# Thomas Groth

#### List of Publications by Citations

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188
papers

5,749
citations

39
h-index

67
g-index

202
ext. papers

5,8
ext. citations

5,8
avg, IF

L-index

#	Paper	IF	Citations
188	Self-assembled monolayers with different terminating groups as model substrates for cell adhesion studies. <i>Biomaterials</i> , <b>2004</b> , 25, 2721-30	15.6	605
187	Studies on the biocompatibility of materials: fibroblast reorganization of substratum-bound fibronectin on surfaces varying in wettability. <i>Journal of Biomedical Materials Research Part B</i> , <b>1996</b> , 30, 385-91		285
186	Surface properties of and cell adhesion onto allylamine-plasma-coated polyethylenterephtalat membranes. <i>Biomaterials</i> , <b>2003</b> , 24, 3989-99	15.6	218
185	Reorganization of substratum-bound fibronectin on hydrophilic and hydrophobic materials is related to biocompatibility. <i>Journal of Materials Science: Materials in Medicine</i> , <b>1994</b> , 5, 732-737	4.5	140
184	Nanofibers from blends of polyvinyl alcohol and polyhydroxy butyrate as potential scaffold material for tissue engineering of skin. <i>Biomacromolecules</i> , <b>2010</b> , 11, 3413-21	6.9	137
183	Engineering the extracellular environment: Strategies for building 2D and 3D cellular structures. <i>Advanced Materials</i> , <b>2010</b> , 22, 5443-62	24	133
182	Studies on cell-biomaterial interaction: role of tyrosine phosphorylation during fibroblast spreading on surfaces varying in wettability. <i>Biomaterials</i> , <b>1996</b> , 17, 1227-34	15.6	131
181	Medical application of glycosaminoglycans: a review. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2018</b> , 12, e23-e41	4.4	112
180	Thermoresponsive polymers and their biomedical application in tissue engineering - a review. <i>Journal of Materials Chemistry B</i> , <b>2020</b> , 8, 607-628	7.3	102
179	Wettability of substrata controls cell-substrate and cell-cell adhesions. <i>Biochimica Et Biophysica Acta - General Subjects</i> , <b>2007</b> , 1770, 1538-47	4	95
178	Amination of Poly(ether imide) Membranes Using Di- and Multivalent Amines. <i>Macromolecular Chemistry and Physics</i> , <b>2003</b> , 204, 510-521	2.6	93
177	The role of surface zeta potential and substratum chemistry for regulation of dermal fibroblasts interaction. <i>Materialwissenschaft Und Werkstofftechnik</i> , <b>2003</b> , 34, 1120-1128	0.9	87
176	Blood compatibility and permeability of heparin-modified polysulfone as potential membrane for simultaneous hemodialysis and LDL removal. <i>Macromolecular Bioscience</i> , <b>2011</b> , 11, 131-40	5.5	80
175	Modulating the biocompatibility of polymer surfaces with poly(ethylene glycol): effect of fibronectin. <i>Journal of Biomedical Materials Research Part B</i> , <b>2000</b> , 52, 219-30		80
174	Anticoagulant potential of regioselective derivatized cellulose. <i>Biomaterials</i> , <b>2001</b> , 22, 2719-29	15.6	76
173	Optimizing CellBurface Interactions by Photografting of Poly(ethylene glycol). <i>Langmuir</i> , <b>2000</b> , 16, 275	66-24765	75
172	Polyetherimide: a new membrane-forming polymer for biomedical applications. <i>Artificial Organs</i> , <b>2002</b> , 26, 189-99	2.6	74

