# Katja Schenke-Layland

# List of Publications by Year in Descending Order

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

206 80 48 7,337 h-index g-index citations papers 6.12 8,819 234 7.9 avg, IF L-index ext. papers ext. citations

#	Paper	IF	Citations
206	Noninvasive Physical Plasma as Innovative and Tissue-Preserving Therapy for Women Positive for Cervical Intraepithelial Neoplasia <i>Cancers</i> , <b>2022</b> , 14,	6.6	5
205	Mapping human haematopoietic stem cells from haemogenic endothelium to birth Nature, 2022,	50.4	4
204	Autologous Human Immunocompetent White Adipose Tissue-on-Chip Advanced Science, 2022, e21044	1 <b>5</b> 113.6	2
203	Raman Microspectroscopy Identifies Biochemical Activation Fingerprints in THP-1- and PBMC-Derived Macrophages. <i>Biomedicines</i> , <b>2022</b> , 10, 989	4.8	0
202	Organ-specific endothelial cell heterogenicity and its impact on regenerative medicine and biomedical engineering applications <i>Advanced Drug Delivery Reviews</i> , <b>2022</b> , 114323	18.5	1
201	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> , <b>2021</b> , 118,	11.5	5
200	Long-term repair of porcine articular cartilage using cryopreservable, clinically compatible human embryonic stem cell-derived chondrocytes. <i>Npj Regenerative Medicine</i> , <b>2021</b> , 6, 77	15.8	2
199	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> , <b>2021</b> , 140, 364-364	10.8	0
198	Targeted Protein Profiling of In Vivo NIPP-Treated Tissues Using DigiWest Technology. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 11238	2.6	2
197	Raman Imaging and Fluorescence Lifetime Imaging Microscopy for Diagnosis of Cancer State and Metabolic Monitoring. <i>Cancers</i> , <b>2021</b> , 13,	6.6	1
196	Basement membrane proteins improve human islet survival in hypoxia: Implications for islet inflammation. <i>Acta Biomaterialia</i> , <b>2021</b> , 137, 92-92	10.8	1
195	Hyaluronic Acid-Functionalized Hybrid Gelatin-Poly-L-Lactide Scaffolds with Tunable Hydrophilicity. <i>Tissue Engineering - Part C: Methods</i> , <b>2021</b> , 27, 589-604	2.9	0
194	Collagen and Endothelial Cell Coculture Improves Ecell Functionality and Rescues Pancreatic Extracellular Matrix. <i>Tissue Engineering - Part A</i> , <b>2021</b> , 27, 977-991	3.9	3
193	Multiplexed Serum Antibody Screening Platform Using Virus Extracts from Endemic and SARS-CoV-2. <i>ACS Infectious Diseases</i> , <b>2021</b> , 7, 1596-1606	5.5	1
192	NeutrobodyPlex-monitoring SARS-CoV-2 neutralizing immune responses using nanobodies. <i>EMBO Reports</i> , <b>2021</b> , 22, e52325	6.5	12
191	Raman microspectroscopy and Raman imaging reveal biomarkers specific for thoracic aortic aneurysms. <i>Cell Reports Medicine</i> , <b>2021</b> , 2, 100261	18	1
190	Immune response to SARS-CoV-2 variants of concern in vaccinated individuals. <i>Nature Communications</i> , <b>2021</b> , 12, 3109	17.4	57

