Martin Griffin

List of Publications by Year
in descending order

114 papers	6,074 citations	57631 44 h-index	74018 75 g-index
114 all docs	114 docs citations	114 times ranked	6682 citing authors

#	Article	IF	Citations
1	Transglutaminases: Natureâ€™s biological glues. Biochemical Journal, 2002, 368, 377-396.	1.7	955
2	The cellular response to transglutaminase-cross-linked collagen. Biomaterials, 2005, 26, 6518-6529.	5.7	183
3	Measurement of tissue transglutaminase activity in a permeabilized cell system: its regulation by Ca2+ and nucleotides. Biochemical Journal, 1996, 313, 803-808.	1.7	146
4	Transglutaminase 2 cross-linking of matrix proteins: biological significance and medical applications. Amino Acids, 2009, 36, 659-670.	1.2	139
5	Application of transglutaminases in the modification of wool textiles. Enzyme and Microbial Technology, 2004, 34, 64-72.	1.6	134
6	A Novel RGD-independent Cell Adhesion Pathway Mediated by Fibronectin-bound Tissue Transglutaminase Rescues Cells from Anoikis. Journal of Biological Chemistry, 2003, 278, 42604-42614.	1.6	128
7	Analysis of Tissue Transglutaminase Function in the Migration of Swiss 3T3 Fibroblasts. Journal of Biological Chemistry, 2002, 277, 16567-16575.	1.6	126
8	Cell Surface Localization of Tissue Transglutaminase Is Dependent on a Fibronectin-binding Site in Its N-terminal Î²-Sandwich Domain. Journal of Biological Chemistry, 1999, 274, 30707-30714.	1.6	125
9	Transglutaminase overexpression sensitizes neuronal cell lines to apoptosis by increasing mitochondrial membrane potential and cellular oxidative stress. Journal of Neurochemistry, 2002, 81, 1061-1072.	2.1	117
10	Fibronectin-Tissue Transglutaminase Matrix Rescues RGD-impaired Cell Adhesion through Syndecan-4 and Î²1 Integrin Co-signaling. Journal of Biological Chemistry, 2008, 283, 20937-20947.	1.6	117
11	Unexpected Role of Surface Transglutaminase Type II in Celiac Disease. Gastroenterology, 2005, 129, 1400-1413.	0.6	114
12	Transglutaminase Inhibition Reduces Fibrosis and Preserves Function in Experimental Chronic Kidney Disease. Journal of the American Society of Nephrology: JASN, 2007, 18, 3078-3088.	3.0	111
13	Tissue transglutaminase (TG2) - a wound response enzyme. Frontiers in Bioscience - Landmark, 2006, 11, 867.	3.0	108
14	Enzymatic stabilization of gelatin-based scaffolds. Journal of Biomedical Materials Research Part B, 2005, 72B, 37-42.	3.0	103
15	TG2, a novel extracellular protein with multiple functions. Amino Acids, 2012, 42, 939-949.	1.2	101
16	Tissue Transglutaminase and the Progression of Human Renal Scarring. Journal of the American Society of Nephrology: JASN, 2003, 14, 2052-2062.	3.0	99
17	Purification and Properties of Cyclopentanone Oxygenase of Pseudomonas NCIB 9872. FEBS Journal, 1976, 63, 199-209.	0.2	97
18	Regulation of Cell Surface Tissue Transglutaminase: Effects on Matrix Storage of Latent Transforming Growth Factor-Î² Binding Protein-1. Journal of Histochemistry and Cytochemistry, 1999, 47, 1417-1432.	1.3	97

