Katja Schenke-Layland

List of Publications by Citations

Source: https://exaly.com/author-pdf/1469190/katja-schenke-layland-publications-by-citations.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

206 papers

7,337 citations

48 h-index 80 g-index

234 ext. papers

8,819 ext. citations

7.9 avg, IF

6.12 L-index

#	Paper	IF	Citations
206	Skin tissue engineeringin vivo and in vitro applications. <i>Advanced Drug Delivery Reviews</i> , 2011 , 63, 352	2-6 68.5	402
205	Three-dimensional electrospun ECM-based hybrid scaffolds for cardiovascular tissue engineering. <i>Biomaterials</i> , 2008 , 29, 2907-14	15.6	376
204	ECM and ECM-like materials - Biomaterials for applications in regenerative medicine and cancer therapy. <i>Advanced Drug Delivery Reviews</i> , 2016 , 97, 260-9	18.5	259
203	Impact of decellularization of xenogeneic tissue on extracellular matrix integrity for tissue engineering of heart valves. <i>Journal of Structural Biology</i> , 2003 , 143, 201-8	3.4	219
202	Self-Organized Cerebral Organoids with Human-Specific Features Predict Effective Drugs to Combat Zika Virus Infection. <i>Cell Reports</i> , 2017 , 21, 517-532	10.6	204
201	Reprogrammed mouse fibroblasts differentiate into cells of the cardiovascular and hematopoietic lineages. <i>Stem Cells</i> , 2008 , 26, 1537-46	5.8	204
200	Mapping the first stages of mesoderm commitment during differentiation of human embryonic stem cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 13742-7	11.5	179
199	Cell death stages in single apoptotic and necrotic cells monitored by Raman microspectroscopy. <i>Scientific Reports</i> , 2014 , 4, 4698	4.9	171
198	Two-photon microscopes and in vivo multiphoton tomographspowerful diagnostic tools for tissue engineering and drug delivery. <i>Advanced Drug Delivery Reviews</i> , 2006 , 58, 878-96	18.5	171
197	Impact of heart valve decellularization on 3-D ultrastructure, immunogenicity and thrombogenicity. <i>Biomaterials</i> , 2010 , 31, 2549-54	15.6	160
196	Drug and cell delivery for cardiac regeneration. Advanced Drug Delivery Reviews, 2015, 84, 85-106	18.5	138
195	Merging organoid and organ-on-a-chip technology to generate complex multi-layer tissue models in a human retina-on-a-chip platform. <i>ELife</i> , 2019 , 8,	8.9	137
194	Cardiac fibrosis - A short review of causes and therapeutic strategies. <i>Advanced Drug Delivery Reviews</i> , 2019 , 146, 77-82	18.5	127
193	Adipose tissue-derived cells improve cardiac function following myocardial infarction. <i>Journal of Surgical Research</i> , 2009 , 153, 217-23	2.5	124
192	Multiphoton autofluorescence imaging of intratissue elastic fibers. <i>Biomaterials</i> , 2005 , 26, 495-500	15.6	121
191	cAMP-induced Interleukin-10 promoter activation depends on CCAAT/enhancer-binding protein expression and monocytic differentiation. <i>Journal of Biological Chemistry</i> , 2003 , 278, 5597-604	5.4	120
190	Human adipose stem cells: a potential cell source for cardiovascular tissue engineering. <i>Cells Tissues Organs</i> , 2008 , 187, 263-74	2.1	100

(2004-2003)