## (2006-1997)

171	Covalent immobilization of hirudin improves the haemocompatibility of polylactide-polyglycolide in vitro. <i>Biomaterials</i> , <b>1997</b> , 18, 1495-502	15.6	71
170	Modulation of osteogenic activity of BMP-2 by cellulose and chitosan derivatives. <i>Acta Biomaterialia</i> , <b>2012</b> , 8, 183-93	10.8	69
169	Characterization of PLGA nanospheres stabilized with amphiphilic polymers: hydrophobically modified hydroxyethyl starch vs pluronics. <i>Molecular Pharmaceutics</i> , <b>2009</b> , 6, 407-15	5.6	67
168	The dependence of fibrillar adhesions in human fibroblasts on substratum chemistry. <i>Biomaterials</i> , <b>2006</b> , 27, 234-45	15.6	63
167	Membranes for biohybrid liver support systemsinvestigations on hepatocyte attachment, morphology and growth. <i>Biomaterials</i> , <b>2002</b> , 23, 2467-78	15.6	63
166	Functionalized nanoparticles for endotoxin binding in aqueous solutions. <i>Biomaterials</i> , <b>1999</b> , 20, 1277-	8315.6	54
165	Both hyaluronan and collagen type II keep proteoglycan 4 (lubricin) at the cartilage surface in a condition that provides low friction during boundary lubrication. <i>Langmuir</i> , <b>2014</b> , 30, 14566-72	4	53
164	Interaction of human skin fibroblasts with moderate wettable polyacrylonitrilecopolymer membranes. <i>Journal of Biomedical Materials Research Part B</i> , <b>2002</b> , 61, 290-300		50
163	pH Responsiveness of Multilayered Films and Membranes Made of Polysaccharides. <i>Langmuir</i> , <b>2015</b> , 31, 11318-28	4	46
162	pH-dependent modulation of fibroblast adhesion on multilayers composed of poly(ethylene imine) and heparin. <i>Biomaterials</i> , <b>2009</b> , 30, 4939-47	15.6	46
161	Fibronectin matrix formation by human fibroblasts on surfaces varying in wettability. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1996</b> , 8, 299-310	3.5	46
160	Layer-by-layer deposition of polyelectrolytesa versatile tool for the in vivo repair of blood vessels. <i>Angewandte Chemie - International Edition</i> , <b>2004</b> , 43, 926-8	16.4	46
159	Host Responses to Biomaterials and Anti-Inflammatory Design-a Brief Review. <i>Macromolecular Bioscience</i> , <b>2018</b> , 18, e1800112	5.5	44
158	Effect of molecular composition of heparin and cellulose sulfate on multilayer formation and cell response. <i>Langmuir</i> , <b>2013</b> , 29, 13853-64	4	43
157	NMR and FT Raman characterisation of regioselectively sulfated chitosan regarding the distribution of sulfate groups and the degree of substitution. <i>Polymer</i> , <b>2010</b> , 51, 4698-4705	3.9	43
156	In vitro blood reactivity to hydroxylated and non-hydroxylated polymer surfaces. <i>Biomaterials</i> , <b>2007</b> , 28, 3617-25	15.6	43
155	Application of enzyme immunoassays for testing haemocompatibility of biomedical polymers. <i>Biomaterials</i> , <b>1995</b> , 16, 1009-15	15.6	43
154	Poly(ether imide) membranes modified with poly(ethylene imine) as potential carriers for epidermal substitutes. <i>Macromolecular Bioscience</i> , <b>2006</b> , 6, 274-84	5.5	42

153	Tuning cell adhesion and growth on biomimetic polyelectrolyte multilayers by variation of pH during layer-by-layer assembly. <i>Macromolecular Bioscience</i> , <b>2013</b> , 13, 1327-38	5.5	41
152	Fibrinogen adsorption and platelet interactions on polymer membranes. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2002</b> , 13, 1033-50	3.5	41
151	Morphological evidence for a different fibronectin receptor organization and function during fibroblast adhesion on hydrophilic and hydrophobic glass substrata. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1997</b> , 8, 721-40	3.5	40
150	Altered vitronectin receptor (alphav integrin) function in fibroblasts adhering on hydrophobic glass. Journal of Biomedical Materials Research Part B, <b>1999</b> , 44, 341-51		40
149	Immobilization of heparin on polysulfone surface for selective adsorption of low-density lipoprotein (LDL). <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 1099-106	10.8	39
148	Remodeling of fibrinogen by endothelial cells in dependence on fibronectin matrix assembly. Effect of substratum wettability. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2002</b> , 13, 1235-44	4.5	39
147	Synthesis of novel celluloses derivatives and investigation of their mitogenic activity in the presence and absence of FGF2. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 2116-25	10.8	38
146	Adhesion of human peripheral blood lymphocytes is dependent on surface wettability and protein preadsorption. <i>Biomaterials</i> , <b>1994</b> , 15, 423-8	15.6	37
145	Molecular composition of GAG-collagen I multilayers affects remodeling of terminal layers and osteogenic differentiation of adipose-derived stem cells. <i>Acta Biomaterialia</i> , <b>2016</b> , 41, 86-99	10.8	37
144	Improved stability and cell response by intrinsic cross-linking of multilayers from collagen I and oxidized glycosaminoglycans. <i>Biomacromolecules</i> , <b>2014</b> , 15, 4272-80	6.9	36
143	Cytotoxicity of Biomaterials Basic Mechanisms and In Vitro Test Methods: A Review. <i>ATLA Alternatives To Laboratory Animals</i> , <b>1995</b> , 23, 790-799	2.1	36
142	Recent Progress on Cellulose-Based Ionic Compounds for Biomaterials. <i>Advanced Materials</i> , <b>2021</b> , 33, e2000717	24	35
141	Bioactivity of immobilized hyaluronic acid derivatives regarding protein adsorption and cell adhesion. <i>Biotechnology and Applied Biochemistry</i> , <b>2011</b> , 58, 376-89	2.8	35
140	Polyelectrolyte multilayers generated in a microfluidic device with pH gradients direct adhesion and movement of cells. <i>Lab on A Chip</i> , <b>2011</b> , 11, 3326-35	7.2	34
139	Microwave plasma surface modification of silicone elastomer with allylamine for improvement of biocompatibility. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2008</b> , 86, 209-19	5.4	34
138	Fibronectin matrix formation and the biocompatibility of materials. <i>Journal of Materials Science: Materials in Medicine</i> , <b>1996</b> , 7, 425-429	4.5	34
137	Recent Developments in Layer-by-Layer Technique for Drug Delivery Applications <i>ACS Applied Bio Materials</i> , <b>2019</b> , 2, 5512-5527	4.1	33
136	The role of surface wettability on hepatocyte adhesive interactions and function. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2001</b> , 12, 613-27	3.5	32

