Joo F Mano

List of Publications by Citations

767 papers	34,352 citations	92 h-index	147 g-index
808 ext. papers	37,992 ext. citations	6.6 avg, IF	7.87 L-index

#	Paper	IF	Citations
767	Natural origin biodegradable systems in tissue engineering and regenerative medicine: present status and some moving trends. *Journal of the Royal Society Interface*, **2007**, 4, 999-1030	4.1	843
766	Chitosan derivatives obtained by chemical modifications for biomedical and environmental applications. *International Journal of Biological Macromolecules*, **2008**, 43, 401-14	7.9	594
765	Molecular interactions driving the layer-by-layer assembly of multilayers. *Chemical Reviews*, **2014**, 114, 8883-942	68.1	585
764	Stimuli-Responsive Polymeric Systems for Biomedical Applications. *Advanced Engineering Materials*, **2008**, 10, 515-527	3.5	528
763	Graft copolymerized chitosan□present status and applications. *Carbohydrate Polymers*, **2005**, 62, 142-158	10.3	491
762	Three-dimensional plotted scaffolds with controlled pore size gradients: Effect of scaffold geometry on mechanical performance and cell seeding efficiency. *Acta Biomaterialia*, **2011**, 7, 1009-18	10.8	402
761	Novel hydroxyapatite/chitosan bilayered scaffold for osteochondral tissue-engineering applications: Scaffold design and its performance when seeded with goat bone marrow stromal cells. *Biomaterials*, **2006**, 27, 6123-37	15.6	387
760	Polymer/bioactive glass nanocomposites for biomedical applications: A review. *Composites Science and Technology*, **2010**, 70, 1764-1776	8.6	384
759	Natural polymers for the microencapsulation of cells. *Journal of the Royal Society Interface*, **2014**, 11, 20140817	4.1	381
758	Chitosan-based particles as controlled drug delivery systems. *Drug Delivery*, **2005**, 12, 41-57	7	354
757	Bioinert, biodegradable and injectable polymeric matrix composites for hard tissue replacement: state of the art and recent developments. *Composites Science and Technology*, **2004**, 64, 789-817	8.6	343
756	FTIR AND DSC STUDIES OF MECHANICALLY DEFORMED □PVDF FILMS. *Journal of Macromolecular Science - Physics*, **2001**, 40, 517-527	1.4	303
755	Stimuli-responsive hydrogels based on polysaccharides incorporated with thermo-responsive polymers as novel biomaterials. *Macromolecular Bioscience*, **2006**, 6, 991-1008	5.5	287
754	Starch-based biodegradable hydrogels with potential biomedical applications as drug delivery systems. *Biomaterials*, **2002**, 23, 1955-66	15.6	274
753	Thermal properties of thermoplastic starch/synthetic polymer blends with potential biomedical applicability. *Journal of Materials Science: Materials in Medicine*, **2003**, 14, 127-35	4.5	268
752	Smart thermoresponsive coatings and surfaces for tissue engineering: switching cell-material boundaries. *Trends in Biotechnology*, **2007**, 25, 577-83	15.1	265
751	Controlling cell behavior through the design of polymer surfaces. *Small*, **2010**, 6, 2208-20	11	257

750	Electrically conductive chitosan/carbon scaffolds for cardiac tissue engineering. *Biomacromolecules*, **2014**, 15, 635-43	6.9	248
749	Genipin-cross-linked collagen/chitosan biomimetic scaffolds for articular cartilage tissue engineering applications. *Journal of Biomedical Materials Research - Part A*, **2010**, 95, 465-75	5.4	247
748	Macro/microporous silk fibroin scaffolds with potential for articular cartilage and meniscus tissue engineering applications. *Acta Biomaterialia*, **2012**, 8, 289-301	10.8	237
747	Polyelectrolyte multilayered assemblies in biomedical technologies. *Chemical Society Reviews*, **2014** , 43, 3453-79	58.5	226
746	Production and characterization of chitosan fibers and 3-D fiber mesh scaffolds for tissue engineering applications. *Macromolecular Bioscience*, **2004**, 4, 811-9	5.5	207
745	Novel genipin-cross-linked chitosan/silk fibroin sponges for cartilage engineering strategies. *Biomacromolecules*, **2008**, 9, 2764-74	6.9	205
744	Natural and Genetically Engineered Proteins for Tissue Engineering. *Progress in Polymer Science*, **2012**, 37, 1-17	29.6	199
743	Properties of melt processed chitosan and aliphatic polyester blends. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 403, 57-68	5.3	197
742	Osteochondral defects: present situation and tissue engineering approaches. *Journal of Tissue Engineering and Regenerative Medicine*, **2007**, 1, 261-73	4.4	186
741	Chitosan/poly(epsilon-caprolactone) blend scaffolds for cartilage repair. *Biomaterials*, **2011**, 32, 1068-79	15.6	182
740	Bionanocomposites from lignocellulosic resources: Properties, applications and future trends for their use in the biomedical field. *Progress in Polymer Science*, **2013**, 38, 1415-1441	29.6	179
739	Biomimetic design of materials and biomaterials inspired by the structure of nacre. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2009**, 367, 1587-605	3	176
738	The dynamic effect of pipe-wall viscoelasticity in hydraulic transients. Part II - model development, calibration and verification. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2005**, 43, 56-70	1.9	171
737	Chitosan/bioactive glass nanoparticle composite membranes for periodontal regeneration. *Acta Biomaterialia*, **2012**, 8, 4173-80	10.8	170
736	Gellan gum-based hydrogels for intervertebral disc tissue-engineering applications. *Journal of Tissue Engineering and Regenerative Medicine*, **2011**, 5, e97-107	4.4	170
735	Bioinspired Degradable Substrates with Extreme Wettability Properties. *Advanced Materials*, **2009**, 21, 1830-1834	24	160
734	Dendrimers and derivatives as a potential therapeutic tool in regenerative medicine strategies - A review. *Progress in Polymer Science*, **2010**, 35, 1163-1194	29.6	156
733	Marine Origin Polysaccharides in Drug Delivery Systems. *Marine Drugs*, **2016**, 14,	6	153

732	Chitosan derivatives bearing cyclodextrin cavitiesas novel adsorbent matrices. *Carbohydrate Polymers*, **2006**, 63, 153-166	10.3	150
731	Materials of marine origin: a review on polymers and ceramics of biomedical interest. *International Materials Reviews*, **2012**, 57, 276-306	16.1	146
730	Bone physiology as inspiration for tissue regenerative therapies. *Biomaterials*, **2018**, 185, 240-275	15.6	145
729	Preparation and in vitro characterization of scaffolds of poly(L-lactic acid) containing bioactive glass ceramic nanoparticles. *Acta Biomaterialia*, **2008**, 4, 1297-306	10.8	143
728	Extracellular vesicles, exosomes and shedding vesicles in regenerative medicine - a new paradigm for tissue repair. *Biomaterials Science*, **2017**, 6, 60-78	7.4	142
727	New partially degradable and bioactive acrylic bone cements based on starch blends and ceramic fillers. *Biomaterials*, **2002**, 23, 1883-95	15.6	141
726	Ionic liquids in the processing and chemical modification of chitin and chitosan for biomedical applications. *Green Chemistry*, **2017**, 19, 1208-1220	10	138
725	Development of Injectable Hyaluronic Acid/Cellulose Nanocrystals Bionanocomposite Hydrogels for Tissue Engineering Applications. *Bioconjugate Chemistry*, **2015**, 26, 1571-81	6.3	138
724	Drug release of pH/temperature-responsive calcium alginate/poly(N-isopropylacrylamide) semi-IPN beads. *Macromolecular Bioscience*, **2006**, 6, 358-63	5.5	138
723	Development of bioactive and biodegradable chitosan-based injectable systems containing bioactive glass nanoparticles. *Acta Biomaterialia*, **2009**, 5, 115-23	10.8	136
722	Carrageenan-based hydrogels for the controlled delivery of PDGF-BB in bone tissue engineering applications. *Biomacromolecules*, **2009**, 10, 1392-401	6.9	136
721	Chemical modification of starch based biodegradable polymeric blends: effects on water uptake, degradation behaviour and mechanical properties. *Polymer Degradation and Stability*, **2000**, 70, 161-170	4.7	136
720	Designing biomaterials based on biomineralization of bone. *Journal of Materials Chemistry*, **2010**, 20, 2911		134
719	Morphological Contributions to Glass Transition in Poly(l-lactic acid). *Macromolecules*, **2005**, 38, 4712-4718	5.5	132
718	Nanostructured polymeric coatings based on chitosan and dopamine-modified hyaluronic acid for biomedical applications. *Small*, **2014**, 10, 2459-69	11	131
717	Preparation and in vitro characterization of novel bioactive glass ceramic nanoparticles. *Journal of Biomedical Materials Research - Part A*, **2009**, 88, 304-13	5.4	126
716	Chitosan scaffolds containing hyaluronic acid for cartilage tissue engineering. *Tissue Engineering - Part C: Methods*, **2011**, 17, 717-30	2.9	125
715	Glass transition and structural relaxation in semi-crystalline poly(ethylene terephthalate): a DSC study. *Polymer*, **2002**, 43, 4111-4122	3.9	125

714	Interactions between cells or proteins and surfaces exhibiting extreme wettabilities. *Soft Matter*, **2013**, 9, 2985	3.6	123
713	Mobile amorphous phase fragility in semi-crystalline polymers: Comparison of PET and PLLA. *Polymer*, **2007**, 48, 1012-1019	3.9	123
712	Marine algae sulfated polysaccharides for tissue engineering and drug delivery approaches. *Biomatter*, **2012**, 2, 278-89		122
711	The osteogenic differentiation of rat bone marrow stromal cells cultured with dexamethasone-loaded carboxymethylchitosan/poly(amidoamine) dendrimer nanoparticles. *Biomaterials*, **2009**, 30, 804-13	15.6	121
710	Glass transition dynamics and structural relaxation of PLLA studied by DSC: Influence of crystallinity. *Polymer*, **2005**, 46, 8258-8265	3.9	121
709	Gellan gum injectable hydrogels for cartilage tissue engineering applications: in vitro studies and preliminary in vivo evaluation. *Tissue Engineering - Part A*, **2010**, 16, 343-53	3.9	120
708	Bioinspired Ultratough Hydrogel with Fast Recovery, Self-Healing, Injectability and Cytocompatibility. *Advanced Materials*, **2017**, 29, 1700759	24	118
707	Polymer-based microparticles in tissue engineering and regenerative medicine. *Biotechnology Progress*, **2011**, 27, 897-912	2.8	118
706	Free-standing polyelectrolyte membranes made of chitosan and alginate. *Biomacromolecules*, **2013**, 14, 1653-60	6.9	117
705	Plasma surface modification of chitosan membranes: characterization and preliminary cell response studies. *Macromolecular Bioscience*, **2008**, 8, 568-76	5.5	117
704	Bilayered silk/silk-nanoCaP scaffolds for osteochondral tissue engineering: In vitro and in vivo assessment of biological performance. *Acta Biomaterialia*, **2015**, 12, 227-241	10.8	115
703	Cold Crystallization of PLLA Studied by Simultaneous SAXS and WAXS. *Macromolecular Materials and Engineering*, **2004**, 289, 910-915	3.9	115
702	Gellan gum: a new biomaterial for cartilage tissue engineering applications. *Journal of Biomedical Materials Research - Part A*, **2010**, 93, 852-63	5.4	111
701	Self assembling and crosslinking of polyelectrolyte multilayer films of chitosan and alginate studied by QCM and IR spectroscopy. *Macromolecular Bioscience*, **2009**, 9, 776-85	5.5	111
700	Functional nanostructured chitosan–siloxane hybrids. *Journal of Materials Chemistry*, **2005**, 15, 3952		110
699	Controlled release strategies for bone, cartilage, and osteochondral engineering--Part I: recapitulation of native tissue healing and variables for the design of delivery systems. *Tissue Engineering - Part B: Reviews*, **2013**, 19, 308-26	7.9	109
698	Dissolution enhancement of active pharmaceutical ingredients by therapeutic deep eutectic systems. *European Journal of Pharmaceutics and Biopharmaceutics*, **2016**, 98, 57-66	5.7	108
697	Mineralized structures in nature: Examples and inspirations for the design of new composite materials and biomaterials. *Composites Science and Technology*, **2010**, 70, 1777-1788	8.6	108

696	Preparation and characterization of bioactive glass nanoparticles prepared by sol-gel for biomedical applications. *Nanotechnology*, **2011**, 22, 494014	3.4	106
695	Green processing of porous chitin structures for biomedical applications combining ionic liquids and supercritical fluid technology. *Acta Biomaterialia*, **2011**, 7, 1166-72	10.8	106
694	Chitosan coated alginate beads containing poly(N-isopropylacrylamide) for dual-stimuli-responsive drug release. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2008**, 84, 595-603	3.5	106
693	Extremely strong and tough hydrogels as prospective candidates for tissue repair A review. *European Polymer Journal*, **2015**, 72, 344-364	5.2	104
692	Characterization of poled and non-poled PVDF films using thermal analysis techniques. *Thermochimica Acta*, **2004**, 424, 201-207	2.9	102
691	Status and future scope of plant-based green hydrogels in biomedical engineering. *Applied Materials Today*, **2019**, 16, 213-246	6.6	100
690	Two-Dimensional Open Microfluidic Devices by Tuning the Wettability on Patterned Superhydrophobic Polymeric Surface. *Applied Physics Express*, **2010**, 3, 085205	2.4	100
689	Physical properties and biocompatibility of chitosan/soy blended membranes. *Journal of Materials Science: Materials in Medicine*, **2005**, 16, 575-9	4.5	99
688	An investigation of the potential application of chitosan/aloe-based membranes for regenerative medicine. *Acta Biomaterialia*, **2013**, 9, 6790-7	10.8	98
687	Preparation of chitosan scaffolds loaded with dexamethasone for tissue engineering applications using supercritical fluid technology. *European Polymer Journal*, **2009**, 45, 141-148	5.2	98
686	Preparation and characterization of poly(L-lactic acid)-chitosan hybrid scaffolds with drug release capability. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2007**, 81, 427-34	3.5	97
685	Morphology and miscibility of chitosan/soy protein blended membranes. *Carbohydrate Polymers*, **2007**, 70, 25-31	10.3	97
684	Development and characterization of a novel hybrid tissue engineering-based scaffold for spinal cord injury repair. *Tissue Engineering - Part A*, **2010**, 16, 45-54	3.9	96
683	High-throughput evaluation of interactions between biomaterials, proteins and cells using patterned superhydrophobic substrates. *Soft Matter*, **2011**, 7, 4147	3.6	96
682	Thermal and Thermomechanical Behaviour of Polycaprolactone and Starch/Polycaprolactone Blends for Biomedical Applications. *Macromolecular Materials and Engineering*, **2005**, 290, 792-801	3.9	96
681	Effect of the labelling ratio on the photophysics of fluorescein isothiocyanate (FITC) conjugated to bovine serum albumin. *Photochemical and Photobiological Sciences*, **2007**, 6, 152-8	4.2	95
680	Influence of melting conditions on the thermal behaviour of poly(l-lactic acid). *European Polymer Journal*, **2005**, 41, 2335-2342	5.2	95
679	Nanostructured 3D constructs based on chitosan and chondroitin sulphate multilayers for cartilage tissue engineering. *PLoS ONE*, **2013**, 8, e55451	3.7	95