189	Complete dynamic repopulation of decellularized heart valves by application of defined physical signals-an in vitro study. <i>Cardiovascular Research</i> , 2003 , 60, 497-509	9.9	97	
188	Differentiation of human embryonic stem cells to HOXA hemogenic vasculature that resembles the aorta-gonad-mesonephros. <i>Nature Biotechnology</i> , 2016 , 34, 1168-1179	44.5	96	
187	The physiological performance of a three-dimensional model that mimics the microenvironment of the small intestine. <i>Biomaterials</i> , 2011 , 32, 7469-78	15.6	92	
186	Tissue engineering of aortic tissue: dire consequence of suboptimal elastic fiber synthesis in vivo. <i>Cardiovascular Research</i> , 2004 , 63, 719-30	9.9	90	
185	Engineering of a bio-functionalized hybrid off-the-shelf heart valve. <i>Biomaterials</i> , 2014 , 35, 2130-9	15.6	89	
184	Collagen IV induces trophoectoderm differentiation of mouse embryonic stem cells. <i>Stem Cells</i> , 2007 , 25, 1529-38	5.8	89	
183	Age-related changes in the elastic tissue of the human aorta. Journal of Vascular Research, 2012, 49, 77-	816 9	88	
182	Non-invasive multiphoton imaging of extracellular matrix structures. <i>Journal of Biophotonics</i> , 2008 , 1, 451-62	3.1	88	
181	Raman spectroscopy in biomedicine - non-invasive in vitro analysis of cells and extracellular matrix components in tissues. <i>Biotechnology Journal</i> , 2013 , 8, 288-97	5.6	86	
180	Impact of cryopreservation on extracellular matrix structures of heart valve leaflets. <i>Annals of Thoracic Surgery</i> , 2006 , 81, 918-26	2.7	85	
179	Comparative study of cellular and extracellular matrix composition of native and tissue engineered heart valves. <i>Matrix Biology</i> , 2004 , 23, 113-25	11.4	79	
178	Biomechanical and biomolecular characterization of extracellular matrix structures in human colon carcinomas. <i>Matrix Biology</i> , 2018 , 68-69, 180-193	11.4	75	
177	A collagen-based scaffold delivering exogenous microrna-29B to modulate extracellular matrix remodeling. <i>Molecular Therapy</i> , 2014 , 22, 786-96	11.7	74	
176	In Vivo Human Somitogenesis Guides Somite Development from hPSCs. <i>Cell Reports</i> , 2017 , 18, 1573-158	35 0.6	67	
175	Human heart-forming organoids recapitulate early heart and foregut development. <i>Nature Biotechnology</i> , 2021 , 39, 737-746	44.5	65	
174	Stem cell microenvironmentsunveiling the secret of how stem cell fate is defined. <i>Macromolecular Bioscience</i> , 2010 , 10, 1302-15	5.5	63	
173	Optimized preservation of extracellular matrix in cardiac tissues: implications for long-term graft durability. <i>Annals of Thoracic Surgery</i> , 2007 , 83, 1641-50	2.7	63	
172	Tissue engineering of ovine aortic blood vessel substitutes using applied shear stress and enzymatically derived vascular smooth muscle cells. <i>Annals of Biomedical Engineering</i> , 2004 , 32, 212-22	4.7	62	

171	Recapitulation of the embryonic cardiovascular progenitor cell niche. <i>Biomaterials</i> , 2011 , 32, 2748-56	15.6	61
170	Electroconductive Biohybrid Collagen/Pristine Graphene Composite Biomaterials with Enhanced Biological Activity. <i>Advanced Materials</i> , 2018 , 30, e1706442	24	60
169	Raman spectroscopy for the non-contact and non-destructive monitoring of collagen damage within tissues. <i>Journal of Biophotonics</i> , 2012 , 5, 47-56	3.1	60
168	Metformin reverses TRAP1 mutation-associated alterations in mitochondrial function in Parkinson's disease. <i>Brain</i> , 2017 , 140, 2444-2459	11.2	59
167	The use of three-dimensional nanostructures to instruct cells to produce extracellular matrix for regenerative medicine strategies. <i>Biomaterials</i> , 2009 , 30, 4665-75	15.6	57
166	Immune response to SARS-CoV-2 variants of concern in vaccinated individuals. <i>Nature Communications</i> , 2021 , 12, 3109	17.4	57
165	Engineering of fibrillar decorin matrices for a tissue-engineered trachea. <i>Biomaterials</i> , 2012 , 33, 5259-66	6 15.6	55
164	Identification of the critical extracellular matrix proteins that promote human embryonic stem cell assembly. <i>Stem Cells and Development</i> , 2009 , 18, 919-28	4.4	55
163	Performance of decellularized xenogeneic tissue in heart valve replacement. <i>Biomaterials</i> , 2006 , 27, 1-2	! 15.6	53
162	The role of extracellular matrix in biomechanics and its impact on bioengineering of cells and 3D tissues. <i>Matrix Biology</i> , 2020 , 85-86, 1-14	11.4	52
161	Raman spectroscopy: a noninvasive analysis tool for the discrimination of human skin cells. <i>Tissue Engineering - Part C: Methods</i> , 2011 , 17, 1027-40	2.9	51
160	Increased expression of cathepsins and obesity-induced proinflammatory cytokines in lacrimal glands of male NOD mouse 2010 , 51, 5019-29		49
159	Quantitative second harmonic generation imaging of cartilage damage. <i>Cell and Tissue Banking</i> , 2008 , 9, 299-307	2.2	48
158	Increased degradation of extracellular matrix structures of lacrimal glands implicated in the pathogenesis of Sjgren's syndrome. <i>Matrix Biology</i> , 2008 , 27, 53-66	11.4	47
157	Elastogenesis at the onset of human cardiac valve development. <i>Development (Cambridge)</i> , 2013 , 140, 2345-53	6.6	45
156	Cardiomyopathy is associated with structural remodelling of heart valve extracellular matrix. <i>European Heart Journal</i> , 2009 , 30, 2254-65	9.5	45
155	Non-invasive marker-independent high content analysis of a microphysiological human pancreas-on-a-chip model. <i>Matrix Biology</i> , 2020 , 85-86, 205-220	11.4	44
154	Imaging of cardiovascular structures using near-infrared femtosecond multiphoton laser scanning microscopy. <i>Journal of Biomedical Optics</i> , 2005 , 10, 024017	3.5	43

