

# Mark E Van Dyke

## List of Publications by Year in descending order

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Version: 2024-02-01

72  
papers

5,402  
citations

101543

36  
h-index

88630

70  
g-index

74  
all docs

74  
docs citations

74  
times ranked

6467  
citing authors

#	ARTICLE	IF	CITATIONS
1	Keratose hydrogel for tissue regeneration and drug delivery. <i>Seminars in Cell and Developmental Biology</i> , 2022, 128, 145-153.	5.0	6
2	Comprehensive characterization of the human pancreatic proteome for bioengineering applications. <i>Biomaterials</i> , 2021, 270, 120613.	11.4	13
3	A keratin-based microparticle for cell delivery. <i>Journal of Biomaterials Applications</i> , 2021, 35, 579-591.	2.4	7
4	Collagen/kerateine multi-protein hydrogels as a thermally stable extracellular matrix for 3D <i>in vitro</i> models. <i>International Journal of Hyperthermia</i> , 2021, 38, 830-845.	2.5	8
5	Keratin Biomaterials Improve Functional Recovery in a Rat Spinal Cord Injury Model. <i>Spine</i> , 2021, 46, 1055-1062.	2.0	1
6	Success and efficiency of cell seeding in Avian Tendon Xenografts – A promising alternative for tendon and ligament reconstruction. <i>Journal of Orthopaedics</i> , 2020, 18, 155-161.	1.3	1
7	A comparative study of materials assembled from recombinant K31 and K81 and extracted human hair keratins. <i>Biomedical Materials (Bristol)</i> , 2020, 15, 065006.	3.3	2
8	Detergent-Free Decellularization of the Human Pancreas for Soluble Extracellular Matrix (ECM) Production. <i>Journal of Visualized Experiments</i> , 2020, , .	0.3	7
9	Development and characterization of a biomimetic coating for percutaneous devices. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 182, 110351.	5.0	7
10	A porcine xenograft-derived bone scaffold is a biocompatible bone graft substitute: An assessment of cytocompatibility and the alpha-Gal epitope. <i>Xenotransplantation</i> , 2019, 26, e12534.	2.8	14
11	Healing of Chronic Wounds: An Update of Recent Developments and Future Possibilities. <i>Tissue Engineering - Part B: Reviews</i> , 2019, 25, 429-444.	4.8	63
12	Effects of Differing Purification Methods on Properties of Keratose Biomaterials. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 1316-1323.	5.2	5
13	Keratin biomaterials augment anti-inflammatory macrophage phenotype <i>in vitro</i> . <i>Acta Biomaterialia</i> , 2018, 66, 213-223.	8.3	45
14	A Decellularized Porcine Xenograft-Derived Bone Scaffold for Clinical Use as a Bone Graft Substitute: A Critical Evaluation of Processing and Structure. <i>Journal of Functional Biomaterials</i> , 2018, 9, 45.	4.4	47
15	Keratose Hydrogels Promote Vascular Smooth Muscle Differentiation from C-kit-Positive Human Cardiac Stem Cells. <i>Stem Cells and Development</i> , 2017, 26, 888-900.	2.1	12
16	and heteropolymer self-assembly of recombinant trichocytic keratins. <i>Biopolymers</i> , 2017, 107, e23037.	2.4	12
17	Evaluating the Past, Present, and Future of Regenerative Medicine: A Global View. <i>Tissue Engineering - Part B: Reviews</i> , 2017, 23, 199-210.	4.8	29
18	The Development of a Xenograft-Derived Scaffold for Tendon and Ligament Reconstruction Using a Decellularization and Oxidation Protocol. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2017, 33, 374-386.	2.7	22

