Guillermo A Ameer

List of Publications by Year
in descending order

118	10,655	66343 42	33894 99
papers	citations	h-index	g-index

122	122	122	14722
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Clinical Relevance of Pre-Existing and Treatment-Induced Anti-Poly(Ethylene Glycol) Antibodies. Regenerative Engineering and Translational Medicine, 2022, 8, 32-42.	2.9	35
2	Reversibly immortalized keratinocytes (iKera) facilitate re-epithelization and skin wound healing: Potential applications in cell-based skin tissue engineering. Bioactive Materials, 2022, 9, 523-540.	15.6	24
3	Subcutaneous nanotherapy repurposes the immunosuppressive mechanism of rapamycin to enhance allogeneic islet graft viability. Nature Nanotechnology, 2022, 17, 319-330.	31.5	37
4	3Dâ€Printed Electroactive Hydrogel Architectures with Subâ€100ÂÂµm Resolution Promote Myoblast Viability. Macromolecular Bioscience, 2022, 22, .	4.1	9
5	Azo polymerization of citrateâ€based biomaterialâ€ceramic composites at physiological temperatures. Nano Select, 2022, 3, 1421-1435.	3.7	1
6	209.8: Subcutaneous Nanotherapy Repurposes the Immunosuppressive Mechanism of Rapamycin to Enhance Allogeneic Islet Graft Viability. Transplantation, 2021, 105, S17-S17.	1.0	0
7	Understanding and Harnessing Variability in Regenerative Engineering. Regenerative Engineering and Translational Medicine, 2020, 6, 429-432.	2.9	9
8	Stretchable, dynamic covalent polymers for soft, long-lived bioresorbable electronic stimulators designed to facilitate neuromuscular regeneration. Nature Communications, 2020, 11, 5990.	12.8	144
9	Cyclodextrin-modified poly(octamethylene citrate) polymers towards enhanced sorption properties. Soft Matter, 2020, 16, 3311-3318.	2.7	9
10	Flexible, wearable microfluidic contact lens with capillary networks for tear diagnostics. Journal of Materials Science, 2020, 55, 9551-9561.	3.7	34
11	Conducting Polymers for Tissue Regeneration <i>in Vivo</i>. Chemistry of Materials, 2020, 32, 4095-4115.	6.7	49
12	Stem cell therapy for chronic skin wounds in the era of personalized medicine: From bench to bedside. Genes and Diseases, 2019, 6, 342-358.	3.4	42
13	The wonders of BMP9: From mesenchymal stem cell differentiation, angiogenesis, neurogenesis, tumorigenesis, and metabolism to regenerative medicine. Genes and Diseases, 2019, 6, 201-223.	3.4	71
14	Polymer-integrated amnion scaffold significantly improves cleft palate repair. Acta Biomaterialia, 2019, 92, 104-114.	8.3	23
15	Advanced Functional Biomaterials for Stem Cell Delivery in Regenerative Engineering and Medicine. Advanced Functional Materials, 2019, 29, 1809009.	14.9	58
16	Multimodal interference-based imaging of nanoscale structure and macromolecular motion uncovers UV induced cellular paroxysm. Nature Communications, 2019, 10, 1652.	12.8	16
17	Imiquimod Acts Synergistically with BMP9 through the Notch Pathway as an Osteoinductive Agent In Vitro. Plastic and Reconstructive Surgery, 2019, 144, 1094-1103.	1.4	2
18	Bone Morphogenetic Protein-9â€“Stimulated Adipocyte-Derived Mesenchymal Progenitors Entrapped in a Thermoresponsive Nanocomposite Scaffold Facilitate Cranial Defect Repair. Journal of Craniofacial Surgery, 2019, 30, 1915-1919.	0.7	11