(2020-2012)

153	Skin tissue engineeringin vivo and in vitro applications. <i>Clinics in Plastic Surgery</i> , 2012 , 39, 33-58	3	40	
152	Allogeneic heart valve storage above the glass transition at -80°C. <i>Annals of Thoracic Surgery</i> , 2011 , 91, 1829-35	2.7	40	
151	Electrospun poly(D/L-lactide-co-L-lactide) hybrid matrix: a novel scaffold material for soft tissue engineering. <i>Journal of Materials Science: Materials in Medicine</i> , 2010 , 21, 2665-71	4.5	39	
150	Enhanced elastin synthesis and maturation in human vascular smooth muscle tissue derived from induced-pluripotent stem cells. <i>Acta Biomaterialia</i> , 2017 , 52, 49-59	10.8	38	
149	Influence of systematically varied nano-scale topography on cell morphology and adhesion. <i>Cell Communication and Adhesion</i> , 2007 , 14, 181-94		38	
148	Non-invasive identification of proteoglycans and chondrocyte differentiation state by Raman microspectroscopy. <i>Journal of Biophotonics</i> , 2013 , 6, 205-11	3.1	37	
147	Exploring beyond clinical routine SARS-CoV-2 serology using MultiCoV-Ab to evaluate endemic coronavirus cross-reactivity. <i>Nature Communications</i> , 2021 , 12, 1152	17.4	37	
146	Modulation of inflammation and angiogenesis and changes in ECM GAG-activity via dual delivery of nucleic acids. <i>Biomaterials</i> , 2015 , 69, 133-47	15.6	36	
145	Stem-cell based organ-on-a-chip models for diabetes research. <i>Advanced Drug Delivery Reviews</i> , 2019 , 140, 101-128	18.5	36	
144	Preserved bioactivity and tunable release of a SDF1-GPVI bi-specific protein using photo-crosslinked PEGda hydrogels. <i>Biomaterials</i> , 2014 , 35, 7180-7	15.6	34	
143	The performance of ice-free cryopreserved heart valve allografts in an orthotopic pulmonary sheep model. <i>Biomaterials</i> , 2010 , 31, 5306-11	15.6	33	
142	In vitro elastogenesis: instructing human vascular smooth muscle cells to generate an elastic fiber-containing extracellular matrix scaffold. <i>Biomedical Materials (Bristol)</i> , 2015 , 10, 034102	3.5	32	
141	A Human Skeletal Muscle Atlas Identifies the Trajectories of Stem and Progenitor Cells across Development and from Human Pluripotent Stem Cells. <i>Cell Stem Cell</i> , 2020 , 27, 158-176.e10	18	32	
140	Ice-free cryopreservation of heart valve allografts: better extracellular matrix preservation in vivo and preclinical results. <i>Cell and Tissue Banking</i> , 2012 , 13, 663-71	2.2	32	
139	Loss of spatial organization and destruction of the pericellular matrix in early osteoarthritis in vivo and in a novel in vitro methodology. <i>Osteoarthritis and Cartilage</i> , 2016 , 24, 1200-9	6.2	32	
139 138		2.1	32	
	and in a novel in vitro methodology. Osteoarthritis and Cartilage, 2016, 24, 1200-9 Allograft Heart Valves: Current Aspects and Future Applications. Biopreservation and Biobanking,			