#### (2012-1994)

135	related to hard segment content and composition. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1994</b> , 6, 497-510	3.5	32	
134	Reducing the inflammatory responses of biomaterials by surface modification with glycosaminoglycan multilayers. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2016</b> , 104, 493-502	5.4	32	
133	Synthesis and characterisation of cellulose sulfates regarding the degrees of substitution, degrees of polymerisation and morphology. <i>Carbohydrate Polymers</i> , <b>2011</b> , 83, 1659-1664	10.3	31	
132	FT Raman investigation of novel chitosan sulfates exhibiting osteogenic capacity. <i>Carbohydrate Polymers</i> , <b>2011</b> , 83, 60-65	10.3	30	
131	Synergistic effect of polyelectrolyte multilayers and osteogenic growth medium on differentiation of human mesenchymal stem cells. <i>Macromolecular Bioscience</i> , <b>2010</b> , 10, 1043-54	5.5	30	
130	Fibroblast spreading and proliferation on hydrophilic and hydrophobic surfaces is related to tyrosine phosphorylation in focal contacts. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1995</b> , 7, 297	-3:55	30	
129	A macrophage/fibroblast co-culture system using a cell migration chamber to study inflammatory effects of biomaterials. <i>Acta Biomaterialia</i> , <b>2015</b> , 26, 54-63	10.8	29	
128	Testing the cytotoxicity of metal alloys used as magnetic prosthetic devices. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2003</b> , 14, 335-45	4.5	29	
127	Novel Surface Coatings Using Oxidized Glycosaminoglycans as Delivery Systems of Bone Morphogenetic Protein 2 (BMP-2) for Bone Regeneration. <i>Macromolecular Bioscience</i> , <b>2018</b> , 18, e18002	<b>8</b> 3 <sup>5</sup>	29	
126	Multilayer coatings on biomaterials for control of MG-63 osteoblast adhesion and growth. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2009</b> , 20, 897-907	4.5	28	
125	Covalent heparin modification of a polysulfone flat sheet membrane for selective removal of low-density lipoproteins: a simple and versatile method. <i>Macromolecular Bioscience</i> , <b>2011</b> , 11, 1218-26	5.5	27	
124	Adhesion of human peripheral lymphocytes on biomaterials preadsorbed with fibronectin and vitronectin. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1994</b> , 6, 729-39	3.5	27	
123	Characterization of scaffolds for tissue engineering by benchtop-magnetic resonance imaging. <i>Tissue Engineering - Part C: Methods</i> , <b>2009</b> , 15, 513-21	2.9	26	
122	Influence of polymer membrane porosity on C3A hepatoblastoma cell adhesive interaction and function. <i>Biomaterials</i> , <b>2004</b> , 25, 2467-76	15.6	25	
121	Enhanced tissue-compatibility of polyethylenterephtalat membranes by plasma aminofunctionalisation. <i>Surface and Coatings Technology</i> , <b>2003</b> , 174-175, 574-578	4.4	25	
120	Covalent immobilization of glycosaminoglycans to reduce the inflammatory effects of biomaterials. <i>International Journal of Artificial Organs</i> , <b>2016</b> , 39, 37-44	1.9	25	
119	Nanostructured material surfacespreparation, effect on cellular behavior, and potential biomedical applications: a review. <i>International Journal of Artificial Organs</i> , <b>2011</b> , 34, 963-85	1.9	24	
118	Mitogenic activity of sulfated chitosan and cellulose derivatives is related to protection of FGF-2 from proteolytic cleavage. <i>Macromolecular Bioscience</i> , <b>2012</b> , 12, 740-50	5.5	23	

