Alexander Southan

List of Publications by Year
in descending order

45 papers	689 citations	567281 15 h-index	610901 24 g-index
46 all docs	46 docs citations	46 times ranked	824 citing authors

#	Article	IF	Citations
1	Quantification of Substitution of Gelatin Methacryloyl: Best Practice and Current Pitfalls. Biomacromolecules, 2018, 19, 42-52.	5.4	93
2	Plant virus-based materials for biomedical applications: Trends and prospects. Advanced Drug Delivery Reviews, 2019, 145, 96-118.	13.7	66
3	Differentiation of physical and chemical cross-linking in gelatin methacryloyl hydrogels. Scientific Reports, 2021, 11, 3256.	3.3	44
4	Beyond the Modification Degree: Impact of Raw Material on Physicochemical Properties of Gelatin Type A and Type B Methacryloyls. Macromolecular Bioscience, 2018, 18, e1800168.	4.1	39
5	Highly Ordered Gelatin Methacryloyl Hydrogel Foams with Tunable Pore Size. Biomacromolecules, 2019, 20, 2666-2674.	5.4	33
6	Physical Interactions Strengthen Chemical Gelatin Methacryloyl Gels. Gels, 2019, 5, 4.	4.5	30
7	Precision 3Dâ€Printed Cell Scaffolds Mimicking Native Tissue Composition and Mechanics. Advanced Healthcare Materials, 2020, 9, e2000918.	7.6	29
8	Influence of shear thinning and material flow on robotic dispensing of poly(ethylene glycol) diacrylate/poloxamer 407 hydrogels. Journal of Applied Polymer Science, 2017, 134, 45083.	2.6	23
9	Adenosine triphosphate diffusion through poly(ethylene glycol) diacrylate hydrogels can be tuned by cross-link density as measured by PFG-NMR. Journal of Chemical Physics, 2017, 146, 225101.	3.0	23
10	Evaluation of novel biomaterials for cartilage regeneration based on gelatin methacryloyl interpenetrated with extractive chondroitin sulfate or unsulfated biotechnological chondroitin. Journal of Biomedical Materials Research - Part A, 2022, 110, 1210-1223.	4.0	22
11	Side chain thiol-functionalized poly(ethylene glycol) by post-polymerization modification of hydroxyl groups: synthesis, crosslinking and inkjet printing. Polymer Chemistry, 2014, 5, 5350-5359.	3.9	20
12	Extrusion-Based 3D Printing of Poly(ethylene glycol) Diacrylate Hydrogels Containing Positively and Negatively Charged Groups. Gels, 2018, 4, 69.	4.5	20
13	Toward Controlling the Formation, Degradation Behavior, and Properties of Hydrogels Synthesized by Azaâ€Michael Reactions. Macromolecular Chemistry and Physics, 2013, 214, 1865-1873.	2.2	18
14	Physically and chemically gelling hydrogel formulations based on poly(ethylene glycol) diacrylate and Poloxamer 407. Polymer, 2017, 108, 21-28.	3.8	16
15	Impact of intermediate UV curing and yield stress of 3D printed poly(ethylene glycol) diacrylate hydrogels on interlayer connectivity and maximum build height. Additive Manufacturing, 2017, 18, 136-144.	3.0	16
16	Photoinduced Cleavage and Hydrolysis of <i>o</i>â€Nitrobenzyl Linker and Covalent Linker Immobilization in Gelatin Methacryloyl Hydrogels. Macromolecular Bioscience, 2018, 18, e1800104.	4.1	16
17	Optimisation of two-photon induced cleavage of molecular linker systems for drug delivery. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 210, 188-192.	3.9	14
18	Charged Triazole Cross-Linkers for Hyaluronan-Based Hybrid Hydrogels. Materials, 2016, 9, 810.	2.9	14

