Robert J Levy

List of Publications by Citations

177 papers	9,278 citations	49 h-index	92 g-index
184 ext. papers	9,925 ext. citations	7.3 avg, IF	5.64 L-index

#	Paper	IF	Citations
177	Gastrointestinal uptake of biodegradable microparticles: effect of particle size. *Pharmaceutical Research*, **1996**, 13, 1838-45	4.5	703
176	The mechanism of uptake of biodegradable microparticles in Caco-2 cells is size dependent. *Pharmaceutical Research*, **1997**, 14, 1568-73	4.5	655
175	Calcification of tissue heart valve substitutes: progress toward understanding and prevention. *Annals of Thoracic Surgery*, **2005**, 79, 1072-80	2.7	509
174	Polymer degradation and in vitro release of a model protein from poly(D,L-lactide-co-glycolide) nano- and microparticles. *Journal of Controlled Release*, **2003**, 92, 173-87	11.7	398
173	Progression of aortic valve stenosis: TGF-beta1 is present in calcified aortic valve cusps and promotes aortic valve interstitial cell calcification via apoptosis. *Annals of Thoracic Surgery*, **2003**, 75, 457-65; discussion 465-6	2.7	338
172	Founders Award, 25th Annual Meeting of the Society for Biomaterials, perspectives. Providence, RI, April 28-May 2, 1999. Tissue heart valves: current challenges and future research perspectives. *Journal of Biomedical Materials Research Part B*, **1999**, 47, 439-65		334
171	High field gradient targeting of magnetic nanoparticle-loaded endothelial cells to the surfaces of steel stents. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 698-703	11.5	213
170	Gene delivery from a DNA controlled-release stent in porcine coronary arteries. *Nature Biotechnology*, **2000**, 18, 1181-4	44.5	204
169	Prevention of bioprosthetic heart valve calcification by ethanol preincubation. Efficacy and mechanisms. *Circulation*, **1997**, 95, 479-88	16.7	182
168	Targeting stents with local delivery of paclitaxel-loaded magnetic nanoparticles using uniform fields. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 8346-51	11.5	158
167	Serotonin mechanisms in heart valve disease I: serotonin-induced up-regulation of transforming growth factor-beta1 via G-protein signal transduction in aortic valve interstitial cells. *American Journal of Pathology*, **2002**, 161, 2111-21	5.8	154
166	Arterial uptake of biodegradable nanoparticles: effect of surface modifications. *Journal of Pharmaceutical Sciences*, **1998**, 87, 1229-34	3.9	142
165	Matrix metalloproteinase-2 is associated with tenascin-C in calcific aortic stenosis. *American Journal of Pathology*, **2001**, 159, 321-7	5.8	141
164	Use of Hancock porcine xenografts in children and adolescents. *American Journal of Cardiology*, **1980**, 46, 429-38	3	139
163	Nanoparticle drug delivery system for restenosis. *Advanced Drug Delivery Reviews*, **1997**, 24, 63-85	18.5	126
162	Transforming growth factor-beta1 mechanisms in aortic valve calcification: increased alkaline phosphatase and related events. *Annals of Thoracic Surgery*, **2007**, 83, 946-53	2.7	120
161	Arterial uptake of biodegradable nanoparticles for intravascular local drug delivery: results with an acute dog model. *Journal of Controlled Release*, **1998**, 54, 201-11	11.7	111

160	In-vivo dynamic deformation of the mitral valve anterior leaflet. *Annals of Thoracic Surgery*, **2006**, 82, 1369-77	2.7	111
159	Mechanisms of bioprosthetic heart valve failure: fatigue causes collagen denaturation and glycosaminoglycan loss. *Journal of Biomedical Materials Research Part B*, **1999**, 46, 44-50		110
158	Pathological considerations in replacement cardiac valves. *Cardiovascular Pathology*, **1992**, 1, 29-52	3.8	106
157	Magnetically driven plasmid DNA delivery with biodegradable polymeric nanoparticles. *FASEB Journal*, **2007**, 21, 2510-9	0.9	104