117	Fabrication and properties of an injectable sodium alginate/PRP composite hydrogel as a potential cell carrier for cartilage repair. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2019</b> , 107, 2076-2087	5.4	22
116	Study on multilayer structures prepared from heparin and semi-synthetic cellulose sulfates as polyanions and their influence on cellular response. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2014</b> , 116, 93-103	6	21
115	Synthesis of thiolated glycosaminoglycans and grafting to solid surfaces. <i>Carbohydrate Polymers</i> , <b>2014</b> , 114, 344-351	10.3	21
114	Comparative studies on osteogenic potential of micro- and nanofibre scaffolds prepared by electrospinning of poly(Eaprolactone). <i>Progress in Biomaterials</i> , <b>2013</b> , 2, 13	4.4	21
113	Nanoscaled surface patterns influence adhesion and growth of human dermal fibroblasts. <i>Langmuir</i> , <b>2013</b> , 29, 13278-90	4	21
112	Synthesis of carboxyl cellulose sulfate with various contents of regioselectively introduced sulfate and carboxyl groups. <i>Carbohydrate Polymers</i> , <b>2010</b> , 82, 92-99	10.3	21
111	Contact activation of plasmatic coagulation on polymeric membranes measured by the activity of kallikrein in heparinized plasma. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1997</b> , 8, 797-807	3.5	21
110	Hemocompatibility of poly(ether imide) membranes functionalized with carboxylic groups. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2008</b> , 19, 3203-10	4.5	21
109	Synthesis of thiolated polysaccharides for formation of polyelectrolyte multilayers with improved cellular adhesion. <i>Carbohydrate Polymers</i> , <b>2017</b> , 157, 1205-1214	10.3	20
108	The influence of the antiviral drugs amantadine and rimantadine on erythrocyte and platelet membranes and its comparison with that of tetracaine. <i>Biochemical Pharmacology</i> , <b>1987</b> , 36, 481-7	6	20
107	Endothelial and beta cell composite aggregates for improved function of a bioartificial pancreas encapsulation device. <i>International Journal of Artificial Organs</i> , <b>2018</b> , 41, 152-159	1.9	19
106	Engineered Microtissues Formed by Schiff Base Crosslinking Restore the Chondrogenic Potential of Aged Mesenchymal Stem Cells. <i>Advanced Healthcare Materials</i> , <b>2015</b> , 4, 1348-58	10.1	19
105	Recent Advances in Artificially Sulfated Polysaccharides for Applications in Cell Growth and Differentiation, Drug Delivery, and Tissue Engineering. <i>ChemBioChem</i> , <b>2019</b> , 20, 737-746	3.8	19
104	Anti-inflammatory Surface Coatings Based on Polyelectrolyte Multilayers of Heparin and Polycationic Nanoparticles of Naproxen-Bearing Polymeric Drugs. <i>Biomacromolecules</i> , <b>2019</b> , 20, 4015-4	023	18
103	Mechanical properties and biocompatibility of in situ enzymatically cross-linked gelatin hydrogels. <i>International Journal of Artificial Organs</i> , <b>2017</b> , 40, 159-168	1.9	18
102	Immobilization of heparin on polylactide for application to degradable biomaterials in contact with blood. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1995</b> , 7, 277-87	3.5	18
101	Polyelectrolyte multilayers of poly (l-lysine) and hyaluronic acid on nanostructured surfaces affect stem cell response. <i>Nanoscale</i> , <b>2019</b> , 11, 2878-2891	7.7	17
100	A comprehensive map of human elastin cross-linking during elastogenesis. FEBS Journal, <b>2019</b> , 286, 359	94 <del>5.3</del> 61	017

