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Natural-based nanocomposites for bone tissue engineering and regenerative medicine: a review

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#	Paper	IF	Citations
641	Important topics in the future of biomaterials and stem cells for bone tissue engineering: Comments from the participants of the International Symposium on Recent Trend of Biomaterials and Stem Cells for Bone Tissue Engineering at Changchun, China. <b>2015</b> , 2, 153-8		
640	Instructive Conductive 3D Silk Foam-Based Bone Tissue Scaffolds Enable Electrical Stimulation of Stem Cells for Enhanced Osteogenic Differentiation. <b>2015</b> , 15, 1490-6		41
639	Highly Ordered 1D Fullerene Crystals for Concurrent Control of Macroscopic Cellular Orientation and Differentiation toward Large-Scale Tissue Engineering. <i>Advanced Materials</i> , <b>2015</b> , 27, 4020-6	24	101
638	A porous elastomeric polyurethane monolith synthesized by concentrated emulsion templating and its pressure-sensitive conductive property. <b>2015</b> , 5, 65890-65896		8
637	Effects of Chitin Whiskers on Physical Properties and Osteoblast Culture of Alginate Based Nanocomposite Hydrogels. <b>2015</b> , 16, 3499-507		86
636	Three-Dimensional Printing of Hollow-Struts-Packed Bioceramic Scaffolds for Bone Regeneration. <b>2015</b> , 7, 24377-83		72
635	Novel porous graphene oxide and hydroxyapatite nanosheets-reinforced sodium alginate hybrid nanocomposites for medical applications. <b>2015</b> , 107, 419-425		43
634	Biomineralization-inspired synthesis of chitosan/hydroxyapatite biocomposites based on a novel bilayer rate-controlling model. <b>2015</b> , 136, 457-64		10
633	Gellan gum-coated gold nanorods: an intracellular nanosystem for bone tissue engineering. <b>2015</b> , 5, 77996-78005		33
632	Effect of Different Surface Treatment for Bamboo Fiber on the Crystallization Behavior and Mechanical Property of Bamboo Fiber/Nanohydroxyapatite/Poly(lactic-co-glycolic) Composite. <b>2015</b> , 54, 12017-12024		38
631	Electrospinning of Nanodiamond-Modified Polysaccharide Nanofibers with Physico-Mechanical Properties Close to Natural Skins. <b>2016</b> , 14,		40
630	The Opportunity for High-Performance Biomaterials from Methane. <b>2016</b> , 4,		71
629	Soft nanocomposites: nanoparticles to tune gel properties. <b>2016</b> , 65, 268-279		27
628	Tackling Mg alloy corrosion by natural polymer coatings-A review. <b>2016</b> , 104, 2628-41		55
627	Silk nanofibers as high efficient and lightweight air filter. <b>2016</b> , 9, 2590-2597		135
626	3D Biomaterial Microarrays for Regenerative Medicine: Current State-of-the-Art, Emerging Directions and Future Trends. <i>Advanced Materials</i> , <b>2016</b> , 28, 771-81	24	71
625	Large-Scale Automated Production of Highly Ordered Ultralong Hydroxyapatite Nanowires and Construction of Various Fire-Resistant Flexible Ordered Architectures. <b>2016</b> , 10, 11483-11495		82

