

# Michael J Sherratt

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

100 papers	5,253 citations	39 h-index	72 g-index
114 ext. papers	5,973 ext. citations	6.1 avg, IF	5.68 L-index

#	Paper	IF	Citations
100	Matrikines as Mediators of Tissue Remodelling.. <i>Advanced Drug Delivery Reviews</i> , <b>2022</b> , 114240	18.5	4
99	Predicting Proteolysis in Complex Proteomes Using Deep Learning. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	4
98	Peptide location fingerprinting reveals modification-associated biomarker candidates of ageing in human tissue proteomes. <i>Aging Cell</i> , <b>2021</b> , 20, e13355	9.9	1
97	Matrix-Bound Growth Factors are Released upon Cartilage Compression by an Aggrecan-Dependent Sodium Flux that is Lost in Osteoarthritis. <i>Function</i> , <b>2021</b> , 2, zqab037	6.1	5
96	Predicting and characterising protein damage in the extracellular matrix. <i>Journal of Photochemistry and Photobiology</i> , <b>2021</b> , 7, 100055	0.8	0
95	X-ray microtomography reveals a lattice-like network within aortic elastic lamellae. <i>FASEB Journal</i> , <b>2021</b> , 35, e21844	0.9	0
94	The systemic influence of chronic smoking on skin structure and mechanical function. <i>Journal of Pathology</i> , <b>2020</b> , 251, 420-428	9.4	6
93	Heterogeneity of fibrillin-rich microfibrils extracted from human skin of diverse ethnicity. <i>Journal of Anatomy</i> , <b>2020</b> , 237, 478-486	2.9	6
92	X-ray Micro-Computed Tomography: An Emerging Technology to Analyze Vascular Calcification in Animal Models. <i>International Journal of Molecular Sciences</i> , <b>2020</b> , 21,	6.3	3
91	Proteomic fingerprints of damage in extracellular matrix assemblies. <i>Matrix Biology Plus</i> , <b>2020</b> , 5, 100027	5.1	9
90	Remodelling of fibrillin-rich microfibrils by solar-simulated radiation: impact of skin ethnicity. <i>Photochemical and Photobiological Sciences</i> , <b>2020</b> , 19, 1160-1167	4.2	2
89	How stiff is skin?. <i>Experimental Dermatology</i> , <b>2019</b> , 28 Suppl 1, 4-9	4	18
88	Lysyl oxidase-like 2 (LOXL2)-mediated cross-linking of tropoelastin. <i>FASEB Journal</i> , <b>2019</b> , 33, 5468-5481	0.9	31
87	Human Skin: Composition, Structure and Visualisation Methods. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , <b>2019</b> , 1-18	0.5	4
86	Fibrillin microfibrils and elastic fibre proteins: Functional interactions and extracellular regulation of growth factors. <i>Seminars in Cell and Developmental Biology</i> , <b>2019</b> , 89, 109-117	7.5	54
85	Circadian rhythms in skin and other elastic tissues. <i>Matrix Biology</i> , <b>2019</b> , 84, 97-110	11.4	12
84	Biotribology of the ageing skinWhy we should care. <i>Biotribology</i> , <b>2019</b> , 17, 75-90	2.3	14

