Ulrich A Stock

List of Publications by Year
in descending order

49 papers	2,599 citations	201674 27 h-index	206112 48 g-index
52 all docs	52 docs citations	52 times ranked	2981 citing authors

#	Article	IF	Citations
1	Tissue Engineering: Current State and Prospects. Annual Review of Medicine, 2001, 52, 443-451.	12.2	420
2	Tissue-engineered valved conduits in the pulmonary circulation. Journal of Thoracic and Cardiovascular Surgery, 2000, 119, 732-740.	0.8	239
3	Two-photon microscopes and in vivo multiphoton tomographs â€" Powerful diagnostic tools for tissue engineering and drug delivery. Advanced Drug Delivery Reviews, 2006, 58, 878-896.	13.7	196
4	Impact of heart valve decellularization on 3-D ultrastructure, immunogenicity and thrombogenicity. Biomaterials, 2010, 31, 2549-2554.	11.4	189
5	Tissue engineering of aortic tissue: dire consequence of suboptimal elastic fiber synthesis in vivo. Cardiovascular Research, 2004, 63, 719-730.	3.8	101
6	Patch augmentation of the pulmonary artery with bioabsorbable polymers and autologous cell seeding. Journal of Thoracic and Cardiovascular Surgery, 2000, 120, 1158-1167.	0.8	98
7	Impact of Cryopreservation on Extracellular Matrix Structures of Heart Valve Leaflets. Annals of Thoracic Surgery, 2006, 81, 918-926.	1.3	98
8	Human immune responses to porcine xenogeneic matrices and their extracellular matrix constituents in vitro. Biomaterials, 2010, 31, 3793-3803.	11.4	86
9	Tissue engineering of heart valves using decellularized xenogeneic or polymeric starter matrices. Philosophical Transactions of the Royal Society B: Biological Sciences, 2007, 362, 1505-1512.	4.0	80
10	Prediction of safe duration of hypothermic circulatory arrest by near-infrared spectroscopy. Journal of Thoracic and Cardiovascular Surgery, 2001, 122, 339-350.	0.8	77
11	Combination of alpha-stat strategy and hemodilution exacerbates neurologic injury in a survival piglet model with deep hypothermic circulatory arrest. Annals of Thoracic Surgery, 2002, 73, 180-189.	1.3	71
12	Optimized Preservation of Extracellular Matrix in Cardiac Tissues: Implications for Long-Term Graft Durability. Annals of Thoracic Surgery, 2007, 83, 1641-1650.	1.3	71
13	Utility and Limitations of Near-Infrared Spectroscopy during Cardiopulmonary Bypass in a Piglet Model. Pediatric Research, 2001, 49, 770-776.	2.3	69
14	Raman spectroscopy for the nonâ€contact and nonâ€destructive monitoring of collagen damage within tissues. Journal of Biophotonics, 2012, 5, 47-56.	2.3	68
15	Engineering of fibrillar decorin matrices for a tissue-engineered trachea. Biomaterials, 2012, 33, 5259-5266.	11.4	66
16	Performance of decellularized xenogeneic tissue in heart valve replacement. Biomaterials, 2006, 27, 1-2.	11.4	59
17	Cardiovascular Physiology During Fetal Development and Implications for Tissue Engineering. Tissue Engineering, 2001, 7, 1-7.	4.6	56
18	Dynamics of extracellular matrix production and turnover in tissue engineered cardiovascular structures. Journal of Cellular Biochemistry, 2001, 81, 220-228.	2.6	54