678	Carboxymethyl chitosan-graft-phosphatidylethanolamine: Amphiphilic matrices for controlled drug delivery. *Reactive and Functional Polymers*, **2007**, 67, 43-52	4.6	94
677	Design of spherically structured 3D in vitro tumor models -Advances and prospects. *Acta Biomaterialia*, **2018**, 75, 11-34	10.8	94
676	New poly(epsilon-caprolactone)/chitosan blend fibers for tissue engineering applications. *Acta Biomaterialia*, **2010**, 6, 418-28	10.8	93
675	Controlled release strategies for bone, cartilage, and osteochondral engineering--Part II: challenges on the evolution from single to multiple bioactive factor delivery. *Tissue Engineering - Part B: Reviews*, **2013**, 19, 327-52	7.9	91
674	Viscoelastic Behavior of Poly(methyl methacrylate) Networks with Different Cross-Linking Degrees. *Macromolecules*, **2004**, 37, 3735-3744	5.5	90
673	Hydroxypropyl chitosan bearing beta-cyclodextrin cavities: synthesis and slow release of its inclusion complex with a model hydrophobic drug. *Macromolecular Bioscience*, **2005**, 5, 965-73	5.5	90
672	Layer-by-Layer Assembly of Light-Responsive Polymeric Multilayer Systems. *Advanced Functional Materials*, **2014**, 24, 5624-5648	15.6	88
671	Cell interactions with superhydrophilic and superhydrophobic surfaces. *Journal of Adhesion Science and Technology*, **2014**, 28, 843-863	2	88
670	Chemical modification of bioinspired superhydrophobic polystyrene surfaces to control cell attachment/proliferation. *Soft Matter*, **2011**, 7, 8932	3.6	88
669	Potential applications of natural origin polymer-based systems in soft tissue regeneration. *Critical Reviews in Biotechnology*, **2010**, 30, 200-21	9.4	88
668	Production methodologies of polymeric and hydrogel particles for drug delivery applications. *Expert Opinion on Drug Delivery*, **2012**, 9, 231-48	8	87
667	Layer-by-layer assembly of chitosan and recombinant biopolymers into biomimetic coatings with multiple stimuli-responsive properties. *Small*, **2011**, 7, 2640-9	11	87
666	Stimuli-responsive chitosan-starch injectable hydrogels combined with encapsulated adipose-derived stromal cells for articular cartilage regeneration. *Soft Matter*, **2010**, 6, 5184	3.6	87
665	Bioinspired superhydrophobic poly(L-lactic acid) surfaces control bone marrow derived cells adhesion and proliferation. *Journal of Biomedical Materials Research - Part A*, **2009**, 91, 480-8	5.4	87
664	Extraction and physico-chemical characterization of a versatile biodegradable polysaccharide obtained from green algae. *Carbohydrate Research*, **2010**, 345, 2194-200	2.9	86
663	Viscoelastic properties of chitosan with different hydration degrees as studied by dynamic mechanical analysis. *Macromolecular Bioscience*, **2008**, 8, 69-76	5.5	86
662	Influence of Semicrystalline Morphology on the Glass Transition of Poly(L-lactic acid). *Macromolecular Chemistry and Physics*, **2006**, 207, 1262-1271	2.6	86
661	Nature-inspired calcium phosphate coatings: present status and novel advances in the science of mimicry. *Current Opinion in Solid State and Materials Science*, **2003**, 7, 309-318	12	86

660	Chitosan membranes containing micro or nano-size bioactive glass particles: evolution of biomineralization followed by in situ dynamic mechanical analysis. *Journal of the Mechanical Behavior of Biomedical Materials*, **2013**, 20, 173-83	4.1	85
659	Hybrid cork□polymer composites containing sisal fibre: Morphology, effect of the fibre treatment on the mechanical properties and tensile failure prediction. *Composite Structures*, **2013**, 105, 153-162	5.3	85
658	Synthesis of temperature-responsive dextran-MA/PNIPAAm particles for controlled drug delivery using superhydrophobic surfaces. *Pharmaceutical Research*, **2011**, 28, 1294-305	4.5	85
657	Development of new chitosan/carrageenan nanoparticles for drug delivery applications. *Journal of Biomedical Materials Research - Part A*, **2010**, 92, 1265-72	5.4	85
656	Superhydrophobic chips for cell spheroids high-throughput generation and drug screening. *ACS Applied Materials & Interfaces*, **2014**, 6, 9488-95	9.5	84
655	Wettability influences cell behavior on superhydrophobic surfaces with different topographies. *Biointerphases*, **2012**, 7, 46	1.8	84
654	The viscoelastic properties of cork. *Journal of Materials Science*, **2002**, 37, 257-263	4.3	84
653	Effect of crosslinking in chitosan/aloe vera-based membranes for biomedical applications. *Carbohydrate Polymers*, **2013**, 98, 581-8	10.3	83
652	Supercritical fluids in biomedical and tissue engineering applications: a review. *International Materials Reviews*, **2009**, 54, 214-222	16.1	83
651	Bioinspired methodology to fabricate hydrogel spheres for multi-applications using superhydrophobic substrates. *Soft Matter*, **2010**, 6, 5868	3.6	82
650	Preparation and characterisation in simulated body conditions of glutaraldehyde crosslinked chitosan membranes. *Journal of Materials Science: Materials in Medicine*, **2004**, 15, 1105-12	4.5	82
649	Biomimetic Extracellular Environment Based on Natural Origin Polyelectrolyte Multilayers. *Small*, **2016**, 12, 4308-42	11	81
648	Chitosan-chondroitin sulphate nanoparticles for controlled delivery of platelet lysates in bone regenerative medicine. *Journal of Tissue Engineering and Regenerative Medicine*, **2012**, 6 Suppl 3, s47-59	4.4	80
647	Melt-based compression-molded scaffolds from chitosan-polyester blends and composites: Morphology and mechanical properties. *Journal of Biomedical Materials Research - Part A*, **2009**, 91, 489-504	5.4	80
646	Chondrogenic potential of injectable □carrageenan hydrogel with encapsulated adipose stem cells for cartilage tissue-engineering applications. *Journal of Tissue Engineering and Regenerative Medicine*, **2015**, 9, 550-63	4.4	79
645	Crystallization of Poly(l-lactic acid) Probed with Dielectric Relaxation Spectroscopy. *Macromolecules* , **2006**, 39, 6513-6520	5.5	79
644	Relaxation Studies in PEO/PMMA Blends. *Macromolecules*, **2000**, 33, 1002-1011	5.5	79
643	Stimuli-Responsive Thin Coatings Using Elastin-Like Polymers for Biomedical Applications. *Advanced Functional Materials*, **2009**, 19, 3210-3218	15.6	78

642	Influence of low-temperature nucleation on the crystallization process of poly(L-lactide). *Biomacromolecules*, **2005**, 6, 3283-90	6.9	78
641	Dynamic mechanical analysis and creep behaviour of PVDF films. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 370, 336-340	5.3	78
640	Stimuli-Responsive Nanocomposite Hydrogels for Biomedical Applications. *Advanced Functional Materials*, **2021**, 31, 2005941	15.6	78
639	Dexamethasone-loaded scaffolds prepared by supercritical-assisted phase inversion. *Acta Biomaterialia*, **2009**, 5, 2054-62	10.8	77
638	Microglia response and in vivo therapeutic potential of methylprednisolone-loaded dendrimer nanoparticles in spinal cord injury. *Small*, **2013**, 9, 738-49	11	76
637	Antimicrobial functionalized genetically engineered spider silk. *Biomaterials*, **2011**, 32, 4255-66	15.6	76
636	The use of ionic liquids in the processing of chitosan/silk hydrogels for biomedical applications. *Green Chemistry*, **2012**, 14, 1463	10	74
635	Rheological and mechanical properties of acellular and cell-laden methacrylated gellan gum hydrogels. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 3438-46	5.4	74
634	Development of gellan gum-based microparticles/hydrogel matrices for application in the intervertebral disc regeneration. *Tissue Engineering - Part C: Methods*, **2011**, 17, 961-72	2.9	74
633	Synthesis and characterization of pH-sensitive thiol-containing chitosan beads for controlled drug delivery applications. *Drug Delivery*, **2007**, 14, 9-17	7	73
632	Coating Strategies Using Layer-by-layer Deposition for Cell Encapsulation. *Chemistry - an Asian Journal*, **2016**, 11, 1753-64	4.5	71
631	Tailored freestanding multilayered membranes based on chitosan and alginate. *Biomacromolecules*, **2014**, 15, 3817-26	6.9	70
630	Strategic Advances in Formation of Cell-in-Shell Structures: From Syntheses to Applications. *Advanced Materials*, **2018**, 30, e1706063	24	69
629	Novel cork polymer composites reinforced with short natural coconut fibres: Effect of fibre loading and coupling agent addition. *Composites Science and Technology*, **2013**, 78, 56-62	8.6	69
628	Preparation of starch-based scaffolds for tissue engineering by supercritical immersion precipitation. *Journal of Supercritical Fluids*, **2009**, 49, 279-285	4.2	69
627	Cooperative rearranging region size in semi-crystalline poly(l-lactic acid). *Polymer*, **2008**, 49, 3130-3135	3.9	69
626	Recent progresses in the adsorption of organic, inorganic, and gas compounds by MCM-41-based mesoporous materials. *Microporous and Mesoporous Materials*, **2020**, 291, 109698	5.3	69
625	Incorporation of antimicrobial peptides on functionalized cotton gauzes for medical applications. *Carbohydrate Polymers*, **2015**, 127, 451-61	10.3	67

624	Enhancement of osteogenic differentiation of human adipose derived stem cells by the controlled release of platelet lysates from hybrid scaffolds produced by supercritical fluid foaming. *Journal of Controlled Release*, **2012**, 162, 19-27	11.7	67
623	Some comments on the significance of the compensation effect observed in thermally stimulated current experiments. *Polymer*, **1997**, 38, 1081-1089	3.9	67
622	Bioplotting of a bioactive alginate dialdehyde-gelatin composite hydrogel containing bioactive glass nanoparticles. *Biofabrication*, **2016**, 8, 035005	10.5	65
621	Engineering biomolecular microenvironments for cell instructive biomaterials. *Advanced Healthcare Materials*, **2014**, 3, 797-810	10.1	65
620	Multilayered hierarchical capsules providing cell adhesion sites. *Biomacromolecules*, **2013**, 14, 743-51	6.9	65
619	Phosphorous Containing Chitosan Beads for Controlled Oral Drug Delivery. *Journal of Bioactive and Compatible Polymers*, **2006**, 21, 327-340	2	65
618	Advanced Bottom-Up Engineering of Living Architectures. *Advanced Materials*, **2020**, 32, e1903975	24	65
617	Development of a bioactive glass-polymer composite for wound healing applications. *Materials Science and Engineering C*, **2017**, 76, 224-232	8.3	64
616	Silk hydrogels from non-mulberry and mulberry silkworm cocoons processed with ionic liquids. *Acta Biomaterialia*, **2013**, 9, 8972-82	10.8	64
615	Biomaterials for drug delivery patches. *European Journal of Pharmaceutical Sciences*, **2018**, 118, 49-66	5.1	63
614	Layer-by-layer deposition of antimicrobial polymers on cellulosic fibers: a new strategy to develop bioactive textiles. *Polymers for Advanced Technologies*, **2013**, 24, 1005-1010	3.2	63
613	Micro/nano-structured superhydrophobic surfaces in the biomedical field: part II: applications overview. *Nanomedicine*, **2015**, 10, 271-97	5.6	63
612	Adhesive nanostructured multilayer films using a bacterial exopolysaccharide for biomedical applications. *Journal of Materials Chemistry B*, **2013**, 1, 2367-2374	7.3	63
611	Cell adhesion and proliferation onto chitosan-based membranes treated by plasma surface modification. *Journal of Biomaterials Applications*, **2011**, 26, 101-16	2.9	63
610	Macroporous hydroxyapatite scaffolds for bone tissue engineering applications: physicochemical characterization and assessment of rat bone marrow stromal cell viability. *Journal of Biomedical Materials Research - Part A*, **2009**, 91, 175-86	5.4	63
609	Crosslink effect and albumin adsorption onto chitosan/alginate multilayered systems: an in situ QCM-D study. *Macromolecular Bioscience*, **2010**, 10, 1444-55	5.5	63
608	Novel 3D scaffolds of chitosan/PLLA blends for tissue engineering applications: Preparation and characterization. *Journal of Supercritical Fluids*, **2010**, 54, 282-289	4.2	63
607	Immobilization of fibronectin in chitosan substrates improves cell adhesion and proliferation. *Journal of Tissue Engineering and Regenerative Medicine*, **2010**, 4, 316-23	4.4	63

606	Fabrication of Hydrogel Particles of Defined Shapes Using Superhydrophobic-Hydrophilic Micropatterns. *Advanced Materials*, **2016**, 28, 7613-9	24	63
605	Chitosan/bioactive glass nanoparticles scaffolds with shape memory properties. *Carbohydrate Polymers*, **2015**, 123, 39-45	10.3	62
604	Thermally Responsive Biomineralization on Biodegradable Substrates. *Advanced Functional Materials*, **2007**, 17, 3312-3318	15.6	60
603	Ex vivo culturing of stromal cells with dexamethasone-loaded carboxymethylchitosan/poly(amidoamine) dendrimer nanoparticles promotes ectopic bone formation. *Bone*, **2010**, 46, 1424-35	4.7	59
602	Genipin-modified silk-fibroin nanometric nets. *Macromolecular Bioscience*, **2008**, 8, 766-74	5.5	59
601	Drug nano-reservoirs synthesized using layer-by-layer technologies. *Biotechnology Advances*, **2015**, 33, 1310-26	17.8	58
600	The Potential of Liquid Marbles for Biomedical Applications: A Critical Review. *Advanced Healthcare Materials*, **2017**, 6, 1700192	10.1	58
599	A novel hanging spherical drop system for the generation of cellular spheroids and high throughput combinatorial drug screening. *Biomaterials Science*, **2015**, 3, 581-5	7.4	58
598	Chitosan microparticles as injectable scaffolds for tissue engineering. *Journal of Tissue Engineering and Regenerative Medicine*, **2008**, 2, 378-80	4.4	58
597	Hydroxyapatite Reinforced Chitosan and Polyester Blends for Biomedical Applications. *Macromolecular Materials and Engineering*, **2005**, 290, 1157-1165	3.9	57
596	Enthalpy relaxation studies in polymethyl methacrylate networks with different crosslinking degrees. *Polymer*, **2005**, 46, 491-504	3.9	56
595	Biomedical applications of laminarin. *Carbohydrate Polymers*, **2020**, 232, 115774	10.3	56
594	Cell selective chitosan microparticles as injectable cell carriers for tissue regeneration. *Biomaterials*, **2015**, 43, 23-31	15.6	55
593	New biotextiles for tissue engineering: development, characterization and in vitro cellular viability. *Acta Biomaterialia*, **2013**, 9, 8167-81	10.8	55
592	Role of superhydrophobicity in the biological activity of fibronectin at the cell material interface. *Soft Matter*, **2011**, 7, 10803	3.6	55
591	Nanostructured multilayer coatings combining chitosan with bioactive glass nanoparticles. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 1741-8	1.3	55
590	Functionalized superhydrophobic biomimetic chitosan-based films. *Carbohydrate Polymers*, **2010**, 81, 140-144	10.3	55
589	Hybrid 3D structure of poly(d,l-lactic acid) loaded with chitosan/chondroitin sulfate nanoparticles to be used as carriers for biomacromolecules in tissue engineering. *Journal of Supercritical Fluids*, **2010**, 54, 320-327	4.2	55

588	Effect of processing conditions on morphology and mechanical properties of injection-molded poly(l-lactic acid). *Polymer Engineering and Science*, **2007**, 47, 1141-1147	2.3	55
587	Dynamic mechanical behavior of starch-based scaffolds in dry and physiologically simulated conditions: effect of porosity and pore size. *Acta Biomaterialia*, **2008**, 4, 950-9	10.8	55
586	Starch-chitosan hydrogels prepared by reductive alkylation cross-linking. *Journal of Materials Science: Materials in Medicine*, **2004**, 15, 759-65	4.5	55
585	Structure/mechanical behavior relationships in crossed-lamellar sea shells. *Materials Science and Engineering C*, **2005**, 25, 113-118	8.3	55
584	Biomechanical and cellular segmental characterization of human meniscus: building the basis for Tissue Engineering therapies. *Osteoarthritis and Cartilage*, **2014**, 22, 1271-81	6.2	54
583	PDLLA enriched with ulvan particles as a novel 3D porous scaffold targeted for bone engineering. *Journal of Supercritical Fluids*, **2012**, 65, 32-38	4.2	54
582	Cork based composites using polyolefin as matrix: Morphology and mechanical performance. *Composites Science and Technology*, **2010**, 70, 2310-2318	8.6	54
581	Mono-dispersed bioactive glass nanospheres: preparation and effects on biomechanics of mammalian cells. *Journal of Biomedical Materials Research - Part A*, **2010**, 95, 747-54	5.4	54
580	Optimization of the formulation and mechanical properties of starch based partially degradable bone cements. *Journal of Materials Science: Materials in Medicine*, **2004**, 15, 73-83	4.5	54
579	Micro-/nano-structured superhydrophobic surfaces in the biomedical field: part I: basic concepts and biomimetic approaches. *Nanomedicine*, **2015**, 10, 103-19	5.6	53
578	Bioactive macro/micro porous silk fibroin/nano-sized calcium phosphate scaffolds with potential for bone-tissue-engineering applications. *Nanomedicine*, **2013**, 8, 359-78	5.6	53
577	Superhydrophobic surfaces engineered using diatomaceous earth. *ACS Applied Materials & Interfaces*, **2013**, 5, 4202-8	9.5	53
576	Modification of paper using polyhydroxybutyrate to obtain biomimetic superhydrophobic substrates. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2013**, 416, 51-55	5.1	53
575	Stimuli-responsive nanocarriers for delivery of bone therapeutics - Barriers and progresses. *Journal of Controlled Release*, **2018**, 273, 51-67	11.7	52
574	Magnetic composite biomaterials for tissue engineering. *Biomaterials Science*, **2014**, 2, 812-818	7.4	52
573	Chitosan/bioactive glass nanoparticles composites for biomedical applications. *Biomedical Materials (Bristol)*, **2012**, 7, 054104	3.5	52
572	Perspectives on: Supercritical Fluid Technology for 3D Tissue Engineering Scaffold Applications. *Journal of Bioactive and Compatible Polymers*, **2009**, 24, 385-400	2	52
571	Nanostructured self-assembled films containing chitosan fabricated at neutral pH. *Carbohydrate Polymers*, **2010**, 80, 570-573	10.3	52