135	Generation and Assessment of Functional Biomaterial Scaffolds for Applications in Cardiovascular Tissue Engineering and Regenerative Medicine. <i>Advanced Healthcare Materials</i> , 2015 , 4, 2326-41	10.1	31
134	A cyclin D2-Rb pathway regulates cardiac myocyte size and RNA polymerase III after biomechanical stress in adult myocardium. <i>Circulation Research</i> , 2008 , 102, 1222-9	15.7	30
133	Phenotypical plasticity of vascular smooth muscle cells-effect of in vitro and in vivo shear stress for tissue engineering of blood vessels. <i>Tissue Engineering</i> , 2007 , 13, 2505-14		28
132	Characterization and therapeutic potential of induced pluripotent stem cell-derived cardiovascular progenitor cells. <i>PLoS ONE</i> , 2012 , 7, e45603	3.7	28
131	Design and analysis of a squamous cell carcinoma in vitro model system. <i>Biomaterials</i> , 2013 , 34, 7401-7	15.6	26
130	In vitro human tissue modelsmoving towards personalized regenerative medicine. <i>Advanced Drug Delivery Reviews</i> , 2011 , 63, 195-6	18.5	26
129	Lymphocytic infiltration leads to degradation of lacrimal gland extracellular matrix structures in NOD mice exhibiting a Sjgren's syndrome-like exocrinopathy. <i>Experimental Eye Research</i> , 2010 , 90, 223-	3 3 7	26
128	Steps toward Maturation of Embryonic Stem Cell-Derived Cardiomyocytes by Defined Physical Signals. <i>Stem Cell Reports</i> , 2017 , 9, 122-135	8	25
127	Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. <i>ACS Applied Materials & Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. ACS Applied Materials & Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. ACS Applied Materials & Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. ACS Applied Materials & Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. ACS Applied Materials & Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. ACS Applied Materials & Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. ACS Applied Materials & Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. ACS Applied Materials & Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Pressure Argon Plasma Pressure Pres</i>	9.5	25
126	Exogenous miR-29B Delivery Through a Hyaluronan-Based Injectable System Yields Functional Maintenance of the Infarcted Myocardium. <i>Tissue Engineering - Part A</i> , 2018 , 24, 57-67	3.9	25
125	Raman spectroscopy as an analytical tool for melanoma research. <i>Clinical and Experimental Dermatology</i> , 2014 , 39, 636-45	1.8	24
124	Prevention of device-related tissue damage during percutaneous deployment of tissue-engineered heart valves. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2006 , 131, 1323-30	1.5	24
123	Tenascin-C Orchestrates an Immune-Suppressive Tumor Microenvironment in Oral Squamous Cell Carcinoma. <i>Cancer Immunology Research</i> , 2020 , 8, 1122-1138	12.5	24
122	Fibronectin Adsorption on Electrospun Synthetic Vascular Grafts Attracts Endothelial Progenitor Cells and Promotes Endothelialization in Dynamic In Vitro Culture. <i>Cells</i> , 2020 , 9,	7.9	23
121	Fluorescent Ly6G antibodies determine macrophage phagocytosis of neutrophils and alter the retrieval of neutrophils in mice. <i>Journal of Leukocyte Biology</i> , 2015 , 98, 365-72	6.5	23
120	Human eye development is characterized by coordinated expression of fibrillin isoforms. Investigative Ophthalmology and Visual Science, 2014, 55, 7934-44		23
119	Non-invasive functional molecular phenotyping of human smooth muscle cells utilized in cardiovascular tissue engineering. <i>Acta Biomaterialia</i> , 2019 , 89, 193-205	10.8	22
118	Guidance for removal of fetal bovine serum from cryopreserved heart valve processing. <i>Cells Tissues Organs</i> , 2011 , 193, 264-73	2.1	22

(2018-2020)

