Dan Simionescu

List of Publications by Year
in descending order

34 papers	1,223 citations	471509 17 h-index	395702 33 g-index
34 all docs	34 docs citations	34 times ranked	1631 citing authors

#	Article	IF	Citations
1	Novel porous aortic elastin and collagen scaffolds for tissue engineering. Biomaterials, 2004, 25, 5227-5237.	11.4	227
2	Elastin stabilization in cardiovascular implants: improved resistance to enzymatic degradation by treatment with tannic acid. Biomaterials, 2004, 25, 3293-3302.	11.4	98
3	Prevention of calcification in bioprosthetic heart valves: challenges and perspectives. Expert Opinion on Biological Therapy, 2004, 4, 1971-1985.	3.1	91
4	Tannic acid treatment enhances biostability and reduces calcification of glutaraldehyde fixed aortic wall. Biomaterials, 2005, 26, 1237-1245.	11.4	90
5	Small Noncytotoxic Carbon Nanoâ€Onions: First Covalent Functionalization with Biomolecules. Chemistry - A European Journal, 2010, 16, 4870-4880.	3.3	73
6	Novel tissueâ€derived biomimetic scaffold for regenerating the human nucleus pulposus. Journal of Biomedical Materials Research - Part A, 2011, 96A, 422-435.	4.0	66
7	Design and Testing of a Pulsatile Conditioning System for Dynamic Endothelialization of Polyphenol-Stabilized Tissue Engineered Heart Valves. Cardiovascular Engineering and Technology, 2010, 1, 138-153.	1.6	60
8	The performance of cross-linked acellular arterial scaffolds as vascular grafts; pre-clinical testing in direct and isolation loop circulatory models. Biomaterials, 2014, 35, 6311-6322.	11.4	60
9	Involvement of matrix metalloproteinases and tenascin-C in elastin calcification. Cardiovascular Pathology, 2004, 13, 146-155.	1.6	55
10	Differentiated distribution of the cell surface charge on the alveolar-capillary unit. Microvascular Research, 1983, 25, 85-100.	2.5	51
11	Lysine-enhanced glutaraldehyde crosslinking of collagenous biomaterials. Journal of Biomedical Materials Research Part B, 1991, 25, 1495-1505.	3.1	46
12	Mapping of glutaraldehyde-treated bovine pericardium and tissue selection for bioprosthetic heart valves. Journal of Biomedical Materials Research Part B, 1993, 27, 697-704.	3.1	42
13	Manipulation of cellular spheroid composition and the effects on vascular tissue fusion. Acta Biomaterialia, 2015, 13, 188-198.	8.3	40
14	Form Follows Function: Advances in Trilayered Structure Replication for Aortic Heart Valve Tissue Engineering. Journal of Healthcare Engineering, 2012, 3, 179-202.	1.9	35
15	Detection of remnant proteolytic activities in unimplanted glutaraldehyde-treated bovine pericardium and explanted cardiac bioprostheses. Journal of Biomedical Materials Research Part B, 1993, 27, 821-829.	3.1	25
16	New evolution in mitral physiology and surgery: Mitral stentless pericardial valve. Annals of Thoracic Surgery, 1995, 60, S433-S438.	1.3	22
17	Development and initial characterization of a chemically stabilized elastin-glycosaminoglycan-collagen composite shape-memory hydrogel for nucleus pulposus regeneration. Journal of Biomedical Materials Research - Part A, 2014, 102, n/a-n/a.	4.0	17
18	Accelerated Iron Oxide Nanoparticle Degradation Mediated by Polyester Encapsulation within Cellular Spheroids. Advanced Functional Materials, 2014, 24, 800-807.	14.9	17

#	Article	IF	Citations
19	Iron Oxide Nanoparticles Stimulates Extra-Cellular Matrix Production in Cellular Spheroids. Bioengineering, 2017, 4, 4.	3.5	16
20	Bioreactor conditioning of valve scaffolds seeded internally with adult stem cells. Tissue Engineering and Regenerative Medicine, 2016, 13, 507-515.	3.7	14
21	Tannic acid mimicking dendrimers as small intestine submucosa stabilizing nanomordants. Biomaterials, 2006, 27, 745-751.	11.4	12
22	Processing cellular spheroids for histological examination. Journal of Histotechnology, 2014, 37, 138-142.	0.5	10
23	Chemical stabilization of the extracellular matrix attenuates growth of experimentally induced abdominal aorta aneurysms in a large animal model. JVS Vascular Science, 2020, 1, 69-80.	1.1	9
24	Partial characterization of low molecular weight proteoglycan isolated from bovine parietal pericardium. Biochemical and Biophysical Research Communications, 1988, 151, 480-486.	2.1	8
25	Aortic valve disease in diabetes: Molecular mechanisms and novel therapies. Journal of Cellular and Molecular Medicine, 2021, 25, 9483-9495.	3.6	8
26	Longitudinal Stretching for Maturation of Vascular Tissues Using Magnetic Forces. Bioengineering, 2016, 3, 29.	3.5	7
27	Lectin and antibody-based histochemical techniques for cardiovascular tissue engineering. Journal of Histotechnology, 2011, 34, 20-28.	0.5	5
28	Pulmonary heart valve replacement using stabilized acellular xenogeneic scaffolds; effects of seeding with autologous stem cells. Romanian Journal of Laboratory Medicine, 2015, 23, 415-430.	0.2	5
29	Preclinical Testing of Living Tissue-Engineered Heart Valves for Pediatric Patients, Challenges and Opportunities. Frontiers in Cardiovascular Medicine, 2021, 8, 707892.	2.4	5
30	In Vivo Testing of Xenogeneic Acellular Aortic Valves Seeded with Stem Cells. Romanian Journal of Laboratory Medicine, 2016, 24, 343-346.	0.2	5
31	Minimally Invasive Surgical Protocol for Adipose Derived Stem Cells Collection and Isolation - Ovine Model. Revista De Chimie (discontinued), 2019, 70, 1826-1828.	0.4	2
32	Xenogenic Cues for Human Mesenchymal Stem Cell Differentiation towards a Nucleus Pulposus Cell-like Phenotype. Spine Journal, 2010, 10, S114-S115.	1.3	1
33	A Standardized Dissection Protocol to Generate Aortic Valvular Scaffolds from Porcine Hearts. Acta Marisiensis - Seria Medica, 2017, 63, 133-135.	0.3	1
34	Reconstitution of the Ventricular Endocardium Within Acellular Hearts. Regenerative Engineering and Translational Medicine, 2020, 6, 90-100.	2.9	0