156	Serotonin mechanisms in heart valve disease II: the 5-HT2 receptor and its signaling pathway in aortic valve interstitial cells. *American Journal of Pathology*, **2002**, 161, 2209-18	5.8	97
155	Effects of antisense c-myb oligonucleotides on vascular smooth muscle cell proliferation and response to vessel wall injury. *Circulation Research*, **1995**, 76, 505-13	15.7	93
154	Endothelial delivery of antioxidant enzymes loaded into non-polymeric magnetic nanoparticles. *Journal of Controlled Release*, **2010**, 146, 144-51	11.7	91
153	Bioprosthetic Heart Valve Failure: Pathology and Pathogenesis. *Cardiology Clinics*, **1984**, 2, 717-739	2.5	89
152	Gene delivery to pig coronary arteries from stents carrying antibody-tethered adenovirus. *Human Gene Therapy*, **2002**, 13, 443-54	4.8	87
151	Bisphosphonate-mediated gene vector delivery from the metal surfaces of stents. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 159-64	11.5	85
150	Elastin calcification and its prevention with aluminum chloride pretreatment. *American Journal of Pathology*, **1999**, 155, 973-82	5.8	83
149	Calcification of cardiac valve bioprostheses. *Journal of Thoracic and Cardiovascular Surgery*, **1982**, 83, 602-609	1.5	80
148	Gene therapy for tissue repair and regeneration. *Advanced Drug Delivery Reviews*, **1998**, 33, 53-69	18.5	79
147	Atherocalcin, a gamma-carboxyglutamic acid containing protein from atherosclerotic plaque. *Biochemical and Biophysical Research Communications*, **1979**, 91, 41-9	3.4	78
146	Delivery and expression of pDNA embedded in collagen matrices. *Journal of Controlled Release*, **2004**, 95, 309-20	11.7	71
145	Inhibition of matrix metalloproteinase activity attenuates tenascin-C production and calcification of implanted purified elastin in rats. *American Journal of Pathology*, **2000**, 157, 885-93	5.8	69
144	Initiation of mineralization in bioprosthetic heart valves: studies of alkaline phosphatase activity and its inhibition by AlCl3 or FeCl3 preincubations. *Journal of Biomedical Materials Research Part B*, **1991**, 25, 905-35		68
143	Mechanism of calcification of porcine bioprosthetic aortic valve cusps: role of T-lymphocytes. *American Journal of Cardiology*, **1983**, 52, 629-31	3	68

142	Endothelial targeting of nanocarriers loaded with antioxidant enzymes for protection against vascular oxidative stress and inflammation. *Biomaterials*, **2014**, 35, 3708-15	15.6	67
141	A DNA controlled-release coating for gene transfer: transfection in skeletal and cardiac muscle. *Journal of Pharmaceutical Sciences*, **1998**, 87, 1347-50	3.9	67
140	Onset and progression of calcification in porcine aortic bioprosthetic valves Implanted as orthotopic mitral valve replacements in juvenile sheep. *Journal of Thoracic and Cardiovascular Surgery*, **1994**, 108, 880-887	1.5	67
139	Triglycidylamine crosslinking of porcine aortic valve cusps or bovine pericardium results in improved biocompatibility, biomechanics, and calcification resistance: chemical and biological mechanisms. *American Journal of Pathology*, **2005**, 166, 1-13	5.8	65
138	Pathology of substitute heart valves: new concepts and developments. *Journal of Cardiac Surgery*, **1994**, 9, 222-7	1.3	63
137	Cardiovascular implant calcification: a survey and update. *Biomaterials*, **1991**, 12, 707-14	15.6	63
136	Controlled-release drug delivery of diphosphonates to inhibit bioprosthetic heart valve calcification: release rate modulation with silicone matrices via drug solubility and membrane coating. *Journal of Pharmaceutical Sciences*, **1987**, 76, 271-6	3.9	63
135	Local delivery of gene vectors from bare-metal stents by use of a biodegradable synthetic complex inhibits in-stent restenosis in rat carotid arteries. *Circulation*, **2008**, 117, 2096-103	16.7	60