570	Microparticles in Contact with Cells: From Carriers to Multifunctional Tissue Modulators. *Trends in Biotechnology*, **2019**, 37, 1011-1028	15.1	51
569	Chitosan nanocomposites based on distinct inorganic fillers for biomedical applications. *Science and Technology of Advanced Materials*, **2016**, 17, 626-643	7.1	51
568	Myoconductive and osteoinductive free-standing polysaccharide membranes. *Acta Biomaterialia*, **2015**, 15, 139-49	10.8	51
567	Influence of Crystallinity in Molecular Motions of Poly(l-lactic acid) Investigated by Dielectric Relaxation Spectroscopy. *Macromolecules*, **2008**, 41, 6419-6430	5.5	51
566	Enzymatic Degradation of Polysaccharide-Based Layer-by-Layer Structures. *Biomacromolecules*, **2016**, 17, 1347-57	6.9	50
565	Biomimetic Miniaturized Platform Able to Sustain Arrays of Liquid Droplets for High-Throughput Combinatorial Tests. *Advanced Functional Materials*, **2014**, 24, 5096-5103	15.6	50
564	The double porogen approach as a new technique for the fabrication of interconnected poly(L-lactic acid) and starch based biodegradable scaffolds. *Journal of Materials Science: Materials in Medicine*, **2007**, 18, 185-93	4.5	50
563	Surface Engineered Carboxymethylchitosan/Poly(amidoamine) Dendrimer Nanoparticles for Intracellular Targeting. *Advanced Functional Materials*, **2008**, 18, 1840-1853	15.6	50
562	Glass Transition Dynamics of Poly(L-lactic acid) during Isothermal Crystallisation Monitored by Real-Time Dielectric Relaxation Spectroscopy Measurements. *Macromolecular Rapid Communications*, **2005**, 26, 1423-1427	4.8	50
561	Tuning cell adhesive properties via layer-by-layer assembly of chitosan and alginate. *Acta Biomaterialia*, **2017**, 51, 279-293	10.8	49
560	Chitosan-silica hybrid porous membranes. *Materials Science and Engineering C*, **2014**, 42, 553-61	8.3	49
559	Thermoresponsive poly(N-isopropylacrylamide)-g-methylcellulose hydrogel as a three-dimensional extracellular matrix for cartilage-engineered applications. *Journal of Biomedical Materials Research - Part A*, **2011**, 98, 596-603	5.4	49
558	Proliferation and differentiation of goat bone marrow stromal cells in 3D scaffolds with tunable hydrophilicity. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2009**, 91, 277-86	3.5	49
557	Departure from the Vogel behaviour in the glass transition: Thermally stimulated recovery, creep and dynamic mechanical analysis studies. *Polymer*, **2004**, 45, 1007-1017	3.9	49
556	Cell surface engineering to control cellular interactions. *ChemNanoMat*, **2016**, 2, 376-384	3.5	49
555	Chitosan/Chondroitin Sulfate Membranes Produced by Polyelectrolyte Complexation for Cartilage Engineering. *Biomacromolecules*, **2016**, 17, 2178-88	6.9	49
554	In-air production of 3D co-culture tumor spheroid hydrogels for expedited drug screening. *Acta Biomaterialia*, **2019**, 94, 392-409	10.8	48
553	Semipermeable Capsules Wrapping a Multifunctional and Self-regulated Co-culture Microenvironment for Osteogenic Differentiation. *Scientific Reports*, **2016**, 6, 21883	4.9	48

552	Liquified chitosan–alginate multilayer capsules incorporating poly(L-lactic acid) microparticles as cell carriers. *Soft Matter*, **2013**, 9, 2125-2130	3.6	48
551	Layer-by-layer technique for producing porous nanostructured 3D constructs using moldable freeform assembly of spherical templates. *Small*, **2010**, 6, 2644-8	11	48
550	Viscoelastic behaviour and time–temperature correspondence of HDPE with varying levels of process-induced orientation. *Polymer*, **2001**, 42, 6187-6198	3.9	48
549	Compact Saloplastic Membranes of Natural Polysaccharides for Soft Tissue Engineering. *Chemistry of Materials*, **2015**, 27, 7490-7502	9.6	47
548	From nano- to macro-scale: nanotechnology approaches for spatially controlled delivery of bioactive factors for bone and cartilage engineering. *Nanomedicine*, **2012**, 7, 1045-66	5.6	47
547	Combinatorial cell-3D biomaterials cytocompatibility screening for tissue engineering using bioinspired superhydrophobic substrates. *Integrative Biology (United Kingdom)*, **2012**, 4, 318-27	3.7	47
546	Green synthesis of a temperature sensitive hydrogel. *Green Chemistry*, **2007**, 9, 75-79	10	47
545	pH Responsiveness of Multilayered Films and Membranes Made of Polysaccharides. *Langmuir*, **2015**, 31, 11318-28	4	46
544	Nanostructured hollow tubes based on chitosan and alginate multilayers. *Advanced Healthcare Materials*, **2014**, 3, 433-40	10.1	46
543	Asymmetric PDLLA membranes containing Bioglass® for guided tissue regeneration: characterization and in vitro biological behavior. *Dental Materials*, **2013**, 29, 427-36	5.7	46
542	Properties of new cork–polymer composites: Advantages and drawbacks as compared with commercially available fibreboard materials. *Composite Structures*, **2011**, 93, 3120-3120	5.3	46
541	Poly(N-isopropylacrylamide) surface-grafted chitosan membranes as a new substrate for cell sheet engineering and manipulation. *Biotechnology and Bioengineering*, **2008**, 101, 1321-31	4.9	46
540	Mechanical performance of starch based bioactive composite biomaterials molded with preferred orientation. *Polymer Engineering and Science*, **2002**, 42, 1032-1045	2.3	46
539	Biomedical applications of natural-based polymers combined with bioactive glass nanoparticles. *Journal of Materials Chemistry B*, **2017**, 5, 4555-4568	7.3	45
538	New Thermo-responsive Hydrogels Based on Poly (N-isopropylacrylamide)/ Hyaluronic Acid Semi-interpenetrated Polymer Networks: Swelling Properties and Drug Release Studies. *Journal of Bioactive and Compatible Polymers*, **2010**, 25, 169-184	2	45
537	pH-Responsive biomineralization onto chitosan grafted biodegradable substrates. *Journal of Materials Chemistry*, **2008**, 18, 2493		45
536	Development of porous lamellar poly(L-lactic acid) scaffolds by conventional injection molding process. *Acta Biomaterialia*, **2008**, 4, 887-96	10.8	45
535	Dynamic mechanical properties of hydroxyapatite-reinforced and porous starch-based degradable biomaterials. *Journal of Materials Science: Materials in Medicine*, **1999**, 10, 857-62	4.5	45

534	Iron Gall Ink Revisited: In Situ Oxidation of Fe(II)-Tannin Complex for Fluidic-Interface Engineering. *Advanced Materials*, **2018**, 30, e1805091	24	45
533	Layer-by-layer assembled cell instructive nanocoatings containing platelet lysate. *Biomaterials*, **2015**, 48, 56-65	15.6	44
532	Hydrogel 3D in vitro tumor models for screening cell aggregation mediated drug response. *Biomaterials Science*, **2020**, 8, 1855-1864	7.4	43
531	Biomimetic methodology to produce polymeric multilayered particles for biotechnological and biomedical applications. *Small*, **2013**, 9, 2487-92, 2486	11	43
530	Fibers and 3D mesh scaffolds from biodegradable starch-based blends: production and characterization. *Macromolecular Bioscience*, **2004**, 4, 776-84	5.5	43
529	High-Throughput Topographic, Mechanical, and Biological Screening of Multilayer Films Containing Mussel-Inspired Biopolymers. *Advanced Functional Materials*, **2016**, 26, 2745-2755	15.6	43
528	Nanoengineering Hybrid Supramolecular Multilayered Biomaterials Using Polysaccharides and Self-Assembling Peptide Amphiphiles. *Advanced Functional Materials*, **2017**, 27, 1605122	15.6	42
527	Extraction and characterization of collagen from Antarctic and Sub-Antarctic squid and its potential application in hybrid scaffolds for tissue engineering. *Materials Science and Engineering C*, **2017**, 78, 787-795	8.3	42
526	Water and Carbon Dioxide: Green Solvents for the Extraction of Collagen/Gelatin from Marine Sponges. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 254-260	8.3	42
525	Adhesive free-standing multilayer films containing sulfated levan for biomedical applications. *Acta Biomaterialia*, **2018**, 69, 183-195	10.8	42
524	Photo-Cross-Linked Laminarin-Based Hydrogels for Biomedical Applications. *Biomacromolecules*, **2016**, 17, 1602-9	6.9	42
523	High-throughput screening for integrative biomaterials design: exploring advances and new trends. *Trends in Biotechnology*, **2014**, 32, 627-36	15.1	42
522	Pectin-coated chitosan microgels crosslinked on superhydrophobic surfaces for 5-fluorouracil encapsulation. *Carbohydrate Polymers*, **2013**, 98, 331-40	10.3	42
521	Patterned superhydrophobic paper for microfluidic devices obtained by writing and printing. *Cellulose*, **2013**, 20, 2185-2190	5.5	42
520	Superhydrophobic paper in the development of disposable labware and lab-on-paper devices. *ACS Applied Materials & Interfaces*, **2013**, 5, 3731-7	9.5	42
519	Multifunctional compartmentalized capsules with a hierarchical organization from the nano to the macro scales. *Biomacromolecules*, **2013**, 14, 2403-10	6.9	42
518	Dual responsive nanostructured surfaces for biomedical applications. *Langmuir*, **2011**, 27, 8415-23	4	42
517	Proteins and their peptide motifs in acellular apatite mineralization of scaffolds for tissue engineering. *Tissue Engineering - Part B: Reviews*, **2008**, 14, 433-45	7.9	42

516	Bi-layered constructs based on poly(l-lactic acid) and starch for tissue engineering of osteochondral defects. *Materials Science and Engineering C*, **2008**, 28, 80-86	8.3	42
515	Antibacterial bioadhesive layer-by-layer coatings for orthopedic applications. *Journal of Materials Chemistry B*, **2016**, 4, 5385-5393	7.3	41
514	Functionalized cork-polymer composites (CPC) by reactive extrusion using suberin and lignin from cork as coupling agents. *Composites Part B: Engineering*, **2014**, 67, 371-380	10	41
513	Unleashing the potential of supercritical fluids for polymer processing in tissue engineering and regenerative medicine. *Journal of Supercritical Fluids*, **2013**, 79, 177-185	4.2	41
512	Superhydrophobic poly(L-lactic acid) surface as potential bacterial colonization substrate. *AMB Express*, **2011**, 1, 34	4.1	41
511	Surface-tension-driven gradient generation in a fluid stripe for bench-top and microwell applications. *Small*, **2011**, 7, 892-901	11	41
510	Novel hydroxyapatite/carboxymethylchitosan composite scaffolds prepared through an innovative "autocatalytic" electroless coprecipitation route. *Journal of Biomedical Materials Research - Part A*, **2009**, 88, 470-80	5.4	41
509	Molecular motions in chitosan studied by dielectric relaxation spectroscopy. *Biomacromolecules*, **2004**, 5, 2073-8	6.9	41
508	On the kinetics of melting and crystallization of poly(l-lactic acid) by TMDSC. *Thermochimica Acta*, **2005**, 430, 201-210	2.9	41
507	Bioinstructive microparticles for self-assembly of mesenchymal stem Cell-3D tumor spheroids. *Biomaterials*, **2018**, 185, 155-173	15.6	41
506	Cork□polymer biocomposites: Mechanical, structural and thermal properties. *Materials and Design*, **2015**, 82, 282-289	8.1	40
505	Gellan gum-hydroxyapatite composite spongy-like hydrogels for bone tissue engineering. *Journal of Biomedical Materials Research - Part A*, **2018**, 106, 479-490	5.4	39
504	Towards the design of 3D multiscale instructive tissue engineering constructs: Current approaches and trends. *Biotechnology Advances*, **2015**, 33, 842-55	17.8	39
503	Micropatterning of bioactive glass nanoparticles on chitosan membranes for spatial controlled biomineralization. *Langmuir*, **2012**, 28, 6970-7	4	39
502	Fluorescence probe techniques to monitor protein adsorption-induced conformation changes on biodegradable polymers. *Journal of Colloid and Interface Science*, **2007**, 312, 193-200	9.3	39
501	In vitro evaluation of the behaviour of human polymorphonuclear neutrophils in direct contact with chitosan-based membranes. *Journal of Biotechnology*, **2007**, 132, 218-26	3.7	39
500	Combinatorial on-chip study of miniaturized 3D porous scaffolds using a patterned superhydrophobic platform. *Small*, **2013**, 9, 768-78	11	38
499	Autonomous osteogenic differentiation of hASCs encapsulated in methacrylated gellan-gum hydrogels. *Acta Biomaterialia*, **2016**, 41, 119-32	10.8	38

498	Bioinspired multilayer membranes as potential adhesive patches for skin wound healing. *Biomaterials Science*, **2018**, 6, 1962-1975	7.4	38
497	Bioresorbable ureteral stents from natural origin polymers. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2015**, 103, 608-17	3.5	37
496	Patterned superhydrophobic surfaces to process and characterize biomaterials and 3D cell culture. *Materials Horizons*, **2018**, 5, 379-393	14.4	37
495	Strontium-Doped Bioactive Glass Nanoparticles in Osteogenic Commitment. *ACS Applied Materials & Interfaces*, **2018**, 10, 23311-23320	9.5	37
494	Polypropylene-based cork□polymer composites: Processing parameters and properties. *Composites Part B: Engineering*, **2014**, 66, 210-223	10	37
493	Novel methodology based on biomimetic superhydrophobic substrates to immobilize cells and proteins in hydrogel spheres for applications in bone regeneration. *Tissue Engineering - Part A*, **2013**, 19, 1175-87	3.9	37
492	In vivo performance of chitosan/soy-based membranes as wound-dressing devices for acute skin wounds. *Tissue Engineering - Part A*, **2013**, 19, 860-9	3.9	37
491	Differentiation of mesenchymal stem cells in chitosan scaffolds with double micro and macroporosity. *Journal of Biomedical Materials Research - Part A*, **2010**, 95, 1182-93	5.4	37
490	Bioactive poly(L-lactic acid)-chitosan hybrid scaffolds. *Materials Science and Engineering C*, **2008**, 28, 1356-1365	8.3	37
489	Viscoelastic properties of bone: Mechanical spectroscopy studies on a chicken model. *Materials Science and Engineering C*, **2005**, 25, 145-152	8.3	37
488	Dipolar relaxation mechanisms in the vitreous state, in the glass transition region and in the mesophase, of a side chain polysiloxane liquid crystal. *Liquid Crystals*, **1996**, 20, 201-217	2.3	37
487	Fabrication and characterization of Eri silk fibers-based sponges for biomedical application. *Acta Biomaterialia*, **2016**, 32, 178-189	10.8	36
486	Spider silk-bone sialoprotein fusion proteins for bone tissue engineering. *Soft Matter*, **2011**, 7, 4964	3.6	36
485	Human chondrocyte morphology, its dedifferentiation, and fibronectin conformation on different PLLA microtopographies. *Tissue Engineering - Part A*, **2008**, 14, 1751-62	3.9	36
484	Effect of structural relaxation at physiological temperature on the mechanical property of poly(L-lactic acid) studied by microhardness measurements. *Journal of Applied Polymer Science*, **2006**, 100, 2628-2633	2.9	36
483	Molecular mobility in polymers studied with thermally stimulated recovery. II. Study of the glass transition of a semicrystalline PET and comparison with DSC and DMA results. *Polymer*, **2002**, 43, 3627-3633	3.9	36
482	Dielectric Behavior in an Oriented □PVDF Film and Chain Reorientation Upon Transverse Mechanical Deformation. *Ferroelectrics*, **2002**, 273, 15-20	0.6	36
481	3D collagen microfibers stimulate the functionality of preadipocytes and maintain the phenotype of mature adipocytes for long term cultures. *Acta Biomaterialia*, **2019**, 84, 194-207	10.8	36