117	Comparability of Raman Spectroscopic Configurations: A Large Scale Cross-Laboratory Study. <i>Analytical Chemistry</i> , 2020 , 92, 15745-15756	7.8	22	
116	Hyaluronic acid as a macromolecular crowding agent for production of cell-derived matrices. <i>Acta Biomaterialia</i> , 2019 , 100, 292-305	10.8	21	
115	Non-invasive Chamber-Specific Identification of Cardiomyocytes in Differentiating Pluripotent Stem Cells. <i>Stem Cell Reports</i> , 2016 , 6, 188-99	8	21	
114	PSM Peptides of Staphylococcus aureus Activate the p38-CREB Pathway in Dendritic Cells, Thereby Modulating Cytokine Production and T Cell Priming. <i>Journal of Immunology</i> , 2016 , 196, 1284-92	5.3	21	
113	Endocardial-to-mesenchymal transformation and mesenchymal cell colonization at the onset of human cardiac valve development. <i>Development (Cambridge)</i> , 2016 , 143, 473-82	6.6	21	
112	Non-contact discrimination of human bone marrow-derived mesenchymal stem cells and fibroblasts using Raman spectroscopy. <i>Medical Laser Application: International Journal for Laser Treatment and Research</i> , 2011 , 26, 119-125		21	
111	Controlled Heterotypic Pseudo-Islet Assembly of Human Ecells and Human Umbilical Vein Endothelial Cells Using Magnetic Levitation. <i>Tissue Engineering - Part A</i> , 2020 , 26, 387-399	3.9	20	
110	Female human primordial germ cells display X-chromosome dosage compensation despite the absence of X-inactivation. <i>Nature Cell Biology</i> , 2020 , 22, 1436-1446	23.4	19	
109	A human in vitro model that mimics the renal proximal tubule. <i>Tissue Engineering - Part C: Methods</i> , 2014 , 20, 599-609	2.9	17	
108	Epigenetic regulation of myogenic gene expression by heterochromatin protein 1 alpha. <i>PLoS ONE</i> , 2013 , 8, e58319	3.7	17	
107	A bioresorbable biomaterial carrier and passive stabilization device to improve heart function post-myocardial infarction. <i>Materials Science and Engineering C</i> , 2019 , 103, 109751	8.3	16	
106	Molecular Effects and Tissue Penetration Depth of Physical Plasma in Human Mucosa Analyzed by Contact- and Marker-Independent Raman Microspectroscopy. <i>ACS Applied Materials & Amp; Interfaces</i> , 2019 , 11, 42885-42895	9.5	16	
105	Facilitated noninvasive visualization of collagen and elastin in blood vessels. <i>Tissue Engineering - Part C: Methods</i> , 2010 , 16, 705-10	2.9	16	
104	Oligonucleotide and Parylene Surface Coating of Polystyrene and ePTFE for Improved Endothelial Cell Attachment and Hemocompatibility. <i>International Journal of Biomaterials</i> , 2012 , 2012, 397813	3.2	16	
103	The role of cytoprotective cytokines in cardiac ischemia/reperfusion injury. <i>Journal of Surgical Research</i> , 2008 , 148, 164-71	2.5	16	
102	Enabling Multiphoton and Second Harmonic Generation Imaging in Paraffin-Embedded and Histologically Stained Sections. <i>Tissue Engineering - Part C: Methods</i> , 2016 , 22, 517-23	2.9	16	
101	Electrospun poly-l-lactide scaffold for the controlled and targeted delivery of a synthetically obtained Diclofenac prodrug to treat actinic keratosis. <i>Acta Biomaterialia</i> , 2017 , 52, 187-196	10.8	15	
100	Surface functionalization of electrospun scaffolds using recombinant human decorin attracts circulating endothelial progenitor cells. <i>Scientific Reports</i> , 2018 , 8, 110	4.9	14	

99	Mononuclear phagocytes contribute to intestinal invasion and dissemination of Yersinia enterocolitica. <i>International Journal of Medical Microbiology</i> , 2016 , 306, 357-66	3.7	13
98	Improved long-term durability of allogeneic heart valves in the orthotopic sheep model. <i>European Journal of Cardio-thoracic Surgery</i> , 2019 , 55, 484-493	3	13
97	Controlled and tuneable drug release from electrospun fibers and a non-invasive approach for cytotoxicity testing. <i>Scientific Reports</i> , 2019 , 9, 3446	4.9	12
96	NeutrobodyPlex-monitoring SARS-CoV-2 neutralizing immune responses using nanobodies. <i>EMBO Reports</i> , 2021 , 22, e52325	6.5	12
95	Non-invasive detection of DNA methylation states in carcinoma and pluripotent stem cells using Raman microspectroscopy and imaging. <i>Scientific Reports</i> , 2019 , 9, 7014	4.9	11
94	Imaging fibrosis in inflammatory diseases: targeting the exposed extracellular matrix. <i>Theranostics</i> , 2019 , 9, 2868-2881	12.1	11
93	Preclinical evaluation of ice-free cryopreserved arteries: structural integrity and hemocompatibility. <i>Cells Tissues Organs</i> , 2012 , 196, 262-70	2.1	11
92	Non-invasive characterization of hybrid gelatin:poly-l-lactide electrospun scaffolds using second harmonic generation and multiphoton imaging. <i>Journal of Materials Chemistry B</i> , 2018 , 6, 6399-6412	7.3	11
91	Tracheal tissue engineering: building on a strong foundation. <i>Expert Review of Medical Devices</i> , 2013 , 10, 33-5	3.5	10
90	Raman microspectroscopy as a diagnostic tool for the non-invasive analysis of fibrillin-1 deficiency in the skin and in the in vitro skin models. <i>Acta Biomaterialia</i> , 2017 , 52, 41-48	10.8	9
89	Trans-Mucosal Efficacy of Non-Thermal Plasma Treatment on Cervical Cancer Tissue and Human Cervix Uteri by a Next Generation Electrosurgical Argon Plasma Device. <i>Cancers</i> , 2020 , 12,	6.6	9
88	Donor age significantly influences the Raman spectroscopic biomolecular fingerprint of human pancreatic extracellular matrix proteins following collagenase-based digestion. <i>Acta Biomaterialia</i> , 2019 , 99, 269-283	10.8	8
87	Cardiomyocyte generation from somatic sources - current status and future directions. <i>Current Opinion in Biotechnology</i> , 2016 , 40, 49-55	11.4	8
86	Induced pluripotent stem cells: it's like d¶vu all over again. <i>Circulation</i> , 2009 , 120, 1462-4	16.7	8
85	Marker-Independent In Situ Quantitative Assessment of Residual Cryoprotectants in Cardiac Tissues. <i>Analytical Chemistry</i> , 2019 , 91, 2266-2272	7.8	8
84	Non-contact, label-free monitoring of cells and extracellular matrix using Raman spectroscopy. Journal of Visualized Experiments, 2012,	1.6	7
83	HepaChip-MP - a twenty-four chamber microplate for a continuously perfused liver coculture model. <i>Lab on A Chip</i> , 2020 , 20, 2911-2926	7.2	7
82	Integration of Electrospun Membranes into Low-Absorption Thermoplastic Organ-on-Chip. <i>ACS Biomaterials Science and Engineering</i> , 2021 , 7, 3006-3017	5.5	7