134	The effect of CD47 modified polymer surfaces on inflammatory cell attachment and activation. *Biomaterials*, **2011**, 32, 4317-26	15.6	58
133	Antimineralization treatments for bioprosthetic heart valves. *Journal of Thoracic and Cardiovascular Surgery*, **1992**, 104, 1285-1288	1.5	58
132	Vitamin K-dependent calcium binding proteins in aortic valve calcification. *Journal of Clinical Investigation*, **1980**, 65, 563-6	15.9	57
131	Gene transfection using biodegradable nanospheres: results in tissue culture and a rat osteotomy model. *Colloids and Surfaces B: Biointerfaces*, **1999**, 16, 281-290	6	54
130	Prevention of calcification of glutaraldehyde-crosslinked porcine aortic cusps by ethanol preincubation: mechanistic studies of protein structure and water-biomaterial relationships. *Journal of Biomedical Materials Research Part B*, **1998**, 40, 577-85		53
129	Sustained behavioral recovery from unilateral nigrostriatal damage produced by the controlled release of dopamine from a silicone polymer pellet placed into the denervated striatum. *Brain Research*, **1990**, 508, 60-4	3.7	53
128	Inhibition of aortic wall calcification in bioprosthetic heart valves by ethanol pretreatment: biochemical and biophysical mechanisms. *Journal of Biomedical Materials Research Part B*, **1998**, 42, 30-7		48
127	Inhibition of calcification of glutaraldehyde pretreated porcine aortic valve cusps with sodium dodecyl sulfate: preincubation and controlled release studies. *Journal of Biomedical Materials Research Part B*, **1993**, 27, 1477-84		47
126	Prevention of leaflet calcification of bioprosthetic heart valves with diphosphonate injection therapy. *Journal of Thoracic and Cardiovascular Surgery*, **1987**, 94, 551-557	1.5	47
125	Inhibition of bioprosthetic heart valve calcification with aminodiphosphonate covalently bound to residual aldehyde groups. *Annals of Thoracic Surgery*, **1988**, 46, 309-16	2.7	47

124	Controlled release of diphosphonate to inhibit bioprosthetic heart valve calcification: Dose-response and mechanistic studies. *Journal of Controlled Release*, **1986**, 4, 181-194	11.7	47
123	Effect of 2-amino oleic acid exposure conditions on the inhibition of calcification of glutaraldehyde cross-linked porcine aortic valves. *Journal of Biomedical Materials Research Part B*, **1994**, 28, 1485-95		42
122	Mechanisms of the in vivo inhibition of calcification of bioprosthetic porcine aortic valve cusps and aortic wall with triglycidylamine/mercapto bisphosphonate. *Biomaterials*, **2007**, 28, 690-9	15.6	41
121	Tissue heart valves: Current challenges and future research perspectives **1999**, 47, 439		41
120	Aortic valve cyclic stretch causes increased remodeling activity and enhanced serotonin receptor responsiveness. *Annals of Thoracic Surgery*, **2011**, 92, 147-53	2.7	39
119	Fenfluramine disrupts the mitral valve interstitial cell response to serotonin. *American Journal of Pathology*, **2009**, 175, 988-97	5.8	39
118	Epicardial administration of ibutilide from polyurethane matrices: effects on defibrillation threshold and electrophysiologic parameters. *Journal of Cardiovascular Pharmacology*, **1994**, 24, 826-40	3.1	39
117	Prevention of calcification of glutaraldehyde pretreated bovine pericardium through controlled release polymeric implants: studies of Fe3+, Al3+, protamine sulphate and levamisole. *Biomaterials*, **1990**, 11, 718-23	15.6	39
116	Endovascular microcoil gene delivery using immobilized anti-adenovirus antibody for vector tethering. *Stroke*, **2002**, 33, 1376-82	6.7	38
115	Diminished adhesion and activation of platelets and neutrophils with CD47 functionalized blood contacting surfaces. *Biomaterials*, **2012**, 33, 5803-11	15.6	37