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19	Three-dimensional piezoelectric polymer microsystems for vibrational energy harvesting, robotic interfaces and biomedical implants. Nature Electronics, 2019, 2, 26-35.	26.0	322
20	Inhibiting intimal hyperplasia in prosthetic vascular grafts via immobilized all-trans retinoic acid. Journal of Controlled Release, 2018, 274, 69-80.	9.9	16
21	A thermoresponsive, citrateâ€based macromolecule for bone regenerative engineering. Journal of Biomedical Materials Research - Part A, 2018, 106, 1743-1752.	4.0	14
22	Copper Metalâ€"Organic Framework Nanoparticles Stabilized with Folic Acid Improve Wound Healing in Diabetes. ACS Nano, 2018, 12, 1023-1032.	14.6	282
23	High-speed on-demand 3D printed bioresorbable vascular scaffolds. Materials Today Chemistry, 2018, 7, 25-34.	3.5	50
24	Single capillary oximetry and tissue ultrastructural sensing by dual-band dual-scan inverse spectroscopic optical coherence tomography. Light: Science and Applications, 2018, 7, 57.	16.6	20
25	Potent laminin-inspired antioxidant regenerative dressing accelerates wound healing in diabetes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6816-6821.	7.1	117
26	Thermoresponsive Citrate-Based Graphene Oxide Scaffold Enhances Bone Regeneration from BMP9-Stimulated Adipose-Derived Mesenchymal Stem Cells. ACS Biomaterials Science and Engineering, 2018, 4, 2943-2955.	5.2	52
27	A biodegradable tri-component graft for anterior cruciate ligament reconstruction. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 704-712.	2.7	29
28	A Tailorable In Situ Lightâ€Activated Biodegradable Vascular Scaffold. Advanced Materials Technologies, 2017, 2, 1600243.	5.8	4
29	Process development for high-resolution 3D-printing of bioresorbable vascular stents. Proceedings of SPIE, 2017, , .	0.8	7
30	Assessment of an engineered endothelium via singleâ€photon emission computed tomography. Biotechnology and Bioengineering, 2017, 114, 2371-2378.	3.3	5
31	Notch Signaling Augments BMP9-Induced Bone Formation by Promoting the Osteogenesis-Angiogenesis Coupling Process in Mesenchymal Stem Cells (MSCs). Cellular Physiology and Biochemistry, 2017, 41, 1905-1923.	1.6	1,939
32	Neural EGF-like protein 1 (NELL-1): Signaling crosstalk in mesenchymal stem cells and applications in regenerative medicine. Genes and Diseases, 2017, 4, 127-137.	3.4	22
33	Vascular scaffolds with enhanced antioxidant activity inhibit graft calcification. Biomaterials, 2017, 144, 166-175.	11.4	41
34	Structural behavior of competitive temperature and pH-responsive tethered polymer layers. Soft Matter, 2017, 13, 6322-6331.	2.7	6
35	3D-printed bioresorbable vascular scaffolds: an important step towards personalizing vascular medical devices?. Expert Review of Precision Medicine and Drug Development, 2017, 2, 145-146.	0.7	0
36	Fabrication Speed Optimization for High-resolution 3D-printing of Bioresorbable Vascular Scaffolds. Procedia CIRP, 2017, 65, 131-138.	1.9	14