(2021-2018)

81	A flow bioreactor system compatible with real-time two-photon fluorescence lifetime imaging microscopy. <i>Biomedical Materials (Bristol)</i> , 2018 , 13, 024101	3.5	7
8o	Visualizing tropoelastin in a long-term human elastic fibre cell culture model. <i>Scientific Reports</i> , 2016 , 6, 20378	4.9	6
79	Influence of aflibercept on platelet activation profile. Experimental Eye Research, 2018, 175, 166-172	3.7	6
78	Nanocellulose and Elastin Act as Plasticizers of Electrospun Bioinspired Scaffolds. <i>ACS Applied Polymer Materials</i> , 2020 , 2, 4836-4847	4.3	6
77	Raman Spectroscopic Analyses of Jaw Periosteal Cell Mineralization. <i>Stem Cells International</i> , 2017 , 2017, 1651376	5	5
76	Impact of T-cell-mediated immune response on xenogeneic heart valve transplantation: short-term success and mid-term failure. <i>European Journal of Cardio-thoracic Surgery</i> , 2018 , 53, 784-792	3	5
75	ProteinChip system technology: a powerful tool to analyze expression differences in tissue-engineered blood vessels. <i>Tissue Engineering</i> , 2004 , 10, 611-20		5
74	Lipidome profiling with Raman microspectroscopy identifies macrophage response to surface topographies of implant materials <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	5
73	Noninvasive Physical Plasma as Innovative and Tissue-Preserving Therapy for Women Positive for Cervical Intraepithelial Neoplasia <i>Cancers</i> , 2022 , 14,	6.6	5
72	Prospects for regenerative medicine approaches in women's health. <i>Journal of Anatomy</i> , 2015 , 227, 78	1-<u>5</u>. 9	4
71	Simplified pulse reactor for real-time long-term in vitro testing of biological heart valves. <i>Annals of Biomedical Engineering</i> , 2010 , 38, 1919-27	4.7	4
70	Fluorescence lifetime metabolic mapping of hypoxia-induced damage in pancreatic pseudo-islets. Journal of Biophotonics, 2020 , 13, e202000375	3.1	4
69	Nidogen-1 Mitigates Ischemia and Promotes Tissue Survival and Regeneration. <i>Advanced Science</i> , 2021 , 8, 2002500	13.6	4
68	Fibronectin adsorption on oxygen plasma-treated polyurethane surfaces modulates endothelial cell response. <i>Journal of Materials Chemistry B</i> , 2021 , 9, 1647-1660	7.3	4
67	Mapping human haematopoietic stem cells from haemogenic endothelium to birth Nature, 2022,	50.4	4
66	Raman microspectroscopy for the development and screening of recombinant cell lines. <i>Biotechnology Journal</i> , 2017 , 12, 1600412	5.6	3
65	RNA isolation from fetal and adult human tissues for transcriptional profiling. <i>Biotechnology Journal</i> , 2013 , 8, 338-44	5.6	3
64	Collagen and Endothelial Cell Coculture Improves ECell Functionality and Rescues Pancreatic Extracellular Matrix. <i>Tissue Engineering - Part A</i> , 2021 , 27, 977-991	3.9	3

