Joerg Tessmar

List of Publications by Year
in descending order

77 papers	4,250 citations	136740 32 h-index	110170 64 g-index
77 all docs	77 docs citations	77 times ranked	5911 citing authors

#	Article	IF	Citations
1	Matrices and scaffolds for protein delivery in tissue engineering. Advanced Drug Delivery Reviews, 2007, 59, 274-291.	6.6	320
2	Polyanhydride degradation and erosion. Advanced Drug Delivery Reviews, 2002, 54, 911-931.	6.6	277
3	Thiolâ€"Ene Clickable Gelatin: A Platform Bioink for Multiple 3D Biofabrication Technologies. Advanced Materials, 2017, 29, 1703404.	11.1	248
4	Hydrogel-based drug delivery systems: Comparison of drug diffusivity and release kinetics. Journal of Controlled Release, 2010, 142, 221-228.	4.8	221
5	Transforming growth factor-Î²1 release from oligo(poly(ethylene glycol) fumarate) hydrogels in conditions that model the cartilage wound healing environment. Journal of Controlled Release, 2004, 94, 101-114.	4.8	192
6	Customized PEG-Derived Copolymers for Tissue-Engineering Applications. Macromolecular Bioscience, 2007, 7, 23-39.	2.1	183
7	Direct 3D powder printing of biphasic calcium phosphate scaffolds for substitution of complex bone defects. Biofabrication, 2014, 6, 015006.	3.7	180
8	Polymer coating of quantum dots â€" A powerful tool toward diagnostics and sensorics. European Journal of Pharmaceutics and Biopharmaceutics, 2008, 68, 138-152.	2.0	169
9	Biodegradable poly(d,l-lactic acid)-poly(ethylene glycol)-monomethyl ether diblock copolymers: structures and surface properties relevant to their use as biomaterials. Biomaterials, 2000, 21, 2361-2370.	5.7	166
10	Biomimetic polymers in pharmaceutical and biomedical sciences. European Journal of Pharmaceutics and Biopharmaceutics, 2004, 58, 385-407.	2.0	161
11	Double printing of hyaluronic acid/poly(glycidol) hybrid hydrogels with poly(<i>Îµ</i> -caprolactone) for MSC chondrogenesis. Biofabrication, 2017, 9, 044108.	3.7	119
12	In VitroandIn VivoCartilage Engineering Using a Combination of Chondrocyte-Seeded Long-Term Stable Fibrin Gels and Polycaprolactone-Based Polyurethane Scaffolds. Tissue Engineering, 2007, 13, 2207-2218.	4.9	117
13	Basic fibroblast growth factor enhances PPARÎ³ ligand-induced adipogenesis of mesenchymal stem cells. FEBS Letters, 2004, 577, 277-283.	1.3	96
14	Thiol-ene Clickable Poly(glycidol) Hydrogels for Biofabrication. Annals of Biomedical Engineering, 2017, 45, 273-285.	1.3	86
15	Does UV irradiation affect polymer properties relevant to tissue engineering?. Surface Science, 2001, 491, 333-345.	0.8	83
16	Poly(D,L-lactic acid)-Poly(ethylene glycol)-Monomethyl Ether Diblock Copolymers Control Adhesion and Osteoblastic Differentiation of Marrow Stromal Cells. Tissue Engineering, 2003, 9, 71-84.	4.9	82
17	Enzymatically degradable poly(ethylene glycol) based hydrogels for adipose tissue engineering. Biomaterials, 2010, 31, 3957-3966.	5.7	82
18	Hyaluronic Acidâ€Based Bioink Composition Enabling 3D Bioprinting and Improving Quality of Deposited Cartilaginous Extracellular Matrix. Advanced Healthcare Materials, 2020, 9, e2000737.	3.9	81

