Themis R Kyriakides

List of Publications by Year
in descending order

111 papers	8,308 citations	34105 52 h-index	48315 88 g-index
111 all docs	111 docs citations	111 times ranked	10225 citing authors

#	Article	IF	Citations
1	Tissue-engineered vascular grafts transform into mature blood vessels via an inflammation-mediated process of vascular remodeling. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4669-4674.	7.1	495
2	Mice That Lack Thrombospondin 2 Display Connective Tissue Abnormalities That Are Associated with Disordered Collagen Fibrillogenesis, an Increased Vascular Density, and a Bleeding Diathesis. Journal of Cell Biology, 1998, 140, 419-430.	5.2	458
3	Bulk metallic glasses for biomedical applications. Jom, 2009, 61, 21-29.	1.9	273
4	The Lack of Thrombospondin-1 (TSP1) Dictates the Course of Wound Healing in Double-TSP1/TSP2-Null Mice. American Journal of Pathology, 2002, 161, 831-839.	3.8	272
5	A critical role for macrophages in neovessel formation and the development of stenosis in tissueâ€engineered vascular grafts. FASEB Journal, 2011, 25, 4253-4263.	0.5	199
6	The CC Chemokine Ligand, CCL2/MCP1, Participates in Macrophage Fusion and Foreign Body Giant Cell Formation. American Journal of Pathology, 2004, 165, 2157-2166.	3.8	198
7	The role of thrombospondins 1 and 2 in the regulation of cellâ€"matrix interactions, collagen fibril formation, and the response to injury. International Journal of Biochemistry and Cell Biology, 2004, 36, 1115-1125.	2.8	193
8	pH-Sensitive polymers that enhance intracellular drug delivery in vivo. Journal of Controlled Release, 2002, 78, 295-303.	9.9	191
9	Matricellular Proteins as Modulators of Cellâ€"Matrix Interactions: Adhesive Defect in Thrombospondin 2-null Fibroblasts is a Consequence of Increased Levels of Matrix Metalloproteinase-2. Molecular Biology of the Cell, 2000, 11, 3353-3364.	2.1	182
10	Extracellular matrix-derived biomaterials in engineering cell function. Biotechnology Advances, 2020, 42, 107421.	11.7	163
11	Small-diameter biodegradable scaffolds for functional vascular tissue engineering in the mouse model. Biomaterials, 2008, 29, 1454-1463.	11.4	160
12	Thrombospondin 2, a matricellular protein with diverse functions. Matrix Biology, 2000, 19, 557-568.	3.6	156
13	Accelerated Wound Healing in Mice With a Disruption of the Thrombospondin 2 Gene. Journal of Investigative Dermatology, 1999, 113, 782-787.	0.7	148
14	Mice that lack matrix metalloproteinase-9 display delayed wound healing associated with delayed reepithelization and disordered collagen fibrillogenesis. Matrix Biology, 2009, 28, 65-73.	3.6	144
15	Redox Signaling in Diabetic Wound Healing Regulates Extracellular Matrix Deposition. Antioxidants and Redox Signaling, 2017, 27, 823-838.	5.4	144
16	Matricellular proteins as modulators of wound healing and the foreign body response. Thrombosis and Haemostasis, 2003, 90, 986-992.	3.4	143
17	Macrophage fusion, giant cell formation, and the foreign body response require matrix metalloproteinase 9. Journal of Leukocyte Biology, 2009, 85, 617-626.	3.3	137
18	Tissueâ€engineered vascular grafts form neovessels that arise from regeneration of the adjacent blood vessel. FASEB Journal, 2011, 25, 2731-2739.	0.5	136