63	Why, When, Who, What, How, and Where for Trainees Writing Literature Review Articles. <i>Annals of Biomedical Engineering</i> , 2019 , 47, 2334-2340	4.7	2
62	Words of wisdom: Re: Hedgehog/Wnt feedback supports regenerative proliferation of epithelial stem cells in bladder. <i>European Urology</i> , 2012 , 61, 1263-4	10.2	2
61	Long-term repair of porcine articular cartilage using cryopreservable, clinically compatible human embryonic stem cell-derived chondrocytes. <i>Npj Regenerative Medicine</i> , 2021 , 6, 77	15.8	2
60	Targeted Protein Profiling of In Vivo NIPP-Treated Tissues Using DigiWest Technology. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 11238	2.6	2
59	Immune response to SARS-CoV-2 variants of concern in vaccinated individuals		2
58	Elastin-like hydrogel stimulates angiogenesis in a severe model of critical limb ischemia (CLI): An insight into the glyco-host response. <i>Biomaterials</i> , 2021 , 269, 120641	15.6	2
57	Comparative Study of MSCA-1 and CD146 Isolated Periosteal Cell Subpopulations. <i>Cellular Physiology and Biochemistry</i> , 2018 , 51, 1193-1206	3.9	2
56	Inflammatory and regenerative processes in bioresorbable synthetic pulmonary valves up to two years in sheep-Spatiotemporal insights augmented by Raman microspectroscopy. <i>Acta Biomaterialia</i> , 2021 , 135, 243-259	10.8	2
55	Autologous Human Immunocompetent White Adipose Tissue-on-Chip Advanced Science, 2022, e21044	51 13.6	2
54	A phasor approach analysis of multiphoton FLIM measurements of three-dimensional cell culture models 2016 ,		1
53	Raman spectroscopy: a powerful tool for the non-contact discrimination of bone marrow mesenchymal stem cells and fibroblasts 2011 ,		1
52	High-resolution multiphoton optical tomography of tissues: an in vitro and in vivo study 2006 , 6142, 208	3	1
51	Raman Imaging and Fluorescence Lifetime Imaging Microscopy for Diagnosis of Cancer State and Metabolic Monitoring. <i>Cancers</i> , 2021 , 13,	6.6	1
50	Basement membrane proteins improve human islet survival in hypoxia: Implications for islet inflammation. <i>Acta Biomaterialia</i> , 2021 , 137, 92-92	10.8	1
49	WATE up!? IDrgan-on-a-chip integrating human mature white adipose tissues for mechanistic research and pharmaceutical applications		1
48	Towards automation in biologics production via Raman micro-spectroscopy, laser-induced forward cell transfer and surface-enhanced Raman spectroscopy. <i>Journal of Biotechnology</i> , 2020 , 323, 313-321	3.7	1
47	Multiplexed Serum Antibody Screening Platform Using Virus Extracts from Endemic and SARS-CoV-2. <i>ACS Infectious Diseases</i> , 2021 , 7, 1596-1606	5.5	1
46	Inflammatory and regenerative processes in bioresorbable synthetic pulmonary valves up to 2 years in sheep: Spatiotemporal insights augmented by Raman microspectroscopy		1