480	Chitosan-alginate multilayered films with gradients of physicochemical cues. *Journal of Materials Chemistry B*, **2015**, 3, 4555-4568	7.3	35
479	Design and functionalization of chitin-based microsphere scaffolds. *Green Chemistry*, **2013**, 15, 3252	10	35
478	Microengineered Multicomponent Hydrogel Fibers: Combining Polyelectrolyte Complexation and Microfluidics. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1322-1331	5.5	35
477	Layer-by-Layer Deposition of Antibacterial Polyelectrolytes on Cotton Fibres. *Journal of Polymers and the Environment*, **2012**, 20, 1084-1094	4.5	35
476	Processing of novel bioactive polymeric matrixes for tissue engineering using supercritical fluid technology. *Materials Science and Engineering C*, **2009**, 29, 2110-2115	8.3	35
475	Biomineralized polysaccharide beads for dual-stimuli-responsive drug delivery. *Macromolecular Bioscience*, **2008**, 8, 260-7	5.5	35
474	Recent advances on open fluidic systems for biomedical applications: A review. *Materials Science and Engineering C*, **2019**, 97, 851-863	8.3	35
473	Nanostructured and thermoresponsive recombinant biopolymer-based microcapsules for the delivery of active molecules. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2013**, 9, 895-902	6	34
472	Magnetic force-based tissue engineering and regenerative medicine. *Journal of Biomedical Nanotechnology*, **2013**, 9, 1129-36	4	34
471	Physical interactions in macroporous scaffolds based on poly(e-caprolactone)/chitosan semi-interpenetrating polymer networks. *Polymer*, **2009**, 50, 2058-2064	3.9	34
470	Nanostructured natural-based polyelectrolyte multilayers to agglomerate chitosan particles into scaffolds for tissue engineering. *Tissue Engineering - Part A*, **2011**, 17, 2663-74	3.9	34
469	Glass transition of semi-crystalline PLLA with different morphologies as studied by dynamic mechanical analysis. *Colloid and Polymer Science*, **2007**, 285, 575-580	2.4	34
468	Morphology and mechanical properties of injection molded poly(ethylene terephthalate). *Polymer Engineering and Science*, **2004**, 44, 2174-2184	2.3	34
467	Thermal analysis of the multiple melting behavior of poly(butylene succinate-co-adipate). *Journal of Polymer Science, Part B: Polymer Physics*, **2005**, 43, 3077-3082	2.6	34
466	Mechanical, dynamic-mechanical, and thermal properties of soy protein-based thermoplastics with potential biomedical applications. *Journal of Macromolecular Science - Physics*, **2002**, 41, 33-46	1.4	34
465	Multi-layer pre-vascularized magnetic cell sheets for bone regeneration. *Biomaterials*, **2020**, 231, 119664	15.6	34
464	Hydrophobic Hydrogels: Toward Construction of Floating (Bio)microdevices. *Chemistry of Materials*, **2016**, 28, 3641-3648	9.6	34
463	Decellularized Extracellular Matrix for Bioengineering Physiomimetic 3D in Vitro Tumor Models. *Trends in Biotechnology*, **2020**, 38, 1397-1414	15.1	33

462	Blood Plasma Derivatives for Tissue Engineering and Regenerative Medicine Therapies. *Tissue Engineering - Part B: Reviews*, **2018**, 24, 454-462	7.9	33
461	Nanocoatings containing sulfated polysaccharides prepared by layer-by-layer assembly as models to study cell-material interactions. *Journal of Materials Chemistry B*, **2013**, 1, 4406-4418	7.3	33
460	Porous hydrogels from shark skin collagen crosslinked under dense carbon dioxide atmosphere. *Macromolecular Bioscience*, **2013**, 13, 1621-31	5.5	33
459	Influence of freezing temperature and deacetylation degree on the performance of freeze-dried chitosan scaffolds towards cartilage tissue engineering. *European Polymer Journal*, **2017**, 95, 232-240	5.2	33
458	Synthesis, mechanical and thermal rheological properties of new gellan gum derivatives. *International Journal of Biological Macromolecules*, **2017**, 98, 646-653	7.9	32
457	Natural assembly of platelet lysate-loaded nanocarriers into enriched 3D hydrogels for cartilage regeneration. *Acta Biomaterialia*, **2015**, 19, 56-65	10.8	32
456	Liquid marbles for high-throughput biological screening of anchorage-dependent cells. *Advanced Healthcare Materials*, **2015**, 4, 264-70	10.1	32
455	Adhesive Bioactive Coatings Inspired by Sea Life. *Langmuir*, **2016**, 32, 560-8	4	32
454	Chitosan scaffolds with a shape memory effect induced by hydration. *Journal of Materials Chemistry B*, **2014**, 2, 3315-3323	7.3	32
453	Functionalized Microparticles Producing Scaffolds in Combination with Cells. *Advanced Functional Materials*, **2014**, 24, 1391-1400	15.6	31
452	Combining biomimetic principles from the lotus leaf and mussel adhesive: polystyrene films with superhydrophobic and adhesive layers. *RSC Advances*, **2013**, 3, 9352	3.7	31
451	Towards bioinspired superhydrophobic poly(L-lactic acid) surfaces using phase inversion-based methods. *Bioinspiration and Biomimetics*, **2008**, 3, 034003	2.6	31
450	Preparation of membranes with polysulfone/polycaprolactone blends using a high pressure cell specially designed for a CO2-assisted phase inversion. *Journal of Supercritical Fluids*, **2008**, 43, 542-548	4.2	31
449	Fucoidan Hydrogels Photo-Cross-Linked with Visible Radiation As Matrices for Cell Culture. *ACS Biomaterials Science and Engineering*, **2016**, 2, 1151-1161	5.5	30
448	Bioinspired bone therapies using naringin: applications and advances. *Drug Discovery Today*, **2018**, 23, 1293-1304	8.8	30
447	Bio-inspired Aloe vera sponges for biomedical applications. *Carbohydrate Polymers*, **2014**, 112, 264-70	10.3	30
446	Investigation of cell adhesion in chitosan membranes for peripheral nerve regeneration. *Materials Science and Engineering C*, **2017**, 71, 1122-1134	8.3	30
445	In vivo study of dendronlike nanoparticles for stem cells "tune-up": from nano to tissues. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2011**, 7, 914-24	6	30

444	Cooperativity in the Crystalline Relaxation of Polyethylene. *Macromolecules*, **2001**, 34, 8825-8828	5.5	30
443	Surface Micro- and Nanoengineering: Applications of Layer-by-Layer Technology as a Versatile Tool to Control Cellular Behavior. *Small*, **2019**, 15, e1901228	11	29
442	Injectable gellan-gum/hydroxyapatite-based bilayered hydrogel composites for osteochondral tissue regeneration. *Applied Materials Today*, **2018**, 12, 309-321	6.6	29
441	Gelatin microparticles aggregates as three-dimensional scaffolding system in cartilage engineering. *Journal of Materials Science: Materials in Medicine*, **2013**, 24, 503-13	4.5	29
440	Revealing the potential of squid chitosan-based structures for biomedical applications. *Biomedical Materials (Bristol)*, **2013**, 8, 045002	3.5	29
439	Cryopreservation of cell laden natural origin hydrogels for cartilage regeneration strategies. *Soft Matter*, **2013**, 9, 875-885	3.6	29
438	Magnetically labeled cells with surface-modified fe3 o4 spherical and rod-shaped magnetic nanoparticles for tissue engineering applications. *Advanced Healthcare Materials*, **2015**, 4, 883-91	10.1	29
437	Microfluidic production of perfluorocarbon-alginate core-shell microparticles for ultrasound therapeutic applications. *Langmuir*, **2014**, 30, 12391-9	4	29
436	Secondary structure of rhBMP-2 in a protective biopolymeric carrier material. *Biomacromolecules*, **2012**, 13, 3620-6	6.9	29
435	Novel Rice-shaped Bioactive Ceramic Nanoparticles. *Advanced Engineering Materials*, **2009**, 11, B25-B29	3.5	29
434	Multi-Layered Films Containing a Biomimetic Stimuli-Responsive Recombinant Protein. *Nanoscale Research Letters*, **2009**, 4, 1247-1253	5	29
433	Enzymatic degradation of 3D scaffolds of starch-poly-(e-caprolactone) prepared by supercritical fluid technology. *Polymer Degradation and Stability*, **2010**, 95, 2110-2117	4.7	29
432	Biodegradable poly(L-lactic acid)/poly(butylene succinate-co-adipate) blends: Miscibility, morphology, and thermal behavior. *Journal of Applied Polymer Science*, **2007**, 105, 3204-3210	2.9	29
431	Influence of beta-radiation sterilisation in properties of new chitosan/soybean protein isolate membranes for guided bone regeneration. *Journal of Materials Science: Materials in Medicine*, **2004**, 15, 523-8	4.5	29
430	The dipolar relaxation behaviour of a liquid-crystalline side-chain polymer as studied by thermally stimulated discharge currents. *Polymer*, **1994**, 35, 5170-5178	3.9	29
429	Chitosan/chondroitin sulfate multilayers as supports for calcium phosphate biomineralization. *Materials Letters*, **2014**, 121, 62-65	3.3	28
428	Dual stimuli responsive poly(N-isopropylacrylamide) coated chitosan scaffolds for controlled release prepared from a non residue technology. *Journal of Supercritical Fluids*, **2012**, 66, 398-404	4.2	28
427	Multifunctionalized CMCht/PAMAM dendrimer nanoparticles modulate the cellular uptake by astrocytes and oligodendrocytes in primary cultures of glial cells. *Macromolecular Bioscience*, **2012**, 12, 591-7	5.5	28

426	Wettable arrays onto superhydrophobic surfaces for bioactivity testing of inorganic nanoparticles. *Materials Letters*, **2011**, 65, 296-299	3.3	28
425	Stereocomplexation and morphology of enantiomeric poly(lactic acid)s with moderate-molecular-weight. *Journal of Applied Polymer Science*, **2008**, 107, 1621-1627	2.9	28
424	Injectable Biomaterials for Dental Tissue Regeneration. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	27
423	Nanoengineering of bioactive glasses: hollow and dense nanospheres. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	27
422	The role of organic solvent on the preparation of chitosan scaffolds by supercritical assisted phase inversion. *Journal of Supercritical Fluids*, **2012**, 72, 326-332	4.2	27
421	Layer-by-layer film growth using polysaccharides and recombinant polypeptides: a combinatorial approach. *Journal of Physical Chemistry B*, **2013**, 117, 6839-48	3.4	27
420	Different hyaluronic acid morphology modulates primary articular chondrocyte behavior in hyaluronic acid-coated polycaprolactone scaffolds. *Journal of Biomedical Materials Research - Part A* , **2013**, 101, 518-27	5.4	27
419	Liquefied Capsules Coated with Multilayered Polyelectrolyte Films for Cell Immobilization. *Advanced Engineering Materials*, **2011**, 13, B218-B224	3.5	27
418	Microcomputed tomography and microfinite element modeling for evaluating polymer scaffolds architecture and their mechanical properties. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2009**, 91, 191-202	3.5	27
417	Creep-recovery behaviour of cork. *Materials Letters*, **2007**, 61, 2473-2477	3.3	27
416	Straightforward Determination of the Degree of N-Acetylation of Chitosan by Means of First-Derivative UV Spectrophotometry. *Macromolecular Chemistry and Physics*, **2008**, 209, 1463-1472	2.6	27
415	Synthesis and characterization of bioactive biodegradable chitosan composite spheres with shape memory capability. *Journal of Non-Crystalline Solids*, **2016**, 432, 158-166	3.9	26
414	Designing biomaterials for tissue engineering based on the deconstruction of the native cellular environment. *Materials Letters*, **2015**, 141, 198-202	3.3	26
413	Photopatterned antibodies for selective cell attachment. *Langmuir*, **2014**, 30, 10066-71	4	26
412	Biocompatible polymeric microparticles produced by a simple biomimetic approach. *Langmuir*, **2014** , 30, 4535-9	4	26
411	Cellular uptake of multilayered capsules produced with natural and genetically engineered biomimetic macromolecules. *Acta Biomaterialia*, **2014**, 10, 2653-62	10.8	26
410	Bioactivity and viscoelastic characterization of chitosan/bioglass composite membranes. *Macromolecular Bioscience*, **2012**, 12, 1106-13	5.5	26
409	Hierarchical fibrillar scaffolds obtained by non-conventional layer-by-layer electrostatic self-assembly. *Advanced Healthcare Materials*, **2013**, 2, 422-7	10.1	26

408	Development of an injectable system based on elastin-like recombinamer particles for tissue engineering applications. *Soft Matter*, **2011**, 7, 6426	3.6	26
407	AFM study of morphology and mechanical properties of a chimeric spider silk and bone sialoprotein protein for bone regeneration. *Biomacromolecules*, **2011**, 12, 1675-85	6.9	26
406	Novel poly(L-lactic acid)/hyaluronic acid macroporous hybrid scaffolds: characterization and assessment of cytotoxicity. *Journal of Biomedical Materials Research - Part A*, **2010**, 94, 856-69	5.4	26
405	Structural evolution of the amorphous phase during crystallization of poly(l-lactic acid): A synchrotron wide-angle X-ray scattering study. *Journal of Non-Crystalline Solids*, **2007**, 353, 2567-2572	3.9	26
404	Assembly of cell-laden hydrogel fiber into non-liquefied and liquefied 3D spiral constructs by perfusion-based layer-by-layer technique. *Biofabrication*, **2015**, 7, 011001	10.5	25
403	Electrochromic devices incorporating biohybrid electrolytes doped with a lithium salt, an ionic liquid or a mixture of both. *Electrochimica Acta*, **2015**, 161, 226-235	6.7	25
402	Platelet lysate membranes as new autologous templates for tissue engineering applications. *Inflammation and Regeneration*, **2014**, 34, 033-044	10.9	25
401	Effect of solvent-dependent viscoelastic properties of chitosan membranes on the permeation of 2-phenylethanol. *Carbohydrate Polymers*, **2009**, 75, 651-659	10.3	25
400	Banded spherulites in poly(L-lactic acid): Effects of the crystallization temperature and molecular weight. *Journal of Applied Polymer Science*, **2007**, 105, 3500-3504	2.9	25
399	Blending polysaccharides with biodegradable polymers. II. Structure and biological response of chitosan/polycaprolactone blends. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2008**, 87, 544-54	3.5	25
398	Data Analysis with the Vogel□Fulcher□Tammann□Hesse Equation. *Journal of Physical Chemistry A*, **2004**, 108, 10824-10833	2.8	25
397	Role of thermal history on the thermal behavior of poly(L-lactic acid) studied by DSC and optical microscopy. *Journal of Thermal Analysis and Calorimetry*, **2005**, 80, 171-175	4.1	25
396	The relaxation frequency as observed in thermally stimulated depolarisation current experiments in polymers. *Thermochimica Acta*, **1999**, 332, 161-170	2.9	25
395	Assembling Human Platelet Lysate into Multiscale 3D Scaffolds for Bone Tissue Engineering. *ACS Biomaterials Science and Engineering*, **2015**, 1, 2-6	5.5	24
394	A Closed Chondromimetic Environment within Magnetic-Responsive Liquified Capsules Encapsulating Stem Cells and Collagen II/TGF-β Microparticles. *Advanced Healthcare Materials*, **2016**, 5, 1346-55	10.1	24
393	Alternative methodology for chitin□hydroxyapatite composites using ionic liquids and supercritical fluid technology. *Journal of Bioactive and Compatible Polymers*, **2013**, 28, 481-491	2	24
392	Biomimetic Ca-P coatings incorporating bisphosphonates produced on starch-based degradable biomaterials. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2010**, 92, 55-67	3.5	24
391	Chitosan Beads as Templates for Layer-by-Layer Assembly and their Application in the Sustained Release of Bioactive Agents. *Journal of Bioactive and Compatible Polymers*, **2008**, 23, 367-380	2	24

