Frederic Heim

List of Publications by Year
in descending order

29 papers	310 citations	840776 11 h-index	888059 17 g-index
30 all docs	30 docs citations	30 times ranked	255 citing authors

#	Article	IF	Citations
1	Influence of fatigue stress on the radial strength of polymeric braided vascular stents. Polymers for Advanced Technologies, 2022, 33, 627-637.	3.2	5
2	Polyethylene terephthalate textile heart valve: How poly(ethylene glycol) grafting limits fibrosis. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 2110-2120.	3.4	1
3	Non-woven textiles for medical implants: mechanical performances improvement. Biomedizinische Technik, 2022, 67, 317-330.	0.8	0
4	Fibrous biomaterials: Effect of textile topography on foreign body reaction. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 1512-1524.	3.4	8
5	Finite Element Simulations of the ID Venous System to Treat Venous Compression Disorders: From Model Validation to Realistic Implant Prediction. Annals of Biomedical Engineering, 2021, 49, 1493-1506.	2.5	5
6	How yarn orientation limits fibrotic tissue ingrowth in a woven polyester heart valve scaffold: a case report. Biomedizinische Technik, 2021, 66, 225-230.	0.8	3
7	In-vitro characterization of self-expandable textile transcatheter aortic valves. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103559.	3.1	6
8	Heart valves from polymeric fibers: potential and limits. Journal of Cardiovascular Surgery, 2020, 61, 586-595.	0.6	4
9	Valves and pipes in the cardiovascular system. Where are we going. Journal of Cardiovascular Surgery, 2020, 61, 525-527.	0.6	0
10	Mechanical properties of medical textiles. , 2019, , 301-340.		3
11	Elastic recovery of polymeric braided stents under cyclic loading: Preliminary assessment. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 98, 131-136.	3.1	21
12	N₂ supercritical jet to modify the characteristics of polymer material surfaces: Influence of the process parameters on the surface topography. Polymer Engineering and Science, 2019, 59, 616-624.	3.1	4
13	How Compression Inside a Delivery System can Degrade the Cover of Aortic Endografts. Annals of Vascular Surgery, 2018, 51, 150-159.	0.9	3
14	Explanted Vascular and Endovascular Graft Analysis: Where Do We Stand and What Should We Do?. European Journal of Vascular and Endovascular Surgery, 2018, 55, 567-576.	1.5	27
15	Fibrous composite material for textile heart valve design: in vitro assessment. Biomedizinische Technik, 2018, 63, 221-230.	0.8	4
16	Hybrid textile heart valve prosthesis: preliminary in vitro evaluation. Biomedizinische Technik, 2018, 63, 333-339.	0.8	3
17	Heart valves from polyester fibers: a preliminary 6-month in vivo study. Biomedizinische Technik, 2018, 63, 271-278.	0.8	20
18	Heart Valves from Polyester Fibers vs. Biological Tissue: Comparative Study In Vitro. Annals of Biomedical Engineering, 2017, 45, 476-486.	2.5	19

#	Article	IF	Citations
19	Fiber heart valve prosthesis: Early in vitro fatigue results. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 986-992.	3.4	10
20	Reynolds shear stress for textile prosthetic heart valves in relation to fabric design. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 60, 280-287.	3.1	4
21	Textile transcatheter heart valve prosthesis: state of the art. Emerging Materials Research, 2015, 4, 1-11.	0.7	1
22	Mechanical degradation of biological heart valve tissue induced by low diameter crimping: An early assessment. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 44, 71-75.	3.1	29
23	Transcatheter fiber heart valve: Effect of crimping on material performances. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 1488-1497.	3.4	26
24	Fiber heart valve prosthesis: Influence of the fabric construction parameters on the valve fatigue performances. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 40, 69-74.	3.1	23
25	Textile heart valve prosthesis: from fabric design criteria to early in-vivo performances. Journal of Heart Valve Disease, 2013, 22, 361-7.	0.5	11
26	A novel heart valve stent design: mechanical interaction with the aortic root. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 157-165.	1.6	1
27	Nitinol Stent for Percutaneous Heart Valve Implantation: Material Shape Setting. Materials and Manufacturing Processes, 2011, 26, 181-187.	4.7	21
28	Textile Heart Valve: Novel Shaping Process and Material Performances. Materials and Manufacturing Processes, 2011, 26, 1303-1309.	4.7	11
29	Textile for heart valve prostheses: Fabric longâ€term durability testing. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 92B, 68-77.	3.4	15