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19	Linking the foreign body response and protein adsorption to PEG-based hydrogels using proteomics. Biomaterials, 2015, 41, 26-36.	11.4	129
20	Immunomodulation by mesenchymal stem cells combats the foreign body response to cell-laden synthetic hydrogels. Biomaterials, 2015, 41, 79-88.	11.4	122
21	Characterization of the <i>in vitro</i> macrophage response and <i>in vivo</i> host response to poly(ethylene glycol)â€based hydrogels. Journal of Biomedical Materials Research - Part A, 2010, 93A, 941-953.	4.0	120
22	Endothelial Akt1 mediates angiogenesis by phosphorylating multiple angiogenic substrates. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12865-12870.	7.1	120
23	The host response to naturally-derived extracellular matrix biomaterials. Seminars in Immunology, 2017, 29, 72-91.	5.6	111
24	Altered Extracellular Matrix Remodeling and Angiogenesis in Sponge Granulomas of Thrombospondin 2-Null Mice. American Journal of Pathology, 2001, 159, 1255-1262.	3.8	105
25	Thrombospondin-2 Modulates Extracellular Matrix Remodeling during Physiological Angiogenesis. American Journal of Pathology, 2008, 173, 879-891.	3.8	95
26	The Distribution of the Matricellular Protein Thrombospondin 2 in Tissues of Embryonic and Adult Mice. Journal of Histochemistry and Cytochemistry, 1998, 46, 1007-1015.	2.5	92
27	Essential Role of DAP12 Signaling in Macrophage Programming into a Fusion-Competent State. Science Signaling, 2008, 1, ra11.	3.6	92
28	Thrombospondin-2 and extracellular matrix assembly. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 2396-2402.	2.4	92
29	The role of thrombospondins in wound healing, ischemia, and the foreign body reaction. Journal of Cell Communication and Signaling, 2009, 3, 215-225.	3.4	91
30	Inflammasome components Asc and caspase-1 mediate biomaterial-induced inflammation and foreign body response. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20095-20100.	7.1	91
31	Engineering Cellular Response Using Nanopatterned Bulk Metallic Glass. ACS Nano, 2014, 8, 4366-4375.	14.6	91
32	An electrospun scaffold integrating nucleic acid delivery for treatment of full-thickness wounds. Biomaterials, 2013, 34, 3891-3901.	11.4	89
33	Thrombospondin 2 Modulates Collagen Fibrillogenesis and Angiogenesis. Journal of Investigative Dermatology Symposium Proceedings, 2000, 5, 61-66.	0.8	88
34	Foreign Body Giant Cell Formation Is Preceded by Lamellipodia Formation and Can Be Attenuated by Inhibition of Rac1 Activation. American Journal of Pathology, 2007, 171, 632-640.	3.8	88
35	Increased Marrow-Derived Osteoprogenitor Cells and Endosteal Bone Formation in Mice Lacking Thrombospondin 2. Journal of Bone and Mineral Research, 2010, 15, 851-862.	2.8	85
36	Dual delivery of VEGF and MCP-1 to support endothelial cell transplantation for therapeutic vascularization. Biomaterials, 2010, 31, 3054-3062.	11.4	85