390	Thermal characterization of a vinylidene fluoride-trifluorethylene (75□25) (%mol) copolymer film. *Journal of Non-Crystalline Solids*, **2006**, 352, 5376-5381	3.9	24
389	Highly robust hydrogels via a fast, simple and cytocompatible dual crosslinking-based process. *Chemical Communications*, **2015**, 51, 15673-6	5.8	23
388	Platelet lysate-based pro-angiogenic nanocoatings. *Acta Biomaterialia*, **2016**, 32, 129-137	10.8	23
387	In vivo high-content evaluation of three-dimensional scaffolds biocompatibility. *Tissue Engineering - Part C: Methods*, **2014**, 20, 851-64	2.9	23
386	Free and copolymerized □-cyclodextrins regulate the performance of dexamethasone-loaded dextran microspheres for bone regeneration. *Journal of Materials Chemistry B*, **2014**, 2, 4943-4956	7.3	23
385	Nanostructured interfacial self-assembled peptide-polymer membranes for enhanced mineralization and cell adhesion. *Nanoscale*, **2017**, 9, 13670-13682	7.7	23
384	Cell-Adhesive Bioinspired and Catechol-Based Multilayer Freestanding Membranes for Bone Tissue Engineering. *Biomimetics*, **2017**, 2,	3.7	23
383	Calcium-phosphate derived from mineralized algae for bone tissue engineering applications. *Materials Letters*, **2007**, 61, 3495-3499	3.3	23
382	Oriented morphology and enhanced mechanical properties of poly(l-lactic acid) from shear controlled orientation in injection molding. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 490, 81-89	5.3	23
381	Molecular motions of side-chain liquid crystalline polymers in the liquid crystalline phase studied by the thermally stimulated currents technique. *Polymer*, **1994**, 35, 3561-3564	3.9	23
380	Designing multigradient biomaterials for skin regeneration. *Materials Today Advances*, **2020**, 5, 100051	7.4	23
379	Nacre-inspired nanocomposites produced using layer-by-layer assembly: Design strategies and biomedical applications. *Materials Science and Engineering C*, **2017**, 76, 1263-1273	8.3	22
378	Structural monitoring and modeling of the mechanical deformation of three-dimensional printed poly(□-caprolactone) scaffolds. *Biofabrication*, **2017**, 9, 025015	10.5	22
377	Magnetically Multilayer Polysaccharide Membranes for Biomedical Applications. *ACS Biomaterials Science and Engineering*, **2015**, 1, 1016-1025	5.5	22
376	Characterization of chitosan and polycaprolactone membranes designed for wound repair application. *Journal of Materials Science*, **2012**, 47, 659-667	4.3	22
375	In vivo biological responses to silk proteins functionalized with bone sialoprotein. *Macromolecular Bioscience*, **2013**, 13, 444-54	5.5	22
374	Synthesis and Characterization of N-methylenephenyl Phosphonic Chitosan. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2007**, 44, 271-275	2.2	22
373	Physicochemical Characterization of Novel Chitosan-Soy Protein/ TEOS Porous Hybrids for Tissue Engineering Applications. *Materials Science Forum*, **2006**, 514-516, 1000-1004	0.4	22

372	Viscoelastic monitoring of starch-based biomaterials in simulated physiological conditions. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2004**, 370, 321-325	5.3	22
371	Biomimetic polysaccharide/bioactive glass nanoparticles multilayer membranes for guided tissue regeneration. *RSC Advances*, **2016**, 6, 75988-75999	3.7	22
370	Photopolymerizable Platelet Lysate Hydrogels for Customizable 3D Cell Culture Platforms. *Advanced Healthcare Materials*, **2018**, 7, e1800849	10.1	22
369	Preparation of Well-Dispersed Chitosan/Alginate Hollow Multilayered Microcapsules for Enhanced Cellular Internalization. *Molecules*, **2018**, 23,	4.8	21
368	Bioactive Glass-Polymer Nanocomposites for Bone Tissue Regeneration Applications: A Review. *Advanced Engineering Materials*, **2019**, 21, 1900287	3.5	21
367	On-chip assessment of the protein-release profile from 3D hydrogel arrays. *Analytical Chemistry*, **2013**, 85, 2391-6	7.8	21
366	Study of the glass transition on viscous-forming and powder materials using dynamic mechanical analysis. *Polymer Testing*, **2009**, 28, 89-95	4.5	21
365	Natural Polymers in tissue engineering applications **2008**, 145-192		21
364	Chemistry and Applications of Phosphorylated Chitin and Chitosan. *E-Polymers*, **2006**, 6,	2.7	21
363	In vivo osteogenic differentiation of stem cells inside compartmentalized capsules loaded with co-cultured endothelial cells. *Acta Biomaterialia*, **2017**, 53, 483-494	10.8	20
362	Freeform 3D printing using a continuous viscoelastic supporting matrix. *Biofabrication*, **2020**, 12, 035017	10.5	20
361	Layered PEGDA hydrogel for islet of Langerhans encapsulation and improvement of vascularization. *Journal of Materials Science: Materials in Medicine*, **2017**, 28, 195	4.5	20
360	Non-monotonic cell differentiation pattern on extreme wettability gradients. *Biomaterials Science*, **2013**, 1, 202-212	7.4	20
359	Development of Biomimetic Chitosan-Based Hydrogels Using an Elastin-Like Polymer. *Advanced Engineering Materials*, **2010**, 12, B37-B44	3.5	20
358	Carboxymethylchitosan/poly(amidoamine) dendrimer nanoparticles in central nervous systems-regenerative medicine: effects on neuron/glial cell viability and internalization efficiency. *Macromolecular Bioscience*, **2010**, 10, 1130-40	5.5	20
357	Local motions in side-chain liquid crystalline polymers. A thermally stimulated currents study. *Thermochimica Acta*, **1998**, 323, 65-73	2.9	20
356	Effects of moisture and degradation time over the mechanical dynamical performance of starch-based biomaterials. *Journal of Applied Polymer Science*, **2000**, 78, 2345-2357	2.9	20
355	Fast and mild strategy, using superhydrophobic surfaces, to produce collagen/platelet lysate gel beads for skin regeneration. *Stem Cell Reviews and Reports*, **2015**, 11, 161-79	6.4	19

354	Mechanochemical Patternable ECM-Mimetic Hydrogels for Programmed Cell Orientation. *Advanced Healthcare Materials*, **2020**, 9, e1901860	10.1	19
353	Water effect in the thermal and molecular dynamics behavior of poly(L-lactic acid). *Journal of Thermal Analysis and Calorimetry*, **2007**, 88, 425-429	4.1	19
352	Effect of the mechanical stretching on the ferroelectric properties of a (VDF/TrFE) (75/25) copolymer film. *Solid State Communications*, **2004**, 129, 5-8	1.6	19
351	Polymerisation of ethylene catalysed by mono-imine-2,6-diacetylpyridine iron/methylaluminoxane (MAO) catalyst system: effect of the ligand on polymer microstructure. *Polymer International*, **2002**, 51, 1301-1303	3.3	19
350	Proteinaceous Hydrogels for Bioengineering Advanced 3D Tumor Models. *Advanced Science*, **2021**, 8, 2003129	13.6	19
349	The influence of surface modified poly(l-lactic acid) films on the differentiation of human monocytes into macrophages. *Biomaterials Science*, **2017**, 5, 551-560	7.4	18
348	Hydroalcoholic extracts from the bark of Quercus suber L. (Cork): optimization of extraction conditions, chemical composition and antioxidant potential. *Wood Science and Technology*, **2017**, 51, 855-872	2.5	18
347	Control of Cell Alignment and Morphology by Redesigning ECM-Mimetic Nanotopography on Multilayer Membranes. *Advanced Healthcare Materials*, **2017**, 6, 1601462	10.1	18
346	Superhydrophobic Surfaces as a Tool for the Fabrication of Hierarchical Spherical Polymeric Carriers. *Small*, **2015**, 11, 3648-52	11	18
345	Responsive laminarin-boronic acid self-healing hydrogels for biomedical applications. *Polymer Journal*, **2020**, 52, 997-1006	2.7	18
344	Multifunctional laminarin microparticles for cell adhesion and expansion. *Carbohydrate Polymers*, **2018**, 202, 91-98	10.3	18
343	Flavonoid-mediated immunomodulation of human macrophages involves key metabolites and metabolic pathways. *Scientific Reports*, **2019**, 9, 14906	4.9	18
342	Bioinspired superamphiphobic surfaces as a tool for polymer- and solvent-independent preparation of drug-loaded spherical particles. *Acta Biomaterialia*, **2014**, 10, 4314-22	10.8	18
341	Enzymatic degradation behavior and cytocompatibility of silk fibroin-starch-chitosan conjugate membranes. *Materials Science and Engineering C*, **2012**, 32, 1314-22	8.3	18
340	In vivo biodistribution of carboxymethylchitosan/poly(amidoamine) dendrimer nanoparticles in rats. *Journal of Bioactive and Compatible Polymers*, **2011**, 26, 619-627	2	18
339	Analysing protein competition on self-assembled mono-layers studied with quartz crystal microbalance. *Acta Biomaterialia*, **2010**, 6, 3499-505	10.8	18
338	PVDF Membranes Induce Cellular Proliferation and Differentiation in Static and Dynamic Conditions. *Materials Science Forum*, **2008**, 587-588, 72-76	0.4	18
337	Creep of PVDF monofilament sutures: service performance prediction from short-term tests. *Polymer*, **2003**, 44, 4293-4300	3.9	18

336	Structural relaxation in a polyester thermoset as seen by thermally stimulated recovery. *Polymer*, **2001**, 42, 4173-4180	3.9	18
335	Dynamic Mechanical Analysis in Polymers for Medical Applications **2002**, 139-164		18
334	Polysaccharide-Based Nanobiomaterials as Controlled Release Systems for Tissue Engineering Applications. *Current Pharmaceutical Design*, **2015**, 21, 4837-50	3.3	18
333	Human Platelet Lysates-Based Hydrogels: A Novel Personalized 3D Platform for Spheroid Invasion Assessment. *Advanced Science*, **2020**, 7, 1902398	13.6	18
332	Oxidized Cashew Gum Scaffolds for Tissue Engineering. *Macromolecular Materials and Engineering*, **2019**, 304, 1800574	3.9	17
331	Perinatal tissues and cells in tissue engineering and regenerative medicine. *Acta Biomaterialia*, **2020**, 110, 1-14	10.8	17
330	The effects of platelet lysate patches on the activity of tendon-derived cells. *Acta Biomaterialia*, **2018**, 68, 29-40	10.8	17
329	Tuneable spheroidal hydrogel particles for cell and drug encapsulation. *Soft Matter*, **2018**, 14, 5622-5627	3.6	17
328	Sequential ionic and thermogelation of chitosan spherical hydrogels prepared using superhydrophobic surfaces to immobilize cells and drugs. *Journal of Bioactive and Compatible Polymers*, **2014**, 29, 50-65	2	17
327	A combinatorial study of nanocomposite hydrogels: on-chip mechanical/viscoelastic and pre-osteoblast interaction characterization. *Journal of Materials Chemistry B*, **2014**, 2, 5627-5638	7.3	17
326	Selective cell recruitment and spatially controlled cell attachment on instructive chitosan surfaces functionalized with antibodies. *Biointerphases*, **2012**, 7, 65	1.8	17
325	Ionic liquids as foaming agents of semi-crystalline natural-based polymers. *Green Chemistry*, **2012**, 14, 1949	10	17
324	Stress–strain experiments as a mechanical spectroscopic technique to characterise the glass transition dynamics in poly(ethylene terephthalate). *Polymer Testing*, **2006**, 25, 953-960	4.5	17
323	Mechanical Characterization and Influence of the High Temperature Shrinkage of PVDF Films on its Electromechanical Properties. *Ferroelectrics*, **2003**, 294, 61-71	0.6	17
322	The Effect of Transreactions on the Structure and Dynamic Mechanical Properties of 1:1 Poly(ethylene terephthalate)/Poly(ethylene 2,6-naphthalate) Blends Produced by Cryogenic Mechanical Alloying. *Macromolecular Materials and Engineering*, **2003**, 288, 778-788	3.9	17
321	Copolymerization of ethylene/unsaturated alcohols using nickel catalysts: effect of the ligand on the activity and comonomer incorporation. *Journal of Organometallic Chemistry*, **2005**, 690, 895-909	2.3	17
320	Effects of the strain rate and temperature in stress–strain tests: study of the glass transition of a polyamide-6. *Polymer Testing*, **2001**, 20, 937-943	4.5	17
319	A thermally stimulated discharge currents study of the molecular motions in two polysiloxane side-chain liquid crystalline polymers. *Journal of Polymer Science, Part B: Polymer Physics*, **1995**, 33, 269-277	2.6	17

318	Dynamic microfactories co-encapsulating osteoblastic and adipose-derived stromal cells for the biofabrication of bone units. *Biofabrication*, **2019**, 12, 015005	10.5	17
317	Microfluidic production of hyaluronic acid derivative microfibers to control drug release. *Materials Letters*, **2016**, 182, 309-313	3.3	17
316	Unraveling the effect of the hydration level on the molecular mobility of nanolayered polymeric systems. *Macromolecular Rapid Communications*, **2015**, 36, 405-12	4.8	16
315	Cell Encapsulation Systems Toward Modular Tissue Regeneration: From Immunoisolation to Multifunctional Devices. *Advanced Functional Materials*, **2020**, 30, 1908061	15.6	16
314	Enhanced cell affinity of chitosan membranes mediated by superficial cross-linking: a straightforward method attainable by standard laboratory procedures. *Biomacromolecules*, **2014**, 15, 291-301	6.9	16
313	Poly(e-caprolactone) Electrospun Scaffolds Filled with Nanoparticles. Production and Optimization According to Taguchi's Methodology. *Journal of Macromolecular Science - Physics*, **2014**, 53, 781-799	1.4	16
312	Synthesis and characterization of stable dicarboxylic pegylated magnetite nanoparticles. *Materials Letters*, **2013**, 100, 266-270	3.3	16
311	The potential of cashew gum functionalization as building blocks for layer-by-layer films. *Carbohydrate Polymers*, **2017**, 174, 849-857	10.3	16
310	Microhardness of starch based biomaterials in simulated physiological conditions. *Acta Biomaterialia*, **2007**, 3, 69-76	10.8	16
309	Dielectric characterization of neutralized and nonneutralized chitosan upon drying. *Biopolymers*, **2006**, 81, 149-59	2.2	16
308	Influence of the sample mass on the study of the glass transition and the structural relaxation by differential scanning calorimetry. *Journal of Non-Crystalline Solids*, **2004**, 337, 68-77	3.9	16
307	Synthesis of polar vinyl monomer□olefin copolymers by □diimine nickel catalyst. *Polymer International*, **2001**, 50, 579-587	3.3	16
306	Dipolar relaxations in the glass transition region and in the liquid crystalline phase of two side-chain liquid crystalline polysiloxanes. *Journal of Polymer Science, Part B: Polymer Physics*, **1996**, 34, 2067-2075	2.6	16
305	GelMA/bioactive silica nanocomposite bioinks for stem cell osteogenic differentiation. *Biofabrication*, **2021**,	10.5	16
304	Solvent-Free Strategy Yields Size and Shape-Uniform Capsules. *Journal of the American Chemical Society*, **2017**, 139, 1057-1060	16.4	15
303	Multiphasic, Multistructured and Hierarchical Strategies for Cartilage Regeneration. *Advances in Experimental Medicine and Biology*, **2015**, 881, 143-60	3.6	15
302	Bone marrow stromal cells on a three-dimensional bioactive fiber mesh undergo osteogenic differentiation in the absence of osteogenic media supplements: the effect of silanol groups. *Acta Biomaterialia*, **2014**, 10, 4175-85	10.8	15
301	Multilayered Films Produced by Layer-by-Layer Assembly of Chitosan and Alginate as a Potential Platform for the Formation of Human Adipose-Derived Stem Cell aggregates. *Polymers*, **2017**, 9,	4.5	15