45	Raman microspectroscopy and Raman imaging reveal biomarkers specific for thoracic aortic aneurysms. <i>Cell Reports Medicine</i> , 2021 , 2, 100261	18	1
44	Macrophage retrieval from 3D biomaterials: A detailed comparison of common dissociation methods. <i>Journal of Immunology and Regenerative Medicine</i> , 2021 , 11, 100035	2.8	1
43	Laparoscopic Peritoneal Wash Cytology-Derived Primary Human Mesothelial Cells for In Vitro Cell Culture and Simulation of Human Peritoneum. <i>Biomedicines</i> , 2021 , 9,	4.8	1
42	The Foreign Body Response to an Implantable Therapeutic Reservoir in a Diabetic Rodent Model. <i>Tissue Engineering - Part C: Methods</i> , 2021 , 27, 515-528	2.9	1
41	Distinct Effects of Heparin and Interleukin-4 Functionalization on Macrophage Polarization and In Situ Arterial Tissue Regeneration Using Resorbable Supramolecular Vascular Grafts in Rats. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2101103	10.1	1
40	Imaging of Bynuclein Aggregates in a Rat Model of Parkinson's Disease Using Raman Microspectroscopy. <i>Frontiers in Cell and Developmental Biology</i> , 2021 , 9, 664365	5.7	1
39	Organ-specific endothelial cell heterogenicity and its impact on regenerative medicine and biomedical engineering applications <i>Advanced Drug Delivery Reviews</i> , 2022 , 114323	18.5	1
38	Development of a bi-layered cryogenic electrospun polylactic acid scaffold to study calcific aortic valve disease in a 3D co-culture model. <i>Acta Biomaterialia</i> , 2021 , 140, 364-364	10.8	O
37	Hyaluronic Acid-Functionalized Hybrid Gelatin-Poly-L-Lactide Scaffolds with Tunable Hydrophilicity. <i>Tissue Engineering - Part C: Methods</i> , 2021 , 27, 589-604	2.9	0
36	Argyrin F Treatment-Induced Vulnerabilities Lead to a Novel Combination Therapy in Experimental Glioma. <i>Advanced Therapeutics</i> , 2021 , 4, 2100078	4.9	O
35	Generation and characterization of the human induced pluripotent stem cell line NMIi010-A from peripheral blood mononuclear cells of a healthy 49-year old male individual. <i>Stem Cell Research</i> , 2021 , 54, 102427	1.6	0
34	Arachnoid membrane as a source of sphingosine-1-phosphate that regulates mouse middle cerebral artery tone. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021 , 271678X211033362	7.3	Ο
33	Raman Microspectroscopy Identifies Biochemical Activation Fingerprints in THP-1- and PBMC-Derived Macrophages. <i>Biomedicines</i> , 2022 , 10, 989	4.8	0
32	In vitro-Hauttestsysteme zur Untersuchung lichtassoziierter Hautsch d igung. <i>BioSpektrum</i> , 2015 , 21, 172-174	0.1	
31	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part C: Methods</i> , 2020 , 26, 287-2	87 .9	
30	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part C: Methods</i> , 2020 , 26, 239-2	39 .9	
29	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part B: Reviews</i> , 2020 , 26, 197-19	9 7 7.9	
28	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part A</i> , 2020 , 26, 823-823	3.9	

27	Die Haut, die den Wissenschaftler juckt. <i>Hautnah Dermatologie</i> , 2016 , 32, 14-16	O
26	3.7 Raman Spectroscopy 2017 , 108-127	
25	4.7 Real-Time Analysis of Biomaterials Function 2017 , 85-100	
24	Invited commentary. Annals of Thoracic Surgery, 2009, 88, 513-4	2.7
23	Multiphoton imaging of cardiovascular structures 2004 , 5463, 29	
22	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part A</i> , 2020 , 26, 1123-1123	3.9
21	Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering - Part C: Methods, 2020, 26, 553-5	5 53 .9
20	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part B: Reviews</i> , 2020 , 26, 497-4	9 7 7.9
19	In vitro elastogenesis (87.1). FASEB Journal, 2014 , 28, 87.1	0.9
18	Scaffold and Biomechanical Transductive Approaches to Elastic Tissue Engineering 2016 , 165-187	
17	Multiphoton Imaging IA Powerful Tool For Tissue-State Diagnosis In Regenerative Medicine. <i>FASEB Journal</i> , 2010 , 24, 65.4	0.9
16	VEGF Receptors Identify a Multipotent Cardiovascular Progenitor Cell in Developing Hearts and Induced Pluripotent Stem Cells. <i>FASEB Journal</i> , 2012 , 26, 209.2	0.9
15	Electrospun Proteoglycan Matrices for Tracheal Tissue Engineering. FASEB Journal, 2012, 26, 911.1	0.9
14	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part A</i> , 2020 , 26, 927-927	3.9
13	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part C: Methods</i> , 2020 , 26, 457-4	157 .9
12	Use of Extracellular Matrix Proteins and Natural Materials in Bioengineering 2020 , 401-413	
11	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part A</i> , 2020 , 26, 1025-1025	3.9
10	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part B: Reviews</i> , 2020 , 26, 295-2	957.9

LIST OF PUBLICATIONS

- 9 Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering Part C: Methods, 2020, 26, 347-342.9
- 8 Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering Part C: Methods, 2020, 26, 503-503.9
- 7 Call for Review Papers: Tissue Engineering, Part B. *Tissue Engineering Part A*, **2020**, 26, 585-585 3.9
- 6 Call for Review Papers: Tissue Engineering, Part B. *Tissue Engineering Part B: Reviews*, **2020**, 26, 103-103_{7.9}
- 5 Call for Review Papers: Tissue Engineering, Part B. *Tissue Engineering Part B: Reviews*, **2020**, 26, 399-3997.9
- Call for Review Papers: Tissue Engineering, Part B. *Tissue Engineering Part A*, **2020**, 26, 829-829 3.9
- Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering Part C: Methods, 2020, 26, 397-392.9
- 2 Call for Review Papers: Tissue Engineering, Part B. *Tissue Engineering Part A*, **2020**, 26, 377-377 3.9
- Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering Part C: Methods, 2020, 26, 199-192.9