Defining the hierarchical organisation of collagen VI microfibrils at nanometre to micrometre length scales. <i>Acta Biomaterialia</i> , 2017, 52, 21-32.	4.1	26
46	Marfan Syndrome-causing Mutations in Fibrillin-1 Result in Gross Morphological Alterations and Highlight the Structural Importance of the Second Hybrid Domain. <i>Journal of Biological Chemistry</i> , 2006, 281, 31854-31862.	1.6	25
47	Structural Effects of Fibulin 5 Missense Mutations Associated with Age-Related Macular Degeneration and Cutis Laxa. , 2010, 51, 2356.		25
48	Heterogeneity of Collagen VI Microfibrils. <i>Journal of Biological Chemistry</i> , 2016, 291, 5247-5258.	1.6	24
49	The herpes viral transcription factor ICP4 forms a novel DNA recognition complex. <i>Nucleic Acids Research</i> , 2017, 45, 8064-8078.	6.5	23
50	Molecular genetic analysis of enoyl-acyl carrier protein reductase inhibition by diazaborine. <i>Molecular Microbiology</i> , 1999, 31, 443-450.	1.2	22
51	A Negatively Charged Residue Stabilizes the Tropoelastin N-terminal Region for Elastic Fiber Assembly. <i>Journal of Biological Chemistry</i> , 2014, 289, 34815-34826.	1.6	22
52	The open architecture of HD-PTP phosphatase provides new insights into the mechanism of regulation of ESCRT function. <i>Scientific Reports</i> , 2017, 7, 9151.	1.6	22
53	Collagen VI, Conformation of A-domain Arrays and Microfibril Architecture. <i>Journal of Biological Chemistry</i> , 2011, 286, 40266-40275.	1.6	21
54	Evidence for the Intramolecular Pleating Model of Fibrillin Microfibril Organisation from Single Particle Image Analysis. <i>Journal of Molecular Biology</i> , 2005, 349, 73-85.	2.0	20

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55	Structural and functional evidence for a substrate exclusion mechanism in mammalian tolloid like α 1 (TLL α 1) proteinase. FEBS Letters, 2010, 584, 657-661.	1.3	20
56	BMP antagonists in tissue development and disease. Matrix Biology Plus, 2021, 11, 100071.	1.9	20
57	The C-terminal dimerization domain of the respiratory mucin MUC5B functions in mucin stability and intracellular packaging before secretion. Journal of Biological Chemistry, 2019, 294, 17105-17116.	1.6	19
58	Tropoelastin is a Flexible Molecule that Retains its Canonical Shape. Macromolecular Bioscience, 2019, 19, 1800250.	2.1	19
59	Collagen VI Microfibril Formation Is Abolished by an α 2(VI) von Willebrand Factor Type A Domain Mutation in a Patient with Ullrich Congenital Muscular Dystrophy. Journal of Biological Chemistry, 2010, 285, 33567-33576.	1.6	18
60	Inter- α -inhibitor heavy chain-1 has an integrin-like 3D structure mediating immune regulatory activities and matrix stabilization during ovulation. Journal of Biological Chemistry, 2020, 295, 5278-5291.	1.6	18
61	Transglutaminase-Mediated Cross-Linking of Tropoelastin to Fibrillin Stabilises the Elastin Precursor Prior to Elastic Fibre Assembly. Journal of Molecular Biology, 2020, 432, 5736-5751.	2.0	17
62	Structural analysis of X-linked retinoschisis mutations reveals distinct classes which differentially effect retinoschisin function. Human Molecular Genetics, 2016, 25, ddw345.	1.4	16
63	Targeted Modulation of Tropoelastin Structure and Assembly. ACS Biomaterials Science and Engineering, 2017, 3, 2832-2844.	2.6	16
64	Synthetic enzyme-substrate tethering obviates the Tolloid-ECM interaction during Drosophila BMP gradient formation. ELife, 2015, 4, .	2.8	16
65	The role of chordin fragments generated by partial tolloid cleavage in regulating BMP activity. Biochemical Society Transactions, 2015, 43, 795-800.	1.6	15
66	Structural characterization of twisted gastrulation provides insights into opposing functions on the BMP signalling pathway. Matrix Biology, 2016, 55, 49-62.	1.5	15
67	Dual role of the active site α -lid TM regions of protochlorophyllide oxidoreductase in photocatalysis and plant development. FEBS Journal, 2021, 288, 175-189.	2.2	15
68	Internal cleavage and synergy with twisted gastrulation enhance BMP inhibition by BMPER. Matrix Biology, 2019, 77, 73-86.	1.5	13
69	Proteolysis of fibrillin-2 microfibrils is essential for normal skeletal development. ELife, 2022, 11, .	2.8	13
70	Tissue specific differences in fibrillin microfibrils analysed using single particle image analysis. Journal of Structural Biology, 2006, 155, 285-293.	1.3	12
71	The morphology of adsorbed extracellular matrix assemblies is critically dependent on solution calcium concentration. Matrix Biology, 2007, 26, 156-166.	1.5	12
72	A Role for Soluble α -Ethylmaleimide-sensitive Factor Attachment Protein Receptor Complex Dimerization during Neurosecretion. Molecular Biology of the Cell, 2008, 19, 3379-3389.	0.9	12

