Sandra Van Vlierberghe

List of Publications by Citations

164 papers	5,581 citations	37 h-index	70 g-index
177 ext. papers	6,819 ext. citations	5.9 avg, IF	5.96 L-index

#	Paper	IF	Citations
164	A review of trends and limitations in hydrogel-rapid prototyping for tissue engineering. *Biomaterials*, **2012**, 33, 6020-41	15.6	882
163	Bioink properties before, during and after 3D bioprinting. *Biofabrication*, **2016**, 8, 032002	10.5	537
162	Laser fabrication of three-dimensional CAD scaffolds from photosensitive gelatin for applications in tissue engineering. *Biomacromolecules*, **2011**, 12, 851-8	6.9	236
161	Porous gelatin hydrogels: 1. Cryogenic formation and structure analysis. *Biomacromolecules*, **2007**, 8, 331-7	6.9	168
160	X-ray computed tomography proof of bacterial-based self-healing in concrete. *Cement and Concrete Composites*, **2014**, 53, 289-304	8.6	153
159	Porous gelatin hydrogels: 2. In vitro cell interaction study. *Biomacromolecules*, **2007**, 8, 338-44	6.9	153
158	Laser photofabrication of cell-containing hydrogel constructs. *Langmuir*, **2014**, 30, 3787-94	4	130
157	Laser Fabrication of 3D Gelatin Scaffolds for the Generation of Bioartificial Tissues. *Materials*, **2011**, 4, 288-299	3.5	113
156	Organic□inorganic behaviour of HMDSO films plasma-polymerized at atmospheric pressure. *Surface and Coatings Technology*, **2009**, 203, 1366-1372	4.4	89
155	pH-sensitive superabsorbent polymers: a potential candidate material for self-healing concrete. *Journal of Materials Science*, **2015**, 50, 970-979	4.3	84
154	Superabsorbent polymers: A review on the characteristics and applications of synthetic, polysaccharide-based, semi-synthetic and □smart□ derivatives. *European Polymer Journal*, **2019**, 117, 165-178	5.2	81
153	Crack Mitigation in Concrete: Superabsorbent Polymers as Key to Success?. *Materials*, **2017**, 10,	3.5	74
152	Novel gelatin□HEMA porous scaffolds for tissue engineering applications. *Soft Matter*, **2012**, 8, 9589	3.6	71
151	pH-responsive superabsorbent polymers: A pathway to self-healing of mortar. *Reactive and Functional Polymers*, **2015**, 93, 68-76	4.6	68
150	Cross-Linkable Gelatins with Superior Mechanical Properties Through Carboxylic Acid Modification: Increasing the Two-Photon Polymerization Potential. *Biomacromolecules*, **2017**, 18, 3260-3272	6.9	66
149	Shape-Memory Polymers for Biomedical Applications. *Advanced Functional Materials*, **2020**, 30, 1909047	15.6	65
148	Collagen-Based Tissue Engineering Strategies for Vascular Medicine. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 166	5.8	64