300	Chitosan Membranes Exhibiting Shape Memory Capability by the Action of Controlled Hydration. *Polymers*, **2014**, 6, 1178-1186	4.5	15
299	Preparation of Chitosan Scaffolds for Tissue Engineering Using Supercritical Fluid Technology. *Materials Science Forum*, **2010**, 636-637, 22-25	0.4	15
298	Development of a Novel Cell Encapsulation System Based on Natural Origin Polymers for Tissue Engineering Applications. *Journal of Bioactive and Compatible Polymers*, **2010**, 25, 341-359	2	15
297	Thermosensitive polymeric matrices for three-dimensional cell culture strategies. *Acta Biomaterialia*, **2011**, 7, 526-9	10.8	15
296	Liquid Crystalline Behaviour of Chitosan in Formic, Acetic, Monochloroacetic Acid Solutions. *Materials Science Forum*, **2006**, 514-516, 1010-1014	0.4	15
295	Mechanical Spectroscopy Studies on a Side-Chain Liquid Crystalline Polysiloxane. Comparison with Dielectric and DSC Data. *Macromolecules*, **2003**, 36, 2816-2824	5.5	15
294	Modelling of thermally stimulated depolarization current peaks obtained by global and thermal cleaning experiments. *Journal Physics D: Applied Physics*, **1998**, 31, 2898-2907	3	15
293	Oxygen releasing materials: Towards addressing the hypoxia-related issues in tissue engineering. *Materials Science and Engineering C*, **2021**, 122, 111896	8.3	15
292	Design Advances in Particulate Systems for Biomedical Applications. *Advanced Healthcare Materials* , **2016**, 5, 1687-723	10.1	15
291	Engineering Enriched Microenvironments with Gradients of Platelet Lysate in Hydrogel Fibers. *Biomacromolecules*, **2016**, 17, 1985-97	6.9	15
290	In vitro biological response of human osteoblasts in 3D chitosan sponges with controlled degree of deacetylation and molecular weight. *Carbohydrate Polymers*, **2021**, 254, 117434	10.3	15
289	Development of novel chitosan / guar gum inks for extrusion-based 3D bioprinting: Process, printability and properties. *Bioprinting*, **2021**, 21, e00122	7	15
288	Screening of Nanocomposite Scaffolds Arrays Using Superhydrophobic-Wettable Micropatterns. *Advanced Functional Materials*, **2017**, 27, 1701219	15.6	14
287	Multilayered Hollow Tubes as Blood Vessel Substitutes. *ACS Biomaterials Science and Engineering*, **2016**, 2, 2304-2314	5.5	14
286	Polysaccharide-based freestanding multilayered membranes exhibiting reversible switchable properties. *Soft Matter*, **2016**, 12, 1200-9	3.6	14
285	Biological responses to spider silk-antibiotic fusion protein. *Journal of Tissue Engineering and Regenerative Medicine*, **2012**, 6, 356-68	4.4	14
284	Processing and characterization of chitosan microspheres to be used as templates for layer-by-layer assembly. *Journal of Materials Science: Materials in Medicine*, **2010**, 21, 1855-65	4.5	14
283	Dielectric behaviour of a side-chain-bearing liquid-crystalline polysiloxane. *Journal of Thermal Analysis*, **1995**, 44, 1037-1046		14

282	Recent Progress on Polysaccharide-Based Hydrogels for Controlled Delivery of Therapeutic Biomolecules. *ACS Biomaterials Science and Engineering*, **2021**, 7, 4102-4127	5.5	14
281	Multilayered membranes with tuned well arrays to be used as regenerative patches. *Acta Biomaterialia*, **2017**, 57, 313-323	10.8	13
280	Antibacterial free-standing polysaccharide composite films inspired by the sea. *International Journal of Biological Macromolecules*, **2019**, 133, 933-944	7.9	13
279	Coffee Melanoidin-Based Multipurpose Film Formation: Application to Single-Cell Nanoencapsulation. *ChemNanoMat*, **2020**, 6, 379-385	3.5	13
278	Sequentially Moldable and Bondable Four-Dimensional Hydrogels Compatible with Cell Encapsulation. *Biomacromolecules*, **2018**, 19, 2742-2749	6.9	13
277	Elastic chitosan/chondroitin sulfate multilayer membranes. *Biomedical Materials (Bristol)*, **2016**, 11, 035008	3.5	13
276	Liquefied Microcapsules as Dual-Microcarriers for 3D+3D Bottom-Up Tissue Engineering. *Advanced Healthcare Materials*, **2019**, 8, e1901221	10.1	13
275	Bioinspired methodology for preparing magnetic responsive chitosan beads to be integrated in a tubular bioreactor for biomedical applications. *Biomedical Materials (Bristol)*, **2013**, 8, 045008	3.5	13
274	Dextrin- and Conducting-Polymer-Containing Biocomposites: Properties and Behavior as Cellular Matrix. *Macromolecular Materials and Engineering*, **2012**, 297, 359-368	3.9	13
273	Chitosan improves the biological performance of soy-based biomaterials. *Tissue Engineering - Part A* , **2010**, 16, 2883-90	3.9	13
272	Transport of small anionic and neutral solutes through chitosan membranes: dependence on cross-linking and chelation of divalent cations. *Biomacromolecules*, **2008**, 9, 2132-8	6.9	13
271	Influence of Molecular Weight and Crystallinity of Poly(L-Lactic Acid) on the Adhesion and Proliferation of Human Osteoblast Like Cells. *Materials Science Forum*, **2006**, 514-516, 1020-1024	0.4	13
270	A simple method for calibrating the temperature in dynamic mechanical analysers and thermal mechanical analysers. *Polymer Testing*, **2004**, 23, 423-430	4.5	13
269	Absorbed water in the cork structure. A study by thermally stimulated currents, dielectric relaxation spectroscopy, isothermal depolarization experiments and differential scanning calorimetry. *Journal of Materials Science*, **1995**, 30, 4394-4400	4.3	13
268	Dipolar relaxations in a side-chain polyacrylate liquid crystal. A study by thermally stimulated currents. *Thermochimica Acta*, **1996**, 285, 347-359	2.9	13
267	One-Step Rapid Fabrication of Cell-Only Living Fibers. *Advanced Materials*, **2020**, 32, e1906305	24	13
266	Strategies for re-vascularization and promotion of angiogenesis in trauma and disease. *Biomaterials* , **2021**, 269, 120628	15.6	13
265	Biomimetic click assembled multilayer coatings exhibiting responsive properties. *Materials Today Chemistry*, **2017**, 4, 150-163	6.2	12

264	Injectable Hyaluronic Acid Hydrogels Enriched with Platelet Lysate as a Cryostable Off-the-Shelf System for Cell-Based Therapies. *Regenerative Engineering and Translational Medicine*, **2017**, 3, 53-69	2.4	12
263	Biomedical films of graphene nanoribbons and nanoflakes with natural polymers. *RSC Advances*, **2017**, 7, 27578-27594	3.7	12
262	Cork extractives exhibit thermo-oxidative protection properties in polypropylene□cork composites and as direct additives for polypropylene. *Polymer Degradation and Stability*, **2015**, 116, 45-52	4.7	12
261	Nickel(II) complexes of bidentate N□? ligands containing mixed pyrazole, pyrimidine and pyridine aromatic rings as catalysts for ethylene polymerisation. *Journal of Organometallic Chemistry*, **2015**, 799-800, 90-98	2.3	12
260	Novel Biodegradable Laminarin Microparticles for Biomedical Applications. *Bulletin of the Chemical Society of Japan*, **2020**, 93, 713-719	5.1	12
259	Coculture of Spheroids/2D Cell Layers Using a Miniaturized Patterned Platform as a Versatile Method to Produce Scaffold-Free Tissue Engineering Building Blocks. *Advanced Biology*, **2018**, 2, 1700069	3.5	12
258	Design Principles and Multifunctionality in Cell Encapsulation Systems for Tissue Regeneration. *Advanced Healthcare Materials*, **2018**, 7, e1701444	10.1	12
257	Bioinstructive Naringin-Loaded Micelles for Guiding Stem Cell Osteodifferentiation. *Advanced Healthcare Materials*, **2018**, 7, e1800890	10.1	12
256	Engineering Membranes for Bone Regeneration. *Tissue Engineering - Part A*, **2017**, 23, 1502-1533	3.9	12
255	A nanotectonics approach to produce hierarchically organized bioactive glass nanoparticles-based macrospheres. *Nanoscale*, **2012**, 4, 6293-7	7.7	12
254	Thermal Behaviour and Glass Transition Dynamics of Inclusion Complexes of □Cyclodextrin with Poly(D,L-lactic acid). *Macromolecular Rapid Communications*, **2008**, 29, 1341-1345	4.8	12
253	Study of the segmental dynamics in semi-crystalline poly(lactic acid) using mechanical spectroscopies. *Macromolecular Bioscience*, **2005**, 5, 337-43	5.5	12
252	Molecular mobility in a thermoset as seen by TSR and DMA near Tg. *Materials Research Innovations*, **2001**, 4, 170-178	1.9	12
251	Bioactive silica nanoparticles with calcium and phosphate for single dose osteogenic differentiation. *Materials Science and Engineering C*, **2020**, 107, 110348	8.3	12
250	High performance free-standing films by layer-by-layer assembly of graphene flakes and ribbons with natural polymers. *Journal of Materials Chemistry B*, **2016**, 4, 7718-7730	7.3	12
249	Combinatorial Effect of Silicon and Calcium Release from Starch-Based Scaffolds on Osteogenic Differentiation of Human Adipose Stem Cells. *ACS Biomaterials Science and Engineering*, **2015**, 1, 760-770	5.5	11
248	Compartmentalized bioencapsulated liquefied 3D macro-construct by perfusion-based layer-by-layer technique. *RSC Advances*, **2015**, 5, 2511-2516	3.7	11
247	Repurposing Old Drugs into New Epigenetic Inhibitors: Promising Candidates for Cancer Treatment?. *Pharmaceutics*, **2020**, 12,	6.4	11

246	Role of active nanoliposomes in the surface and bulk mechanical properties of hybrid hydrogels. *Materials Today Bio*, **2020**, 6, 100046	9.9	11
245	Synthesis and characterization of sensitive hydrogels based on semi-interpenetrated networks of poly[2-ethyl-(2-pyrrolidone) methacrylate] and hyaluronic acid. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 157-66	5.4	11
244	Membranes of poly(dl-lactic acid)/Bioglass® with asymmetric bioactivity for biomedical applications. *Journal of Bioactive and Compatible Polymers*, **2012**, 27, 429-440	2	11
243	Analysis of the thermal environment inside the furnace of a dynamic mechanical analyser. *Polymer Testing*, **2003**, 22, 471-481	4.5	11
242	Molecular motions in a polycarbonate composite as studied by thermally stimulated recovery and dynamic mechanical analysis. *Macromolecular Symposia*, **1999**, 148, 437-454	0.8	11
241	The molecular relaxation mechanisms in cork as studied by thermally stimulated discharge currents. *Journal of Materials Science*, **1995**, 30, 2035-2041	4.3	11
240	Dynamic Electrophoretic Assembly of Metal–Phenolic Films: Accelerated Formation and Cytocompatible Detachment. *Chemistry of Materials*, **2020**, 32, 7746-7753	9.6	11
239	Platelet lysates-based hydrogels incorporating bioactive mesoporous silica nanoparticles for stem cell osteogenic differentiation. *Materials Today Bio*, **2021**, 9, 100096	9.9	11
238	Cell encapsulation in liquified compartments: Protocol optimization and challenges. *PLoS ONE*, **2019**, 14, e0218045	3.7	10
237	Cell engineering by the internalization of bioinstructive micelles for enhanced bone regeneration. *Nanomedicine*, **2015**, 10, 1707-21	5.6	10
236	In vitro bioactivity studies of ceramic structures isolated from marine sponges. *Biomedical Materials (Bristol)*, **2016**, 11, 045004	3.5	10
235	Nanogrooved microdiscs for bottom-up modulation of osteogenic differentiation. *Nanoscale*, **2019**, 11, 16214-16221	7.7	10
234	Surface Modification of Silica-Based Marine Sponge Bioceramics Induce Hydroxyapatite Formation. *Crystal Growth and Design*, **2014**, 14, 4545-4552	3.5	10
233	Biomineralization in chitosan/Bioglass® composite membranes under different dynamic mechanical conditions. *Materials Science and Engineering C*, **2013**, 33, 4480-3	8.3	10
232	Supercritical phase inversion of starch-poly(epsilon-caprolactone) for tissue engineering applications. *Journal of Materials Science: Materials in Medicine*, **2010**, 21, 533-40	4.5	10
231	Cooperative Character of the Relaxation Processes in a Side-Chain Liquid Crystalline Polymer. *Journal of Macromolecular Science - Physics*, **2003**, 42, 1169-1182	1.4	10
230	Molecular mobility in polymers studied with thermally stimulated recovery. *Magyar Apród Közlemények*, **2002**, 70, 633-649	0	10
229	(R=alkyl or aryl) complexes as catalysts for ethylene polymerization. *Inorganic Chemistry Communication*, **2003**, 6, 331-334	3.1	10

228	Study of the influence of beta-radiation on the properties and mineralization of different starch-based biomaterials. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2005**, 74, 560-9	3.5	10
227	Simple versus cooperative relaxations in complex correlated systems. *Journal of Applied Physics*, **2001**, 89, 1844	2.5	10
226	The Thermally Stimulated Currents Spectrum of Side-Chain Liquid Crystalline Polymers. A Further Contribution for the Attribution of the Different Discharges at the Molecular Level. *Molecular Crystals and Liquid Crystals*, **1996**, 281, 267-278		10
225	Effect of Polyelectrolyte Multilayers Assembled on Ordered Nanostructures on Adhesion of Human Fibroblasts. *ACS Applied Materials & Interfaces*, **2016**, 8, 25142-51	9.5	10
224	Recent advances in the design of implantable insulin secreting heterocellular islet organoids. *Biomaterials*, **2021**, 269, 120627	15.6	10
223	Eco-friendly sol-gel derived sodium-based ormolytes for electrochromic devices. *Electrochimica Acta*, **2017**, 232, 484-494	6.7	9
222	Mechanical Properties of Ca-Saturated Hydrogels with Functionalized Alginate. *Gels*, **2019**, 5,	4.2	9
221	Cork processing with supercritical carbon dioxide: Impregnation and sorption studies. *Journal of Supercritical Fluids*, **2015**, 104, 251-258	4.2	9
220	Injectable PEGylated fibrinogen cell-laden microparticles made with a continuous solvent- and oil-free preparation method. *Acta Biomaterialia*, **2015**, 13, 78-87	10.8	9
219	Fabrication of Artificial Nanobasement Membranes for Cell Compartmentalization in 3D Tissues. *Small*, **2020**, 16, e1907434	11	9
218	Hybrid biodegradable membranes of silane-treated chitosan/soy protein for biomedical applications. *Journal of Bioactive and Compatible Polymers*, **2013**, 28, 385-397	2	9
217	Mesenchymal Stem Cells Relevance in Multicellular Bioengineered 3D In Vitro Tumor Models. *Biotechnology Journal*, **2017**, 12, 1700079	5.6	9
216	Multiple melting behaviour of poly(l-lactide-co-glycolide) investigated by DSC. *Polymer Testing*, **2009**, 28, 452-455	4.5	9
215	Nanostructured Composites Based on Polyethylene–Polyamide Blends. II. Probing the Orientation in Polyethylene–Polyamide Nanocomposites and Their Precursors. *Journal of Macromolecular Science - Physics*, **2004**, 43, 163-176	1.4	9
214	Phase heterogeneity in poly(methyl acrylate)-polystyrene sequential interpenetrating polymer networks studied by thermally stimulated recovery. *Journal of Non-Crystalline Solids*, **2002**, 307-310, 758-764	3.9	9
213	Molecular motions in a side-chain liquid-crystalline polymethacrylate. A thermally stimulated currents study of the dipolar relaxations in the vitreous and liquid-crystalline phases and at the glass transition. *Macromolecular Chemistry and Physics*, **1995**, 196, 2289-2301	2.6	9
212	Bioinstructive Layer-by-Layer-Coated Customizable 3D Printed Perfusable Microchannels Embedded in Photocrosslinkable Hydrogels for Vascular Tissue Engineering. *Biomolecules*, **2021**, 11,	5.9	9
211	Three-Dimensional Osteosarcoma Models for Advancing Drug Discovery and Development. *Advanced Therapeutics*, **2019**, 2, 1800108	4.9	9