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37	CXCR3-dependent accumulation and activation of perivascular macrophages is necessary for homeostatic arterial remodeling to hemodynamic stresses. Journal of Experimental Medicine, 2010, 207, 1951-1966.	8.5	84
38	Nanomaterials, Inflammation, and Tissue Engineering. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2015, 7, 355-370.	6.1	84
39	Endothelial Expression of Î²1 Integrin Is Required for Embryonic Vascular Patterning and Postnatal Vascular Remodeling. Molecular and Cellular Biology, 2008, 28, 794-802.	2.3	83
40	Reticulon 4B (Nogo-B) is necessary for macrophage infiltration and tissue repair. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17511-17516.	7.1	82
41	Angiopoietin-2 Secretion by Endothelial Cell Exosomes. Journal of Biological Chemistry, 2014, 289, 510-519.	3.4	79
42	Thrombospondin 1 is expressed by proliferating mesangial cells and is up-regulated by PDGF and bFGF in vivo. Kidney International, 1995, 48, 1846-1856.	5.2	76
43	Increased and prolonged inflammation and angiogenesis in delayed-type hypersensitivity reactions elicited in the skin of thrombospondin-2â€“deficient mice. Blood, 2002, 99, 538-545.	1.4	73
44	Design of ?Smart? polymers that can ï¿½direct intracellular drug delivery. Polymers for Advanced Technologies, 2002, 13, 992-999.	3.2	72
45	Thrombospondin 2 levels are increased in aged mice: consequences for cutaneous wound healing and angiogenesis. Matrix Biology, 2004, 22, 539-547.	3.6	70
46	Temporal progression of the host response to implanted poly(ethylene glycol)â€based hydrogels. Journal of Biomedical Materials Research - Part A, 2011, 96A, 621-631.	4.0	70
47	Biodegradation of poly(anhydride-esters) into non-steroidal anti-inflammatory drugs and their effect on Pseudomonas aeruginosa biofilms in vitro and on the foreign-body response in vivo. Biomaterials, 2006, 27, 5039-5048.	11.4	67
48	Click-coated, heparinized, decellularized vascular grafts. Acta Biomaterialia, 2015, 13, 177-187.	8.3	65
49	LMO7 Is a Negative Feedback Regulator of Transforming Growth Factor Î² Signaling and Fibrosis. Circulation, 2019, 139, 679-693.	1.6	63
50	Endothelial nitric oxide synthase controls the expression of the angiogenesis inhibitor thrombospondin 2. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E1137-45.	7.1	62
51	Regulation of Angiogenesis and Matrix Remodeling by Localized, Matrix-Mediated Antisense Gene Delivery. Molecular Therapy, 2001, 3, 842-849.	8.2	59
52	Proteolysis of Cell-Surface Tissue Transglutaminase by Matrix Metalloproteinase-2 Contributes to the Adhesive Defect and Matrix Abnormalities in Thrombospondin-2-Null Fibroblasts and Mice. American Journal of Pathology, 2005, 167, 81-88.	3.8	58
53	Nanopatterned bulk metallic glass-based biomaterials modulate macrophage polarization. Acta Biomaterialia, 2018, 75, 427-438.	8.3	57
54	Loss of monocyte chemoattractant protein-1 alters macrophage polarization and reduces NFÎºB activation in the foreign body response. Acta Biomaterialia, 2015, 11, 37-47.	8.3	56

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55	Lack of TNF-Î±â€“Induced MMP-9 Production and Abnormal E-Cadherin Redistribution Associated with Compromised Fusion in MCP-1â€“Null Macrophages. American Journal of Pathology, 2011, 178, 2311-2321.	3.8	54
56	Biocompatibility of nanomaterials and their immunological properties. Biomedical Materials (Bristol), 2021, 16, 042005.	3.3	54
57	Matricellular proteins and biomaterials. Matrix Biology, 2014, 37, 183-191.	3.6	51
58	Biodegradation, biocompatibility, and drug delivery in poly(Ï‰-pentadecalactone-co-p-dioxanone) copolyesters. Biomaterials, 2011, 32, 6646-6654.	11.4	49
59	The effect of inflammatory cell-derived MCP-1 loss on neuronal survival during chronic neuroinflammation. Biomaterials, 2014, 35, 6698-6706.	11.4	48
60	Improving inÂvivo outcomes of decellularized vascular grafts via incorporation of a novel extracellular matrix. Biomaterials, 2017, 141, 63-73.	11.4	48
61	Enhanced Angiogenesis and Reduced Contraction in Thrombospondin-2â€“null Wounds Is Associated With Increased Levels of Matrix Metalloproteinases-2 and â^'9, and Soluble VEGF. Journal of Histochemistry and Cytochemistry, 2009, 57, 301-313.	2.5	47
62	Macrophage Î²2 Integrinâ€“Mediated, HuR-Dependent Stabilization of Angiogenic Factorâ€“Encoding mRNAs in Inflammatory Angiogenesis. American Journal of Pathology, 2012, 180, 1751-1760.	3.8	47
63	Megakaryocytes require thrombospondin-2 for normal platelet formation and function. Blood, 2003, 101, 3915-3923.	1.4	45
64	Matrix metalloproteinase-9 deficiency leads to prolonged foreign body response in the brain associated with increased IL-1Î² levels and leakage of the blood-brain barrier. Matrix Biology, 2009, 28, 148-159.	3.6	43
65	Molecular Characterization of Macrophage-Biomaterial Interactions. Advances in Experimental Medicine and Biology, 2015, 865, 109-122.	1.6	42
66	Regulation of Mesenchymal Stem Cell Differentiation by Nanopatterning of Bulk Metallic Glass. Scientific Reports, 2018, 8, 8758.	3.3	41
67	Histologic changes of the fetal membranes after fetoscopic laser surgery for twin-twin transfusion syndrome. Pediatric Research, 2015, 78, 247-255.	2.3	40
68	Astrocyte-Derived Thrombospondin-2 Is Critical for the Repair of the Blood-Brain Barrier. American Journal of Pathology, 2011, 179, 860-868.	3.8	39
69	Matricellular proteins in drug delivery: Therapeutic targets, active agents, and therapeutic localization. Advanced Drug Delivery Reviews, 2016, 97, 56-68.	13.7	39
70	A peptide-morpholino oligomer conjugate targeting Staphylococcus aureus gyrA mRNA improves healing in an infected mouse cutaneous wound model. International Journal of Pharmaceutics, 2013, 453, 651-655.	5.2	37
71	The role of extracellular matrix in the pathophysiology of diabetic wounds. Matrix Biology Plus, 2020, 6-7, 100037.	3.5	36
72	Endothelial Cell Autonomous Role of Akt1. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 870-879.	2.4	34