83	Selective proteolysis by matrix metalloproteinases of photo-oxidised dermal extracellular matrix proteins. <i>Cellular Signalling</i> , <b>2019</b> , 54, 191-199	4.9	18
82	Structural and compositional diversity of fibrillin microfibrils in human tissues. <i>Journal of Biological Chemistry</i> , <b>2018</b> , 293, 5117-5133	5.4	33
81	Defining tissue proteomes by systematic literature review. <i>Scientific Reports</i> , <b>2018</b> , 8, 546	4.9	7
80	Macro- and micromechanical remodelling in the fish atrium is associated with regulation of collagen 1 alpha 3 chain expression. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2018</b> , 470, 1205-1219	4.6	6
79	Multiscale Imaging Reveals the Hierarchical Organization of Fibrillin Microfibrils. <i>Journal of Molecular Biology</i> , <b>2018</b> , 430, 4142-4155	6.5	7
78	The Impact of Ultraviolet Radiation on Barrier Function in Human Skin: Molecular Mechanisms and Topical Therapeutics. <i>Current Medicinal Chemistry</i> , <b>2018</b> , 25, 5503-5511	4.3	9
77	MicroCT imaging reveals differential 3D micro-scale remodelling of the murine aorta in ageing and Marfan syndrome. <i>Theranostics</i> , <b>2018</b> , 8, 6038-6052	12.1	7
76	Defining the hierarchical organisation of collagen VI microfibrils at nanometre to micrometre length scales. <i>Acta Biomaterialia</i> , <b>2017</b> , 52, 21-32	10.8	19
75	Implication of Free Fatty Acids in Thrombin Generation and Fibrinolysis in Vascular Inflammation in Zucker Rats and Evolution with Aging. <i>Frontiers in Physiology</i> , <b>2017</b> , 8, 949	4.6	5
74	Three-dimensional visualisation of soft biological structures by X-ray computed micro-tomography. <i>Journal of Cell Science</i> , <b>2016</b> , 129, 2483-92	5.3	43
73	Raised mammographic density: causative mechanisms and biological consequences. <i>Breast Cancer Research</i> , <b>2016</b> , 18, 45	8.3	42
72	Increased peri-ductal collagen micro-organization may contribute to raised mammographic density. <i>Breast Cancer Research</i> , <b>2016</b> , 18, 5	8.3	70
71	The impact of intrinsic ageing on the protein composition of the dermal-epidermal junction. <i>Mechanisms of Ageing and Development</i> , <b>2016</b> , 156, 14-6	5.6	45
70	The Skin Extracellular Matrix as a Target of Environmental Exposure: Molecular Mechanisms, Prevention and Repair <b>2016</b> , 101-125		2
69	Combined MSC and GLP-1 Therapy Modulates Collagen Remodeling and Apoptosis following Myocardial Infarction. <i>Stem Cells International</i> , <b>2016</b> , 2016, 7357096	5	8
68	Morphological Characterisation of Unstained and Intact Tissue Micro-architecture by X-ray Computed Micro- and Nano-Tomography. <i>Scientific Reports</i> , <b>2015</b> , 5, 10074	4.9	72
67	A novel ex vivo model of compressive immature rib fractures at pathophysiological rates of loading. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2015</b> , 51, 154-62	4.1	3
66	Body mass index and dermal remodelling. <i>Experimental Dermatology</i> , <b>2015</b> , 24, 922-3	4	7

65	A potential role for endogenous proteins as sacrificial sunscreens and antioxidants in human tissues. <i>Redox Biology</i> , <b>2015</b> , 5, 101-113	11.3	37
64	Over-the-counter anti-ageing topical agents and their ability to protect and repair photoaged skin. <i>Maturitas</i> , <b>2015</b> , 80, 265-72	5	14
63	The Dynamic Nature of Hypertrophic and Fibrotic Remodeling of the Fish Ventricle. <i>Frontiers in Physiology</i> , <b>2015</b> , 6, 427	4.6	35
62	Damage to skin extracellular matrix induced by UV exposure. <i>Antioxidants and Redox Signaling</i> , <b>2014</b> , 21, 1063-77	8.4	81
61	Geographical ancestry is a key determinant of epidermal morphology and dermal composition. <i>British Journal of Dermatology</i> , <b>2014</b> , 171, 274-82	4	23
60	Skin health in older age. <i>Maturitas</i> , <b>2014</b> , 79, 256-64	5	36
59	Localized micro- and nano-scale remodelling in the diabetic aorta. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 4843-4851	10.8	20
58	Scanning acoustic microscopy of biological cryosections: the effect of local thickness on apparent acoustic wave speed. <i>Materials Research Society Symposia Proceedings</i> , <b>2014</b> , 1621, 143-148		
57	Growth differentiation factor 6 and transforming growth factor-beta differentially mediate mesenchymal stem cell differentiation, composition, and micromechanical properties of nucleus pulposus constructs. <i>Arthritis Research and Therapy</i> , <b>2014</b> , 16, R67	5.7	92
56	Structural proteins and arterial ageing. <i>Artery Research</i> , <b>2013</b> , 7, 15	2.2	4
55	Cross-linking of structural proteins in ageing skin: an in situ assay for the detection of amine oxidase activity. <i>Biogerontology</i> , <b>2013</b> , 14, 89-97	4.5	23
54	Age-Related Tissue Stiffening: Cause and Effect. <i>Advances in Wound Care</i> , <b>2013</b> , 2, 11-17	4.8	40
53	Chemical consequences of cutaneous photoageing. <i>Chemistry Central Journal</i> , <b>2012</b> , 6, 34		20
52	Multi-layer phase analysis: quantifying the elastic properties of soft tissues and live cells with ultra-high-frequency scanning acoustic microscopy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2012</b> , 59, 610-20	3.2	21
51	Differential expression of elastic fibre components in intrinsically aged skin. <i>Biogerontology</i> , <b>2012</b> , 13, 37-48	4.5	26
50	Molecular aspects of skin ageing. <i>Maturitas</i> , <b>2011</b> , 69, 249-56	5	334
49	Localised micro-mechanical stiffening in the ageing aorta. <i>Mechanisms of Ageing and Development</i> , <b>2011</b> , 132, 459-67	5.6	39
48	Characterizing the elastic properties of tissues. <i>Materials Today</i> , <b>2011</b> , 14, 96-105	21.8	184