## (2018-2015)

99	Composites of malonic acid diamides and phospholipidsImpact of lipoplex stability on transfection efficiency. <i>Journal of Controlled Release</i> , <b>2015</b> , 220, 295-307	11.7	17	
98	Novel mineralized heparin-gelatin nanoparticles for potential application in tissue engineering of bone. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2014</b> , 25, 669-80	4.5	17	
97	Membranes from acrylonitrile-based polymers for selective cultivation of human keratinocytes. <i>Tissue Engineering</i> , <b>2007</b> , 13, 2995-3002		17	
96	On the tissue compatibility of poly(ether imide) membranes: an in vitro study on their interaction with human dermal fibroblasts and keratinocytes. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2005</b> , 16, 23-42	3.5	17	
95	Development of highly porous microparticles from poly(ether imide) prepared by a spraying/coagulation process. <i>Journal of Membrane Science</i> , <b>2006</b> , 273, 106-115	9.6	17	
94	Synthesis and Bioactivity of Cellulose Derivatives. <i>Macromolecular Symposia</i> , <b>2009</b> , 280, 28-35	0.8	16	
93	Surface modification of biomaterials to control adhesion of cells. <i>Clinical Hemorheology and Microcirculation</i> , <b>2008</b> , 39, 247-251	2.5	16	
92	Modification of poly(ether imide) membranes with brominated polyvinylpyrrolidone. <i>Journal of Membrane Science</i> , <b>2007</b> , 291, 10-18	9.6	16	
91	Poly(ether imide) membranes: studies on the effect of surface modification and protein pre-adsorption on endothelial cell adhesion, growth and function. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2008</b> , 19, 837-52	3.5	16	
90	The influence of the chemical composition of cell culture material on the growth and antibody production of hybridoma cells. <i>Journal of Biotechnology</i> , <b>2005</b> , 115, 291-301	3.7	16	
89	Morphological studies on the culture of kidney epithelial cells in a fiber-in-fiber bioreactor design with hollow fiber membranes. <i>Journal of Biomedical Materials Research Part B</i> , <b>2003</b> , 65, 144-57		16	
88	Development of membranes for the cultivation of kidney epithelial cells. <i>Biomaterials</i> , <b>2000</b> , 21, 183-92	15.6	16	
87	Stimuli-Responsive Multilayers Based on Thiolated Polysaccharides That Affect Fibroblast Cell Adhesion. <i>ACS Applied Materials &amp; Discourse Materials &amp; Dis</i>	9.5	15	
86	Biomineralization improves mechanical and osteogenic properties of multilayer-modified PLGA porous scaffolds. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2018</b> , 106, 2714-2725	5.4	15	
85	Enantiopure chiral poly(glycerol methacrylate) self-assembled monolayers knock down protein adsorption and cell adhesion. <i>Advanced Healthcare Materials</i> , <b>2013</b> , 2, 1377-87	10.1	15	
84	In vitro toxicity of Stearoyl-poly(glycerol adipate) nanoparticles. <i>Journal of Applied Biomaterials and Functional Materials</i> , <b>2012</b> , 10, 163-9	1.8	15	
83	Bioresorbable, heparinized polymers for stent coating:in vitro studies on heparinization efficiency, maintenance of anticoagulant properties and improvement of stent haemocompatibility. <i>Journal of Materials Science: Materials in Medicine</i> , <b>1996</b> , 7, 465-469	4.5	15	
82	Cross-linking multilayers of poly-l-lysine and hyaluronic acid: Effect on mesenchymal stem cell behavior. <i>International Journal of Artificial Organs</i> , <b>2018</b> , 41, 223-235	1.9	14	