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37	3-D bioprinting technologies in tissue engineering and regenerative medicine: Current and future trends. Genes and Diseases, 2017, 4, 185-195.	3.4	452
38	A Cooperative Copper Metalâ€"Organic Frameworkâ€Hydrogel System Improves Wound Healing in Diabetes. Advanced Functional Materials, 2017, 27, 1604872.	14.9	280
39	Repair of critical sized cranial defects with BMP9-transduced calvarial cells delivered in a thermoresponsive scaffold. PLoS ONE, 2017, 12, e0172327.	2.5	32
40	A thermoresponsive polydiolcitrate-gelatin scaffold and delivery system mediates effective bone formation from BMP9-transduced mesenchymal stem cells. Biomedical Materials (Bristol), 2016, 11, 025021.	3.3	59
41	3Dâ€Printing Strong Highâ€Resolution Antioxidant Bioresorbable Vascular Stents. Advanced Materials Technologies, 2016, 1, 1600138.	5.8	138
42	Sustained release of stromal cell derived factor-1 from an antioxidant thermoresponsive hydrogel enhances dermal wound healing in diabetes. Journal of Controlled Release, 2016, 238, 114-122.	9.9	105
43	Antioxidant Polymers as Biomaterial. , 2016, , 251-296.		21
44	Tissue Engineering: Mechanocompatible Polymerâ€Extracellularâ€Matrix Composites for Vascular Tissue Engineering (Adv. Healthcare Mater. 13/2016). Advanced Healthcare Materials, 2016, 5, 1593-1593.	7.6	1
45	Targeting Heparin to Collagen within Extracellular Matrix Significantly Reduces Thrombogenicity and Improves Endothelialization of Decellularized Tissues. Biomacromolecules, 2016, 17, 3940-3948.	5.4	44
46	Mechanocompatible Polymerâ€Extracellularâ€Matrix Composites for Vascular Tissue Engineering. Advanced Healthcare Materials, 2016, 5, 1594-1605.	7.6	17
47	Biodegradable Elastomers with Antioxidant and Retinoid-like Properties. ACS Biomaterials Science and Engineering, 2016, 2, 268-277.	5.2	17
48	Stem cells, growth factors and scaffolds in craniofacial regenerative medicine. Genes and Diseases, 2016, 3, 56-71.	3.4	93
49	Bone morphogenetic protein 9 (BMP9) induces effective bone formation from reversibly immortalized multipotent adipose-derived (iMAD) mesenchymal stem cells. American Journal of Translational Research (discontinued), 2016, 8, 3710-3730.	0.0	39
50	Diazeniumdiolation of protamine sulfate reverses mitogenic effects on smooth muscle cells and fibroblasts. Free Radical Biology and Medicine, 2015, 82, 13-21.	2.9	3
51	Citrate-Based Biomaterials and Their Applications in Regenerative Engineering. Annual Review of Materials Research, 2015, 45, 277-310.	9.3	103
52	A polymerâ€"extracellular matrix composite with improved thromboresistance and recellularization properties. Acta Biomaterialia, 2015, 18, 50-58.	8.3	30
53	Biodegradable Elastomers and Silicon Nanomembranes/Nanoribbons for Stretchable, Transient Electronics, and Biosensors. Nano Letters, 2015, 15, 2801-2808.	9.1	281
54	SIRT1 Overexpression Maintains Cell Phenotype and Function of Endothelial Cells Derived from Induced Pluripotent Stem Cells. Stem Cells and Development, 2015, 24, 2740-2745.	2.1	16

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55	Enabling non-invasive assessment of an engineered endothelium on ePTFE vascular grafts without increasing oxidative stress. Biomaterials, 2015, 69, 110-120.	11.4	20
56	Bone morphogenetic protein-9 effectively induces osteogenic differentiation of reversibly immortalized calvarial mesenchymal progenitor cells. Genes and Diseases, 2015, 2, 268-275.	3.4	5
57	Biomimetic approaches to complex craniofacial defects. Annals of Maxillofacial Surgery, 2015, 5, 4.	0.7	28
58	Periadventitial atRA citrate-based polyester membranes reduce neointimal hyperplasia and restenosis after carotid injury in rats. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 307, H1419-H1429.	3.2	19
59	A Receptorâ€Based Bioadsorbent to Target Advanced Glycation End Products in Chronic Kidney Disease. Artificial Organs, 2014, 38, 474-483.	1.9	12
60	Impact of serum source and inflammatory cytokines on the isolation of endothelial colony-forming cells from peripheral blood. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 747-756.	2.7	15
61	A Thermoresponsive Biodegradable Polymer with Intrinsic Antioxidant Properties. Biomacromolecules, 2014, 15, 3942-3952.	5.4	95
62	Albumin Hydrogels Formed by Electrostatically Triggered Self-Assembly and Their Drug Delivery Capability. Biomacromolecules, 2014, 15, 3625-3633.	5.4	65
63	Advanced nanocomposites for bone regeneration. Biomaterials Science, 2014, 2, 1355.	5.4	17
64	Engineering biodegradable polyester elastomers with antioxidant properties to attenuate oxidative stress in tissues. Biomaterials, 2014, 35, 8113-8122.	11.4	94
65	Photo-crosslinked biodegradable elastomers for controlled nitric oxide delivery. Biomaterials Science, 2013, 1, 625.	5.4	27
66	The blood and vascular cell compatibility of heparin-modified ePTFE vascular grafts. Biomaterials, 2013, 34, 30-41.	11.4	240
67	Cotransplantation with specific populations of spina bifida bone marrow stem/progenitor cells enhances urinary bladder regeneration. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4003-4008.	7.1	68
68	Sustained, localized transgene expression mediated from lentivirusâ€loaded biodegradable polyester elastomers. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1328-1335.	4.0	11
69	Low-Pressure Foaming: A Novel Method for the Fabrication of Porous Scaffolds for Tissue Engineering. Tissue Engineering - Part C: Methods, 2012, 18, 113-121.	2.1	28
70	Recent Insights Into the Biomedical Applications of Shapeâ€memory Polymers. Macromolecular Bioscience, 2012, 12, 1156-1171.	4.1	136
71	Growth factor release from a chemically modified elastomeric poly(1,8â€octanediolâ€coâ€citrate) thin film promotes angiogenesis<i>in vivo</i>. Journal of Biomedical Materials Research - Part A, 2012, 100A, 561-570.	4.0	26
72	Polymerâ€Based Nitric Oxide Therapies: Recent Insights for Biomedical Applications. Advanced Functional Materials, 2012, 22, 239-260.	14.9	155