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19	Improving alginate printability for biofabrication: establishment of a universal and homogeneous pre-crosslinking technique. Biofabrication, 2020, 12, 045004.	3.7	81
20	Mediating specific cell adhesion to low-adhesive diblock copolymers by instant modification with cyclic RGD peptides. Biomaterials, 2005, 26, 2333-2341.	5.7	68
21	Ligand-functionalized nanoparticles target endothelial cells in retinal capillaries after systemic application. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6115-6120.	3.3	57
22	Towards biomimetic scaffolds: Anhydrous scaffold fabrication from biodegradable amine-reactive diblock copolymers. Biomaterials, 2003, 24, 4459-4473.	5.7	56
23	The use of poly(ethylene glycol)-block-poly(lactic acid) derived copolymers for the rapid creation of biomimetic surfaces. Biomaterials, 2003, 24, 4475-4486.	5.7	52
24	G protein-coupled receptors function as logic gates for nanoparticle binding and cell uptake. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10667-10672.	3.3	51
25	The effect of poly(ethylene glycol)â€“poly(d,l-lactic acid) diblock copolymers on peptide acylation. Journal of Controlled Release, 2002, 80, 157-168.	4.8	48
26	Enhanced bone morphogenetic proteinâ€2 performance on hydroxyapatite ceramic surfaces. Journal of Biomedical Materials Research - Part A, 2009, 90A, 959-971.	2.1	48
27	Bioprinting and Differentiation of Adipose-Derived Stromal Cell Spheroids for a 3D Breast Cancer-Adipose Tissue Model. Cells, 2021, 10, 803.	1.8	46
28	<i>In Vivo</i>Development and Long-Term Survival of Engineered Adipose Tissue Depend on<i>In Vitro</i>Precultivation Strategy. Tissue Engineering - Part A, 2008, 14, 275-284.	1.6	45
29	Kidney Podocytes as Specific Targets for cyclo(RGDfC)â€Modified Nanoparticles. Small, 2012, 8, 3368-3375.	5.2	42
30	Biodegradable Hydrogels for Time-Controlled Release of Tethered Peptides or Proteins. Biomacromolecules, 2010, 11, 496-504.	2.6	41
31	Melt electrospinning writing of defined scaffolds using polylactide-poly(ethylene glycol) blends with 45S5 bioactive glass particles. Materials Letters, 2017, 205, 257-260.	1.3	39
32	Poly(Ethylene Glycol) Based Hydrogels for Intraocular Applications. Advanced Engineering Materials, 2007, 9, 1141-1149.	1.6	38
33	Evaluation of Hydrogels Based on Oxidized Hyaluronic Acid for Bioprinting. Gels, 2018, 4, 82.	2.1	34
34	Influence of wettability and surface activity on release behavior of hydrophilic substances from lipid matrices. Journal of Controlled Release, 2007, 119, 173-181.	4.8	33
35	Cyclodextrin based hydrogels: Inclusion complex formation and micellization of adamantane and cholesterol grafted polymers. Polymer, 2011, 52, 4806-4812.	1.8	32
36	Self-Assembling Colloidal System for the Ocular Administration of Cyclosporine A. Cornea, 2014, 33, 77-81.	0.9	28

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37	Tethered TGF-Î²1 in a Hyaluronic Acid-Based Bioink for Bioprinting Cartilaginous Tissues. International Journal of Molecular Sciences, 2022, 23, 924.	1.8	26
38	Developing an in situ nanosuspension: A novel approach towards the efficient administration of poorly soluble drugs at the anterior eye. European Journal of Pharmaceutical Sciences, 2013, 50, 385-392.	1.9	25
39	TGFâ€Î²1â€Modified Hyaluronic Acid/Poly(glycidol) Hydrogels for Chondrogenic Differentiation of Human Mesenchymal Stromal Cells. Macromolecular Bioscience, 2018, 18, e1700390.	2.1	25
40	Ascorbic Acid Modulates Proliferation and Extracellular Matrix Accumulation of Hyalocytes. Tissue Engineering, 2007, 13, 1281-1289.	4.9	23
41	Permanent Hydrophilization and Generic Bioactivation of Melt Electrowritten Scaffolds. Advanced Healthcare Materials, 2019, 8, e1801544.	3.9	23
42	Size-dependent release of fluorescent macromolecules and nanoparticles from radically cross-linked hydrogels. European Journal of Pharmaceutics and Biopharmaceutics, 2010, 74, 184-192.	2.0	22
43	Comparison of Hydrogels for the Development of Well-Defined 3D Cancer Models of Breast Cancer and Melanoma. Cancers, 2020, 12, 2320.	1.7	22
44	Multivalent targeting of AT1receptors with angiotensin II-functionalized nanoparticles. Journal of Drug Targeting, 2015, 23, 681-689.	2.1	21
45	Confocal Microscopy for the Elucidation of Mass Transport Mechanisms Involved in Protein Release from Lipid-based Matrices. Pharmaceutical Research, 2007, 24, 1325-1335.	1.7	19
46	Product-oriented chemical surface modification of a levansucrase (SacB) <i>via</i> an ene-type reaction. Chemical Science, 2018, 9, 5312-5321.	3.7	19
47	Toward the Development of Biomimetic Polymers by Protein Immobilization: PEGylation of Insulin as a Model Reaction. Tissue Engineering, 2004, 10, 441-453.	4.9	18
48	Hyalocyte proliferation and ECM accumulation modulated by bFGF and TGF-Î²1. Graefe's Archive for Clinical and Experimental Ophthalmology, 2008, 246, 1275-1284.	1.0	18
49	Catechol-modified poly(oxazoline)s with tunable degradability facilitate cell invasion and lateral cartilage integration. Journal of Industrial and Engineering Chemistry, 2019, 80, 757-769.	2.9	18
50	PEGylation Does Not Impair Insulin Efficacy in Three-Dimensional Cartilage Culture: An Investigation toward Biomimetic Polymers. Tissue Engineering, 2004, 10, 429-440.	4.9	16
51	Ascorbic Acid Enhances Adipogenesis of Bone Marrow-Derived Mesenchymal Stromal Cells. Cells Tissues Organs, 2009, 189, 373-381.	1.3	15
52	Influence of electron irradiation on the crystallisation, molecular weight and mechanical properties of poly-(R)-3-hydroxybutyrate. Journal of Materials Science, 2007, 42, 3732-3738.	1.7	14
53	Highly flexible and degradable dual setting systems based on PEG-hydrogels and brushite cement. Acta Biomaterialia, 2018, 79, 182-201.	4.1	14
54	Bilateral <scp>PLA</scp>/alginate membranes for the prevention of postsurgical adhesions. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1563-1570.	1.6	13