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19	Desmosine-Inspired Cross-Linkers for Hyaluronan Hydrogels. Scientific Reports, 2013, 3, 2043.	3.3	13
20	Interactions of methacryloylated gelatin and heparin modulate physico-chemical properties of hydrogels and release of vascular endothelial growth factor. Biomedical Materials (Bristol), 2018, 13, 055008.	3.3	13
21	Multi-axis 3D printing of gelatin methacryloyl hydrogels on a non-planar surface obtained from magnetic resonance imaging. Additive Manufacturing, 2022, 50, 102566.	3.0	10
22	Gelatin methacrylamide as coating material in cell culture. Biointerphases, 2016, 11, 021007.	1.6	9
23	Covalent incorporation of tobacco mosaic virus increases the stiffness of poly(ethylene glycol) diacrylate hydrogels. RSC Advances, 2018, 8, 4686-4694.	3.6	9
24	Azide-Functional Extracellular Matrix Coatings as a Bioactive Platform for Bioconjugation. ACS Applied Materials & Interfaces, 2020, 12, 26868-26879.	8.0	9
25	Cellâ€derived and enzymeâ€based decellularized extracellular matrix exhibit compositional and structural differences that are relevant for its use as a biomaterial. Biotechnology and Bioengineering, 2022, 119, 1142-1156.	3.3	9
26	Synthesis of Pyridine Acrylates and Acrylamides and Their Corresponding Pyridinium Ions as Versatile Cross-Linkers for Tunable Hydrogels. Synthesis, 2014, 46, 1243-1253.	2.3	8
27	Silicon Integrated Dual-Mode Interferometer with Differential Outputs. Biosensors, 2017, 7, 37.	4.7	8
28	Generation of an azide-modified extracellular matrix by adipose-derived stem cells using metabolic glycoengineering. Current Directions in Biomedical Engineering, 2019, 5, 393-395.	0.4	7
29	Acid catalyzed crossâ€linking of polyvinyl alcohol for humidifier membranes. Journal of Applied Polymer Science, 0, , 51606.	2.6	7
30	Active Ester Containing Surfmer for One-Stage Polymer Nanoparticle Surface Functionalization in Mini-Emulsion Polymerization. Polymers, 2018, 10, 408.	4.5	6
31	Hydrogels with multiple clickable anchor points: synthesis and characterization of poly(furfuryl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 4485-4494.	3.9	5
32	Hydrophobization of Tobacco Mosaic Virus to Control the Mineralization of Organic Templates. Nanomaterials, 2019, 9, 800.	4.1	5
33	Tailoring and visualising pore openings in gelatin-based hydrogel foams. Journal of Colloid and Interface Science, 2021, 588, 326-335.	9.4	5
34	An Advanced â€˜clickECMâ€™ That Can be Modified by the Inverseâ€Electronâ€Demand Dielsâ€Alder Reaction. ChemBioChem, 2022, 23, .	2.6	5
35	Photo-crosslinking and surface-attachment of polyvinyl alcohol nanocoatings by C,H insertion to customize their swelling behavior and stability in polar media. Polymer Chemistry, 2022, 13, 4273-4283.	3.9	5
36	Gelatin-Based Foamed and Non-foamed Hydrogels for Sorption and Controlled Release of Metoprolol. ACS Applied Polymer Materials, 2021, 3, 5674-5682.	4.4	4

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37	Triazole-based cross-linkers in radical polymerization processes: tuning mechanical properties of poly(acrylamide) and poly(<i>N,N</i>-dimethylacrylamide) hydrogels. RSC Advances, 2018, 8, 34743-34753.	3.6	3
38	Expanding the Range of Available Isoelectric Points of Highly Methacryloylated Gelatin. Macromolecular Chemistry and Physics, 2019, 220, 1900097.	2.2	3
39	Coumarinâ€4â€ylmethylâ€•andpâ€Hydroxyphenacylâ€Based Photoacid Generators with High Solubility in Aqueous Media: Synthesis, Stability and Photolysis. ChemPhotoChem, 2020, 4, 207-217.	3.0	3
40	Eclectic characterisation of chemically modified cell-derived matrices obtained by metabolic glycoengineering and re-assessment of commonly used methods. RSC Advances, 2020, 10, 35273-35286.	3.6	3
41	Structureâ€"property relations of amphiphilic poly(furfuryl glycidyl ether)-<i>block</i>-poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlo	3.9	2
42	Azidoâ€functionalized gelatin via direct conversion of lysine amino groups by diazo transfer as a building block for biofunctional hydrogels. Journal of Biomedical Materials Research - Part A, 2021, 109, 77-91.	4.0	1
43	New Gelatinâ€Based Hydrogel Foams for Improved Substrate Conversion of Immobilized Horseradish Peroxidase. Macromolecular Bioscience, 0, , 2200139.	4.1	1
44	Biofunktionale Tinten mit einstellbaren Eigenschaften fÃ¼r Bioprinting und additive Fertigungsverfahren. Chemie-Ingenieur-Technik, 2018, 90, 1195-1196.	0.8	0
45	High Precision 3D Bioâ€printing: Precision 3Dâ€Printed Cell Scaffolds Mimicking Native Tissue Composition and Mechanics (Adv. Healthcare Mater. 24/2020). Advanced Healthcare Materials, 2020, 9, 2070087.	7.6	0