114	Current Progress in Anticalcif ication for Bioprosthetic and Polymeric Heart Valves. *Cardiovascular Pathology*, **1997**, 6, 219-29	3.8	36
113	Prevention of polyurethane valve cusp calcification with covalently attached bisphosphonate diethylamino moieties. *Journal of Biomedical Materials Research Part B*, **2003**, 66, 385-95		35
112	Porcine bioprosthetic valve calcification in bovine left ventricle-aorta shunts: studies of the deposition of vitamin K-dependent proteins. *Annals of Thoracic Surgery*, **1983**, 36, 187-92	2.7	35
111	Calcification and Oxidative Modifications Are Associated With Progressive Bioprosthetic Heart Valve Dysfunction. *Journal of the American Heart Association*, **2017**, 6,	6	33
110	Capillary electrophoresis of supercoiled and linear DNA in dilute hydroxyethyl cellulose solution. *Analytical Chemistry*, **1997**, 69, 1192-6	7.8	33
109	Inhibition of cusp and aortic wall calcification in ethanol- and aluminum-treated bioprosthetic heart valves in sheep: background, mechanisms, and synergism. *Journal of Heart Valve Disease*, **2003**, 12, 209-16; discussion 216		33
108	Magnetically responsive biodegradable nanoparticles enhance adenoviral gene transfer in cultured smooth muscle and endothelial cells. *Molecular Pharmaceutics*, **2009**, 6, 1380-7	5.6	32
107	A novel mercapto-bisphosphonate as an efficient anticalcification agent for bioprosthetic tissues. *Journal of Organometallic Chemistry*, **2005**, 690, 2543-2547	2.3	32

106	Cholesterol-modified polyurethane valve cusps demonstrate blood outgrowth endothelial cell adhesion post-seeding in vitro and in vivo. *Annals of Thoracic Surgery*, **2006**, 81, 47-55	2.7	31
105	Site specific gene delivery in the cardiovascular system. *Journal of Controlled Release*, **2005**, 109, 37-48	11.7	31
104	The susceptibility of bioprosthetic heart valve leaflets to oxidation. *Biomaterials*, **2014**, 35, 2097-102	15.6	29
103	Site-specific gene delivery to stented arteries using magnetically guided zinc oleate-based nanoparticles loaded with adenoviral vectors. *FASEB Journal*, **2013**, 27, 2198-206	0.9	29
102	Site-specific dexamethasone delivery for the prevention of neointimal thickening after vascular stent implantation. *Coronary Artery Disease*, **1994**, 5, 435-42	1.4	29
101	Covalent binding of aminopropanehydroxydiphosphonate to glutaraldehyde residues in pericardial bioprosthetic tissue: stability and calcification inhibition studies. *Experimental and Molecular Pathology*, **1989**, 50, 291-302	4.4	29
100	Serotonin transporter mechanisms and cardiac disease. *Circulation*, **2006**, 113, 2-4	16.7	28
99	gamma-Carboxyglutamate excretion and warfarin therapy. *Clinical Pharmacology and Therapeutics*, **1979**, 25, 562-70	6.1	28
98	Refinement of the alpha aminooleic acid bioprosthetic valve anticalcification technique. *Annals of Thoracic Surgery*, **1997**, 64, 50-8	2.7	27
97	Immobilization of plasmid DNA on an anti-DNA antibody modified coronary stent for intravascular site-specific gene therapy. *Journal of Gene Medicine*, **2008**, 10, 421-9	3.5	27
96	Nanoparticle-mediated delivery of a rapidly activatable prodrug of SN-38 for neuroblastoma therapy. *Biomaterials*, **2015**, 51, 22-29	15.6	26
95	Adenoviral gene vector tethering to nanoparticle surfaces results in receptor-independent cell entry and increased transgene expression. *Molecular Therapy*, **2006**, 14, 382-91	11.7	26
94	The incorporation of an ion channel gene mutation associated with the long QT syndrome (Q9E-hMiRP1) in a plasmid vector for site-specific arrhythmia gene therapy: in vitro and in vivo feasibility studies. *Human Gene Therapy*, **2003**, 14, 907-22	4.8	26