147	Reversible gelatin-based hydrogels: Finetuning of material properties. *European Polymer Journal*, **2011**, 47, 1039-1047	5.2	62
146	Gelatin- and starch-based hydrogels. Part A: Hydrogel development, characterization and coating. *Carbohydrate Polymers*, **2016**, 152, 129-139	10.3	59
145	Plasma-Polymerization of HMDSO Using an Atmospheric Pressure Dielectric Barrier Discharge. *Plasma Processes and Polymers*, **2009**, 6, S537-S542	3.4	58
144	Additive manufacturing of photo-crosslinked gelatin scaffolds for adipose tissue engineering. *Acta Biomaterialia*, **2019**, 94, 340-350	10.8	55
143	Soft tissue fillers for adipose tissue regeneration: From hydrogel development toward clinical applications. *Acta Biomaterialia*, **2017**, 63, 37-49	10.8	54
142	(Photo-)crosslinkable gelatin derivatives for biofabrication applications. *Acta Biomaterialia*, **2019**, 97, 46-73	10.8	53
141	Thiol-Gelatin-Norbornene Bioink for Laser-Based High-Definition Bioprinting. *Advanced Healthcare Materials*, **2020**, 9, e1900752	10.1	52
140	Alginate- and gelatin-based bioactive photocross-linkable hybrid materials for bone tissue engineering. *Carbohydrate Polymers*, **2017**, 157, 1714-1722	10.3	50
139	Gelatin-Based Hydrogels Promote Chondrogenic Differentiation of Human Adipose Tissue-Derived Mesenchymal Stem Cells In Vitro. *Materials*, **2014**, 7, 1342-1359	3.5	50
138	Alginate biopolymers: Counteracting the impact of superabsorbent polymers on mortar strength. *Construction and Building Materials*, **2016**, 110, 169-174	6.7	49
137	Highly Reactive Thiol-Norbornene Photo-Click Hydrogels: Toward Improved Processability. *Macromolecular Rapid Communications*, **2018**, 39, e1800181	4.8	48
136	Cross-linkable alginate-graft-gelatin copolymers for tissue engineering applications. *European Polymer Journal*, **2015**, 72, 494-506	5.2	45
135	Hybrid Tissue Engineering Scaffolds by Combination of Three-Dimensional Printing and Cell Photoencapsulation. *Journal of Nanotechnology in Engineering and Medicine*, **2015**, 6, 0210011-210017		45
134	One-pot synthesis of superabsorbent hybrid hydrogels based on methacrylamide gelatin and polyacrylamide. Effortless control of hydrogel properties through composition design. *New Journal of Chemistry*, **2014**, 38, 3112-3126	3.6	44
133	Deposition of Polyacrylic Acid Films by Means of an Atmospheric Pressure Dielectric Barrier Discharge. *Plasma Chemistry and Plasma Processing*, **2009**, 29, 103-117	3.6	43
132	Fabrication of biomimetic placental barrier structures within a microfluidic device utilizing two-photon polymerization. *International Journal of Bioprinting*, **2018**, 4, 144	6.2	42
131	A joint action of aptamers and gold nanoparticles chemically trapped on a glassy carbon support for the electrochemical sensing of ofloxacin. *Sensors and Actuators B: Chemical*, **2017**, 240, 1024-1035	8.5	39
130	Impact of Hydrogel Stiffness on Differentiation of Human Adipose-Derived Stem Cell Microspheroids. *Tissue Engineering - Part A*, **2019**, 25, 1369-1380	3.9	38

129	Cross-linkable polyethers as healing/sealing agents for self-healing of cementitious materials. *Materials and Design*, **2016**, 98, 215-222	8.1	38
128	Hydrogel network formation revised: high-resolution magic angle spinning nuclear magnetic resonance as a powerful tool for measuring absolute hydrogel cross-link efficiencies. *Applied Spectroscopy*, **2010**, 64, 1176-80	3.1	38
127	Gelatin- and starch-based hydrogels. Part B: In vitro mesenchymal stem cell behavior on the hydrogels. *Carbohydrate Polymers*, **2017**, 161, 295-305	10.3	35
126	Poly(methyl methacrylate) capsules as an alternative to the □proof-of-concept□ glass capsules used in self-healing concrete. *Cement and Concrete Composites*, **2018**, 89, 260-271	8.6	35
125	Adsorption of cobalt (II) 5,10,15,20-tetrakis(2-aminophenyl)-porphyrin onto copper substrates: Characterization and impedance studies for corrosion inhibition. *Corrosion Science*, **2012**, 62, 73-82	6.8	35
124	Affinity study of novel gelatin cell carriers for fibronectin. *Macromolecular Bioscience*, **2009**, 9, 1105-15	5.5	35
123	Gelatin Functionalization of Biomaterial Surfaces: Strategies for Immobilization and Visualization. *Polymers*, **2011**, 3, 114-130	4.5	35
122	Gelatin nanofibers: Analysis of triple helix dissociation temperature and cold-water-solubility. *Food Hydrocolloids*, **2016**, 57, 200-208	10.6	34
121	Extrusion-based 3D printing of photo-crosslinkable gelatin and □carrageenan hydrogel blends for adipose tissue regeneration. *International Journal of Biological Macromolecules*, **2019**, 140, 929-938	7.9	34
120	Electrochemical determination of hydrogen peroxide with cytochrome c peroxidase and horse heart cytochrome c entrapped in a gelatin hydrogel. *Bioelectrochemistry*, **2012**, 83, 15-8	5.6	34
119	Implantation of ultrathin, biofunctionalized polyimide membranes into the subretinal space of rats. *Biomaterials*, **2011**, 32, 3890-8	15.6	33
118	Development of Gelatin-Alginate Hydrogels for Burn Wound Treatment. *Macromolecular Bioscience* , **2019**, 19, e1900123	5.5	32
117	Introduction of amino groups on the surface of thin photo definable epoxy resin layers via chemical modification. *Applied Surface Science*, **2009**, 255, 8780-8787	6.7	31
116	Immobilization of pseudorabies virus in porcine tracheal respiratory mucus revealed by single particle tracking. *PLoS ONE*, **2012**, 7, e51054	3.7	31
115	Indirect Rapid Prototyping: Opening Up Unprecedented Opportunities in Scaffold Design and Applications. *Annals of Biomedical Engineering*, **2017**, 45, 58-83	4.7	29
114	Interactions of Pluronic nanocarriers with 2D and 3D cell cultures: Effects of PEO block length and aggregation state. *Journal of Controlled Release*, **2016**, 224, 126-135	11.7	29
113	Plasma modification of PET foils with different crystallinity. *Surface and Coatings Technology*, **2011**, 205, S511-S515	4.4	29
112	Indirect additive manufacturing as an elegant tool for the production of self-supporting low density gelatin scaffolds. *Journal of Materials Science: Materials in Medicine*, **2015**, 26, 247	4.5	28