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19	Transglutaminase inhibition ameliorates experimental diabetic nephropathy. Kidney International, 2009, 76, 383-394.	2.6	94
20	Transglutaminase 2 is involved in autophagosome maturation. Autophagy, 2009, 5, 1145-1154.	4.3	89
21	Transglutaminase Transcription and Antigen Translocation in Experimental Renal Scarring. Journal of the American Society of Nephrology: JASN, 1999, 10, 2146-2157.	3.0	88
22	Transglutaminase treatment of wool fabrics leads to resistance to detergent damage. Journal of Biotechnology, 2005, 116, 379-386.	1.9	86
23	Isolation and Characterization of a Cyclohexane-Metabolizing Xanthobacter sp. Applied and Environmental Microbiology, 1985, 49, 1282-1289.	1.4	82
24	RGD-independent Cell Adhesion via a Tissue Transglutaminase-Fibronectin Matrix Promotes Fibronectin Fibril Deposition and Requires Syndecan-4/2 and Î±5Î²1 Integrin Co-signaling. Journal of Biological Chemistry, 2010, 285, 40212-40229.	1.6	81
25	Inhibition of Transglutaminase Activity Reduces Extracellular Matrix Accumulation Induced by High Glucose Levels in Proximal Tubular Epithelial Cells. Journal of Biological Chemistry, 2004, 279, 47754-47762.	1.6	77
26	The metabolism of cyclopentanol by Pseudomonas N.C.I.B. 9872. Biochemical Journal, 1972, 129, 595-603.	3.2	74
27	Detection of Ca2+-Dependent Transglutaminase Activity in Root and Leaf Tissue of Monocotyledonous and Dicotyledonous Plants. Plant Physiology, 1998, 117, 1115-1123.	2.3	70
28	Towards development of a dermal rudiment for enhanced wound healing response. Biomaterials, 2008, 29, 857-868.	5.7	70
29	Characterization of a Microbial Transglutaminase Cross-linked Type II Collagen Scaffold. Tissue Engineering, 2006, 12, 1467-1474.	4.9	69
30	Importance of syndecan-4 and syndecan -2 in osteoblast cell adhesion and survival mediated by a tissue transglutaminaseâ˜fibronectin complex. Experimental Cell Research, 2011, 317, 367-381.	1.2	69
31	In Vitro Characterization of a Collagen Scaffold Enzymatically Cross-Linked with a Tailored Elastin-like Polymer. Tissue Engineering - Part A, 2009, 15, 887-899.	1.6	68
32	Synthesis of potent water-soluble tissue transglutaminase inhibitors. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5559-5562.	1.0	66
33	Increased TG2 Expression Can Result in Induction of Transforming Growth Factor Î²1, Causing Increased Synthesis and Deposition of Matrix Proteins, Which Can Be Regulated by Nitric Oxide. Journal of Biological Chemistry, 2009, 284, 29547-29558.	1.6	65
34	Cardiac fibrosis can be attenuated by blocking the activity of transglutaminase 2 using a selective small-molecule inhibitor. Cell Death and Disease, 2018, 9, 613.	2.7	65
35	Alterations in the distribution and activity of transglutaminase during tumour growth and metastasis. Carcinogenesis, 1985, 6, 459-463.	1.3	64
36	Characterization of Heparin-binding Site of Tissue Transglutaminase. Journal of Biological Chemistry, 2012, 287, 13063-13083.	1.6	64

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37	Cross-linking of cellular proteins by tissue transglutaminase during necrotic cell death: a mechanism for maintaining tissue integrity. Biochemical Journal, 2003, 371, 413-422.	1.7	63
38	Transglutaminase mediated grafting of silk proteins onto wool fabrics leading to improved physical and mechanical properties. Enzyme and Microbial Technology, 2007, 40, 1698-1704.	1.6	61
39	Assessment of cell viability in a three-dimensional enzymatically cross-linked collagen scaffold. Journal of Materials Science: Materials in Medicine, 2007, 18, 1991-2001.	1.7	57
40	Increases in Renal Îµ-(Î³-Glutamyl)-Lysine Crosslinks Result from Compartment-Specific Changes in Tissue Transglutaminase in Early Experimental Diabetic Nephropathy: Pathologic Implications. Laboratory Investigation, 2001, 81, 705-716.	1.7	50
41	Celiac disease IgA modulates vascular permeability in vitro through the activity of transglutaminase 2 and RhoA. Cellular and Molecular Life Sciences, 2009, 66, 3375-3385.	2.4	50
42	An extracellular transglutaminase is required for apple pollen tube growth. Biochemical Journal, 2010, 429, 261-271.	1.7	49
43	Activation of protein kinase B by adenosine A and A receptors in newborn rat cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2004, 37, 989-999.	0.9	48
44	Modulation of tissue transglutaminase in tubular epithelial cells alters extracellular matrix levels: A potential mechanism of tissue scarring. Matrix Biology, 2009, 28, 20-31.	1.5	48
45	Calmodulin antagonists of improved potency and specificity for use in the study of calmodulin biochemistry. Biochemical Pharmacology, 1988, 37, 1717-1723.	2.0	45
46	Importance of Tissue Transglutaminase in Repair of Extracellular Matrices and Cell Death of Dermal Fibroblasts After Exposure to a Solarium Ultraviolet A Source. Journal of Investigative Dermatology, 2003, 121, 412-423.	0.3	44
47	A rapid and sensitive procedure for the quantitative determination of plasma amino acids. Clinica Chimica Acta, 1982, 125, 89-95.	0.5	43
48	Characterization of Tissue Transglutaminase in Human Osteoblast-like Cells. Journal of Bone and Mineral Research, 2001, 16, 1477-1485.	3.1	43
49	Are Transglutaminase 2 Inhibitors Able to Reduce Gliadin-Induced Toxicity Related to Celiac Disease? A Proof-of-Concept Study. Journal of Clinical Immunology, 2013, 33, 134-142.	2.0	43
50	Recent advances in the development of tissue transglutaminase (TG2) inhibitors. Amino Acids, 2013, 44, 119-127.	1.2	41
51	Cross-linking of collagen I by tissue transglutaminase provides a promising biomaterial for promoting bone healing. Amino Acids, 2014, 46, 1751-1761.	1.2	40
52	Development of Potent and Selective Tissue Transglutaminase Inhibitors: Their Effect on TG2 Function and Application in Pathological Conditions. Chemistry and Biology, 2015, 22, 1347-1361.	6.2	39
53	The Role of TG2 in Regulating S100A4-Mediated Mammary Tumour Cell Migration. PLoS ONE, 2013, 8, e57017.	1.1	38
54	Involvement of tissue transglutaminase in the stabilisation of biomaterial/tissue interfaces important in medical devices. Biomaterials, 2002, 23, 1519-1526.	5.7	37