93	Nanoparticle delivery of an SN38 conjugate is more effective than irinotecan in a mouse model of neuroblastoma. *Cancer Letters*, **2015**, 360, 205-12	9.9	25
92	Cholesterol-derivatized polyurethane: characterization and endothelial cell adhesion. *Journal of Biomedical Materials Research - Part A*, **2005**, 72, 200-12	5.4	25
91	Calcification of valved aortic allografts in rats: effects of age, crosslinking, and inhibitors. *Journal of Biomedical Materials Research Part B*, **1995**, 29, 217-26		25
90	Growth after surgical repair of simple D-transposition of the great arteries. *Annals of Thoracic Surgery*, **1978**, 25, 225-30	2.7	25
89	Enhanced biocompatibility of CD47-functionalized vascular stents. *Biomaterials*, **2016**, 87, 82-92	15.6	25

88	Calcification resistance with aluminum-ethanol treated porcine aortic valve bioprostheses in juvenile sheep. *Annals of Thoracic Surgery*, **2003**, 75, 1267-73	2.7	23
87	Sotalol controlled-release systems for arrhythmias: in vitro characterization, in vivo drug disposition, and electrophysiologic effects. *Journal of Pharmaceutical Sciences*, **1994**, 83, 156-64	3.9	23
86	Magnetically enhanced cell delivery for accelerating recovery of the endothelium in injured arteries. *Journal of Controlled Release*, **2016**, 222, 169-75	11.7	22
85	Posttranslational control of a cardiac ion channel transgene in vivo: clarithromycin-hMiRP1-Q9E interactions. *Human Gene Therapy*, **2005**, 16, 906-10	4.8	22
84	Effects of metallic ions and diphosphonates on inhibition of pericardial bioprosthetic tissue calcification and associated alkaline phosphatase activity. *Biomaterials*, **1993**, 14, 371-7	15.6	22
83	Phosphonated polyurethanes that resist calcification. *Journal of Applied Biomaterials: an Official Journal of the Society for Biomaterials*, **1994**, 5, 65-77		21
82	Serotonin and catecholamines in the development and progression of heart valve diseases. *Cardiovascular Research*, **2017**, 113, 849-857	9.9	20
81	Formulation and in vitro characterization of composite biodegradable magnetic nanoparticles for magnetically guided cell delivery. *Pharmaceutical Research*, **2012**, 29, 1232-41	4.5	20
80	The effect of intramural delivery of polymeric nanoparticles loaded with the antiproliferative 2-aminochromone U-86983 on neointimal hyperplasia development in balloon-injured porcine coronary arteries. *Advanced Drug Delivery Reviews*, **1997**, 24, 87-108	18.5	20
79	Elastomeric polyurethanes modified with geminal bisphosphonate groups. *Journal of Polymer Science Part A*, **2001**, 39, 105-116	2.5	20
78	Calcification of polyurethanes implanted subdermally in rats is enhanced by calciphylaxis. *Journal of Biomedical Materials Research Part B*, **1996**, 31, 201-7		20
77	Modulated drug release using iontophoresis through heterogeneous cation exchange membranes: membrane preparation and influence of resin crosslinkage. *Macromolecules*, **1992**, 25, 2531-2540	5.5	20
76	Cardiac controlled release for arrhythmia therapy: Lidocaine-polyurethane matrix studies. *Journal of Controlled Release*, **1988**, 8, 157-165	11.7	20
75	Triglycidyl amine crosslinking combined with ethanol inhibits bioprosthetic heart valve calcification. *Annals of Thoracic Surgery*, **2011**, 92, 858-65	2.7	19
74	Prevention of calcification of bioprosthetic heart valve leaflets by Ca2+ diphosphonate pretreatment. *Journal of Pharmaceutical Sciences*, **1988**, 77, 740-4	3.9	19
73	Real-time analysis of composite magnetic nanoparticle disassembly in vascular cells and biomimetic media. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 4245-50	11.5	18
72	In vivo biomechanical assessment of triglycidylamine crosslinked pericardium. *Biomaterials*, **2007**, 28, 5390-8	15.6	18