111	A chitosan based pH-responsive hydrogel for encapsulation of bacteria for self-sealing concrete. *Cement and Concrete Composites*, **2018**, 93, 309-322	8.6	28
110	High-Resolution 3D Bioprinting of Photo-Cross-linkable Recombinant Collagen to Serve Tissue Engineering Applications. *Biomacromolecules*, **2020**, 21, 3997-4007	6.9	28
109	Poly(D,L-Lactic Acid) (PDLLA) Biodegradable and Biocompatible Polymer Optical Fiber. *Journal of Lightwave Technology*, **2019**, 37, 1916-1923	4	27
108	Role of the surface chemistry of the adsorbent on the initialization step of the water sorption process. *Carbon*, **2016**, 106, 284-288	10.4	27
107	Synergistic effect of κ-carrageenan and gelatin blends towards adipose tissue engineering. *Carbohydrate Polymers*, **2018**, 189, 1-9	10.3	26
106	Crosslinking strategies for porous gelatin scaffolds. *Journal of Materials Science*, **2016**, 51, 4349-4357	4.3	25
105	Evaluation of 3D Printed Gelatin-Based Scaffolds with Varying Pore Size for MSC-Based Adipose Tissue Engineering. *Macromolecular Bioscience*, **2020**, 20, e1900364	5.5	24
104	Immunocompatibility evaluation of hydrogel-coated polyimide implants for applications in regenerative medicine. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 1982-90	5.4	24
103	Cryogel-PCL combination scaffolds for bone tissue repair. *Journal of Materials Science: Materials in Medicine*, **2015**, 26, 123	4.5	23
102	Hybrid Bioprinting of Chondrogenically Induced Human Mesenchymal Stem Cell Spheroids. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 484	5.8	23
101	Electrochemical study of gelatin as a matrix for the immobilization of horse heart cytochrome c. *Talanta*, **2010**, 82, 1980-5	6.2	23
100	Application of super absorbent polymers (SAP) in concrete construction—update of RILEM state-of-the-art report. *Materials and Structures/Materiaux Et Constructions*, **2021**, 54, 1	3.4	23
99	Heterocellular 3D scaffolds as biomimetic to recapitulate the tumor microenvironment of peritoneal metastases in vitro and in vivo. *Biomaterials*, **2018**, 158, 95-105	15.6	21
98	Engineered (hep/pARG)2polyelectrolyte capsules for sustained release of bioactive TGF-β1. *Soft Matter*, **2012**, 8, 1146-1154	3.6	21
97	Bio-inspired surface modification of PET for cardiovascular applications: Case study of gelatin. *Colloids and Surfaces B: Biointerfaces*, **2015**, 134, 113-21	6	20
96	Thermoresponsive polymer coated gold nanoparticles: from MADIX/RAFT copolymerization of N-vinylpyrrolidone and N-vinylcaprolactam to salt and temperature induced nanoparticle aggregation. *RSC Advances*, **2015**, 5, 42388-42398	3.7	20
95	Polydopamine-Gelatin as Universal Cell-Interactive Coating for Methacrylate-Based Medical Device Packaging Materials: When Surface Chemistry Overrules Substrate Bulk Properties. *Biomacromolecules*, **2016**, 17, 56-68	6.9	20
94	Clear to clear laser welding for joining thermoplastic polymers: A comparative study based on physicochemical characterization. *Journal of Materials Processing Technology*, **2018**, 255, 808-815	5.3	20

