Stefan Baudis

List of Publications by Year
in descending order

54 papers	1,331 citations	471509 17 h-index	361022 35 g-index
56 all docs	56 docs citations	56 times ranked	1977 citing authors

#	Article	IF	Citations
1	Photopolymers with tunable mechanical properties processed by laser-based high-resolution stereolithography. Journal of Micromechanics and Microengineering, 2008, 18, 125014.	2.6	191
2	Biodegradable, thermoplastic polyurethane grafts for small diameter vascular replacements. Acta Biomaterialia, 2015, 11, 104-113.	8.3	107
3	Real Time-NIR/MIR-Photorheology: A Versatile Tool for the <i>in Situ</i> Characterization of Photopolymerization Reactions. Analytical Chemistry, 2017, 89, 4958-4968.	6.5	90
4	A highly efficient waterborne photoinitiator for visible-light-induced three-dimensional printing of hydrogels. Chemical Communications, 2018, 54, 920-923.	4.1	77
5	Highly Reactive Thiolâ€Norbornene Photoâ€Click Hydrogels: Toward Improved Processability. Macromolecular Rapid Communications, 2018, 39, e1800181.	3.9	77
6	Thiolâ€“Gelatinâ€“Norbornene Bioink for Laserâ€Based Highâ€Definition Bioprinting. Advanced Healthcare Materials, 2020, 9, e1900752.	7.6	75
7	Impact of Hydrogel Stiffness on Differentiation of Human Adipose-Derived Stem Cell Microspheroids. Tissue Engineering - Part A, 2019, 25, 1369-1380.	3.1	71
8	Metalloâ€Supramolecular Gels that are Photocleavable with Visible and Nearâ€Infrared Irradiation. Angewandte Chemie - International Edition, 2017, 56, 15857-15860.	13.8	62
9	Elastomeric degradable biomaterials by photopolymerization-based CAD-CAM for vascular tissue engineering. Biomedical Materials (Bristol), 2011, 6, 055003.	3.3	51
10	Differentiation of physical and chemical cross-linking in gelatin methacryloyl hydrogels. Scientific Reports, 2021, 11, 3256.	3.3	44
11	(Meth)acrylateâ€based photoelastomers as tailored biomaterials for artificial vascular grafts. Journal of Polymer Science Part A, 2009, 47, 2664-2676.	2.3	42
12	Hardâ€block degradable thermoplastic urethaneâ€elastomers for electrospun vascular prostheses. Journal of Polymer Science Part A, 2012, 50, 1272-1280.	2.3	42
13	Combining cure depth and cure degree, a new way to fully characterize novel photopolymers. Additive Manufacturing, 2018, 24, 166-172.	3.0	40
14	Modular material system for the microfabrication of biocompatible hydrogels based on thiol-ene-modified poly(vinyl alcohol). Journal of Polymer Science Part A, 2016, 54, 2060-2070.	2.3	36
15	Long Term Evaluation of Nanofibrous, Bioabsorbable Polycarbonate Urethane Grafts for Small Diameter Vessel Replacement in Rodents. European Journal of Vascular and Endovascular Surgery, 2020, 59, 643-652.	1.5	25
16	Surface characterization and protein interaction of a series of model poly[acrylonitrile-co-(N-vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 87-96.	5.2	22
17	Gelatin methacryloyl as environment for chondrocytes and cell delivery to superficial cartilage defects. Journal of Tissue Engineering and Regenerative Medicine, 2022, 16, 207-222.	2.7	22
18	Hard Block Degradable Polycarbonate Urethanes: Promising Biomaterials for Electrospun Vascular Prostheses. Biomacromolecules, 2020, 21, 376-387.	5.4	21