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19	Imaging of cardiovascular structures using near-infrared femtosecond multiphoton laser scanning microscopy. Journal of Biomedical Optics, 2005, 10, 024017.	2.6	51
20	Cardiomyopathy is associated with structural remodelling of heart valve extracellular matrix. European Heart Journal, 2009, 30, 2254-2265.	2.2	48
21	Fibronectin Adsorption on Electrospun Synthetic Vascular Grafts Attracts Endothelial Progenitor Cells and Promotes Endothelialization in Dynamic In Vitro Culture. Cells, 2020, 9, 778.	4.1	39
22	The performance of ice-free cryopreserved heart valve allografts in an orthotopic pulmonary sheep model. Biomaterials, 2010, 31, 5306-5311.	11.4	37
23	Ice-free cryopreservation of heart valve allografts: better extracellular matrix preservation in vivo and preclinical results. Cell and Tissue Banking, 2012, 13, 663-671.	1.1	36
24	Phenotypical Plasticity of Vascular Smooth Muscle Cellsâ€"Effect of<i>In Vitro</i>and<i>In Vivo</i>Shear Stress for Tissue Engineering of Blood Vessels. Tissue Engineering, 2007, 13, 2505-2514.	4.6	33
25	Percutaneous pulmonary valve replacement: autologous tissue-engineered valved stents. Cardiovascular Research, 2010, 88, 453-461.	3.8	33
26	<i>InÂ vivo</i> tissue engineering of heart valves: evolution of a novel concept. Regenerative Medicine, 2009, 4, 613-619.	1.7	32
27	Absence of Immune Responses with Xenogeneic Collagen and Elastin. Tissue Engineering - Part A, 2013, 19, 1592-1600.	3.1	28
28	Preclinical Evaluation of Ice-Free Cryopreserved Arteries: Structural Integrity and Hemocompatibility. Cells Tissues Organs, 2012, 196, 262-270.	2.3	16
29	Oligonucleotide and Parylene Surface Coating of Polystyrene and ePTFE for Improved Endothelial Cell Attachment and Hemocompatibility. International Journal of Biomaterials, 2012, 2012, 1-14.	2.4	16
30	The choice of cryopreservation method affects immune compatibility of human cardiovascular matrices. Scientific Reports, 2017, 7, 17027.	3.3	16
31	Marker-Independent In Situ Quantitative Assessment of Residual Cryoprotectants in Cardiac Tissues. Analytical Chemistry, 2019, 91, 2266-2272.	6.5	12
32	Valves in Development for Autogenous Tissue Valve Replacement. Pediatric Cardiac Surgery Annual, 1999, 2, 51-64.	1.2	11
33	Xeno-immunogenicity of ice-free cryopreserved porcine leaflets. Journal of Surgical Research, 2015, 193, 933-941.	1.6	11
34	Pros and Cons of Different Types of Mechanical Circulatory Support Device in Case of Postinfarction Ventricular Septal Defect. ASAIO Journal, 2021, 67, e110-e113.	1.6	11
35	Percutaneous SAPIEN S3 Transcatheter Valve Implantation for Postâ€"Left Ventricular Assist Device Aortic Regurgitation. Annals of Thoracic Surgery, 2015, 100, e67-e69.	1.3	10
36	Methylene Blue Modulates Transendothelial Migration of Peripheral Blood Cells. PLoS ONE, 2013, 8, e82214.	2.5	10

#	Article	IF	Citations
37	Development of a Simplified Ice-Free Cryopreservation Method for Heart Valves Employing VS83, an 83% Cryoprotectant Formulation. Biopreservation and Biobanking, 2012, 10, 479-484.	1.0	8
38	Impact of T-cell-mediated immune response on xenogeneic heart valve transplantation: short-term success and mid-term failure. European Journal of Cardio-thoracic Surgery, 2018, 53, 784-792.	1.4	8
39	Effects on human heart valve immunogenicity <i>in vitro</i> by high concentration cryoprotectant treatment. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1046-e1055.	2.7	8
40	Searching for the optimal heart valve. Biotechnology Journal, 2013, 8, 286-287.	3.5	5
41	Influence of hypothermia and subsequent rewarming upon leukocyte-endothelial interactions and expression of Junctional-Adhesion-Molecules A and B. Scientific Reports, 2016, 6, 21996.	3.3	5
42	Simplified Pulse Reactor for Real-Time Long-Term In Vitro Testing of Biological Heart Valves. Annals of Biomedical Engineering, 2010, 38, 1919-1927.	2.5	4
43	The results of cardiac surgery during the COVID-19 pandemic compared with previous years: a propensity weighted study of outcomes at six months. Journal of the Royal Society of Medicine, 2022, 115, 341-347.	2.0	4
44	Cardiac surgery during the COVID-19 pandemic: from <i>vita minima</i> to recovery. British Journal of Surgery, 2020, 107, e481-e483.	0.3	3
45	Methylene blue modulates adhesion molecule expression on microvascular endothelial cells. Inflammation Research, 2014, 63, 649-656.	4.0	1
46	Kinetics of circulating endothelial progenitor cells in patients undergoing carotid artery surgery. Therapeutics and Clinical Risk Management, 2016, Volume 12, 1841-1847.	2.0	1
47	The role of extracellular and intracellular proteolytic systems in aneurysms of the ascending aorta. Histology and Histopathology, 2016, 31, 523-34.	0.7	1
48	Gelatin and Decorin are Suitable Candidates for Application in Tissue-Engineered Matrices - an Immunological In Vitro Study. , 2012, , .		0
49	The Myth of Cryopreservation of Heart Valves. FASEB Journal, 2013, 27, 16.6.	0.5	0