93	Parameter Study of Superabsorbent Polymers (SAPs) for Use in Durable Concrete Structures. *Materials*, **2019**, 12,	3.5	19
92	Bioprinting predifferentiated adipose-derived mesenchymal stem cell spheroids with methacrylated gelatin ink for adipose tissue engineering. *Journal of Materials Science: Materials in Medicine*, **2020**, 31, 36	4.5	19
91	Combined use of superabsorbent polymers and nanosilica for reduction of restrained shrinkage and strength compensation in cementitious mortars. *Construction and Building Materials*, **2020**, 251, 118966	6.7	19
90	A New Approach for Adipose Tissue Regeneration Based on Human Mesenchymal Stem Cells in Contact to Hydrogels□n In Vitro Study. *Advanced Engineering Materials*, **2009**, 11, B155-B161	3.5	19
89	Mechanical and self-healing properties of cementitious materials with pH-responsive semi-synthetic superabsorbent polymers. *Materials and Structures/Materiaux Et Constructions*, **2017** , 50, 1	3.4	18
88	Photo-crosslinkable recombinant collagen mimics for tissue engineering applications. *Journal of Materials Chemistry B*, **2019**, 7, 3100-3108	7.3	18
87	Evaluation of the Self-Healing Ability of Mortar Mixtures Containing Superabsorbent Polymers and Nanosilica. *Materials*, **2020**, 13,	3.5	18
86	Endothelialization and Anticoagulation Potential of Surface-Modified PET Intended for Vascular Applications. *Macromolecular Bioscience*, **2018**, 18, e1800125	5.5	18
85	Combinatory approach of methacrylated alginate and acid monomers for concrete applications. *Carbohydrate Polymers*, **2017**, 155, 448-455	10.3	18
84	Development of amine-based pH-responsive superabsorbent polymers for mortar applications. *Construction and Building Materials*, **2017**, 132, 556-564	6.7	17
83	Aqueous electrospinning of poly(2-ethyl-2-oxazoline): Mapping the parameter space. *European Polymer Journal*, **2017**, 88, 724-732	5.2	17
82	Stability of Pluronic□ F127 bismethacrylate hydrogels: Reality or utopia?. *Polymer Degradation and Stability*, **2017**, 146, 201-211	4.7	14
81	Screening of two-photon activated photodynamic therapy sensitizers using a 3D osteosarcoma model. *Analyst, The*, **2019**, 144, 3056-3063	5	14
80	SPECT/CT Imaging of Pluronic Nanocarriers with Varying Poly(ethylene oxide) Block Length and Aggregation State. *Molecular Pharmaceutics*, **2016**, 13, 1158-65	5.6	14
79	Flexible oligomer spacers as the key to solid-state photopolymerization of hydrogel precursors. *Materials Today Chemistry*, **2017**, 4, 84-89	6.2	13
78	The Contribution of Elastic Wave NDT to the Characterization of Modern Cementitious Media. *Sensors*, **2020**, 20,	3.8	13
77	High-throughput fabrication of vascularized adipose microtissues for 3D bioprinting. *Journal of Tissue Engineering and Regenerative Medicine*, **2020**, 14, 840-854	4.4	13
76	Indirect Solid Freeform Fabrication of an Initiator-Free Photocrosslinkable Hydrogel Precursor for the Creation of Porous Scaffolds. *Macromolecular Bioscience*, **2016**, 16, 1883-1894	5.5	13