## (2020-2021)

189	Argyrin F Treatment-Induced Vulnerabilities Lead to a Novel Combination Therapy in Experimental Glioma. <i>Advanced Therapeutics</i> , <b>2021</b> , 4, 2100078	4.9	О
188	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> , <b>2021</b> , 54, 102427	1.6	0
187	Macrophage retrieval from 3D biomaterials: A detailed comparison of common dissociation methods. <i>Journal of Immunology and Regenerative Medicine</i> , <b>2021</b> , 11, 100035	2.8	1
186	Nidogen-1 Mitigates Ischemia and Promotes Tissue Survival and Regeneration. <i>Advanced Science</i> , <b>2021</b> , 8, 2002500	13.6	4
185	Fibronectin adsorption on oxygen plasma-treated polyurethane surfaces modulates endothelial cell response. <i>Journal of Materials Chemistry B</i> , <b>2021</b> , 9, 1647-1660	7.3	4
184	Exploring beyond clinical routine SARS-CoV-2 serology using MultiCoV-Ab to evaluate endemic coronavirus cross-reactivity. <i>Nature Communications</i> , <b>2021</b> , 12, 1152	17.4	37
183	Elastin-like hydrogel stimulates angiogenesis in a severe model of critical limb ischemia (CLI): An insight into the glyco-host response. <i>Biomaterials</i> , <b>2021</b> , 269, 120641	15.6	2
182	Integration of Electrospun Membranes into Low-Absorption Thermoplastic Organ-on-Chip. <i>ACS Biomaterials Science and Engineering</i> , <b>2021</b> , 7, 3006-3017	5.5	7
181	Laparoscopic Peritoneal Wash Cytology-Derived Primary Human Mesothelial Cells for In Vitro Cell Culture and Simulation of Human Peritoneum. <i>Biomedicines</i> , <b>2021</b> , 9,	4.8	1
180	Human heart-forming organoids recapitulate early heart and foregut development. <i>Nature Biotechnology</i> , <b>2021</b> , 39, 737-746	44.5	65
180 179		2.9	65
	Biotechnology, <b>2021</b> , 39, 737-746  The Foreign Body Response to an Implantable Therapeutic Reservoir in a Diabetic Rodent Model.		1
179	Biotechnology, 2021, 39, 737-746  The Foreign Body Response to an Implantable Therapeutic Reservoir in a Diabetic Rodent Model. Tissue Engineering - Part C: Methods, 2021, 27, 515-528  Distinct Effects of Heparin and Interleukin-4 Functionalization on Macrophage Polarization and In Situ Arterial Tissue Regeneration Using Resorbable Supramolecular Vascular Grafts in Rats.	2.9	1
179 178	Biotechnology, 2021, 39, 737-746  The Foreign Body Response to an Implantable Therapeutic Reservoir in a Diabetic Rodent Model. Tissue Engineering - Part C: Methods, 2021, 27, 515-528  Distinct Effects of Heparin and Interleukin-4 Functionalization on Macrophage Polarization and In Situ Arterial Tissue Regeneration Using Resorbable Supramolecular Vascular Grafts in Rats. Advanced Healthcare Materials, 2021, 10, e2101103  Arachnoid membrane as a source of sphingosine-1-phosphate that regulates mouse middle	2.9	1 1 0
179 178 177	The Foreign Body Response to an Implantable Therapeutic Reservoir in a Diabetic Rodent Model. <i>Tissue Engineering - Part C: Methods</i> , <b>2021</b> , 27, 515-528  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> , <b>2021</b> , 10, e2101103  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> , <b>2021</b> , 271678X211033362  Inflammatory and regenerative processes in bioresorbable synthetic pulmonary valves up to two years in sheep-Spatiotemporal insights augmented by Raman microspectroscopy. <i>Acta</i>	2.9 10.1 7·3	1 1 0
179 178 177 176	Biotechnology, 2021, 39, 737-746  The Foreign Body Response to an Implantable Therapeutic Reservoir in a Diabetic Rodent Model. Tissue Engineering - Part C: Methods, 2021, 27, 515-528  Distinct Effects of Heparin and Interleukin-4 Functionalization on Macrophage Polarization and In Situ Arterial Tissue Regeneration Using Resorbable Supramolecular Vascular Grafts in Rats. Advanced Healthcare Materials, 2021, 10, e2101103  Arachnoid membrane as a source of sphingosine-1-phosphate that regulates mouse middle cerebral artery tone. Journal of Cerebral Blood Flow and Metabolism, 2021, 271678X211033362  Inflammatory and regenerative processes in bioresorbable synthetic pulmonary valves up to two years in sheep-Spatiotemporal insights augmented by Raman microspectroscopy. Acta Biomaterialia, 2021, 135, 243-259  Imaging of Esynuclein Aggregates in a Rat Model of Parkinson's Disease Using Raman	2.9 10.1 7·3 10.8	1 1 0
179 178 177 176	The Foreign Body Response to an Implantable Therapeutic Reservoir in a Diabetic Rodent Model. <i>Tissue Engineering - Part C: Methods</i> , <b>2021</b> , 27, 515-528  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> , <b>2021</b> , 10, e2101103  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> , <b>2021</b> , 271678X211033362  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> , <b>2021</b> , 135, 243-259  Imaging of ⊞ynuclein Aggregates in a Rat Model of Parkinson's Disease Using Raman Microspectroscopy. <i>Frontiers in Cell and Developmental Biology</i> , <b>2021</b> , 9, 664365	2.9 10.1 7·3 10.8	1 1 0