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55	Thiolâ€ene Crossâ€Linkable Hydrogels as Bioinks for Biofabrication. Macromolecular Symposia, 2017, 372, 102-107.	0.4	13
56	Tuning the Product Spectrum of a Glycoside Hydrolase Enzyme by a Combination of Siteâ€Directed Mutagenesis and Tyrosineâ€Specific Chemical Modification. Chemistry - A European Journal, 2019, 25, 6533-6541.	1.7	13
57	Advanced ADA-GEL bioink for bioprinted artificial cancer models. Bioprinting, 2021, 23, e00145.	2.9	13
58	Rheological analysis of the interplay between the molecular weight and concentration of hyaluronic acid in formulations of supramolecular HA/FmocFF hybrid hydrogels. Polymer Journal, 2020, 52, 1007-1012.	1.3	13
59	FACS as useful tool to study distinct hyalocyte populations. Experimental Eye Research, 2009, 88, 995-999.	1.2	12
60	Biodistribution of Quantum Dots in the Kidney After Intravenous Injection. Journal of Nanoscience and Nanotechnology, 2014, 14, 3313-3319.	0.9	12
61	Influence of charged groups on the cross-linking efficiency and release of guest molecules from thiolâ€"ene cross-linked poly(2-oxazoline) hydrogels. Journal of Materials Chemistry B, 2019, 7, 1782-1794.	2.9	12
62	Appreciating the First Line of the Human Innate Immune Defense: A Strategy to Model and Alleviate the Neutrophil Elastaseâ€Mediated Attack toward Bioactivated Biomaterials. Small, 2021, 17, e2007551.	5.2	12
63	Bioink Platform Utilizing Dualâ€Stage Crosslinking of Hyaluronic Acid Tailored for Chondrogenic Differentiation of Mesenchymal Stromal Cells. Macromolecular Bioscience, 2022, 22, e2100331.	2.1	12
64	Heterobifunctional Poly(ethylene glycol) Derivatives for the Surface Modification of Gold Nanoparticles Toward Bone Mineral Targeting. Macromolecular Bioscience, 2012, 12, 1124-1136.	2.1	11
65	Preparation of wellâ€defined calcium crossâ€linked alginate films for the prevention of surgical adhesions. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 826-839.	1.6	11
66	Differential Production of Cartilage ECM in 3D Agarose Constructs by Equine Articular Cartilage Progenitor Cells and Mesenchymal Stromal Cells. International Journal of Molecular Sciences, 2020, 21, 7071.	1.8	11
67	Hydrogels for Tissue Engineering. , 2009, , 495-517.		8
68	Oxidized Hyaluronic Acid-Gelatin-Based Hydrogels for Tissue Engineering and Soft Tissue Mimicking. Tissue Engineering - Part C: Methods, 2022, 28, 301-313.	1.1	7
69	Processing of Poly(lacticâ€<i>co</i>â€glycolic acid) Microfibers via Melt Electrowriting. Macromolecular Chemistry and Physics, 2022, 223, .	1.1	6
70	Targeted Printing of Cells: Evaluation of ADA-PEG Bioinks for Drop on Demand Approaches. Gels, 2022, 8, 206.	2.1	6
71	Foamed oligo(poly(ethylene glycol)fumarate) hydrogels as versatile prefabricated scaffolds for tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 248-252.	1.3	4
72	Application of Linear and Branched Poly(Ethylene Glycol)â€Poly(Lactide) Block Copolymers for the Preparation of Films and Solution Electrospun Meshes. Macromolecular Bioscience, 2016, 16, 441-450.	2.1	4

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73	In Situ Polymer Analogue Generation of Azlactone Functions at Poly(oxazoline)s for Peptide Conjugation. Macromolecular Chemistry and Physics, 2020, 221, 1900500.	1.1	4
74	Covalently Crossâ€Linked Pig Gastric Mucin Hydrogels Prepared by Radicalâ€Based Chainâ€Growth and Thiolâ€ene Mechanisms. Macromolecular Bioscience, 2022, 22, e2100274.	2.1	4
75	Live-cell super-resolution imaging of intrinsically fast moving flagellates. Journal Physics D: Applied Physics, 2017, 50, 074004.	1.3	3
76	Tough and Elastic Î±-Tricalcium Phosphate Cement Composites with Degradable PEG-Based Cross-Linker. Materials, 2019, 12, 53.	1.3	3
77	TEMPO/TCC as a Chemo Selective Alternative for the Oxidation of Hyaluronic Acid. Molecules, 2021, 26, 5963.	1.7	3