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19	Hyaluronic acid vinyl esters: A toolbox toward controlling mechanical properties of hydrogels for 3D microfabrication. Journal of Polymer Science, 2020, 58, 1288-1298.	3.8	20
20	Physically and chemically gelling hydrogel formulations based on poly(ethylene glycol) diacrylate and Poloxamer 407. Polymer, 2017, 108, 21-28.	3.8	16
21	Thiolâ€"Ene Cross-linking of Poly(ethylene glycol) within High Internal Phase Emulsions: Degradable Hydrophilic PolyHIPEs for Controlled Drug Release. Macromolecules, 2021, 54, 10370-10380.	4.8	16
22	Smart Polymers for Biomedical Applications. Macromolecular Chemistry and Physics, 2014, 215, 2399-2402.	2.2	14
23	Effect of diisocyanate linkers on the degradation characteristics of copolyester urethanes as potential drug carrier matrices. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 95, 18-26.	4.3	14
24	A structural reconsideration: Linear aliphatic or alicyclic hard segments for biodegradable thermoplastic polyurethanes?. Journal of Polymer Science Part A, 2018, 56, 2214-2224.	2.3	13
25	Highâ€Throughput and Combinatorial Approaches for the Development of Multifunctional Polymers. Macromolecular Rapid Communications, 2022, 43, e2100400.	3.9	13
26	Durch sichtbares Licht und Nahinfrarotstrahlung abbaubare supramolekulare Metalloâ€Gele. Angewandte Chemie, 2017, 129, 16071-16075.	2.0	12
27	The interaction of adipose-derived human mesenchymal stem cells and polyether ether ketone. Clinical Hemorheology and Microcirculation, 2015, 61, 301-321.	1.7	11
28	Photopolymerizable Elastomers for Vascular Tissue Regeneration. Macromolecular Symposia, 2010, 296, 121-126.	0.7	10
29	Photopolymerizable precursors for degradable biomaterials based on acetal moieties. European Polymer Journal, 2021, 154, 110536.	5.4	10
30	Highâ€Throughput Synthesis as a Technology Platform for Copolymer Libraries. Macromolecular Symposia, 2014, 345, 105-111.	0.7	9
31	Toughness enhancers for bone scaffold materials based on biocompatible photopolymers. Journal of Polymer Science Part A, 2019, 57, 110-119.	2.3	9
32	Assessment of a long-term in vitro model to characterize the mechanical behavior and macrophage-mediated degradation of a novel, degradable, electrospun poly-urethane vascular graft. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 112, 104077.	3.1	9
33	Guiding cell migration in 3D with high-resolution photografting. Scientific Reports, 2022, 12, .	3.3	8
34	High Throughput Characterization of Polymer Libraries by Diffuse Reflectance Infrared Spectroscopy. Macromolecular Materials and Engineering, 2014, 299, 1292-1297.	3.6	7
35	Study on Modified Dealkaline Lignin as Visible Light Macromolecular Photoinitiator for 3D Printing. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	6
36	Increasing the Microfabrication Performance of Synthetic Hydrogel Precursors through Molecular Design. Biomacromolecules, 2021, 22, 4919-4932.	5.4	6

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37	Photopolymerizable Materials for Cell Encapsulation. , 2018, , 353-396.		5
38	Shapeâ€Memory Polymer Networks Prepared from Starâ€Shaped Poly[(<i>L</i>â€lactide)â€<i>co</i>â€glycolide] Precursors. Macromolecular Symposia, 2014, 345, 98-104.	0.7	4
39	Single-Molecule Force Spectroscopy Reveals Adhesion-by-Demand in Statherin at the Proteinâ€“Hydroxyapatite Interface. Langmuir, 2020, 36, 13292-13300.	3.5	4
40	A disulfide-based linker for thiolâ€“norbornene conjugation: formation and cleavage of hydrogels by the use of light. Polymer Chemistry, 2022, 13, 1158-1168.	3.9	4
41	Hybrid Hydrogel Networks by Photocrosslinking of Thermoresponsive Î±,Ï‰â€itaconylâ€PLGAâ€PEGâ€PLGA Micelles in Water: Influence of the Lithium Phenylâ€2,4,6â€Trimethylbenzoylphosphinate Photoinitinator. Macromolecular Chemistry and Physics, 2020, 221, 2000165.	2.2	3
42	Biomimetic adhesion motifs based on RAFT polymers with phosphonate groups. European Polymer Journal, 2021, 143, 110188.	5.4	3
43	Characterization of bi-layered magnetic nanoparticles synthesized via two-step surface-initiated ring-opening polymerization. Pure and Applied Chemistry, 2015, 87, 1085-1097.	1.9	2
44	3D-printing of Urethane-based Photoelastomers for Vascular Tissue Regeneration. Materials Research Society Symposia Proceedings, 2009, 1239, 1.	0.1	1
45	(Bio)degradable Urethane-Elastomers for Electrospun Vascular Grafts. Materials Research Society Symposia Proceedings, 2009, 1235, 1.	0.1	1
46	Robot Assisted Synthesis and Characterization of Polyester-based Polyurethanes. Materials Research Society Symposia Proceedings, 2015, 1718, 109-115.	0.1	1
47	Robot Assisted Polyurethane Chain Extension of Dihydroxy Telechelic Depsipeptides. MRS Advances, 2016, 1, 2003-2009.	0.9	1
48	Knochen, Knorpel und GefÃÃŸe maÃŸschneidern mit Licht. Nachrichten Aus Der Chemie, 2016, 64, 406-410.	0.0	1
49	Polymer Networks for Enrichment of Calcium Ions. Polymers, 2021, 13, 3506.	4.5	1
50	Approaching new biomaterials: copolymerization characteristics of vinyl esters with norbornenes, allyl esters and allyl ethers. Polymer International, 2022, 71, 790-796.	3.1	1
51	Additive manufactured, biocompatible hydrogels based on hyaluronic acid. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	1
52	From macromolecules to materials to systems. Polymers for Advanced Technologies, 2014, 25, 1187-1188.	3.2	0
53	Poly(vinyl alcohol) based hydrogels for 3D biomaterial constructs. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	0
54	From space group to space groupoid: the partial symmetry of low-temperature<i>E</i>-vanillyl oxime. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2019, 75, 733-741.	1.1	0