75	Use of a gelatin cryogel as biomaterial scaffold in the differentiation process of human bone marrow stromal cells. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 247-50	0.9	13
74	Polymer architecture as key to unprecedented high-resolution 3D-printing performance: The case of biodegradable hexa-functional telechelic urethane-based poly-ε-caprolactone. *Materials Today*, **2021**, 44, 25-39	21.8	13
73	Thiol-Norbornene gelatin hydrogels: influence of thiolated crosslinker on network properties and high definition 3D printing. *Biofabrication*, **2020**,	10.5	13
72	Acrylate-endcapped polymer precursors: effect of chemical composition on the healing efficiency of active concrete cracks. *Smart Materials and Structures*, **2017**, 26, 055031	3.4	12
71	RAFT/MADIX polymerization of N-vinylcaprolactam in water–ethanol solvent mixtures. *Polymer Chemistry*, **2017**, 8, 2433-2437	4.9	12
70	Combined effect of Laponite and polymer molecular weight on the cell-interactive properties of synthetic PEO-based hydrogels. *Reactive and Functional Polymers*, **2019**, 136, 95-106	4.6	12
69	On the effect of alignment layers on blue phase liquid crystals. *Applied Physics Letters*, **2015**, 106, 101105	3.4	12
68	Photo-crosslinkable biopolymers targeting stem cell adhesion and proliferation: the case study of gelatin and starch-based IPNs. *Journal of Materials Science: Materials in Medicine*, **2015**, 26, 104	4.5	12
67	Extrusion Printed Scaffolds with Varying Pore Size As Modulators of MSC Angiogenic Paracrine Effects. *ACS Biomaterials Science and Engineering*, **2019**, 5, 5348-5358	5.5	11
66	Technological advancements for the development of stem cell-based models for hepatotoxicity testing. *Archives of Toxicology*, **2019**, 93, 1789-1805	5.8	11
65	Characterization of methacrylated polysaccharides in combination with amine-based monomers for application in mortar. *Carbohydrate Polymers*, **2017**, 168, 173-181	10.3	10
64	Development of Mechanically Tailored Gelatin-Chondroitin Sulphate Hydrogel Films. *Macromolecular Symposia*, **2011**, 309-310, 173-181	0.8	10
63	Fully automated z-scan setup based on a tunable fs-oscillator. *Optical Materials Express*, **2019**, 9, 3567	2.6	10
62	Designer Descemet Membranes Containing PDLLA and Functionalized Gelatins as Corneal Endothelial Scaffold. *Advanced Healthcare Materials*, **2020**, 9, e2000760	10.1	9
61	Single-step solution polymerization of poly(alkylene terephthalate)s: synthesis parameters and polymer characterization. *Polymer International*, **2018**, 67, 292-300	3.3	9
60	Multifactorial Optimization of Contrast-Enhanced Nanofocus Computed Tomography for Quantitative Analysis of Neo-Tissue Formation in Tissue Engineering Constructs. *PLoS ONE*, **2015**, 10, e0130227	3.7	9
59	On-chip high-definition bioprinting of microvascular structures. *Biofabrication*, **2021**, 13, 015016	10.5	9
58	Design and development of a reinforced tubular electrospun construct for the repair of ruptures of deep flexor tendons. *Materials Science and Engineering C*, **2021**, 119, 111504	8.3	9