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73	Macrophage fusion leading to foreign body giant cell formation persists under phagocytic stimulation by microspheres <i>in vitro</i> and <i>in vivo</i> in mouse models. Journal of Biomedical Materials Research - Part A, 2010, 93A, 189-199.	4.0	33
74	Tunable Hydrogels Derived from Genetically Engineered Extracellular Matrix Accelerate Diabetic Wound Healing. ACS Applied Materials & Interfaces, 2018, 10, 41892-41901.	8.0	33
75	Glycocalyxâ€Like Hydrogel Coatings for Small Diameter Vascular Grafts. Advanced Functional Materials, 2020, 30, 1908963.	14.9	33
76	Decellularized materials derived from TSP2-KO mice promote enhanced neovascularization and integration in diabetic wounds. Biomaterials, 2018, 169, 61-71.	11.4	31
77	Understanding the host response to cell-laden poly(ethylene glycol)-based hydrogels. Biomaterials, 2013, 34, 952-964.	11.4	30
78	Inadequate Processing of Decellularized Dermal Matrix Reduces Cell Viability <i>In Vitro</i> and Increases Apoptosis and Acute Inflammation <i>In Vivo</i>. BioResearch Open Access, 2016, 5, 177-187.	2.6	30
79	Regulation of cell-cell fusion by nanotopography. Scientific Reports, 2016, 6, 33277.	3.3	30
80	SPARC-thrombospondin-2-double-null Mice Exhibit Enhanced Cutaneous Wound Healing and Increased Fibrovascular Invasion of Subcutaneous Polyvinyl Alcohol Sponges. Journal of Histochemistry and Cytochemistry, 2005, 53, 571-581.	2.5	29
81	Nanopatterned Bulk Metallic Glass Biosensors. ACS Sensors, 2017, 2, 1779-1787.	7.8	26
82	HIF-1Î± represses the expression of the angiogenesis inhibitor thrombospondin-2. Matrix Biology, 2018, 65, 45-58.	3.6	26
83	On-line observation of cell growth in a three-dimensional matrix on surface-modified microelectrode arrays. Biomaterials, 2009, 30, 3110-3117.	11.4	25
84	Impaired von Willebrand factor adhesion and platelet response in thrombospondin-2 knockout mice. Blood, 2016, 128, 1642-1650.	1.4	25
85	Nanoparticle delivery of miR-223 to attenuate macrophage fusion. Biomaterials, 2016, 89, 127-135.	11.4	25
86	Elevated Thrombospondin 2 Contributes to Delayed Wound Healing in Diabetes. Diabetes, 2019, 68, 2016-2023.	0.6	23
87	Angiogenesis and Vasculogenesis in Health and Disease. BioMed Research International, 2015, 2015, 1-2.	1.9	21
88	Dual therapeutic targeting of intra-articular inflammation and intracellular bacteria enhances chondroprotection in septic arthritis. Science Advances, 2021, 7, .	10.3	21
89	Foreign body response to synthetic polymer biomaterials and the role of adaptive immunity. Biomedical Materials (Bristol), 2022, 17, 022007.	3.3	20
90	Nanoparticle-based evaluation of bloodâ€“brain barrier leakage during the foreign body response. Journal of Neural Engineering, 2013, 10, 016013.	3.5	19