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19	Assessment of Deep Partial Thickness Burn Treatment with Keratin Biomaterial Hydrogels in a Swine Model. <i>BioMed Research International</i> , 2016, 2016, 1-10.	1.9	19
20	Keratin hydrogel carrier system for simultaneous delivery of exogenous growth factors and muscle progenitor cells. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2016, 104, 864-879.	3.4	57
21	Activation of Astrocytes &lt;i&gt;in Vitro&lt;/i&gt; by Macrophages Polarized with Keratin Biomaterial Treatment. <i>Open Journal of Regenerative Medicine</i> , 2016, 05, 1-13.	0.9	6
22	Enhancing Tissue Engineering and Regenerative Medicine Product Commercialization: The Role of Science in Regulatory Decision-Making for the TE/RM Product Development. <i>Tissue Engineering - Part A</i> , 2015, 21, 2476-2479.	3.1	8
23	Binding Interactions of Keratin-Based Hair Fiber Extract to Gold, Keratin, and BMP-2. <i>PLoS ONE</i> , 2015, 10, e0137233.	2.5	21
24	Treatment of a Spinal Cord Hemitranssection Injury with Keratin Biomaterial Hydrogel Elicits Recovery and Tissue Repair. <i>ISRN Biomaterials</i> , 2014, 2014, 1-9.	0.7	6
25	Novel keratin (KeraStat <sup>®</sup> ,c) and polyurethane (Nanosan <sup>®</sup> -Sorb) biomaterials are hemostatic in a porcine lethal extremity hemorrhage model. <i>Journal of Biomaterials Applications</i> , 2014, 28, 869-879.	2.4	47
26	Awareness of the Role of Science in the FDA Regulatory Submission Process: A Survey of the TERMIS-Americas Membership. <i>Tissue Engineering - Part A</i> , 2014, 20, 1565-1582.	3.1	6
27	The effect of gamma keratose on cell viability inÂvitro after thermal stress and the regulation of cell death pathway-specific gene expression. <i>Biomaterials</i> , 2014, 35, 4646-4655.	11.4	11
28	Reduction of ectopic bone growth in critically-sized rat mandible defects by delivery of rhBMP-2 from kerateine biomaterials. <i>Biomaterials</i> , 2014, 35, 3220-3228.	11.4	50
29	Evaluation of skin regeneration after burns inÂvivo and rescue of cells after thermal stress inÂvitro following treatment with a keratin biomaterial. <i>Journal of Biomaterials Applications</i> , 2014, 29, 26-35.	2.4	58
30	In vitro response of macrophage polarization to a keratin biomaterial. <i>Acta Biomaterialia</i> , 2014, 10, 3136-3144.	8.3	87
31	Biomimetic approaches to modulate cellular adhesion in biomaterials: A review. <i>Acta Biomaterialia</i> , 2013, 9, 5431-5437.	8.3	185
32	The effect of human hair keratin hydrogel on early cellular response toÂsciatic nerve injury in a rat model. <i>Biomaterials</i> , 2013, 34, 5907-5914.	11.4	101
33	Development of a porcine deep partial thickness burn model. <i>Burns</i> , 2013, 39, 311-319.	1.9	48
34	A mechanistic investigation of the effect of keratin-based hemostatic agents on coagulation. <i>Biomaterials</i> , 2013, 34, 2492-2500.	11.4	79
35	Hemostatic properties and the role of cell receptor recognition in human hair keratin protein hydrogels. <i>Biomaterials</i> , 2013, 34, 2632-2640.	11.4	101
36	Bone regeneration with BMP-2 delivered from keratose scaffolds. <i>Biomaterials</i> , 2013, 34, 1644-1656.	11.4	130

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37	A Human Hair Keratin Hydrogel Scaffold Enhances Median Nerve Regeneration in Nonhuman Primates: An Electrophysiological and Histological Study. <i>Tissue Engineering - Part A</i> , 2013, 20, 131115063659000.	3.1	34
38	Bench to Business: A Framework to Assess Technology Readiness. <i>Tissue Engineering - Part A</i> , 2013, 19, 2314-2317.	3.1	6
39	Enhancing Tissue Engineering/Regenerative Medical Product Commercialization: The Role of Science in Regulatory Decision Making for Tissue Engineering/Regenerative Medicine Product Development. <i>Tissue Engineering - Part A</i> , 2013, 19, 2313-2313.	3.1	3
40	Hemodynamic recovery after hypovolemic shock with lactated Ringer's and keratin resuscitation fluid (KRF), a novel colloid. <i>Artificial Cells, Nanomedicine and Biotechnology</i> , 2013, 41, 293-303.	2.8	1
41	Effect of Cyclic Strain on Tensile Properties of a Naturally Derived, Decellularized Tendon Scaffold Seeded With Allogeneic Tenocytes and Associated Messenger RNA Expression. <i>Journal of Surgical Orthopaedic Advances</i> , 2013, 22, 224-232.	0.1	13
42	How much risk are you prepared to take?. <i>Nature Biotechnology</i> , 2012, 30, 821-824.	17.5	0
43	Regenerative Medicine as Applied to General Surgery. <i>Annals of Surgery</i> , 2012, 255, 867-880.	4.2	97
44	Keratin Gel Filler for Peripheral Nerve Repair in a Rodent Sciatic Nerve Injury Model. <i>Plastic and Reconstructive Surgery</i> , 2012, 129, 67-78.	1.4	57
45	TRANSDUCTION OF STRAIN TO CELLS SEEDED ONTO SCAFFOLDS EXPOSED TO UNIAXIAL STRETCHING: A THREE DIMENSIONAL FINITE ELEMENT STUDY. <i>Journal of Mechanics in Medicine and Biology</i> , 2012, 12, 1250022.	0.7	3
46	Hurdles in Tissue Engineering/Regenerative Medicine Product Commercialization: A Pilot Survey of Governmental Funding Agencies and the Financial Industry. <i>Tissue Engineering - Part A</i> , 2012, 18, 2187-2194.	3.1	43
47	Isolation and culture of primary osteocytes from the long bones of skeletally mature and aged mice. <i>BioTechniques</i> , 2012, 52, 361-373.	1.8	168
48	Structure-property relationships of meta-kerateine biomaterials derived from human hair. <i>Acta Biomaterialia</i> , 2012, 8, 274-281.	8.3	47
49	Repair of Peripheral Nerve Defects in Rabbits Using Keratin Hydrogel Scaffolds. <i>Tissue Engineering - Part A</i> , 2011, 17, 1499-1505.	3.1	92
50	Vasoactive Properties of Keratin-Derived Compounds. <i>Microcirculation</i> , 2011, 18, 663-669.	1.8	14
51	Mechanisms of hepatocyte attachment to keratin biomaterials. <i>Biomaterials</i> , 2011, 32, 7555-7561.	11.4	50
52	Mechanical and biological properties of keratose biomaterials. <i>Biomaterials</i> , 2011, 32, 8205-8217.	11.4	136
53	Keratin hydrogels support the sustained release of bioactive ciprofloxacin. <i>Journal of Biomedical Materials Research - Part A</i> , 2011, 98A, 544-553.	4.0	93
54	A Review of Keratin-Based Biomaterials for Biomedical Applications. <i>Materials</i> , 2010, 3, 999-1014.	2.9	503