47	Network connectivity, mechanical properties and cell adhesion for hyaluronic acid/PEG hydrogels. <i>Biomaterials</i> , <b>2011</b> , 32, 6456-70	15.6	87
46	Quantifying Micro-mechanical Properties of Soft Biological Tissues with Scanning Acoustic Microscopy. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1301, 181		4
45	The Effect of Type 1 Diabetes on the Structure and Function of Fibrillin Microfibrils. <i>Materials Research Society Symposia Proceedings</i> , <b>2010</b> , 1274, 1		4
44	Growth of collagen fibril seeds from embryonic tendon: fractured fibril ends nucleate new tip growth. <i>Journal of Molecular Biology</i> , <b>2010</b> , 399, 9-16	6.5	14
43	Tissue section AFM: In situ ultrastructural imaging of native biomolecules. <i>Matrix Biology</i> , <b>2010</b> , 29, 254-60	4	82
42	Low-dose ultraviolet radiation selectively degrades chromophore-rich extracellular matrix components. <i>Journal of Pathology</i> , <b>2010</b> , 222, 32-40	9.4	50
41	A new wrinkle on old skin: the role of elastic fibres in skin ageing. <i>International Journal of Cosmetic Science</i> , <b>2010</b> , 32, 330-9	2.7	109
40	Nanoindentation of histological specimens: Mapping the elastic properties of soft tissues. <i>Journal of Materials Research</i> , <b>2009</b> , 24, 638-646	2.5	67
39	Tissue elasticity and the ageing elastic fibre. <i>Age</i> , <b>2009</b> , 31, 305-25		207
38	Liver X receptor $\gamma$ maintenance of epidermal expression in intrinsic and extrinsic skin aging. <i>Age</i> , <b>2009</b> , 31, 365-72		2
37	Self-assembly and gelation properties of $\alpha$ helix versus $\beta$ sheet forming peptides. <i>Soft Matter</i> , <b>2009</b> , 5, 193-202	3.6	112
36	ECM macromolecules: height-mapping and nano-mechanics using atomic force microscopy. <i>Methods in Molecular Biology</i> , <b>2009</b> , 522, 123-41	1.4	4
35	Mapping the Micromechanical Properties of Cryo-sectioned Aortic Tissue with Scanning Acoustic Microscopy. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1132E, ukpmcpa27262		9
34	Mass-mapping of ECM macromolecules by scanning transmission electron microscopy. <i>Methods in Molecular Biology</i> , <b>2009</b> , 522, 151-61	1.4	2
33	Nanoindentation of Histological Specimens using an Extension of the Oliver and Pharr Method. <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1097, 1		2
32	The morphology of adsorbed extracellular matrix assemblies is critically dependent on solution calcium concentration. <i>Matrix Biology</i> , <b>2007</b> , 26, 156-66	11.4	11
31	Applying elastic fibre biology in vascular tissue engineering. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2007</b> , 362, 1293-312	5.8	53
30	Reprint of "Structural correlation between collagen VI microfibrils and collagen VI banded aggregates" [J. Struct. Biol. 154 (2006) 312-326]. <i>Journal of Structural Biology</i> , <b>2006</b> , 155, 379-93	3.4	