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55	Role of transglutaminaseï¿½1 in stabilisation of intercellular junctions of the vascular endothelium. Histochemistry and Cell Biology, 2004, 122, 17-25.	0.8	37
56	Expression of the cytosolic and particulate forms of transglutaminase during chemically induced rat liver carcinogenesis. Biochimica Et Biophysica Acta - Molecular Cell Research, 1988, 970, 137-145.	1.9	36
57	Transglutaminase 2 interacts with syndecan-4 and CD44 at the surface of human macrophages to promote removal of apoptotic cells. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 201-212.	1.9	35
58	Tissue transglutaminase induces Epithelial-Mesenchymal-Transition and the acquisition of stem cell like characteristics in colorectal cancer cells. Oncotarget, 2017, 8, 20025-20041.	0.8	35
59	Induction of tissue transglutaminase by dexamethasone: its correlation to receptor number and transglutaminase-mediated cell death in a series of malignant hamster fibrosarcomas. Biochemical Journal, 1998, 331, 105-112.	1.7	33
60	The functional relationship between transglutaminase 2 and transforming growth factor Î²1 in the regulation of angiogenesis and endothelialâ€“mesenchymal transition. Cell Death and Disease, 2017, 8, e3032-e3032.	2.7	26
61	Characterization of an FMN-containing cyclohexanone monooxygenase from a cyclohexane-grown Xanthobacter sp.. FEBS Journal, 1989, 181, 199-206.	0.2	25
62	Decreased Efficiency of Trypsinization of Cells Following Photodynamic Therapy: Evaluation of a Role for Tissue TransglutaminaseÂ¶. Photochemistry and Photobiology, 2001, 73, 47.	1.3	25
63	Do changes in transglutaminase activity alter latent transforming growth factor beta activation in experimental diabetic nephropathy?. Nephrology Dialysis Transplantation, 2010, 25, 3897-3910.	0.4	24
64	Structure and Regulation of Type 2 Transglutaminase in Relation to its Physiological Functions and Pathological Roles. Advances in Enzymology and Related Areas of Molecular Biology, 2011, 78, 1-46.	1.3	24
65	Isopeptidase activity of human transglutaminase 2: disconnection from transamidation and characterization by kinetic parameters. Amino Acids, 2016, 48, 31-40.	1.2	24
66	Comparative Study of the Ability of Three Xanthobacter Species To Metabolize Cycloalkanes. Applied and Environmental Microbiology, 1986, 52, 665-671.	1.4	24
67	Detection and quantification of adulteration of durum wheat flour by flour from common wheat using reverse phase HPLC. Journal of the Science of Food and Agriculture, 1990, 50, 211-226.	1.7	23
68	A novel regulatory role for tissue transglutaminase in epithelial-mesenchymal transition in cystic fibrosis. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 2234-2244.	1.9	23
69	Role of the cross-linking enzyme tissue transglutaminase in the biological recognition of synthetic biodegradable polymers. Journal of Biomedical Materials Research Part B, 2001, 54, 294-304.	3.0	22
70	Celiac Diseaseâ€“Specific TG2-Targeted Autoantibodies Inhibit Angiogenesis Ex Vivo and In Vivo in Mice by Interfering with Endothelial Cell Dynamics. PLoS ONE, 2013, 8, e65887.	1.1	22
71	Transglutaminase and Vascular Biology: Physiopathologic Implications and Perspectives for Therapeutic Interventions. Current Medicinal Chemistry, 2005, 12, 2357-2372.	1.2	21
72	The role of tissue transglutaminase (TG2) in regulating the tumour progression of the mouse colon carcinoma CT26. Amino Acids, 2011, 41, 909-921.	1.2	21