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Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering - Part B: Reviews, 2020, 26, 197-1977.9 171 Fibronectin Adsorption on Electrospun Synthetic Vascular Grafts Attracts Endothelial Progenitor 170 23 7.9 Cells and Promotes Endothelialization in Dynamic In Vitro Culture. Cells, 2020, 9, Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering - Part A, 2020, 26, 823-823 169 3.9 Trans-Mucosal Efficacy of Non-Thermal Plasma Treatment on Cervical Cancer Tissue and Human 168 6.6 9 Cervix Uteri by a Next Generation Electrosurgical Argon Plasma Device. Cancers, 2020, 12, WAT-on-a-chip integrating human mature white adipocytes for mechanistic research and 167 4.9 31 pharmaceutical applications. Scientific Reports, 2020, 10, 6666 166 Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering - Part A, 2020, 26, 1123-1123 3.9 165 Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering - Part C: Methods, 2020, 26, 553-553.9 Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering - Part B: Reviews, 2020, 26, 497-497<sub>7-9</sub> 164 Controlled Heterotypic Pseudo-Islet Assembly of Human ECells and Human Umbilical Vein 163 3.9 20 Endothelial Cells Using Magnetic Levitation. Tissue Engineering - Part A, 2020, 26, 387-399 The role of extracellular matrix in biomechanics and its impact on bioengineering of cells and 3D 162 11.4 52 tissues. Matrix Biology, 2020, 85-86, 1-14 Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering - Part A, 2020, 26, 927-927 161 3.9 Call for Review Papers: Tissue Engineering, Part B. Tissue Engineering - Part C: Methods, 2020, 26, 457-452.9 160 Fluorescence lifetime metabolic mapping of hypoxia-induced damage in pancreatic pseudo-islets. 159 3.1 4 Journal of Biophotonics, **2020**, 13, e202000375 HepaChip-MP - a twenty-four chamber microplate for a continuously perfused liver coculture 158 7.2 model. Lab on A Chip, 2020, 20, 2911-2926 Tenascin-C Orchestrates an Immune-Suppressive Tumor Microenvironment in Oral Squamous Cell 24 157 12.5 Carcinoma. Cancer Immunology Research, 2020, 8, 1122-1138 156 Use of Extracellular Matrix Proteins and Natural Materials in Bioengineering 2020, 401-413

Comparability of Raman Spectroscopic Configurations: A Large Scale Cross-Laboratory Study.

Female human primordial germ cells display X-chromosome dosage compensation despite the

Analytical Chemistry, 2020, 92, 15745-15756

absence of X-inactivation. Nature Cell Biology, 2020, 22, 1436-1446

155

153	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part A</i> , <b>2020</b> , 26, 1025-1025	3.9	
152	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part B: Reviews</i> , <b>2020</b> , 26, 295-29	<b>5</b> 7.9	
151	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part C: Methods</i> , <b>2020</b> , 26, 347-34	<b>1Z</b> .9	
150	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part C: Methods</i> , <b>2020</b> , 26, 503-50	0 <b>3</b> .9	
149	Towards automation in biologics production via Raman micro-spectroscopy, laser-induced forward cell transfer and surface-enhanced Raman spectroscopy. <i>Journal of Biotechnology</i> , <b>2020</b> , 323, 313-321	3.7	1
148	Nanocellulose and Elastin Act as Plasticizers of Electrospun Bioinspired Scaffolds. <i>ACS Applied Polymer Materials</i> , <b>2020</b> , 2, 4836-4847	4.3	6
147	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part A</i> , <b>2020</b> , 26, 585-585	3.9	
146	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part B: Reviews</i> , <b>2020</b> , 26, 103-10	<b>3</b> 7.9	
145	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part B: Reviews</i> , <b>2020</b> , 26, 399-39	<b>9</b> 7.9	
144	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part A</i> , <b>2020</b> , 26, 829-829	3.9	
143	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part C: Methods</i> , <b>2020</b> , 26, 397-39	<b>92</b> .9	
142	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part A</i> , <b>2020</b> , 26, 377-377	3.9	
141	Non-invasive marker-independent high content analysis of a microphysiological human pancreas-on-a-chip model. <i>Matrix Biology</i> , <b>2020</b> , 85-86, 205-220	11.4	44
140	Call for Review Papers: Tissue Engineering, Part B. <i>Tissue Engineering - Part C: Methods</i> , <b>2020</b> , 26, 199-19	<b>92</b> .9	
139	Donor age significantly influences the Raman spectroscopic biomolecular fingerprint of human pancreatic extracellular matrix proteins following collagenase-based digestion. <i>Acta Biomaterialia</i> , <b>2019</b> , 99, 269-283	10.8	8
138	Hyaluronic acid as a macromolecular crowding agent for production of cell-derived matrices. <i>Acta Biomaterialia</i> , <b>2019</b> , 100, 292-305	10.8	21
137	Cardiac fibrosis - A short review of causes and therapeutic strategies. <i>Advanced Drug Delivery Reviews</i> , <b>2019</b> , 146, 77-82	18.5	127
136	Why, When, Who, What, How, and Where for Trainees Writing Literature Review Articles. <i>Annals of Biomedical Engineering</i> , <b>2019</b> , 47, 2334-2340	4.7	2