210	Investigating the effect of fibulin-1 on the differentiation of human nasal inferior turbinate-derived mesenchymal stem cells into osteoblasts. *Journal of Biomedical Materials Research - Part A*, **2017**, 105, 2291-2298	5.4	8
209	Modular Functionalization of Laminarin to Create Value-Added Naturally Derived Macromolecules. *Journal of the American Chemical Society*, **2020**, 142, 19689-19697	16.4	8
208	Enzymatically degradable, starch-based layer-by-layer films: application to cytocompatible single-cell nanoencapsulation. *Soft Matter*, **2020**, 16, 6063-6071	3.6	8
207	Extraction and Physicochemical Characterization of Chitin from Sloughs of the South-Eastern French Mediterranean Basin. *Molecules*, **2020**, 25,	4.8	8
206	Confinement effects on the dynamic behavior of poly(D,L-lactic acid) upon incorporation in □cyclodextrin. *Journal of Physical Chemistry B*, **2014**, 118, 6972-81	3.4	8
205	Silk-Fibroin/Methacrylated Gellan Gum Hydrogel As An Novel Scaffold For Application In Meniscus Cell-Based Tissue Engineering. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2013**, 29, e53-e55	5.4	8
204	Inclusion complexes of □cyclodextrins with poly(d,l-lactic acid): structural, characterization, and glass transition dynamics. *Colloid and Polymer Science*, **2014**, 292, 863-871	2.4	8
203	Cell behaviour in new poly(l-lactic acid) films with crystallinity gradients. *Materials Letters*, **2012**, 87, 105-108	3.9	8
202	In vitro monitoring of surface mechanical properties of poly(L-lactic acid) using microhardness. *Journal of Applied Polymer Science*, **2007**, 105, 3860-3864	2.9	8
201	Synthesis and Characterization of Chitosan-graft-Poly(3-(trimethoxysilyl)propyl methacrylate) Initiated by Ceric (IV) Ion. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2007**, 44, 489-494	2.2	8
200	Innovative Technique for the Preparation of Porous Bilayer Hydroxyapatite/Chitosan Scaffolds for Osteochondral Applications. *Key Engineering Materials*, **2006**, 309-311, 927-930	0.4	8
199	Synthesis, structure, thermal and non-linear optical properties of L-argininium hydrogen selenite. *Acta Crystallographica Section B: Structural Science*, **2001**, 57, 828-32		8
198	Temperature Calibration in Dielectric Measurements. *Magyar Apr□ad K□alem□nyek*, **2001**, 65, 37-49	0	8
197	Stress release in oriented HIPS as observed by dynamic mechanical analysis. *Thermochimica Acta*, **1999**, 332, 171-177	2.9	8
196	Recent Developments in Chitosan-Based Micro/Nanofibers for Sustainable Food Packaging, Smart Textiles, Cosmeceuticals, and Biomedical Applications. *Molecules*, **2021**, 26,	4.8	8
195	3D-bioprinted cancer-on-a-chip: level-up organotypic in vitro models. *Trends in Biotechnology*, **2021**,	15.1	8
194	Flexible method for fabricating protein patterns on superhydrophobic platforms controlled by magnetic field. *Biomaterials Science*, **2017**, 5, 408-411	7.4	7
193	Multiscale characterization of the hierarchical structure of Dynastes hercules elytra. *Micron*, **2017**, 101, 16-24	2.3	7

192	Open Fluidics: A Cell Culture Flow System Developed Over Wettability Contrast-Based Chips. *Advanced Healthcare Materials*, **2017**, 6, 1700638	10.1	7
191	Light responsive multilayer surfaces with controlled spatial extinction capability. *Journal of Materials Chemistry B*, **2016**, 4, 1398-1404	7.3	7
190	In vitro evaluation of the cytotoxicity and cellular uptake of CMCht/PAMAM dendrimer nanoparticles by glioblastoma cell models. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	7
189	Novel antibacterial bioactive glass nanocomposite functionalized with tetracycline hydrochloride. *Biomedical Glasses*, **2015**, 1,	2.7	7
188	Natural Origin Materials for Bone Tissue Engineering Properties, Processing, and Performance **2011**, 557-586		7
187	Mineralization of Chitosan Membrane Using a Double Diffusion System for Bone Related Applications. *Materials Science Forum*, **2008**, 587-588, 77-81	0.4	7
186	Hydrogels And Hydrophilic Partially Degradable Bone Cements Based On Biodegradable Blends Incorporating Starch **2003**, 243-260		7
185	Molecular motions in a rigid backbone polymer: poly(n-hexyl isocyanate). A Study by thermally stimulated currents. *Journal of the Chemical Society, Faraday Transactions*, **1995**, 91, 2003		7
184	Double network laminarin-boronic/alginate dynamic bioink for 3D bioprinting cell-laden constructs. *Biofabrication*, **2021**, 13,	10.5	7
183	Screening of dual chemo-photothermal cellular nanotherapies in organotypic breast cancer 3D spheroids. *Journal of Controlled Release*, **2021**, 331, 85-102	11.7	7
182	Organotypic 3D decellularized matrix tumor spheroids for high-throughput drug screening. *Biomaterials*, **2021**, 275, 120983	15.6	7
181	Smart Instructive Polymer Substrates for Tissue Engineering **2019**, 411-438		6
180	From honeycomb- to microsphere-patterned surfaces of poly(lactic acid) and a starch-poly(lactic acid) blend via the breath figure method. *Journal of Applied Biomaterials and Functional Materials*, **2017**, 15, e31-e42	1.8	6
179	Novel Antibacterial and Bioactive Silicate Glass Nanoparticles for Biomedical Applications. *Advanced Engineering Materials*, **2018**, 20, 1700855	3.5	6
178	Membranes combining chitosan and natural-origin nanoliposomes for tissue engineering. *RSC Advances*, **2016**, 6, 83626-83637	3.7	6
177	Screening of perfused combinatorial 3D microenvironments for cell culture. *Acta Biomaterialia*, **2019**, 96, 222-236	10.8	6
176	New biomaterial based on cotton with incorporated Biomolecules. *Journal of Applied Polymer Science*, **2014**, 131, n/a-n/a	2.9	6
175	Surface properties of extracts from cork black condensate. *Holzforschung*, **2010**, 64,	2	6

174	New Composite Membranes Containing Bioactive Glass-Ceramic Nanoparticles and Chitosan for Biomedical Applications. *Materials Science Forum*, **2010**, 636-637, 31-35	0.4	6
173	The effects of Anodonta cygnea biological fluids on biomineralization of chitosan membranes. *Journal of Membrane Science*, **2010**, 364, 82-89	9.6	6
172	Synthesis of N-Carboxymethyl Chitosan Beads for Controlled Drug Delivery Applications. *Materials Science Forum*, **2006**, 514-516, 1015-1019	0.4	6
171	Dynamic-mechanical behavior of hydrophobic/hydrophilic interpenetrating copolymer networks. *Polymer Engineering and Science*, **2006**, 46, 930-937	2.3	6
170	Cooperative and Local Relaxations in Complex Systems: Polymers and Crystals. *Ferroelectrics*, **2002**, 270, 271-276	0.6	6
169	Temperature correction of dynamic mechanical and thermomechanical analysers during heating, cooling and isothermal experiments. *Thermochimica Acta*, **2000**, 346, 133-145	2.9	6
168	Curcumin Loaded Nanoliposomes Localization by Nanoscale Characterization. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	6
167	Efficient Single-Dose Induction of Osteogenic Differentiation of Stem Cells Using Multi-Bioactive Hybrid Nanocarriers. *Advanced Biology*, **2020**, 4, e2000123	3.5	6
166	Minimalist Tissue Engineering Approaches Using Low Material-Based Bioengineered Systems. *Advanced Healthcare Materials*, **2021**, 10, e2002110	10.1	6
165	Protein-olive oil-in-water nanoemulsions as encapsulation materials for curcumin acting as anticancer agent towards MDA-MB-231 cells. *Scientific Reports*, **2021**, 11, 9099	4.9	6
164	Bioactive Hydrogel Marbles. *Scientific Reports*, **2018**, 8, 15215	4.9	6
163	Bioengineering a humanized 3D tri-culture osteosarcoma model to assess tumor invasiveness and therapy response. *Acta Biomaterialia*, **2021**, 134, 204-214	10.8	6
162	Temperature-responsive nanomagnetic logic gates for cellular hyperthermia. *Materials Horizons*, **2019**, 6, 524-530	14.4	5
161	Layer-by-Layer Assembly for Biofunctionalization of Cellulosic Fibers with Emergent Antimicrobial Agents. *Advances in Polymer Science*, **2015**, 225-240	1.3	5
160	Instantaneous fibrillation of egg white proteome with ionic liquid and macromolecular crowding. *Communications Materials*, **2020**, 1,	6	5
159	Nanostructured Biopolymer/Few-Layer Graphene Freestanding Films with Enhanced Mechanical and Electrical Properties. *Macromolecular Materials and Engineering*, **2018**, 303, 1700316	3.9	5
158	Porous polylactic acid-silica hybrids: preparation, characterization, and study of mesenchymal stem cell osteogenic differentiation. *Macromolecular Bioscience*, **2015**, 15, 262-74	5.5	5
157	Silk-Based Biomaterials **2012**, 75-92		5

156	Tissue Analogs by the Assembly of Engineered Hydrogel Blocks **2012**, 471-493		5
155	Dielectric and thermal characterization of low density ethylene/10-undecen-1-ol copolymers prepared with nickel catalysts. *Journal of Polymer Science, Part B: Polymer Physics*, **2007**, 45, 2802-2812	2.6	5
154	Effect of Poling on the Mechanical Properties of Poly(Vinylidene Fluoride). *Materials Science Forum*, **2006**, 514-516, 951-955	0.4	5
153	Modelling of TSDC results in polymeric materials. *Journal Physics D: Applied Physics*, **2000**, 33, 280-285	3	5
152	Multiple and inter-related relaxation mechanisms in the mesophase of side-chain liquid crystalline polysiloxanes: a thermally stimulated currents study. *Polymer*, **1996**, 37, 3161-3164	3.9	5
151	Geometrically Controlled Liquefied Capsules for Modular Tissue Engineering Strategies. *Advanced Biology*, **2020**, 4, e2000127	3.5	5
150	Moldable Superhydrophobic Surfaces. *Advanced Materials Interfaces*, **2016**, 3, 1600074	4.6	5
149	Fabrication of Quasi-2D Shape-Tailored Microparticles using Wettability Contrast-Based Platforms. *Advanced Materials*, **2021**, 33, e2007695	24	5
148	Nanostructured Capsules for Cartilage Tissue Engineering. *Methods in Molecular Biology*, **2015**, 1340, 181-9	1.4	4
147	Gelatin Methacryloyl (GelMA) Nanocomposite Hydrogels Embedding Bioactive Naringin Liposomes. *Polymers*, **2020**, 12,	4.5	4
146	Self-Assembled Bioactive Colloidal Gels as Injectable Multiparticle Shedding Platforms. *ACS Applied Materials & Interfaces*, **2020**, 12, 31282-31291	9.5	4
145	Cell Behavior within Nanogrooved Sandwich Culture Systems. *Small*, **2020**, 16, e2001975	11	4
144	BSA/HSA ratio modulates the properties of Ca(2+)-induced cold gelation scaffolds. *International Journal of Biological Macromolecules*, **2016**, 89, 535-44	7.9	4
143	Fractality and metastability of a complex amide cross-linked dipodal alkyl/siloxane hybrid. *RSC Advances*, **2014**, 4, 59664-59675	3.7	4
142	Smart instructive polymer substrates for tissue engineering **2014**, 301-326		4
141	Introducing biomimetic approaches to materials development and product design for engineering students. *Bioinspired, Biomimetic and Nanobiomaterials*, **2015**, 4, 207-212	1.3	4
140	Homogeneous poly(L-lactic acid)/chitosan blended films. *Polymers for Advanced Technologies*, **2014**, 25, 1492-1500	3.2	4
139	Biomaterials from Marine-Origin Biopolymers **2012**, 1-23		4

138	Elastin-Like Macromolecules **2012**, 93-116		4
137	Isolation of Friedelin from Black Condensate of Cork. *Natural Product Communications*, **2011**, 6, 1934578X1100601	0.9	4
136	Preparation and Characterization of New Biodegradable Films Made from Poly(L-Lactic Acid) and Chitosan Blends Using a Common Solvent. *Journal of Macromolecular Science - Physics*, **2011**, 50, 1121-1129	1.4	4
135	Three-dimensional scaffolds as a model system for neural and endothelial 'in vitro' culture. *Journal of Biomaterials Applications*, **2011**, 26, 293-310	2.9	4
134	Bio-Inspired Mineral Growth on Porous Spherulitic Textured Poly(L-lactic acid)/Bioactive Glass Composite Scaffolds. *Advanced Engineering Materials*, **2008**, 10, B18-B22	3.5	4
133	Nanostructure Evolution during Uni-Axial Deformation of PET – A WAXS and SAXS Study Using Synchrotron Radiation. *Materials Science Forum*, **2006**, 514-516, 1583-1587	0.4	4
132	Study of the Molecular Mobility in Polymers with the Thermally Stimulated Recovery Technique – A Review. *Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics*, **2005**, 45, 99-124		4
131	Study of the viscoelastic properties of PET by thermally stimulated recovery. *Plastics, Rubber and Composites*, **2003**, 32, 281-290	1.5	4
130	Chain Reorientation in PVDF Films Upon Transverse Mechanical Deformation Studied by SEM and Dielectric Relaxation. *Ferroelectrics*, **2003**, 294, 73-83	0.6	4
129	Re-crystallization of MNA under a strong dc electric field. *Solid State Sciences*, **2001**, 3, 733-740	3.4	4
128	The Dynamics of the Glass Transition in a Semicrystalline PET Studied by Mechanical and Dielectric Spectroscopic Methods. *Defect and Diffusion Forum*, **2002**, 206-207, 131-134	0.7	4
127	Comparing dielectric measurements on poly(ethylene terephthalate) at constant heating rates with isothermal measurements. *Polymer*, **1999**, 40, 2675-2679	3.9	4
126	Self-glucose feeding hydrogels by enzyme empowered degradation for 3D cell culture. *Materials Horizons*, **2021**,	14.4	4
125	3D Printed Dual-Porosity Scaffolds: The Combined Effect of Stiffness and Porosity in the Modulation of Macrophage Polarization. *Advanced Healthcare Materials*, **2021**, e2101415	10.1	4
124	Complex Morphogenesis by a Model Intrinsically Disordered Protein. *Small*, **2020**, 16, e2005191	11	4
123	Leachable-Free Fabrication of Hydrogel Foams Enabling Homogeneous Viability of Encapsulated Cells in Large-Volume Constructs. *Advanced Healthcare Materials*, **2020**, 9, e2000543	10.1	4
122	Partial Coated Stem Cells with Bioinspired Silica as New Generation of Cellular Hybrid Materials. *Advanced Functional Materials*, **2021**, 31, 2009619	15.6	4
121	Synthesis and characterization of scaffolds produced under mild conditions based on oxidized cashew gums and carboxyethyl chitosan. *International Journal of Biological Macromolecules*, **2021**, 176, 26-36	7.9	4

120	Natural Origin Biomaterials for 4D Bioprinting Tissue-Like Constructs. *Advanced Materials Technologies*, **2021**, 6, 2100168	6.8	4
119	Physical immobilization of particles inspired by pollination. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 5405-5410	11.5	3
118	Bone Tissue Disorders: Healing Through Coordination Chemistry. *Chemistry - A European Journal*, **2020**, 26, 15416-15437	4.8	3
117	Layer-by-layer self-assembly techniques for nanostructured devices in tissue engineering **2013**, 88-118		3
116	Natural-Based and Stimuli-Responsive Polymers for Tissue Engineering and Regenerative Medicine **2015**, 49-90		3
115	Fibronectin Fibrillogenesis at the Cell Material Interface **2012**, 189-212		3
114	Bioactivity and Viscoelastic Characterization in Physiological Simulated Conditions of Chitosan/Bioglass Composite Membranes. *Materials Science Forum*, **2010**, 636-637, 26-30	0.4	3
113	Electric Techniques. *Handbook of Thermal Analysis and Calorimetry*, **2008**, 5, 209-268		3
112	Enzymatic Degradation Behaviour of Starch Conjugated Phosphorylated Chitosan. *Materials Science Forum*, **2006**, 514-516, 995-999	0.4	3
111	Osteochondral Tissue Engineering Constructs with a Cartilage Part Made of Poly(L-lactic Acid) / Starch Blend and a Bioactive Poly(L-Lactic Acid) Composite Layer for Subchondral Bone. *Key Engineering Materials*, **2006**, 309-311, 1109-1112	0.4	3
110	Tissue engineering using natural polymers **2007**, 197-217		3
109	Behaviour of the Ferroelectric Phase Transition of P(VDF/TrFE) (75/25) with Increasing Deformation. *Ferroelectrics*, **2004**, 304, 23-26	0.6	3
108	Influence of experimental variables on thermally stimulated recovery results: analysis of simulations and real data on a polymeric system. *Polymer International*, **2002**, 51, 434-442	3.3	3
107	Intrinsic compensation phenomenon in thermally stimulated depolarisation studies. *Thermochimica Acta*, **2005**, 430, 135-141	2.9	3
106	Dipolar Motions in Two Side-Chain Liquid-Crystalline Polysiloxanes Studied by the TSDC Technique. *Molecular Crystals and Liquid Crystals*, **1995**, 261, 567-575		3
105	Capacitive interdigitated system of high osteoinductive/conductive performance for personalized acting-sensing implants. *Npj Regenerative Medicine*, **2021**, 6, 80	15.8	3
104	Complex-shaped magnetic 3D cell-based structures for tissue engineering. *Acta Biomaterialia*, **2020** , 118, 18-31	10.8	3
103	Chemical modification strategies to prepare advanced protein-based biomaterials. *Biomaterials and Biosystems*, **2021**, 1, 100010		3