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73	Antioxidants modulate the antiproliferative effects of nitric oxide on vascular smooth muscle cells and adventitial fibroblasts by regulating oxidative stress. American Journal of Surgery, 2011, 202, 536-540.	1.8	11
74	Effect of bilateral oophorectomy on wound healing of the rabbit vagina. Fertility and Sterility, 2011, 95, 1467-1470.	1.0	12
75	Biohybrid Strategies for Vascular Grafts. , 2011, , 279-316.		3
76	The role of hydroxyapatite in citric acid-based nanocomposites: Surface characteristics, degradation, and osteogenicity in vitro. Acta Biomaterialia, 2011, 7, 4057-4063.	8.3	39
77	Long-term in vivo response to citric acid-based nanocomposites for orthopaedic tissue engineering. Journal of Materials Science: Materials in Medicine, 2011, 22, 2131-2138.	3.6	23
78	Poly(diol<i>â€coâ€</i>citrate)s as Novel Elastomeric Perivascular Wraps for the Reduction of Neointimal Hyperplasia. Macromolecular Bioscience, 2011, 11, 700-709.	4.1	29
79	Novel Biodegradable Shapeâ€Memory Elastomers with Drugâ€Releasing Capabilities. Advanced Materials, 2011, 23, 2211-2215.	21.0	134
80	Shape-Memory Polymers: Novel Biodegradable Shape-Memory Elastomers with Drug-Releasing Capabilities (Adv. Mater. 19/2011). Advanced Materials, 2011, 23, 2210-2210.	21.0	2
81	Early tissue response to citric acidâ€"based microâ€•and nanocomposites. Journal of Biomedical Materials Research - Part A, 2011, 96A, 29-37.	4.0	33
82	Biodegradable nitric oxideâ€releasing poly(diol citrate) elastomers. Journal of Biomedical Materials Research - Part A, 2010, 93A, 356-363.	4.0	21
83	Citric acidâ€based elastomers provide a biocompatible interface for vascular grafts. Journal of Biomedical Materials Research - Part A, 2010, 93A, 314-324.	4.0	31
84	Toward Engineering a Human Neoendothelium with Circulating Progenitor Cells. Stem Cells, 2010, 28, 318-328.	3.2	52
85	Urinary bladder smooth muscle regeneration utilizing bone marrow derived mesenchymal stem cell seeded elastomeric poly(1,8-octanediol-co-citrate) based thin films. Biomaterials, 2010, 31, 6207-6217.	11.4	129
86	Advances and Applications of Biodegradable Elastomers in Regenerative Medicine. Advanced Functional Materials, 2010, 20, 192-208.	14.9	168
87	Nanocomposites for Regenerative Medicine. NATO Science for Peace and Security Series A: Chemistry and Biology, 2010, , 175-206.	0.5	0
88	Nanoporous Biodegradable Elastomers. Advanced Materials, 2009, 21, 188-192.	21.0	36
89	Biomedical Materials: Nanoporous Biodegradable Elastomers (Adv. Mater. 2/2009). Advanced Materials, 2009, 21, NA-NA.	21.0	0
90	Modulating the mechanical properties of poly(diol citrates) via the incorporation of a second type of crosslink network. Journal of Applied Polymer Science, 2009, 114, 1464-1470.	2.6	26