81	Effect of Different Crosslinking Strategies on Physical Properties and Biocompatibility of Freestanding Multilayer Films Made of Alginate and Chitosan. <i>Macromolecular Bioscience</i> , <b>2019</b> , 19, e19	ō̄̄̄̄̄̄ 81	14
80	The viability and function of primary rat hepatocytes cultured on polymeric membranes developed for hybrid artificial liver devices. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2005</b> , 73, 367-75	5.4	14
79	The effect of shear rate on the adhesion/activation of human platelets in flow through a closed-loop polymeric tubular system. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1994</b> , 6, 399-410	3.5	14
78	Poly (L-lactic acid) porous scaffold-supported alginate hydrogel with improved mechanical properties and biocompatibility. <i>International Journal of Artificial Organs</i> , <b>2016</b> , 39, 435-443	1.9	13
77	Functionality of MDCK kidney tubular cells on flat polymer membranes for biohybrid kidney. Journal of Materials Science: Materials in Medicine, 1998, 9, 711-5	4.5	13
76	Functionality of surface-coupled oxidised glycosaminoglycans towards fibroblast adhesion. <i>Journal of Bioactive and Compatible Polymers</i> , <b>2016</b> , 31, 191-207	2	12
75	Adhesion of adipose-derived mesenchymal stem cells to glycosaminoglycan surfaces with different protein patterns. <i>ACS Applied Materials &amp; District Research</i> , 10034-43	9.5	12
74	Effect of Immobilized Thiolated Glycosaminoglycans on Fibronectin Adsorption and Behavior of Fibroblasts. <i>Macromolecular Bioscience</i> , <b>2016</b> , 16, 381-94	5.5	12
73	Development of hydrogels based on oxidized cellulose sulfates and carboxymethyl chitosan. <i>Cellulose</i> , <b>2019</b> , 26, 7371-7382	5.5	12
72	Immobilization of poly (ethylene imine) on poly (L-lactide) promotes MG63 cell proliferation and function. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2009</b> , 20, 2317-26	4.5	12
71	Synthesis and Characterization of Oxidized Polysaccharides for In Situ Forming Hydrogels. <i>Biomolecules</i> , <b>2020</b> , 10,	5.9	12
70	Protective Effect of N-Arachidonoyl Glycine-GPR18 Signaling after Excitotoxical Lesion in Murine Organotypic Hippocampal Slice Cultures. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	11
69	Study on the potential mechanism of anti-inflammatory activity of covalently immobilized hyaluronan and heparin. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2020</b> , 108, 1099-1111	5.4	11
68	Bioinspired multiple-interaction model revealed in adsorption of low-density lipoprotein to surface containing saccharide and alkanesulfonate. <i>Langmuir</i> , <b>2013</b> , 29, 8363-9	4	11
67	Studies on the Mechanisms of Anti-Inflammatory Activity of Heparin- and Hyaluronan-Containing Multilayer Coatings-Targeting NF- <b>B</b> Signalling Pathway. <i>International Journal of Molecular Sciences</i> , <b>2020</b> , 21,	6.3	10
66	Development of a new dynamic method for quantitative evaluation of in vitro hemocompatibility of biomedical materials. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1992</b> , 3, 285-300	3.5	10
65	Conformational alterations within the glycocalyx of erythrocyte membranes studied by spin labelling. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>1986</b> , 861, 111-121	3.8	10
64	Chemical and Physical Modifications of Biomaterial Surfaces to Control Adhesion of Cells. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , <b>2010</b> , 253-284	0.1	10

63	Effect of Polyelectrolyte Multilayers Assembled on Ordered Nanostructures on Adhesion of Human Fibroblasts. <i>ACS Applied Materials &amp; Damp; Interfaces</i> , <b>2016</b> , 8, 25142-51	9.5	10
62	In vitro study of the host responses to model biomaterials via a fibroblast/macrophage co-culture system. <i>Biomaterials Science</i> , <b>2016</b> , 5, 141-152	7.4	9
61	Introduction of Laser Interference Lithography to Make Nanopatterned Surfaces for Fundamental Studies on Stem Cell Response. <i>ACS Biomaterials Science and Engineering</i> , <b>2018</b> , 4, 1820-1832	5.5	9
60	Multilayer films by blending heparin with semisynthetic cellulose sulfates: Physico-chemical characterization and cell responses. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2014</b> , 102, 4224-	.33 <sup>5.4</sup>	9
59	Effect of microenvironment on adhesion and differentiation of murine C3H10T1/2 cells cultured on multilayers containing collagen I and glycosaminoglycans. <i>Journal of Tissue Engineering</i> , <b>2020</b> , 11, 204	1731542	0940560
58	Spectral analysis combined with nonlinear optical measurement of laser printed biopolymer composites comprising chitosan/SWCNT. <i>Analytical Biochemistry</i> , <b>2020</b> , 598, 113710	3.1	9
57	Cyclic Redox-Mediated Switching of Surface Properties of Thiolated Polysaccharide Multilayers and Its Effect on Fibroblast Adhesion. <i>ACS Applied Materials &amp; Description of Surfaces</i> , <b>2018</b> , 10, 31168-31177	9.5	9
56	Biocompatibility of poly(L-lactide) films modified with poly(ethylene imine) and polyelectrolyte multilayers. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2010</b> , 21, 893-912	3.5	8
55	Membranes for biohybrid liver support: the behaviour of C3A hepatoblastoma cells is dependent on the composition of acrylonitrile copolymers. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2005</b> , 16, 1-22	3.5	8
54	Dynamics of beta1-integrins in living fibroblastseffect of substratum wettability. <i>Biophysical Journal</i> , <b>2005</b> , 89, 3555-62	2.9	8
53	The influenza virus-induced fusion of erythrocyte ghosts does not depend on osmotic forces. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>1988</b> , 943, 411-8	3.8	8
52	Contact-Triggered Lipofection from Multilayer Films Designed as Surfaces for in Situ Transfection Strategies in Tissue Engineering. <i>ACS Applied Materials &amp; Designed Materials &amp;</i>	9.5	8
51	Development of polymer membranes with improved haemocompatibility for biohybrid organ technology. <i>Clinical Hemorheology and Microcirculation</i> , <b>2005</b> , 32, 129-43	2.5	8
50	Fast therapeutic DNA internalization - A high potential transfection system based on a peptide mimicking cationic lipid. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2017</b> , 118, 38-47	5.7	7
49	Switchable and Obedient Interfacial Properties That Grant New Biomedical Applications. <i>ACS Applied Materials &amp; Applications</i> , 11, 25637-25653	9.5	7
48	Controlling fibroblast adhesion with pH modified polyelectrolyte multilayers. <i>International Journal of Artificial Organs</i> , <b>2011</b> , 34, 185-91	1.9	7
47	Modification of poly(ether urethane)elastomers by incorporation of poly(isobutylene)glycol. Relation between polymer properties and thrombogenicity. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1996</b> , 7, 1105-18	3.5	7
46	Heparin-modified polylactide as biodegradable hemocompatible biomaterial. <i>Journal of Materials Science: Materials in Medicine</i> , <b>1994</b> , 5, 728-731	4.5	7