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73	Transglutaminase 2 null macrophages respond to lipopolysaccharide stimulation by elevated proinflammatory cytokine production due to an enhanced Î±vÎ²3 integrin-induced Src tyrosine kinase signaling. Immunology Letters, 2011, 138, 71-78.	1.1	21
74	Tethering a laminin peptide to a crosslinked collagen scaffold for biofunctionality. Journal of Biomedical Materials Research - Part A, 2009, 89A, 1001-1010.	2.1	20
75	Imidazolium-based warheads strongly influence activity ofÂwater-soluble peptidic transglutaminase inhibitors. European Journal of Medicinal Chemistry, 2013, 66, 526-530.	2.6	20
76	Inhibition of collagen I accumulation reduces glomerulosclerosis by a Hic-5-dependent mechanism in experimental diabetic nephropathy. Laboratory Investigation, 2013, 93, 553-565.	1.7	20
77	Tissue transglutaminase (TG2) enables survival of human malignant pleural mesothelioma cells in hypoxia. Cell Death and Disease, 2017, 8, e2592-e2592.	2.7	20
78	The cell cycle and induction of apoptosis in a hamster fibrosarcoma cell line treated with anti-cancer drugs: its importance to solid tumour chemotherapy. Journal of Neuro-Oncology, 1997, 31, 195-207.	1.4	19
79	The effects of bleomycin and copper bleomycin upon transglutaminase enzymes. Biochemical Pharmacology, 1978, 27, 1211-1219.	2.0	18
80	TISSUE TRANSGLUTAMINASE: A MEDIATOR AND PREDICTOR OF CHRONIC ALLOGRAFT NEPHROPATHY?. Transplantation, 2004, 77, 1667-1675.	0.5	18
81	Targeted delivery of a novel group of site-directed transglutaminase inhibitors to the liver using liposomes: a new approach for the potential treatment of liver fibrosis. Journal of Drug Targeting, 2011, 19, 624-631.	2.1	17
82	Thermodynamics of binding of regulatory ligands to tissue transglutaminase. Amino Acids, 2010, 39, 297-304.	1.2	16
83	Inhibition of transglutaminase 2 enzymatic activity ameliorates the anti-angiogenic effects of coeliac disease autoantibodies. Scandinavian Journal of Gastroenterology, 2010, 45, 421-427.	0.6	16
84	Transglutaminase 2: a novel therapeutic target for idiopathic pulmonary fibrosis using selective small molecule inhibitors. Amino Acids, 2021, 53, 205-217.	1.2	16
85	Correlation of changes in transglutaminase activity and polyamine content of neoplastic tissue during the metastatic process. Biochimica Et Biophysica Acta - Molecular Cell Research, 1987, 930, 432-437.	1.9	15
86	Tailored laminin-332 Î±3 sequence is tethered through an enzymatic linker to a collagen scaffold to promote cellular adhesion. Acta Biomaterialia, 2009, 5, 2441-2450.	4.1	15
87	The role of TG2 in ECV304-related vasculogenic mimicry. Amino Acids, 2013, 44, 89-101.	1.2	14
88	Pituitary Adenylate Cyclase-activating Polypeptide Type 1 Receptor (PAC1) Gene Is Suppressed by Transglutaminase 2 Activation. Journal of Biological Chemistry, 2013, 288, 32720-32730.	1.6	14
89	In vivo effects of tailored lamininâ€332 Î±3 conjugated scaffolds enhances wound healing: A histomorphometric analysis. Journal of Biomedical Materials Research - Part A, 2013, 101, 2788-2795.	2.1	13
90	Celiac disease patient IgA antibodies induce endothelial adhesion and cell polarization defects via extracellular transglutaminase 2. Cellular and Molecular Life Sciences, 2014, 71, 1315-1326.	2.4	13