135	Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. <i>ACS Applied Materials &amp; Description</i> , 11, 19841-19853	9.5	25
134	Non-invasive detection of DNA methylation states in carcinoma and pluripotent stem cells using Raman microspectroscopy and imaging. <i>Scientific Reports</i> , <b>2019</b> , 9, 7014	4.9	11
133	A bioresorbable biomaterial carrier and passive stabilization device to improve heart function post-myocardial infarction. <i>Materials Science and Engineering C</i> , <b>2019</b> , 103, 109751	8.3	16
132	Imaging fibrosis in inflammatory diseases: targeting the exposed extracellular matrix. <i>Theranostics</i> , <b>2019</b> , 9, 2868-2881	12.1	11
131	Non-invasive functional molecular phenotyping of human smooth muscle cells utilized in cardiovascular tissue engineering. <i>Acta Biomaterialia</i> , <b>2019</b> , 89, 193-205	10.8	22
130	Controlled and tuneable drug release from electrospun fibers and a non-invasive approach for cytotoxicity testing. <i>Scientific Reports</i> , <b>2019</b> , 9, 3446	4.9	12
129	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; Amp; Interfaces</i> , <b>2019</b> , 11, 42885-42895	9.5	16
128	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> , <b>2019</b> , 8,	8.9	137
127	Improved long-term durability of allogeneic heart valves in the orthotopic sheep model. <i>European Journal of Cardio-thoracic Surgery</i> , <b>2019</b> , 55, 484-493	3	13
126	Marker-Independent In Situ Quantitative Assessment of Residual Cryoprotectants in Cardiac Tissues. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 2266-2272	7.8	8
125	Stem-cell based organ-on-a-chip models for diabetes research. <i>Advanced Drug Delivery Reviews</i> , <b>2019</b> , 140, 101-128	18.5	36
124	Electroconductive Biohybrid Collagen/Pristine Graphene Composite Biomaterials with Enhanced Biological Activity. <i>Advanced Materials</i> , <b>2018</b> , 30, e1706442	24	60
123	Biomechanical and biomolecular characterization of extracellular matrix structures in human colon carcinomas. <i>Matrix Biology</i> , <b>2018</b> , 68-69, 180-193	11.4	75
122	Surface functionalization of electrospun scaffolds using recombinant human decorin attracts circulating endothelial progenitor cells. <i>Scientific Reports</i> , <b>2018</b> , 8, 110	4.9	14
121	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> , <b>2018</b> , 53, 784-792	3	5
120	Exogenous miR-29B Delivery Through a Hyaluronan-Based Injectable System Yields Functional Maintenance of the Infarcted Myocardium. <i>Tissue Engineering - Part A</i> , <b>2018</b> , 24, 57-67	3.9	25
119	Influence of aflibercept on platelet activation profile. Experimental Eye Research, 2018, 175, 166-172	3.7	6
118	A flow bioreactor system compatible with real-time two-photon fluorescence lifetime imaging microscopy. <i>Biomedical Materials (Bristol)</i> , <b>2018</b> , 13, 024101	3.5	7