45	Comparative Study of Osteogenic Activity of Multilayers Made of Synthetic and Biogenic Polyelectrolytes. <i>Macromolecular Bioscience</i> , <b>2017</b> , 17, 1700078	5.5	6
44	Formation of porous bilayer hollow fibre membranes. <i>Macromolecular Symposia</i> , <b>2002</b> , 188, 131-142	0.8	6
43	Platelet adhesion and activation under static and flow conditions. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>1994</b> , 3, 241-249	6	6
42	Conformational alterations within the glycocalyx of erythrocyte membranes studied by spin labelling. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>1986</b> , 861, 111-21	3.8	6
41	Effect of Sulfation Route and Subsequent Oxidation on Derivatization Degree and Biocompatibility of Cellulose Sulfates. <i>Macromolecular Bioscience</i> , <b>2020</b> , 20, e1900403	5.5	6
40	Tris(2-aminoethyl)amine-based Ebranched fatty acid amides - Synthesis of lipids and comparative study of transfection efficiency of their lipid formulations. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2015</b> , 96, 349-62	5.7	5
39	Effect of thiolated glycosaminoglycans on the behavior of breast cancer cells: toward the development of in vitro models of cancer. <i>International Journal of Artificial Organs</i> , <b>2017</b> , 40, 31-39	1.9	5
38	In memoriam Dieter Falkenhagen (1942-2015): Pioneer, enthusiast, visionary. <i>International Journal of Artificial Organs</i> , <b>2015</b> , 38, 615-6	1.9	5
37	Synthesis and Characterization of Biologically Active Chitosan Sulfates. <i>ACS Symposium Series</i> , <b>2012</b> , 297-314	0.4	5
36	The Haemocompatibility of Biomaterials In Vitro: Investigations on the Mechanism of the Whole-blood Clot Formation Test. <i>ATLA Alternatives To Laboratory Animals</i> , <b>1992</b> , 20, 390-395	2.1	5
35	The Hemocompatibility of Reference Materials in Vitro © Comparative Investigation of Platelet Adhesion/Activation and Platelet Aggregability <b>1992</b> , 183-192		5
34	Engineering osteogenic microenvironments by combination of multilayers from collagen type I and chondroitin sulfate with novel cationic liposomes. <i>Materials Today Bio</i> , <b>2020</b> , 7, 100071	9.9	5
33	Tailoring Bulk and Surface Composition of Polylactides for Application in Engineering of Skeletal Tissues. <i>Advances in Polymer Science</i> , <b>2017</b> , 79-108	1.3	4
32	Novel polymer blends for the preparation of membranes for biohybrid liver systems. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2009</b> , 20, 821-39	3.5	4
31	Investigation of plasma protein adsorption on functionalized nanoparticles for application in apheresis. <i>Artificial Organs</i> , <b>1999</b> , 23, 87-97	2.6	4
30	Generic Methods of Surface Modification to Control Adhesion of Cells and Beyond <b>2013</b> , 441-467		3
29	Surface microstructuring and protein patterning using hyaluronan derivatives. <i>Microelectronic Engineering</i> , <b>2013</b> , 106, 21-26	2.5	3
28	Cell adhesion on nanostructured surfaces designed by nanosphere lithography <b>2011</b> ,		3