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91	Enhanced apoptosis in transformed human lung fibroblasts after exposure to sodium butyrate. In Vitro Cellular and Developmental Biology - Animal, 1996, 32, 505-513.	0.7	12
92	Mapping the minimum domain of the fibronectin binding site on transglutaminase 2 (TG2) and its importance in mediating signaling, adhesion, and migration in TG2â€expressing cells. FASEB Journal, 2019, 33, 2327-2342.	0.2	12
93	Transglutaminase 2 maintains a colorectal cancer stem phenotype by regulating epithelial-mesenchymal transition. Oncotarget, 2019, 10, 4556-4569.	0.8	11
94	CDKN2A Determines Mesothelioma Cell Fate to EZH2 Inhibition. Frontiers in Oncology, 2021, 11, 678447.	1.3	10
95	Nitrosylation of tissue transglutaminase enhances fibroblast migration and regulates MMP activation. Matrix Biology, 2022, 105, 1-16.	1.5	10
96	Characterisation of the cellular substrates for transglutaminase in normal liver and hepatocellular carcinoma. Biochimica Et Biophysica Acta - General Subjects, 1990, 1033, 57-64.	1.1	7
97	Thioredoxin Is Involved in Endothelial Cell Extracellular Transglutaminase 2 Activation Mediated by Celiac Disease Patient IgA. PLoS ONE, 2013, 8, e77277.	1.1	7
98	Changes in transglutaminase activity during tumour growth and metastasis. Biochemical Society Transactions, 1984, 12, 297-298.	1.6	6
99	The inhibition of human duodenal adenylate cyclase activity by Ca2+and the effects of EGTA. FEBS Letters, 1993, 327, 137-140.	1.3	6
100	Indwelling catheters and medical implants with FXIIIa inhibitors: A novel approach to the treatment of catheter and medical device-related infections. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 83, 106-113.	2.0	6
101	Possible Uses of Micro-organisms in the Manufacture of Plastics and Synthetic Fibres. Biotechnology and Genetic Engineering Reviews, 1986, 4, 263-290.	2.4	4
102	Transglutaminase activity, tumour growth and metastasis. Biochemical Society Transactions, 1989, 17, 714-715.	1.6	4
103	The visualisation of vitreous using surface modified poly(lactic-co-glycolic acid) microparticles. British Journal of Ophthalmology, 2010, 94, 648-653.	2.1	3
104	Neurite outgrowth inhibitory levels of organophosphates induce tissue transglutaminase activity in differentiating N2a cells: evidence for covalent adduct formation. Archives of Toxicology, 2020, 94, 3861-3875.	1.9	3
105	Effect of platelet activation on transglutaminase activity. Biochemical Society Transactions, 1985, 13, 227-228.	1.6	2
106	Reduction in transglutaminase activity associated with tumour metastasis is due to the presence of an inactive form of the enzyme. Biochemical Society Transactions, 1990, 18, 681-682.	1.6	2
107	The use of a biotin-labelled amine to identify endogenous substrates of transglutaminase in pancreatic islets. Biochemical Society Transactions, 1993, 21, 424S-424S.	1.6	2
108	Polyamine levels in chemically induced rat liver tumours. Biochemical Society Transactions, 1986, 14, 695-696.	1.6	1

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109	Calmodulin involvement in Ca2+-induced insulin release from electropermeabilized islets of Langerhans. Biochemical Society Transactions, 1990, 18, 464-464.	1.6	1
110	A study of the pulmonary toxicity induced by the anti-tumour compound bleomycin. Biochemical Society Transactions, 1984, 12, 298-299.	1.6	0
111	Identification and characterization of an aspartate-specific peptidase (peptidase E) in Escherichia coli K12. Biochemical Society Transactions, 1989, 17, 354-354.	1.6	0
112	Identification of the endogenous substrates of the pancreatic islet transglutaminase. Biochemical Society Transactions, 1990, 18, 465-466.	1.6	0
113	Decreased Efficiency of Trypsinization of Cells Following Photodynamic Therapy: Evaluation of a Role for Tissue TransglutaminaseÂ¶. Photochemistry and Photobiology, 2007, 73, 47-53.	1.3	0
114	Characterization of a Microbial Transglutaminase Cross-linked Type II Collagen Scaffold. Tissue Engineering, 2006, .	4.9	0