## (2016-2018)

117	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> , <b>2018</b> , 6, 6399-6412	7.3	11
116	Comparative Study of MSCA-1 and CD146 Isolated Periosteal Cell Subpopulations. <i>Cellular Physiology and Biochemistry</i> , <b>2018</b> , 51, 1193-1206	3.9	2
115	Allograft Heart Valves: Current Aspects and Future Applications. <i>Biopreservation and Biobanking</i> , <b>2017</b> , 15, 148-157	2.1	31
114	Enhanced elastin synthesis and maturation in human vascular smooth muscle tissue derived from induced-pluripotent stem cells. <i>Acta Biomaterialia</i> , <b>2017</b> , 52, 49-59	10.8	38
113	Applying phasor approach analysis of multiphoton FLIM measurements to probe the metabolic activity of three-dimensional in vitro cell culture models. <i>Scientific Reports</i> , <b>2017</b> , 7, 42730	4.9	31
112	In Vivo Human Somitogenesis Guides Somite Development from hPSCs. <i>Cell Reports</i> , <b>2017</b> , 18, 1573-15	<b>85</b> 0.6	67
111	Steps toward Maturation of Embryonic Stem Cell-Derived Cardiomyocytes by Defined Physical Signals. <i>Stem Cell Reports</i> , <b>2017</b> , 9, 122-135	8	25
110	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> , <b>2017</b> , 52, 41-48	10.8	9
109	Self-Organized Cerebral Organoids with Human-Specific Features Predict Effective Drugs to Combat Zika Virus Infection. <i>Cell Reports</i> , <b>2017</b> , 21, 517-532	10.6	204
108	Raman Spectroscopic Analyses of Jaw Periosteal Cell Mineralization. <i>Stem Cells International</i> , <b>2017</b> , 2017, 1651376	5	5
108		5	59
	2017, 1651376  Metformin reverses TRAP1 mutation-associated alterations in mitochondrial function in Parkinson's		59
107	2017, 1651376  Metformin reverses TRAP1 mutation-associated alterations in mitochondrial function in Parkinson's disease. <i>Brain</i> , <b>2017</b> , 140, 2444-2459  Electrospun poly-l-lactide scaffold for the controlled and targeted delivery of a synthetically	11.2	59
107	Metformin reverses TRAP1 mutation-associated alterations in mitochondrial function in Parkinson's disease. <i>Brain</i> , <b>2017</b> , 140, 2444-2459  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> , <b>2017</b> , 52, 187-196  Raman microspectroscopy for the development and screening of recombinant cell lines.	11.2	59 15
107 106 105	Metformin reverses TRAP1 mutation-associated alterations in mitochondrial function in Parkinson's disease. <i>Brain</i> , <b>2017</b> , 140, 2444-2459  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> , <b>2017</b> , 52, 187-196  Raman microspectroscopy for the development and screening of recombinant cell lines. <i>Biotechnology Journal</i> , <b>2017</b> , 12, 1600412	11.2	59 15
107 106 105	2017, 1651376  Metformin reverses TRAP1 mutation-associated alterations in mitochondrial function in Parkinson's disease. <i>Brain</i> , 2017, 140, 2444-2459  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  Raman microspectroscopy for the development and screening of recombinant cell lines. <i>Biotechnology Journal</i> , 2017, 12, 1600412  3.7 Raman Spectroscopy 2017, 108-127	11.2	59 15
107 106 105 104	Metformin reverses TRAP1 mutation-associated alterations in mitochondrial function in Parkinson's disease. <i>Brain</i> , 2017, 140, 2444-2459  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  Raman microspectroscopy for the development and screening of recombinant cell lines. <i>Biotechnology Journal</i> , 2017, 12, 1600412  3.7 Raman Spectroscopy 2017, 108-127  4.7 Real-Time Analysis of Biomaterials Function 2017, 85-100  Differentiation of human embryonic stem cells to HOXA hemogenic vasculature that resembles the	11.2 10.8 5.6	59 15 3