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91	New Functional Tools for Antithrombogenic Activity Assessment of Live Surface Glycocalyx. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 1847-1853.	2.4	18
92	Loss of endothelial glucocorticoid receptor promotes angiogenesis via upregulation of Wnt/Î²-catenin pathway. Angiogenesis, 2021, 24, 631-645.	7.2	18
93	An in situ collagenâ€HA hydrogel system promotes survival and preserves the proangiogenic secretion of hiPSCâ€derived vascular smooth muscle cells. Biotechnology and Bioengineering, 2020, 117, 3912-3923.	3.3	17
94	The role of myeloid cell-derived PDGF-B in neotissue formation in a tissue-engineered vascular graft. Regenerative Medicine, 2017, 12, 249-261.	1.7	16
95	Bioinspired polymers that control intracellular drug delivery. Biotechnology and Bioprocess Engineering, 2001, 6, 205-212.	2.6	15
96	Up-regulation of Thrombospondin-2 in Akt1-null Mice Contributes to Compromised Tissue Repair Due to Abnormalities in Fibroblast Function. Journal of Biological Chemistry, 2015, 290, 409-422.	3.4	14
97	Multicompartment Drug Release System for Dynamic Modulation of Tissue Responses. Advanced Healthcare Materials, 2017, 6, 1700370.	7.6	14
98	Molecular Events at Tissueâ€"Biomaterial Interface. , 2015, , 81-116.		13
99	Locally delivered adjuvant biofilmâ€penetrating antibiotics rescue impaired endochondral fracture healing caused by MRSA infection. Journal of Orthopaedic Research, 2021, 39, 402-414.	2.3	13
100	Hierarchical Micro- and Nanopatterning of Metallic Glass to Engineer Cellular Responses. ACS Applied Bio Materials, 2018, 1, 51-58.	4.6	12
101	Thrombospondin 2-null mice display an altered brain foreign body response to polyvinyl alcohol sponge implants. Biomedical Materials (Bristol), 2009, 4, 015010.	3.3	9
102	Biocompatibility of platinum-based bulk metallic glass in orthopedic applications. Biomedical Materials (Bristol), 2021, 16, 045018.	3.3	8
103	Regulation and synthesis of selected bacteria-induced proteins in Manduca sexta. Insect Biochemistry and Molecular Biology, 1992, 22, 321-331.	2.7	7
104	The impact of modulating the bloodâ€"brain barrier on the electrophysiological and histological outcomes of intracortical electrodes. Journal of Neural Engineering, 2019, 16, 046005.	3.5	6
105	Treating â€˜Septicâ€™ With Enhanced Antibiotics and â€˜Arthritisâ€™ by Mitigation of Excessive Inflammation. Frontiers in Cellular and Infection Microbiology, 0, 12, .	3.9	5
106	Integrin Î²3 targeting biomaterial preferentially promotes secretion of bFGF and viability of iPSC-derived vascular smooth muscle cells. Biomaterials Science, 2021, 9, 5319-5329.	5.4	4
107	Thrombospondin says no to NO. Blood, 2007, 109, 1793-1793.	1.4	3
108	Cell interactions with polymers. , 2020, , 275-293.		3

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109	Elevated Thrombospondinâ€2 Contributes to Delayed Wound Healing in Diabetes. FASEB Journal, 2018, 32, 414.3.	0.5	1
110	Engineered molecular delivery for control and enhancement of transplanted endothelial cell fate in tissue engineering. , 2009, , .		0
111	Thrombospondin 2 deficiency influences extracellular matrix assembly leading to increased ischemiaâ€induced angiogenesis and arteriogenesis. FASEB Journal, 2007, 21, A529.	0.5	0