71	Retardation of calcification of bovine pericardium used in bioprosthetic heart valves by phosphocitrate and a synthetic analogue. *Biomaterials*, **1988**, 9, 393-7	15.6	18

70	Comparative pathology of human and canine myxomatous mitral valve degeneration: 5HT and TGF-□mechanisms. *Cardiovascular Pathology*, **2020**, 46, 107196	3.8	18
69	Serotonin receptor 2B signaling with interstitial cell activation and leaflet remodeling in degenerative mitral regurgitation. *Journal of Molecular and Cellular Cardiology*, **2018**, 115, 94-103	5.8	17
68	The use of CD47-modified biomaterials to mitigate the immune response. *Experimental Biology and Medicine*, **2016**, 241, 1033-41	3.7	17
67	Differential calcification of cusps and aortic wall of failed stented porcine bioprosthetic valves. *Journal of Biomedical Materials Research Part B*, **1997**, 34, 411-5		17
66	Prevention of oxidative degradation of polyurethane by covalent attachment of di-tert-butylphenol residues. *Journal of Biomedical Materials Research - Part A*, **2006**, 78, 653-61	5.4	17
65	Controlled release implants for cardiovascular disease. *Journal of Controlled Release*, **1990**, 11, 245-254	11.7	17
64	Prevention of calcification of bioprosthetic heart valve cusp and aortic wall with ethanol and aluminum chloride. *Annals of Thoracic Surgery*, **2005**, 79, 897-904	2.7	16
63	Synergistic inhibition of the calcification of glutaraldehyde pretreated bovine pericardium in a rat subdermal model by FeCl3 and ethanehydroxydiphosphonate: preincubation and polymeric controlled release studies. *Biomaterials*, **1993**, 14, 705-11	15.6	16
62	Modulation of NO and ROS production by AdiNOS transduced vascular cells through supplementation with L-Arg and BH4: implications for gene therapy of restenosis. *Atherosclerosis*, **2013**, 230, 23-32	3.1	15
61	Intracellular signaling mechanisms associated with CD47 modified surfaces. *Biomaterials*, **2013**, 34, 8640-8	15.6	14
60	Addressing the Inflammatory Response to Clinically Relevant Polymers by Manipulating the Host Response Using ITIM Domain-Containing Receptors. *Polymers*, **2014**, 6, 2526-2551	4.5	14
59	High reactivity of alkyl sulfides towards epoxides under conditions of collagen fixation--a convenient approach to 2-amino-4-butyrolactones. *Biomaterials*, **2001**, 22, 2501-6	15.6	14
58	Inhibition of bioprosthetic heart valve calcification by sustained local delivery of Ca and Na diphosphonate via controlled release matrices. *ASAIO Transactions*, **1986**, 32, 587-90		14
57	Sustained-release local hirulog therapy decreases early thrombosis but not neointimal thickening after arterial stenting. *American Heart Journal*, **1996**, 131, 211-8	4.9	13
56	Determinants of the modulated release of antiarrhythmic drugs by iontophoresis through polymer membranes. *Macromolecules*, **1993**, 26, 2264-2272	5.5	13
55	Ethanol inhibition of porcine bioprosthetic heart valve cusp calcification is enhanced by reduction with sodium borohydride. *Journal of Heart Valve Disease*, **2004**, 13, 487-93		13
54	Gene-based therapies for restenosis. *Advanced Drug Delivery Reviews*, **1997**, 24, 109-120	18.5	12
53	Biological stability of polyurethane modified with covalent attachment of di-tert-butyl-phenol. *Journal of Biomedical Materials Research - Part A*, **2007**, 82, 1004-11	5.4	12

52	Thymosin beta4 regulation, expression and function in aortic valve interstitial cells. *Journal of Heart Valve Disease*, **2002**, 11, 726-35		12
51	The effects of the covalent attachment of 3-(4-hydroxy-3,5-di-tert-butylphenyl) propyl amine to glutaraldehyde pretreated bovine pericardium on structural degeneration, oxidative modification, and calcification of rat subdermal implants. *Journal of Biomedical Materials Research - Part A*, **2015**, 103, 2411-2	5.4	11