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73	Order within disorder: Aggrecan chondroitin sulphate attachment region provides new structural insights into protein sequences classified as disordered. <i>Proteins: Structure, Function and Bioinformatics</i> , 2010, 78, 3317-3327.	1.5	12
74	Deriving the ultrastructure of Î±-crustacyanin using lower-resolution structural and biophysical methods. <i>Journal of Synchrotron Radiation</i> , 2011, 18, 79-83.	1.0	12
75	The Cryo-EM structure of the CorA channel from <i>Methanocaldococcus jannaschii</i> in low magnesium conditions. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2015, 1848, 2206-2215.	1.4	12
76	Multiscale Imaging Reveals the Hierarchical Organization of Fibrillin Microfibrils. <i>Journal of Molecular Biology</i> , 2018, 430, 4142-4155.	2.0	12
77	Elastic Fibre Proteins in Elastogenesis and Wound Healing. <i>International Journal of Molecular Sciences</i> , 2022, 23, 4087.	1.8	12
78	Crystallization and preliminary X-ray crystallographic studies on acyl-(acyl carrier protein) from <i>Escherichia coli</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2002, 58, 330-332.	2.5	11
79	Fibulin 5 Forms a Compact Dimer in Physiological Solutions. <i>Journal of Biological Chemistry</i> , 2009, 284, 25938-25943.	1.6	11
80	A new MMP-mediated prodomain cleavage mechanism to activate bone morphogenetic proteins from the extracellular matrix. <i>FASEB Journal</i> , 2021, 35, e21353.	0.2	10
81	Structure of PLA2R reveals presentation of the dominant membranous nephropathy epitope and an immunogenic patch. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	10
82	Mammalian tolloid proteinases: role in growth factor signalling. <i>FEBS Letters</i> , 2016, 590, 2398-2407.	1.3	9
83	The Dual PDZ Domain from Postsynaptic Density Protein 95 Forms a Scaffold with Peptide Ligand. <i>Biophysical Journal</i> , 2020, 119, 667-689.	0.2	9
84	Latent TGFÎ² complexes are transglutaminase cross-linked to fibrillin to facilitate TGFÎ² activation. <i>Matrix Biology</i> , 2022, 107, 24-39.	1.5	9
85	Diversity between mammalian tolloid proteinases: Oligomerisation and non-catalytic domains influence activity and specificity. <i>Scientific Reports</i> , 2016, 6, 21456.	1.6	8
86	Marfan Syndrome-causing Mutations in Fibrillin-1 Result in Gross Morphological Alterations and Highlight the Structural Importance of the Second Hybrid Domain. <i>Journal of Biological Chemistry</i> , 2006, 281, 31854-31862.	1.6	7
87	Delineation of a new fibrillin-2-pathway with evidence for a role of FBN2 in the pathogenesis of carpal tunnel syndrome. <i>Journal of Medical Genetics</i> , 2020, 58, jmedgenet-2020-107085.	1.5	4
88	Unraveling the Mechanism of Procollagen C-Proteinase Enhancer. <i>Structure</i> , 2018, 26, 1299-1301.	1.6	3
89	Autosomal Recessive Cutis Laxa 1C Mutations Disrupt the Structure and Interactions of Latent TGFÎ² Binding Protein-4. <i>Frontiers in Genetics</i> , 2021, 12, 706662.	1.1	3
90	Fibrillin: From Microfibril Assembly to Biomechanical Function. , 2003, , 94-114.		2

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91	Structural studies of elastic fibre and microfibrillar proteins. <i>Matrix Biology Plus</i> , 2021, 12, 100078.	1.9	2
92	Modelling the structure of Short Gastrulation and generation of a toolkit for studying its function in <i>Drosophila</i> . <i>Biology Open</i> , 2022, 11, .	0.6	1
93	Reprint of "Structural correlation between collagen VI microfibrils and collagen VI banded aggregates". <i>J. Struct. Biol.</i> 154 (2006) 312-326]. <i>Journal of Structural Biology</i> , 2006, 155, 379-393.	1.3	0
94	Organization and Biomechanical Properties of Fibrillin Microfibrils. , 2004, , 143-160.		0
95	Order in Disorder: Aggrecan CS Region Predicts a New Class of Protein Structure. <i>FASEB Journal</i> , 2010, 24, 684.9.	0.2	0
96	Molecular Cloning, Lentiviral Transduction, and Expression of Recombinant ADAMTSL2 and ADAMTSL4. <i>Methods in Molecular Biology</i> , 2020, 2043, 137-155.	0.4	0
97	Purification of Recombinant ADAMTSL2. <i>Methods in Molecular Biology</i> , 2020, 2043, 157-172.	0.4	0