99	A phasor approach analysis of multiphoton FLIM measurements of three-dimensional cell culture models <b>2016</b> ,		1
98	ECM and ECM-like materials - Biomaterials for applications in regenerative medicine and cancer therapy. <i>Advanced Drug Delivery Reviews</i> , <b>2016</b> , 97, 260-9	18.5	259
97	Non-invasive Chamber-Specific Identification of Cardiomyocytes in Differentiating Pluripotent Stem Cells. <i>Stem Cell Reports</i> , <b>2016</b> , 6, 188-99	8	21
96	Cardiomyocyte generation from somatic sources - current status and future directions. <i>Current Opinion in Biotechnology</i> , <b>2016</b> , 40, 49-55	11.4	8
95	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> , <b>2016</b> , 196, 1284-92	5.3	21
94	Endocardial-to-mesenchymal transformation and mesenchymal cell colonization at the onset of human cardiac valve development. <i>Development (Cambridge)</i> , <b>2016</b> , 143, 473-82	6.6	21
93	Scaffold and Biomechanical Transductive Approaches to Elastic Tissue Engineering <b>2016</b> , 165-187		
92	Mononuclear phagocytes contribute to intestinal invasion and dissemination of Yersinia enterocolitica. <i>International Journal of Medical Microbiology</i> , <b>2016</b> , 306, 357-66	3.7	13
91	Enabling Multiphoton and Second Harmonic Generation Imaging in Paraffin-Embedded and Histologically Stained Sections. <i>Tissue Engineering - Part C: Methods</i> , <b>2016</b> , 22, 517-23	2.9	16
90	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> , <b>2016</b> , 24, 1200-9	6.2	32
89	In vitro elastogenesis: instructing human vascular smooth muscle cells to generate an elastic fiber-containing extracellular matrix scaffold. <i>Biomedical Materials (Bristol)</i> , <b>2015</b> , 10, 034102	3.5	32
88	In vitro-Hauttestsysteme zur Untersuchung lichtassoziierter Hautschlägung. <i>BioSpektrum</i> , <b>2015</b> , 21, 172-174	0.1	
87	Modulation of inflammation and angiogenesis and changes in ECM GAG-activity via dual delivery of nucleic acids. <i>Biomaterials</i> , <b>2015</b> , 69, 133-47	15.6	36
86	Drug and cell delivery for cardiac regeneration. Advanced Drug Delivery Reviews, 2015, 84, 85-106	18.5	138
85	Generation and Assessment of Functional Biomaterial Scaffolds for Applications in Cardiovascular Tissue Engineering and Regenerative Medicine. <i>Advanced Healthcare Materials</i> , <b>2015</b> , 4, 2326-41	10.1	31
84	Fluorescent Ly6G antibodies determine macrophage phagocytosis of neutrophils and alter the retrieval of neutrophils in mice. <i>Journal of Leukocyte Biology</i> , <b>2015</b> , 98, 365-72	6.5	23
83	Prospects for regenerative medicine approaches in women's health. <i>Journal of Anatomy</i> , <b>2015</b> , 227, 781-	<b>-5</b> .9	4
82	Engineering of a bio-functionalized hybrid off-the-shelf heart valve. <i>Biomaterials</i> , <b>2014</b> , 35, 2130-9	15.6	89

#### (2012-2014)

81	Raman spectroscopy as an analytical tool for melanoma research. <i>Clinical and Experimental Dermatology</i> , <b>2014</b> , 39, 636-45	1.8	24
80	Preserved bioactivity and tunable release of a SDF1-GPVI bi-specific protein using photo-crosslinked PEGda hydrogels. <i>Biomaterials</i> , <b>2014</b> , 35, 7180-7	15.6	34
79	Cell death stages in single apoptotic and necrotic cells monitored by Raman microspectroscopy. <i>Scientific Reports</i> , <b>2014</b> , 4, 4698	4.9	171
78	A collagen-based scaffold delivering exogenous microrna-29B to modulate extracellular matrix remodeling. <i>Molecular Therapy</i> , <b>2014</b> , 22, 786-96	11.7	74
77	A human in vitro model that mimics the renal proximal tubule. <i>Tissue Engineering - Part C: Methods</i> , <b>2014</b> , 20, 599-609	2.9	17
76	Human eye development is characterized by coordinated expression of fibrillin isoforms. <i>Investigative Ophthalmology and Visual Science</i> , <b>2014</b> , 55, 7934-44		23
75	In vitro elastogenesis (87.1). FASEB Journal, <b>2014</b> , 28, 87.1	0.9	
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3	WATE up!? [Organ-on-a-chip integrating human mature white adipose tissues for mechanistic research and pharmaceutical applications		1	
2	Immune response to SARS-CoV-2 variants of concern in vaccinated individuals		2	
1	Inflammatory and regenerative processes in bioresorbable synthetic pulmonary valves up to 2 years in sheep: Spatiotemporal insights augmented by Raman microspectroscopy		1	