50	Porphyrin-Based SOD Mimic MnTnBu OE -2-PyP Inhibits Mechanisms of Aortic Valve Remodeling in Human and Murine Models of Aortic Valve Sclerosis. *Journal of the American Heart Association*, **2018**, 7, e007861	6	11
49	Adenoviral vector tethering to metal surfaces via hydrolyzable cross-linkers for the modulation of vector release and transduction. *Biomaterials*, **2013**, 34, 6938-48	15.6	10
48	The efficacy of controlled release D-sotalol-polyurethane epicardial implants for ventricular arrhythmias due to acute ischemia in dogs. *Journal of Controlled Release*, **1993**, 23, 75-85	11.7	10
47	Efficacy of epicardial controlled-release lidocaine for ventricular tachycardia induced by rapid ventricular pacing in dogs. *Journal of Cardiovascular Pharmacology*, **1990**, 16, 812-7	3.1	10
46	Birthweight of infants with congenital heart disease. *JAMA Pediatrics*, **1978**, 132, 249-54		10
45	Site-specific gene therapy for cardiovascular disease. *Current Opinion in Drug Discovery & Development*, **2010**, 13, 203-13		10
44	Noncalcific Mechanisms of Bioprosthetic Structural Valve Degeneration. *Journal of the American Heart Association*, **2021**, 10, e018921	6	10
43	CD47-dependent molecular mechanisms of blood outgrowth endothelial cell attachment on cholesterol-modified polyurethane. *Biomaterials*, **2010**, 31, 6394-9	15.6	9
42	Controlled release implant dosage forms for cardiac arrhythmias: Review and perspectives. *Drug Delivery*, **1996**, 3, 137-42	7	9
41	Synergistic inhibition of calcification of porcine aortic root with preincubation in FeCl3 and alpha-amino oleic acid in a rat subdermal model. *Journal of Biomedical Materials Research Part B*, **1997**, 38, 43-8		8
40	Modulated drug release using iontophoresis through heterogeneous cation-exchange membranes. 2. Influence of cation-exchanger content on membrane resistance and characteristic times. *Journal of Pharmaceutical Sciences*, **1994**, 83, 1482-94	3.9	8
39	Conversion of ouabain-induced ventricular tachycardia in dogs with epicardial lidocaine: pharmacodynamics and functional effects. *Pharmaceutical Research*, **1990**, 7, 28-33	4.5	8
38	Polymeric drug delivery systems for treatment of cardiovascular calcification, arrhythmias and restenosis. *Journal of Controlled Release*, **1995**, 36, 137-147	11.7	7
37	Model features of a cardiac iontophoretic drug delivery implant. *Pharmaceutical Research*, **1995**, 12, 790-5	4.5	7
36	Glycation and Serum Albumin Infiltration Contribute to the Structural Degeneration of Bioprosthetic Heart Valves. *JACC Basic To Translational Science*, **2020**, 5, 755-766	8.7	7
35	Circulating and tissue matricellular RNA and protein expression in calcific aortic valve disease. *Physiological Genomics*, **2020**, 52, 191-199	3.6	6

34	Vascular gene transfer from metallic stent surfaces using adenoviral vectors tethered through hydrolysable cross-linkers. *Journal of Visualized Experiments*, **2014**, e51653	1.6	6
33	Stent-mediated gene delivery for site-specific transgene administration to the airway epithelium and management of tracheobronchial tumors. *Respiration*, **2014**, 88, 406-17	3.7	6
32	Prevention of polyurethane oxidative degradation with phenolic antioxidants covalently attached to the hard segments: structure-function relationships. *Journal of Biomedical Materials Research - Part A*, **2010**, 94, 751-9	5.4	6
31	Prevention of acute inducible atrial flutter in dogs by using an ibutilide-polymer-coated pacing electrode. *Journal of Cardiovascular Pharmacology*, **1998**, 31, 449-55	3.1	6
30	Drug-associated valvular heart diseases and serotonin-related pathways: a meta-analysis. *Heart*, **2019**, 105, 1140-1148	5.1	5