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91	Sustained transgene expression via citric acid-based polyester elastomers. Biomaterials, 2009, 30, 2632-2641.	11.4	60
92	A new strategy to characterize the extent of reaction of thermoset elastomers. Journal of Polymer Science Part A, 2008, 46, 1318-1328.	2.3	15
93	The role of nanocomposites in bone regeneration. Journal of Materials Chemistry, 2008, 18, 4233.	6.7	82
94	Characterization of Porcine Circulating Progenitor Cells: Toward a Functional Endothelium. Tissue Engineering - Part A, 2008, 14, 183-194.	3.1	32
95	Characterization of Porcine Circulating Progenitor Cells: Toward a Functional Endothelium. Tissue Engineering, 2008, 14, 183-194.	4.6	11
96	Biodegradable poly(diol citrate) nanocomposite elastomers for soft tissue engineering. Journal of Materials Chemistry, 2007, 17, 900-906.	6.7	41
97	Hemocompatibility evaluation of poly(diol citrate)in vitro for vascular tissue engineering. Journal of Biomedical Materials Research - Part A, 2007, 82A, 907-916.	4.0	117
98	A biodegradable vascularizing membrane: A feasibility study. Acta Biomaterialia, 2007, 3, 631-642.	8.3	17
99	InÂVitro Characterization of a Compliant Biodegradable Scaffold with a Novel Bioreactor System. Annals of Biomedical Engineering, 2007, 35, 1357-1367.	2.5	32
100	Spectroscopic translation of cellâ€"material interactions. Biomaterials, 2007, 28, 162-174.	11.4	7
101	Synthesis and evaluation of poly(diol citrate) biodegradable elastomers. Biomaterials, 2006, 27, 1889-1898.	11.4	346
102	A citric acid-based hydroxyapatite composite for orthopedic implants. Biomaterials, 2006, 27, 5845-5854.	11.4	184
103	Hemocompatibility evaluation of poly(glycerol-sebacate) in vitro for vascular tissue engineering. Biomaterials, 2006, 27, 4315-4324.	11.4	335
104	Biomechanical characterization of vaginal versus abdominal surgical wound healing in the rabbit. American Journal of Obstetrics and Gynecology, 2006, 194, 1472-1477.	1.3	15
105	Mechanical Interlocking of Engineered Cartilage to an Underlying Polymeric Substrate: Towards a Biohybrid Tissue Equivalent. Annals of Biomedical Engineering, 2006, 34, 737-747.	2.5	5
106	A new biodegradable polyester elastomer for cartilage tissue engineering. Journal of Biomedical Materials Research - Part A, 2006, 77A, 331-339.	4.0	121
107	Modulating Expanded Polytetrafluoroethylene Vascular Graft Host Response via Citric Acid-Based Biodegradable Elastomers. Advanced Materials, 2006, 18, 1493-1498.	21.0	88
108	Engineering sub-100 nm multi-layer nanoshells. Nanotechnology, 2006, 17, 5435-5440.	2.6	75

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109	Novel Biphasic Elastomeric Scaffold for Small-Diameter Blood Vessel Tissue Engineering. Tissue Engineering, 2005, 11, 1876-1886.	4.6	122
110	Assessment of the Stability of an Immunoadsorbent for the Extracorporeal Removal of Beta-2-Microglobulin from Blood. Blood Purification, 2005, 23, 287-297.	1.8	4
111	Biodegradable polyester elastomers in tissue engineering. Expert Opinion on Biological Therapy, 2004, 4, 801-812.	3.1	189
112	Single-chain antibody fragment-based adsorbent for the extracorporeal removal of Î²2-microglobulin. Kidney International, 2004, 65, 310-322.	5.2	15
113	Novel Citric Acid-Based Biodegradable Elastomers for Tissue Engineering. Advanced Materials, 2004, 16, 511-516.	21.0	499
114	A tough biodegradable elastomer. Nature Biotechnology, 2002, 20, 602-606.	17.5	1,136
115	A novel immunoadsorption device for removing Î²2-microglobulin from whole blood. Kidney International, 2001, 59, 1544-1550.	5.2	25
116	Modalities for the Removal of Î²₂â€Microglobulin fromâ€ƒBlood. Seminars in Dialysis, 2001, 14, 103-106.	1.3	10
117	Cell-killing potential of a water-soluble radical initiator. International Journal of Cancer, 2001, 93, 875-879.	5.1	3
118	Modeling the mixing behavior of a novel fluidized extracorporeal immunoadsorber. Chemical Engineering Science, 2001, 56, 5437-5441.	3.8	9