29	Tissue specific differences in fibrillin microfibrils analysed using single particle image analysis. <i>Journal of Structural Biology</i> , <b>2006</b> , 155, 285-93	3.4	7
28	Structural correlation between collagen VI microfibrils and collagen VI banded aggregates. <i>Journal of Structural Biology</i> , <b>2006</b> , 154, 312-26	3.4	29
27	Proteomic analysis of fibrillin-rich microfibrils. <i>Proteomics</i> , <b>2006</b> , 6, 111-22	4.8	78
26	Fibulin-5 interacts with fibrillin-1 molecules and microfibrils. <i>Biochemical Journal</i> , <b>2005</b> , 388, 1-5	3.8	90
25	Substrate chemistry influences the morphology and biological function of adsorbed extracellular matrix assemblies. <i>Biomaterials</i> , <b>2005</b> , 26, 7192-206	15.6	52
24	Extracellular matrix molecules in vascular tissue engineering <b>2005</b> , 637-665		3
23	Fibrillin microfibrils. <i>Advances in Protein Chemistry</i> , <b>2005</b> , 70, 405-36		105
22	Expression and supramolecular assembly of recombinant alpha1(viii) and alpha2(viii) collagen homotrimers. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 21469-77	5.4	49
21	Substrate-dependent morphology of supramolecular assemblies: fibrillin and type-VI collagen microfibrils. <i>Biophysical Journal</i> , <b>2004</b> , 86, 3211-22	2.9	41
20	Organization and Biomechanical Properties of Fibrillin Microfibrils <b>2004</b> , 143-160		
19	Fibrillin: From Microfibril Assembly to Biomechanical Function <b>2003</b> , 94-114		2
18	The supramolecular organization of collagen VI microfibrils. <i>Journal of Molecular Biology</i> , <b>2003</b> , 330, 2973-97	6.7	80
17	Fibrillin microfibrils are stiff reinforcing fibres in compliant tissues. <i>Journal of Molecular Biology</i> , <b>2003</b> , 332, 183-93	6.5	120
16	Fibrillin-rich microfibrils: elastic biopolymers of the extracellular matrix. <i>Journal of Muscle Research and Cell Motility</i> , <b>2002</b> , 23, 581-596	3.5	74
15	Elastic fibres. <i>Journal of Cell Science</i> , <b>2002</b> , 115, 2817-2828	5.3	622
14	Elastic fibres. <i>Journal of Cell Science</i> , <b>2002</b> , 115, 2817-28	5.3	567
13	Fibrillin-rich microfibrils of the extracellular matrix: ultrastructure and assembly. <i>Micron</i> , <b>2001</b> , 32, 185-200	2.0	69
12	The supramolecular organization of fibrillin-rich microfibrils. <i>Journal of Cell Biology</i> , <b>2001</b> , 152, 1045-56	7.3	136

11	ECM macromolecules: rotary shadowing and scanning transmission electron microscopy. <i>Methods in Molecular Biology</i> , <b>2000</b> , 139, 119-32	1.4	1
10	Fibrillin degradation by matrix metalloproteinases: implications for connective tissue remodelling. <i>Biochemical Journal</i> , <b>1999</b> , 340, 171-181	3.8	194
9	Fibrillin degradation by matrix metalloproteinases: implications for connective tissue remodelling. <i>Biochemical Journal</i> , <b>1999</b> , 340, 171	3.8	67
8	Calcium determines the supramolecular organization of fibrillin-rich microfibrils. <i>Journal of Cell Biology</i> , <b>1998</b> , 141, 829-37	7.3	65
7	The Tight skin mouse: demonstration of mutant fibrillin-1 production and assembly into abnormal microfibrils. <i>Journal of Cell Biology</i> , <b>1998</b> , 140, 1159-66	7.3	97
6	Scanning transmission electron microscopy mass analysis of fibrillin-containing microfibrils from foetal elastic tissues. <i>International Journal of Biochemistry and Cell Biology</i> , <b>1997</b> , 29, 1063-70	5.6	40
5	Gastroduodenal dysfunction and bacterial colonisation of the ventilated lung. <i>Lancet, The</i> , <b>1993</b> , 341, 911-3	4.0	175
4	Antibacterial activity of sucralfate against <i>Escherichia coli</i> , <i>Staphylococcus aureus</i> and <i>Pseudomonas aeruginosa</i> in batch and continuous culture. <i>European Journal of Clinical Microbiology and Infectious Diseases</i> , <b>1993</b> , 12, 869-71	5.3	16
3	Gastroduodenal dysfunction as a cause of gastric bacterial overgrowth in patients undergoing mechanical ventilation of the lungs. <i>British Journal of Anaesthesia</i> , <b>1992</b> , 68, 499-502	5.4	34
2	Peptide location fingerprinting reveals modification-associated biomarkers of ageing in human tissue proteomes		1
1	Estrogen mediates acute elastic fibre homeostasis in skin		1