27	Modulation of hybridoma cell growth and antibody production by coating cell culture material with extracellular matrix proteins. <i>Biochemical Engineering Journal</i> , <b>2007</b> , 35, 301-308	4.2	3
26	Structural alterations of the human erythrocyte membrane upon influenza virus attachment. <i>Bioscience Reports</i> , <b>1986</b> , 6, 45-55	4.1	3
25	Arteriovenous access in hemodialysis: A multidisciplinary perspective for future solutions. <i>International Journal of Artificial Organs</i> , <b>2021</b> , 44, 3-16	1.9	3
24	Extracellular matrix-inspired surface coatings functionalized with dexamethasone-loaded liposomes to induce osteo- and chondrogenic differentiation of multipotent stem cells. <i>Materials Science and Engineering C</i> , <b>2021</b> , 131, 112516	8.3	3
23	Development of Provisional Extracellular Matrix on Biomaterials Interface: Lessons from In Vitro Cell Culture. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , <b>2010</b> , 19-43	0.1	3
22	Surface modification of biomaterials to control adhesion of cells. <i>Clinical Hemorheology and Microcirculation</i> , <b>2008</b> , 39, 247-51	2.5	3
21	Controlling Cell Adhesion Using pH-ModifiedPolyelectrolyte Multilayer Films <b>2015</b> , 1-30		2
20	In-vivo-Reparatur von Blutgef\(\textit{B}\)n durch alternierende Adsorption von Polyelektrolyten. <i>Angewandte Chemie</i> , <b>2004</b> , 116, 944-946	3.6	2
19	Enhanced wound healing in diabetic mice by hyaluronan/chitosan multilayer-coated PLLA nanofibrous mats with sustained release of insulin. <i>Applied Surface Science</i> , <b>2022</b> , 576, 151825	6.7	2
18	A triple chain polycationic peptide-mimicking amphiphile - efficient DNA-transfer without co-lipids. <i>Biomaterials Science</i> , <b>2019</b> , 8, 232-249	7.4	2
17	Interaction of Blood with Biomedical Polymers <b>S</b> ome Basic Aspects <b>1988</b> , 133-142		2
16	Biogenic Polyelectrolyte Multilayers on Poly(L-lactide) Films for Control of Osteoblast Adhesion. <i>Macromolecular Symposia</i> , <b>2010</b> , 294, 133-143	0.8	1
15	A Study of the Velocity Field in the Sputnik Left Ventricular Assist Device. <i>Bio-Medical Engineering</i> , <b>2021</b> , 55, 278	0.5	1
14	Tissue response to biphasic calcium phosphate covalently modified with either heparin or hyaluronic acid in a mouse subcutaneous implantation model. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2021</b> , 109, 1353-1365	5.4	1
13	Hydrogels Based on Oxidized Cellulose Sulfates and Carboxymethyl Chitosan: Studies on Intrinsic Gel Properties, Stability, and Biocompatibility. <i>Macromolecular Bioscience</i> , <b>2021</b> , 21, e2100098	5.5	1
12	Effect of metal ions on the physical properties of multilayers from hyaluronan and chitosan, and the adhesion, growth and adipogenic differentiation of multipotent mouse fibroblasts. <i>Soft Matter</i> , <b>2021</b> , 17, 8394-8410	3.6	1
11	Chapter 13:Biomimetic Surface Modifications of Biomaterials Using a Layer-by-layer Technique. <i>RSC Soft Matter</i> , <b>2021</b> , 326-362	0.5	1
10	Altered vitronectin receptor ( integrin) function in fibroblasts adhering on hydrophobic glass <b>1999</b> , 44, 341		1

- Crosstalk between Macrophages and Mesenchymal Stem Cells Regulated by Biomaterials and Its 1.5 О 9 Role in Bone Regeneration. Advances in Materials Science and Engineering, 2021, 2021, 1-21 Materials, surfaces, and systems for extracorporeal therapies and beyond. *International Journal of* 8 1.9 Artificial Organs, 2017, 40, 1-3 Novel Cellulose Derivatives with Mitogenic and Osteogenic Activity. ACS Symposium Series, 2013, 259-270.4 ESAO Presidential Message. International Journal of Artificial Organs, 2017, 40, 368-368 1.9 A new module arrangement for plasmapheresis. Transfusion and Apheresis Science, 2001, 25, 5-15 5 2.4 Investigation of blood-biomaterial interaction by means of a new quantitative dynamic measuring principle. Biomaterials, Artificial Cells, and Artificial Organs, 1990, 18, 517-22 Membranes: Bioartificial Organs and Tissue Engineering4487-4515 3
- ImplantatBerzge fildie in situ-Transfektion in der regenerativen Medizin. BioSpektrum, 2021, 27, 445-4470.1

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