Laura Iop

List of Publications by Year
in descending order

50 papers	1,828 citations	257101 24 h-index	264894 42 g-index
53 all docs	53 docs citations	53 times ranked	2535 citing authors

#	Article	IF	Citations
1	Dantrolene rescues arrhythmogenic RYR2 defect in a patientâ€specific stem cell model of catecholaminergic polymorphic ventricular tachycardia. EMBO Molecular Medicine, 2012, 4, 180-191.	3.3	298
2	Human amniotic fluid-derived stem cells are rejected after transplantation in the myocardium of normal, ischemic, immuno-suppressed or immuno-deficient rat. Journal of Molecular and Cellular Cardiology, 2007, 42, 746-759.	0.9	144
3	First quantification of alphaâ€<scp>G</scp>al epitope in current glutaraldehydeâ€fixed heart valve bioprostheses. Xenotransplantation, 2013, 20, 252-261.	1.6	113
4	The influence of heart valve leaflet matrix characteristics on the interaction between human mesenchymal stem cells and decellularized scaffolds. Biomaterials, 2009, 30, 4104-4116.	5.7	79
5	Neovascularization induced by porous collagen scaffold implanted on intact and cryoinjured rat hearts. Biomaterials, 2007, 28, 5449-5461.	5.7	74
6	Decellularized Allogeneic Heart Valves Demonstrate Self-Regeneration Potential after a Long-Term Preclinical Evaluation. PLoS ONE, 2014, 9, e99593.	1.1	71
7	Interplay of cellâ€“cell contacts and RhoA/ <scp>MRTF</scp> â€A signaling regulates cardiomyocyte identity. EMBO Journal, 2018, 37, .	3.5	66
8	First quantitative assay of alpha-Gal in soft tissues: Presence and distribution of the epitope before and after cell removal from xenogeneic heart valves. Acta Biomaterialia, 2011, 7, 1728-1734.	4.1	65
9	Different Cardiovascular Potential of Adult- and Fetal-Type Mesenchymal Stem Cells in a Rat Model of Heart Cryoinjury. Cell Transplantation, 2008, 17, 679-694.	1.2	63
10	Alphaâ€Gal detectors in xenotransplantation research: a word of caution. Xenotransplantation, 2012, 19, 215-220.	1.6	59
11	A sterilization method for decellularized xenogeneic cardiovascular scaffolds. Acta Biomaterialia, 2018, 67, 282-294.	4.1	52
12	Mechanical testing of pericardium for manufacturing prosthetic heart valves. Interactive Cardiovascular and Thoracic Surgery, 2016, 22, 72-84.	0.5	47
13	Clones of Interstitial Cells From Bovine Aortic Valve Exhibit Different Calcifying Potential When Exposed to Endotoxin and Phosphate. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 2165-2172.	1.1	45
14	A Comprehensive Comparison of Bovine and Porcine Decellularized Pericardia: New Insights for Surgical Applications. Biomolecules, 2020, 10, 371.	1.8	42
15	The role of antibody responses against glycans in bioprosthetic heart valve calcification and deterioration. Nature Medicine, 2022, 28, 283-294.	15.2	40
16	<i>In vitro</i> comparative assessment of decellularized bovine pericardial patches and commercial bioprosthetic heart valves. Biomedical Materials (Bristol), 2017, 12, 015021.	1.7	37
17	Bioengineered tissue solutions for repair, correction and reconstruction in cardiovascular surgery. Journal of Thoracic Disease, 2018, 10, S2390-S2411.	0.6	36
18	Human Bone Marrow-Derived CD133⁺Cells Delivered to a Collagen Patch on Cryoinjured Rat Heart Promote Angiogenesis and Arteriogenesis. Cell Transplantation, 2010, 19, 1247-1260.	1.2	34