57	Characterization of methacrylated alginate and acrylic monomers as versatile SAPs. *Carbohydrate Polymers*, **2017**, 168, 44-51	10.3	8
56	Influence of polymer hydrolysis on adjuvant effect of Gantrez AN nanoparticles: implications for oral vaccination. *European Journal of Pharmaceutics and Biopharmaceutics*, **2011**, 79, 392-8	5.7	8
55	Challenges in the Fabrication of Biodegradable and Implantable Optical Fibers for Biomedical Applications. *Materials*, **2021**, 14,	3.5	8
54	Optical-quality controllable wet-chemical doping of graphene through a uniform, transparent and low-roughness F4-TCNQ/MEK layer. *RSC Advances*, **2016**, 6, 104491-104501	3.7	7
53	Protein functionalization revised: N-tert-butoxycarbonylation as an elegant tool to circumvent protein crosslinking. *Macromolecular Rapid Communications*, **2014**, 35, 1351-5	4.8	7
52	A Semiempirical Scaling Model for the Solid- and Liquid-State Photopolymerization Kinetics of Semicrystalline Acrylated Oligomers. *Macromolecules*, **2018**, 51, 5027-5038	5.5	5
51	Ozonization and cyclic voltammetry as efficient methods for the regeneration of gelatin-coated SPR chips. *Macromolecular Bioscience*, **2008**, 8, 1090-7	5.5	5
50	Design, preparation and in vitro characterization of biomimetic and bioactive chitosan/polyethylene oxide based nanofibers as wound dressings. *International Journal of Biological Macromolecules*, **2021**, 193, 996-1008	7.9	5
49	Potential of poly(alkylene terephthalate)s to control endothelial cell adhesion and viability. *Materials Science and Engineering C*, **2021**, 129, 112378	8.3	5
48	Oil-in-water emulsion impregnated electrospun poly(ethylene terephthalate) fiber mat as a novel tool for optical fiber cleaning. *Journal of Colloid and Interface Science*, **2018**, 520, 64-69	9.3	4
47	Ring opening copolymerisation of lactide and mandelide for the development of environmentally degradable polyesters with controllable glass transition temperatures. *Reactive and Functional Polymers*, **2018**, 128, 16-23	4.6	4
46	Surface characterization of a cross-linked cytochrome c film on cysteamine-modified gold electrodes. *Surface and Interface Analysis*, **2009**, 41, 389-393	1.5	4
45	Effect of extrusion and fused filament fabrication processing parameters of recycled poly(ethylene terephthalate) on the crystallinity and mechanical properties. *Additive Manufacturing*, **2021**, 50, 102518	6.1	4
44	Poly(alkylene terephthalate)s: from current developments in synthetic strategies towards applications. *European Polymer Journal*, **2021**, 110840	5.2	4
43	Toward Adipose Tissue Engineering Using Thiol-Norbornene Photo-Crosslinkable Gelatin Hydrogels. *Biomacromolecules*, **2021**, 22, 2408-2418	6.9	4
42	Activated Carbon Containing PEG-Based Hydrogels as Novel Candidate Dressings for the Treatment of Malodorous Wounds. *Macromolecular Materials and Engineering*, **2021**, 306, 2000529	3.9	4
41	Engineering microvasculature by 3D bioprinting of prevascularized spheroids in photo-crosslinkable gelatin. *Biofabrication*, **2021**, 13,	10.5	4
40	Atomic Layer Deposition on Polymer Thin Films: On the Role of Precursor Infiltration and Reactivity. *ACS Applied Materials & Interfaces*, **2021**, 13, 46151-46163	9.5	4

39	Biomimetic strategy towards gelatin coatings on PET. Effect of protocol on coating stability and cell-interactive properties. *Journal of Materials Chemistry B*, **2019**, 7, 1258-1269	7.3	3
38	Laser welding of carbon fibre filled polytetrafluoroethylene. *Journal of Materials Processing Technology*, **2020**, 282, 116681	5.3	3
37	A low-cost photonic biosensor built on a polymer platform **2011**,		3
36	Innovative SuperAbsorbent Polymers (iSAPs) to construct crack-free reinforced concrete walls: An in-field large-scale testing campaign. *Journal of Building Engineering*, **2021**, 43, 102639	5.2	3
35	Long Term Stability of Polymer Stabilized Blue Phase Liquid Crystals. *Journal of Display Technology*, **2015**, 11, 703-708		2
34	Indirect versus direct 3D printing of hydrogel scaffolds for adipose tissue regeneration Lana Van Damme, Emilie Briant, Phillip Blondeel, Sandra Van Vlierberghe. *MRS Advances*, **2020**, 5, 855-864	0.7	2
33	Deep proton writing with 12 MeV protons for rapid prototyping of microstructures in polymethylmethacrylate. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2016**, 15, 044501	0.7	2
32	Amorphous random copolymers of lacOCA and manOCA for the design of biodegradable polyesters with tuneable properties. *European Polymer Journal*, **2019**, 118, 685-693	5.2	2
31	Flexor tendon repair using a reinforced tubular, medicated electrospun construct. *Journal of Orthopaedic Research*, **2021**,	3.8	2
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29	Localized optical-quality doping of graphene on silicon waveguides through a TFSA-containing polymer matrix. *Journal of Materials Chemistry C*, **2018**, 6, 10739-10750	7.1	2
28	Enhanced durability performance of cracked and uncracked concrete by means of smart in-house developed superabsorbent polymers with alkali-stable and -unstable crosslinkers. *Construction and Building Materials*, **2021**, 297, 123812	6.7	2
27	Gelatin-Based Versus Alginate-Based Hydrogels: Providing Insight in Wound Healing Potential. *Macromolecular Bioscience*, **2021**, 21, e2100230	5.5	2
26	Development of photo-crosslinkable collagen hydrogel building blocks for vascular tissue engineering applications: A superior alternative to methacrylated gelatin?. *Materials Science and Engineering C*, **2021**, 130, 112460	8.3	2
25	From Chain Growth to Step Growth Polymerization of Photoreactive Poly-ε-Caprolactone: The Network Topology of Bioresorbable Networks as Tool in Tissue Engineering. *Advanced Functional Materials*,2108869	15.6	2
24	Towards encapsulation of thiol-ene mixtures: Synthesis of thioacetate cross-linker for in-situ deprotection. *Materials Letters*, **2019**, 249, 165-168	3.3	1
23	Non-steady scaling model for the kinetics of the photo-induced free radical polymerization of crosslinking networks. *Polymer Chemistry*, **2020**, 11, 2475-2484	4.9	1
22	Planar polymer waveguides with a graded-index profile resulting from intermixing of methacrylates in closed microchannels. *Optical Materials*, **2018**, 76, 210-215	3.3	1