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55	Some properties of keratin biomaterials: Kerateines. <i>Biomaterials</i> , 2010, 31, 585-593.	11.4	279
56	Correlation of cell strain in single osteocytes with intracellular calcium, but not intracellular nitric oxide, in response to fluid flow. <i>Journal of Biomechanics</i> , 2010, 43, 1560-1564.	2.1	43
57	A keratin biomaterial gel hemostat derived from human hair: Evaluation in a rabbit model of lethal liver injury. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009, 90B, 45-54.	3.4	90
58	The influence of extracellular matrix derived from skeletal muscle tissue on the proliferation and differentiation of myogenic progenitor cells ex vivo. <i>Biomaterials</i> , 2009, 30, 2393-2399.	11.4	153
59	Tissue-specific extracellular matrix coatings for the promotion of cell proliferation and maintenance of cell phenotype. <i>Biomaterials</i> , 2009, 30, 4021-4028.	11.4	226
60	Smooth Muscle Cell Seeding of Decellularized Scaffolds: The Importance of Bioreactor Preconditioning to Development of a More Native Architecture for Tissue-Engineered Blood Vessels. <i>Tissue Engineering - Part A</i> , 2009, 15, 827-840.	3.1	50
61	Smooth Muscle Cell Seeding on Decellularized Porcine Saphenous Vein Scaffolds – A Step Towards Functional Tissue Engineered Blood Vessels. <i>FASEB Journal</i> , 2009, 23, 817.2.	0.5	0
62	The use of keratin biomaterials derived from human hair for the promotion of rapid regeneration of peripheral nerves. <i>Biomaterials</i> , 2008, 29, 118-128.	11.4	304
63	Peripheral Nerve Regeneration Using a Keratin-Based Scaffold: Long-Term Functional and Histological Outcomes in a Mouse Model. <i>Journal of Hand Surgery</i> , 2008, 33, 1541-1547.	1.6	141
64	Smart biomaterials design for tissue engineering and regenerative medicine. <i>Biomaterials</i> , 2007, 28, 5068-5073.	11.4	347
65	A naturally derived, cytocompatible, and architecturally optimized scaffold for tendon and ligament regeneration. <i>Biomaterials</i> , 2007, 28, 4321-4329.	11.4	116
66	Total Organ Replacement Using Tissue Engineering. <i>FASEB Journal</i> , 2007, 21, A140.	0.5	1
67	Development, Characterization and Cell Seeding of a Novel Biocompatible Scaffold for Tendon and Ligament Reconstruction. <i>FASEB Journal</i> , 2007, 21, A268.	0.5	1
68	Engineering Complex Tissues. <i>Tissue Engineering</i> , 2006, 12, 3307-3339.	4.6	513
69	Controlled fabrication of a biological vascular substitute. <i>Biomaterials</i> , 2006, 27, 1088-1094.	11.4	414
70	Organosiloxane-Cross-Linked Poly(2,6-Dimethyl-1,4-Phenylene Oxide) Network Structures. <i>Journal of Inorganic and Organometallic Polymers</i> , 1998, 8, 119-126.	1.5	6
71	Title is missing!. <i>Journal of Inorganic and Organometallic Polymers</i> , 1998, 8, 111-117.	1.5	30
72	Investigation of low energy conformations of substituted silphenylenes by computational techniques. <i>Computational and Theoretical Polymer Science</i> , 1998, 8, 127-131.	1.1	0