102	One-Step All-Aqueous Interfacial Assembly of Robust Membranes for Long-Term Encapsulation and Culture of Adherent Stem/Stromal Cells. *Advanced Healthcare Materials*, **2021**, 10, e2100266	10.1	3
101	Polyethylene Composites with Lignocellulosic Material117-161		3
100	Biomaterials: Nanoengineering Hybrid Supramolecular Multilayered Biomaterials Using Polysaccharides and Self-Assembling Peptide Amphiphiles (Adv. Funct. Mater. 17/2017). *Advanced Functional Materials*, **2017**, 27,	15.6	2
99	Cell-Based Microarrays Using Superhydrophobic Platforms Patterned with Wettable Regions. *Methods in Molecular Biology*, **2018**, 1771, 11-26	1.4	2
98	Supramolecular Presentation of Hyaluronan onto Model Surfaces for Studying the Behavior of Cancer Stem Cells. *Advanced Biology*, **2019**, 3, e1900017	3.5	2
97	Polymer Particles: Biomimetic Methodology to Produce Polymeric Multilayered Particles for Biotechnological and Biomedical Applications (Small 15/2013). *Small*, **2013**, 9, 2486-2486	11	2
96	Development of new poly(?-caprolactone)/chitosan films. *Polymer International*, **2013**, 62, 1425-1432	3.3	2
95	Multilayers as 3D nanostructured porous constructs. *Bioinspired, Biomimetic and Nanobiomaterials*, **2012**, 1, 245-251	1.3	2
94	Lessons from Sea Organisms to Produce New Biomedical Adhesives **2012**, 273-291		2
93	Soft Constructs for Skin Tissue Engineering **2012**, 537-557		2
92	Correction to Multilayered Hierarchical Capsules Providing Cell Adhesion Sites *Biomacromolecules*, **2013**, 14, 1250-1250	6.9	2
91	Superhydrophobic to Superhydrophylic Biomimetic Poly(3-Hydroxybutyrate) Surfaces Made by Phase Inversion. *Materials Science Forum*, **2012**, 730-732, 44-49	0.4	2
90	Natural Fibres as Reinforcement Strategy on Cork-Polymer Composites. *Materials Science Forum*, **2012**, 730-732, 373-378	0.4	2
89	Layer-by-layer assembly: Layer-By-Layer Technique for Producing Porous Nanostructured 3D Constructs Using Moldable Freeform Assembly of Spherical Templates (Small 23/2010). *Small*, **2010** , 6, 2643-2643	11	2
88	A Novel pH and Thermo-sensitive N,O-Carboxymethyl Chitosan-graft-Poly(N-isopropylacrylamide) Hydrogel for Controlled Drug Delivery. *E-Polymers*, **2007**, 7,	2.7	2
87	Electrical Response of PVDF in a Constant Uniaxial Strain Rate Deformation. *Ferroelectrics*, **2004**, 304, 43-46	0.6	2
86	Bioactive Composite Chitosan Membranes to Be Used in Bone Regeneration Applications. *Key Engineering Materials*, **2003**, 240-242, 423-426	0.4	2
85	Supramolecular dendrimer-containing layer-by-layer nanoassemblies for bioapplications: current status and future prospects. *Polymer Chemistry*, **2021**, 12, 5902-5930	4.9	2

84	Brewer's yeast polysaccharides - A review of their exquisite structural features and biomedical applications. *Carbohydrate Polymers*, **2022**, 277, 118826	10.3	2
83	Differential Modulation of the Phospholipidome of Proinflammatory Human Macrophages by the Flavonoids Quercetin, Naringin and Naringenin. *Molecules*, **2020**, 25,	4.8	2
82	Modeling of Cell-Mediated Self-Assembled Colloidal Scaffolds. *ACS Applied Materials & Interfaces*, **2020**, 12, 48321-48328	9.5	2
81	Stratified 3D Microtumors as Organotypic Testing Platforms for Screening Pancreatic Cancer Therapies.. *Small Methods*, **2021**, 5, e2001207	12.8	2
80	Coordination Compounds As Multi-Delivery Systems for Osteoporosis. *ACS Applied Materials & Interfaces*, **2021**, 13, 35469-35483	9.5	2
79	3D-Bioprinted Constructs that Breathe. *Matter*, **2021**, 4, 15-17	12.7	2
78	An Immunomodulatory Miniaturized 3D Screening Platform Using Liquefied Capsules. *Advanced Healthcare Materials*, **2021**, 10, e2001993	10.1	2
77	Macrophage-Targeted Shikonin-Loaded Nanogels for Modulation of Inflammasome Activation.. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2022**, 102548	6	2
76	Programmable Living Units for Emulating Pancreatic Tumor-Stroma Interplay.. *Advanced Healthcare Materials*, **2022**, e2102574	10.1	2
75	Advancing Tissue Decellularized Hydrogels for Engineering Human Organoids. *Advanced Functional Materials*,2202825	15.6	2
74	Thin Silica-Based Microsheets with Controlled Geometry. *European Journal of Inorganic Chemistry*, **2020**, 2020, 1574-1578	2.3	1
73	3D Cell Culture: Fabrication of Hydrogel Particles of Defined Shapes Using Superhydrophobic-Hydrophilic Micropatterns (Adv. Mater. 35/2016). *Advanced Materials*, **2016**, 28, 7552-7552	24	1
72	General Characterization of Chemical Properties of Natural-Based Biomaterials **2016**, 517-531		1
71	Polycaprolactone membranes reinforced by toughened sol-gel produced silica networks. *Journal of Sol-Gel Science and Technology*, **2014**, 71, 136-146	2.3	1
70	BIOMIMETIC SUPERHYDROPHOBIC SURFACES. *World Scientific Series in Nanoscience and Nanotechnology*, **2014**, 153-180	0.1	1
69	Stimuli-Responsive Surfaces for Biomedical Applications **2013**, 63-87		1
68	Plasma-Assisted Surface Treatments and Modifications for Biomedical Applications **2013**, 375-408		1
67	Bioactive and Smart Hydrogel Surfaces **2013**, 239-268		1

66	Investigation of calcium carbonate precipitated in the presence of alkanols. *Crystal Research and Technology*, **2014**, 49, 418-430	1.3	1
65	Collagen-Based Biomaterials for Regenerative Medicine **2012**, 55-74		1
64	Nanoscale Control of Cell Behavior on Biointerfaces **2012**, 213-236		1
63	Surfaces with Extreme Wettability Ranges for Biomedical Applications **2012**, 237-257		1
62	Nanostructures and Nanostructured Networks for Smart Drug Delivery **2012**, 417-458		1
61	Biomimetic Hydrogels for Regenerative Medicine **2012**, 503-513		1
60	Biomimetic and Smart Polymeric Surfaces for Biomedical and Biotechnological Applications. *Materials Science Forum*, **2010**, 636-637, 3-8	0.4	1
59	Superhydrophobic Coatings: Bioinspired Degradable Substrates with Extreme Wettability Properties (Adv. Mater. 18/2009). *Advanced Materials*, **2009**, 21, NA-NA	24	1
58	Nanostructured Thin Coatings from Chitosan and an Elastin-Like Recombinamer with Acute Stimuli-Responsive Behavior. *Materials Science Forum*, **2012**, 730-732, 32-37	0.4	1
57	Thermomechanical processing environment and morphology development of a thermotropic polymer liquid crystal. *Journal of Applied Polymer Science*, **2010**, 115, 2991-3004	2.9	1
56	Processing of starch-based blends for biomedical applications **2008**, 85-105		1
55	Ethylene Polymerization over Transition Metal Supported Catalysts. III. Vanadium. *E-Polymers*, **2006**, 6,	2.7	1
54	Glass Transition And Compensation Phenomenon In Thermally Stimulated Studies On Polymers. *Materials Research Innovations*, **2004**, 8, 136-137	1.9	1
53	Miscibility of a PET/PEN Blend Studied by Dynamic Mechanical Analysis. *Defect and Diffusion Forum*, **2002**, 206-207, 135-138	0.7	1
52	Protocol of Osteogenesis from BMSC Cultured with Dexamethasone-Loaded Dendrimer Nanoparticles onto Ceramic and Polymeric Scaffolds: In Vivo Studies. *Manuals in Biomedical Research*, **2014**, 67-74		1
51	New insights into the biomimetic design and biomedical applications of bioengineered bone microenvironments. *APL Bioengineering*, **2021**, 5, 041507	6.6	1
50	Engineering mammalian living materials towards clinically relevant therapeutics. *EBioMedicine*, **2021**, 74, 103717	8.8	1
49	Freestanding magnetic microtissues for tissue engineering applications.. *Advanced Healthcare Materials*, **2021**, e2101532	10.1	1

48	Bioactive Composites Reinforced with Inorganic Glasses and Glass□Ceramics for Tissue Engineering Applications. *Springer Series in Biomaterials Science and Engineering*, **2014**, 331-353	0.6	1
47	Temperature-responsive bioactive hydrogels based on a multifunctional recombinant elastin-like polymer. *Biomaterials and Biomechanics in Bioengineering*, **2015**, 2, 47-59		1
46	Bioinspired biomaterials to develop cell-rich spherical microtissues for 3D in vitro tumor modeling **2020**, 43-65		1
45	In Situ Cross-Linking of Artificial Basement Membranes in 3D Tissues and Their Size-Dependent Molecular Permeability. *Biomacromolecules*, **2020**, 21, 4923-4932	6.9	1
44	The Therapeutic Potential of Hematopoietic Stem Cells in Bone Regeneration. *Tissue Engineering - Part B: Reviews*, **2021**,	7.9	1
43	Metabolomic Applications in Stem Cell Research: a Review. *Stem Cell Reviews and Reports*, **2021**, 17, 2003-2024	7.3	1
42	Design of Protein-Based Liquefied Cell-Laden Capsules with Bioinspired Adhesion for Tissue Engineering. *Advanced Healthcare Materials*, **2021**, 10, e2100782	10.1	1
41	Adjustable conduits for guided peripheral nerve regeneration prepared from bi-zonal unidirectional and multidirectional laminar scaffold of type I collagen. *Materials Science and Engineering C*, **2021**, 121, 111838	8.3	1
40	Cell-Based Therapy: Partial Coated Stem Cells with Bioinspired Silica as New Generation of Cellular Hybrid Materials (Adv. Funct. Mater. 29/2021). *Advanced Functional Materials*, **2021**, 31, 2170211	15.6	1
39	Customizable and Regioselective One-Pot N□H Functionalization of DNA Nucleobases to Create a Library of Nucleobase Derivatives for Biomedical Applications. *European Journal of Organic Chemistry*, **2021**, 2021, 4423-4433	3.2	1
38	Microparticles orchestrating cell fate in bottom-up approaches. *Current Opinion in Biotechnology*, **2021**, 73, 276-281	11.4	1
37	Human Protein-Based Porous Scaffolds as Platforms for Xeno-Free 3D Cell Culture.. *Advanced Healthcare Materials*, **2022**, e2102383	10.1	1
36	Universal Strategy for Designing Shape Memory Hydrogels **2022**, 4, 701-706		1
35	G9a inhibition by CM-272: Developing a novel anti-tumoral strategy for castration-resistant prostate cancer using 2D and 3D in vitro models.. *Biomedicine and Pharmacotherapy*, **2022**, 150, 113031	7.5	1
34	Biomimetic Nanostructured Apatitic Matrices for Drug Delivery **2012**, 381-416		0
33	Comparison of the Physicochemical Properties of Chitin Extracted from Cicada orni Sloughs Harvested in Three Different Years and Characterization of the Resulting Chitosan. *Applied Sciences (Switzerland)*, **2021**, 11, 11278	2.6	0
32	Designing highly customizable human based platforms for cell culture using proteins from the amniotic membrane.. *Materials Science and Engineering C*, **2021**, 112574	8.3	0
31	Fabrication of highly stretchable hydrogel based on crosslinking between alendronates functionalized poly-□glutamate and calcium cations.. *Materials Today Bio*, **2022**, 14, 100225	9.9	0

30 Three-Dimensional Multilayered Devices for Biomedical Applications **2015**, 363-384

29 General Characterization of Physical Properties of Natural-Based Biomaterials **2016**, 494-516

28 Polymer Vesicles on Surfaces **2013**, 159-203

27 Biology Lessons for Engineering Surfaces for Controlling Cell Material Adhesion **2012**, 157-187

26 Bio-Inspired Reversible Adhesives for Dry and Wet Conditions **2012**, 259-272

25 Interfacial Forces and Interfaces in Hard Biomaterial Mechanics **2012**, 293-311

24 Surfaces Inducing Biomineralization **2012**, 333-351

23 Progress in Dendrimer-Based Nanocarriers **2012**, 459-469

22 Injectable In-Situ-Forming Scaffolds for Tissue Engineering **2012**, 495-502

21 Bio-Inspired 3D Environments for Cartilage Engineering **2012**, 515-536

20 Hydrogels from Protein Engineering **2012**, 25-54

19 Biomimetic Molecular Recognition Elements for Chemical Sensing **2012**, 117-156

18 Nacre-Inspired Biomaterials **2012**, 313-331

17 Bioactive Nanocomposites Containing Silicate Phases for Bone Replacement and Regeneration **2012**, 353-379

16 Polymer Patterns and Scaffolds for Biomedical Applications and Tissue Engineering **2011**, 291-302

15 New biomineralization strategies for the use of natural-based polymeric materials in bone-tissue engineering **2008**, 193-230

14 Physical Properties of an Artificial Extracellular Matrix Based on a Crosslinked Elastin-Like Polymer. *Materials Science Forum*, **2008**, 587-588, 47-51 0.4

13 Study of the Fosfosal Controlled Permeation through Glutaraldehyde Crosslinked Chitosan Membranes. *Materials Science Forum*, **2006**, 514-516, 990-994 0.4

12	Using mechanical spectroscopies to study the glass transition dynamics in unsaturated polyester resins cured with different styrene contents. *Colloid and Polymer Science*, **2005**, 283, 753-761	2.4
11	Mechanical Behaviour of Polyethylene/Hydroxyapatite Bone-Analogue Composites Moulded with an Induced Anisotropy. *Key Engineering Materials*, **2001**, 218-220, 469-474	0.4
10	Nanoscale design in biomineralization for developing new biomaterials **2022**, 345-384	
9	Biomorphs: Complex Morphogenesis by a Model Intrinsically Disordered Protein (Small 51/2020). *Small*, **2020**, 16, 2070276	11
8	Biomimetic Materials: Smart Polymer Surfaces for Tissue Engineering932-946	
7	Mechanical Characterization4399-4410	
6	Biomimetic Materials: Smart Polymer Surfaces for Tissue Engineering **2017**, 214-228	
5	Engineering Strategies for Allogeneic Solid Tissue Acceptance. *Trends in Molecular Medicine*, **2021**, 27, 572-587	11.5
4	Consistent Inclusion of Mesenchymal Stem Cells into In Vitro Tumor Models. *Methods in Molecular Biology*, **2021**, 2269, 3-23	1.4
3	Bioimaging of Mesenchymal Stem Cells Spatial Distribution and Interactions with 3D In Vitro Tumor Spheroids. *Methods in Molecular Biology*, **2021**, 2269, 49-61	1.4
2	Multifunctional Granular Hydrogels for Tissue-Specific Repair **2022**, 295-321	
1	Natural-based biomaterials for drug delivery wound healing patches **2022**, 51-73	