21	Exploring the Future of Hydrogels in Rapid Prototyping: A Review on Current Trends and Limitations. *Springer Series in Biomaterials Science and Engineering*, **2013**, 201-249	0.6	1
20	The Effect of Medium Pressure Plasma Treatment on Thin Poly-?-Caprolactone Layers. *Journal of Adhesion Science and Technology*, **2012**, 26, 2239-2249	2	1
19	Electrospinning of poly(decamethylene terephthalate) to support vascular graft applications. *European Polymer Journal*, **2022**, 165, 111003	5.2	1
18	A Low Cost Photonic Biosensor Built on a Polymer Platform **2011**,		1
17	Cell Regeneration: Current Knowledge and Evolutions **2016**, 15-63		1
16	Equine Tenocyte Seeding on Gelatin Hydrogels Improves Elongated Morphology. *Polymers*, **2021**, 13,	4.5	1
15	Photo-Crosslinked Gelatin-Based Hydrogel Films to Support Wound Healing. *Macromolecular Bioscience*, **2021**, 21, e2100246	5.5	1
14	Acrylate-endcapped urethane-based hydrogels: An in vivo study on wound healing potential. *Materials Science and Engineering C*, **2021**, 130, 112436	8.3	1
13	Plasma Treatments and Light Extraction from Fluorinated CVD-Grown (400) Single Crystal Diamond Nanopillars. *Journal of Carbon Research*, **2020**, 6, 37	3.3	0
12	Proteomics as a tool to gain next level insights into photo-crosslinkable biopolymer modifications.. *Bioactive Materials*, **2022**, 17, 204-220	16.7	0
11	Thiol-Mediated Chain Transfer as a Tool to Improve the Toughness of Acrylate Photo-Crosslinked Poly(Caprolactone). *Macromolecular Materials and Engineering*,2100754	3.9	0
10	Tuning the Phenotype of Cartilage Tissue Mimics by Varying Spheroid Maturation and Methacrylamide-Modified Gelatin Hydrogel Characteristics. *Macromolecular Bioscience*, **2021**, 21, e2000401	5.5	0
9	Injectable biomaterials as minimal invasive strategy towards soft tissue regeneration n overview. *JPhys Materials*, **2021**, 4, 022001	4.2	0
8	Melt Electrowriting of a Photo-Crosslinkable Poly(Caprolactone)-Based Material into Tubular Constructs with Predefined Architecture and Tunable Mechanical Properties. *Macromolecular Materials and Engineering*,2200097	3.9	0
7	Cell response of flexible PMMA-derivatives: supremacy of surface chemistry over substrate stiffness. *Journal of Materials Science: Materials in Medicine*, **2017**, 28, 183	4.5	
6	Ultrasound stimulus to enhance the bone regeneration capability of gelatin cryogels. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 846-9	0.9	
5	Paper No S5.3: Importance of Alignment Layers in Blue Phase Liquid Crystal Devices. *Digest of Technical Papers SID International Symposium*, **2015**, 46, 23-23	0.5	
4	A case of successful interaction between cells derived from human ovarian follicular liquid and gelatin cryogel for biotech and medical applications. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 6240-3	0.9	

3 Natural hydrogels for bone tissue engineering **2022**, 743-770

2 Biopolymers as Novel Tool for Self-Sealing and Self-Healing of Mortar. *Materials Research Society Symposia Proceedings*, **2016**, 1813, 1

1 Preparation of Biological Scaffolds and Primary Intestinal Epithelial Cells to Efficiently 3D Model the Fish Intestinal Mucosa. *Methods in Molecular Biology*, **2021**, 2273, 263-278 1.4