29	Anchoring of self-assembled plasmid DNA/anti-DNA antibody/cationic lipid micelles on bisphosphonate-modified stent for cardiovascular gene delivery. *International Journal of Nanomedicine*, **2013**, 8, 1029-35	7.3	5
28	Novel delivery of antiarrhythmic agents. *Clinical Pharmacokinetics*, **1995**, 29, 1-5	6.2	5
27	Calcification of Cardiac Valve Bioprostheses **1985**, 661-668		5
26	Paraffin processing of stented arteries using a postfixation dissolution of metallic and polymeric stents. *Cardiovascular Pathology*, **2016**, 25, 483-488	3.8	4
25	The use of the ex vivo Chandler Loop Apparatus to assess the biocompatibility of modified polymeric blood conduits. *Journal of Visualized Experiments*, **2014**,	1.6	4
24	Endovascular Gene Delivery from a Stent Platform: Gene- Eluting Stents. *Angiology: Open Access*, **2013**, 1,		4
23	Pathological Calcification of Biomaterials **2013**, 739-754		3
22	Biomechanical and biologic effects of meniscus stabilization using triglycidyl amine. *Journal of Biomedical Materials Research - Part A*, **2010**, 93, 235-42	5.4	3
21	Local release polymeric-controlled immunotherapy of cardiac transplants in rats. *Polymers for Advanced Technologies*, **1992**, 3, 345-350	3.2	3
20	Age-related enhanced degeneration of bioprosthetic valves due to leaflet calcification, tissue crosslinking, and structural changes.. *Cardiovascular Research*, **2022**,	9.9	3
19	Pathological Calcification of Biomaterials **2020**, 973-994		3
18	Glycation and Serum Albumin Infiltration Contribute to the Structural Degeneration of Bioprosthetic Heart Valves		2
17	Prevention of calcification of glutaraldehyde-crosslinked porcine aortic cusps by ethanol preincubation: Mechanistic studies of protein structure and waterBiomaterial relationships **1998**, 40, 577		2

List of Publications

16	Polymeric Controlled Release of Cardiovascular Drugs **1991**, 231-238		2
15	Stability and bioactivity of pepCD47 attachment on stainless steel surfaces. *Acta Biomaterialia*, **2020**, 104, 231-240	10.8	1
14	Optimizing endothelial cell functionalization for cell therapy of vascular proliferative disease using a direct contact co-culture system. *Drug Delivery and Translational Research*, **2018**, 8, 954-963	6.2	1
13	Site Specific Controlled Release for Cardiovascular Disease: Translational Directions **2012**, 445-492		1
12	Bioprosthetic Heart Valve Calcification: Clinicopathologic Correlations, Mechanisms, and Prevention. *Contemporary Cardiology*, **2020**, 183-215	0.1	1
11	Degradation of Materials in the Biological Environment **1996**, 411-453		1
10	Model studies of advanced glycation end product modification of heterograft biomaterials: The effects of in vitro glucose, glyoxal, and serum albumin on collagen structure and mechanical properties. *Acta Biomaterialia*, **2021**, 123, 275-285	10.8	1
9	Altered Responsiveness to TGF and BMP and Increased CD45+ Cell Presence in Mitral Valves Are Unique Features of Ischemic Mitral Regurgitation. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2021**, 41, 2049-2062	9.4	1
8	Stent-based delivery of AAV2 vectors encoding oxidation-resistant apoA1.. *Scientific Reports*, **2022**, 12, 5464	4.9	0
7	Experimental Single-Platform Approach to Enhance the Functionalization of Magnetically Targetable Cells. *ACS Applied Bio Materials*, **2020**, 3, 3914-3922	4.1	
6	Biomaterials-Associated Pathology of Cardiac Valve Prostheses: Clinical Explant Analysis and Studies of Tissue Valve Calcification. *Materials Research Society Symposia Proceedings*, **1985**, 55, 29		
5	Adeno-Associated Viral Vector Immobilization and Local Delivery from Bare Metal Surfaces.. *Methods in Molecular Biology*, **2022**, 2394, 601-616	1.4	
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