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19	Proteomic Analysis of Clonal Interstitial Aortic Valve Cells Acquiring a Pro-calcific Profile. Journal of Proteome Research, 2010, 9, 5913-5921.	1.8	33
20	Preservation strategies for decellularized pericardial scaffolds for off-the-shelf availability. Acta Biomaterialia, 2019, 84, 208-221.	4.1	33
21	Present and future perspectives on total artificial hearts. Annals of Cardiothoracic Surgery, 2014, 3, 595-602.	0.6	33
22	Guided Tissue Regeneration in Heart Valve Replacement: From Preclinical Research to First-in-Human Trials. BioMed Research International, 2015, 2015, 1-13.	0.9	29
23	Multimodal label-free ex vivo imaging using a dual-wavelength microscope with axial chromatic aberration compensation. Journal of Biomedical Optics, 2018, 23, 1.	1.4	27
24	Extracellular pyrophosphate is reduced in aortic interstitial valve cells acquiring a calcifying profile: Implications for aortic valve calcification. Atherosclerosis, 2014, 237, 568-576.	0.4	26
25	Role of coronary microvascular dysfunction in heart failure with preserved ejection fraction. Reviews in Cardiovascular Medicine, 2021, 22, 97.	0.5	26
26	Decellularized Cryopreserved Allografts as Off-the-Shelf Allogeneic Alternative for Heart Valve Replacement: In Vitro Assessment Before Clinical Translation. Journal of Cardiovascular Translational Research, 2017, 10, 93-103.	1.1	25
27	Decellularized aortic conduits: could their cryopreservation affect post-implantation outcomes? A morpho-functional study on porcine homografts. Heart and Vessels, 2016, 31, 1862-1873.	0.5	24
28	The Rapidly Evolving Concept of Whole Heart Engineering. Stem Cells International, 2017, 2017, 1-18.	1.2	19
29	The Biocompatibility Challenges in the Total Artificial Heart Evolution. Annual Review of Biomedical Engineering, 2019, 21, 85-110.	5.7	17
30	Fibrosis in tissue engineering and regenerative medicine: treat or trigger?. Advanced Drug Delivery Reviews, 2019, 146, 17-36.	6.6	16
31	Antibodies against Angiotensin II Type 1 and Endothelin 1 Type A Receptors in Cardiovascular Pathologies. International Journal of Molecular Sciences, 2022, 23, 927.	1.8	16
32	Are <scp>FDA</scp> and <scp>CE</scp> sacrificing safety for a faster commercialization of xenogeneic tissue devices? Unavoidable need for legislation in decellularized tissue manufacturing. Tissue Antigens, 2014, 83, 193-194.	1.0	14
33	RegenHeart: A Time-Effective, Low-Concentration, Detergent-Based Method Aiming for Conservative Decellularization of the Whole Heart Organ. ACS Biomaterials Science and Engineering, 2020, 6, 5493-5506.	2.6	13
34	The Vietnamese pig as a translational animal model to evaluate tissue engineered heart valves: promising early experience. International Journal of Artificial Organs, 2017, 40, 142-149.	0.7	13
35	Hybrid membranes for the production of blood contacting surfaces: physicochemical, structural and biomechanical characterization. Biomaterials Research, 2021, 25, 26.	3.2	12
36	Native Bovine and Porcine Pericardia Respond to Load With Additive Recruitment of Collagen Fibers. Artificial Organs, 2018, 42, 540-548.	1.0	11

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37	Covalent functionalization of decellularized tissues accelerates endothelialization. Bioactive Materials, 2021, 6, 3851-3864.	8.6	10
38	The Light and Shadow of Senescence and Inflammation in Cardiovascular Pathology and Regenerative Medicine. Mediators of Inflammation, 2017, 2017, 1-13.	1.4	9
39	Bioengineering the Cardiac Conduction System: Advances in Cellular, Gene, and Tissue Engineering for Heart Rhythm Regeneration. Frontiers in Bioengineering and Biotechnology, 2021, 9, 673477.	2.0	9
40	Bioengineered percutaneous heart valves for transcatheter aortic valve replacement: a comparative evaluation of decellularised bovine and porcine pericardia. Materials Science and Engineering C, 2021, 123, 111936.	3.8	8
41	Inherited and Acquired Rhythm Disturbances in Sick Sinus Syndrome, Brugada Syndrome, and Atrial Fibrillation: Lessons from Preclinical Modeling. Cells, 2021, 10, 3175.	1.8	8
42	Nanopatterned acellular valve conduits drive the commitment of blood-derived multipotent cells. International Journal of Nanomedicine, 2016, Volume 11, 5041-5055.	3.3	7
43	Cellular, molecular, genomic changes occurring in the heart under mechanical circulatory support. Annals of Cardiothoracic Surgery, 2014, 3, 496-504.	0.6	7
44	Biocompatibility Issues of Next Generation Decellularized Bioprosthetic Devices. Conference Papers in Science, 2014, 2014, 1-6.	0.3	4
45	Mechanical Circulatory Support and Stem Cellâ€Based Heart Treatment in Europeâ€"2018 Clinical Update. Artificial Organs, 2018, 42, 871-878.	1.0	4
46	Toward the Effective Bioengineering of a Pathological Tissue for Cardiovascular Disease Modeling: Old Strategies and New Frontiers for Prevention, Diagnosis, and Therapy. Frontiers in Cardiovascular Medicine, 2020, 7, 591583.	1.1	3
47	Cutting-Edge Regenerative Medicine Technologies for the Treatment of Heart Valve Calcification. , 0, , .		2
48	Modeling Cardiac Congenital Diseases: From Mathematic Tools to Human Induced Pluripotent Stem Cells. Conference Papers in Science, 2014, 2014, 1-9.	0.3	2
49	Xenotransplantation: The Way beyond and Ahead toward Clinical Application. Journal of Immunology Research, 2018, 2018, 1-2.	0.9	1
50	Correction to: New Generation Devices for Transcatheter Aortic Valve Implantation. , 2020, , C1-C1.		0