624	A multifunctional porous scaffold with capacities of minimally invasive implantation, self-fitting and drug delivery. <b>2016</b> , 1-2, 52-62	12
623	Glycol chitosan/nanohydroxyapatite biocomposites for potential bone tissue engineering and regenerative medicine. <b>2016</b> , 93, 1465-1478	41
622	The effect of fiber size and pore size on cell proliferation and infiltration in PLLA scaffolds on bone tissue engineering. <b>2016</b> , 30, 1545-51	44
621	Fabrication and biocompatibility of poly(l-lactic acid) and chitosan composite scaffolds with hierarchical microstructures. <b>2016</b> , 64, 341-345	29
620	The effect of particle size on the in vivo degradation of poly(d,l-lactide-co-glycolide)/β-tricalcium phosphate micro- and nanocomposites. <b>2016</b> , 45, 340-348	15
619	Bioinspired Design of Polycaprolactone Composite Nanofibers as Artificial Bone Extracellular Matrix for Bone Regeneration Application. <b>2016</b> , 8, 27594-27610	46
618	Graphene Oxide: A Unique Nano-Platform to Build Advanced Multifunctional Composites. <b>2016</b> , 193-236	
617	A novel chitosan-tussah silk fibroin/nano-hydroxyapatite composite bone scaffold platform with tunable mechanical strength in a wide range. <b>2016</b> , 93, 87-97	27
616	Content-Dependent Osteogenic Response of Nanohydroxyapatite: An in Vitro and in Vivo Assessment within Collagen-Based Scaffolds. <b>2016</b> , 8, 23477-88	55
615	3D Porous Graphene by Low-Temperature Plasma Welding for Bone Implants. <i>Advanced Materials</i> , <b>2016</b> , 28, 8959-8967	24 43
614	Improved Mechanical Properties and Sustained Release Behavior of Cationic Cellulose Nanocrystals Reinforced Cationic Cellulose Injectable Hydrogels. <b>2016</b> , 17, 2839-48	66
613	A novel GEL-OHA/HAp bone substitute. <b>2016</b> , 21, 491-498	2
612	Tissue engineering with gellan gum. <b>2016</b> , 4, 1276-90	91
611	Dityrosine Cross-Linking in Designing Biomaterials. <b>2016</b> , 2, 2108-2121	74
610	Structure and Rheology of Poloxamine T1107 and Its Nanocomposite Hydrogels with Cyclodextrin-Modified Barium Titanate Nanoparticles. <b>2016</b> , 32, 6398-408	25
609	Carboxylated Agarose (CA)-Silk Fibroin (SF) Dual Confluent Matrices Containing Oriented Hydroxyapatite (HA) Crystals: Biomimetic Organic/Inorganic Composites for Tibia Repair. <b>2016</b> , 17, 2437-47	18
608	Electrospun Poly(ε-caprolactone)/Polyhedral Oligomeric Silsesquioxane-Based Copolymer Blends: Evolution of Fiber Internal Structures. <b>2016</b> , 16, 705-16	14
607	Cartilage and Bone Regeneration How Close Are We to Bedside?. <b>2016</b> , 89-106	4

606	Fabrication of a poly( $\epsilon$ -caprolactone)/starch nanocomposite scaffold with a solvent-casting/salt-leaching technique for bone tissue engineering applications. <b>2016</b> , 133,	32
605	Quaternized Chitosan/Poly(acrylic acid) Polyelectrolyte Complex Hydrogels with Tough, Self-Recovery, and Tunable Mechanical Properties. <b>2016</b> , 49, 1049-1059	118
604	Polydopamine-Templated Hydroxyapatite Reinforced Polycaprolactone Composite Nanofibers with Enhanced Cytocompatibility and Osteogenesis for Bone Tissue Engineering. <b>2016</b> , 8, 3499-515	114
603	Length-Controlled Synthesis of Calcium Phosphate Nanorod and Nanowire and Application in Intracellular Protein Delivery. <b>2016</b> , 8, 8710-20	31
602	Injectable Hydrogel Composite Based Gelatin-PEG and Biphasic Calcium Phosphate Nanoparticles for Bone Regeneration. <b>2016</b> , 45, 2415-2422	26
601	Spontaneous osteogenic differentiation of mesenchymal stem cells on electrospun nanofibrous scaffolds. <b>2016</b> , 6, 22144-22152	6
600	On-Demand Guided Bone Regeneration with Microbial Protection of Ornamented SPU Scaffold with Bismuth-Doped Single Crystalline Hydroxyapatite: Augmentation and Cartilage Formation. <b>2016</b> , 8, 4086-100	30
599	Preparation and characterization of biodegradable nano hydroxyapatite/Bacterial cellulose composites with well-defined honeycomb pore arrays for bone tissue engineering applications. <b>2016</b> , 23, 1263-1282	50
598	Hydrogels 2.0: improved properties with nanomaterial composites for biomedical applications. <b>2015</b> , 11, 014104	67
597	Proving the suitability of magnetoelectric stimuli for tissue engineering applications. <b>2016</b> , 140, 430-436	99
596	Polymer nanocomposites in medicine. <b>2016</b> , 53, 55-62	65
595	Chitosan and carboxymethyl-chitosan capping ligands: Effects on the nucleation and growth of hydroxyapatite nanoparticles for producing biocomposite membranes. <b>2016</b> , 59, 265-277	53
594	Porous nanoplate-like hydroxyapatite/Sodium alginate nanocomposite scaffolds for potential bone tissue engineering. <b>2017</b> , 32, 78-84	12
593	Functional calcium phosphate composites in nanomedicine. <b>2017</b> , 244, 281-295	43
592	Oriented bone regenerative capacity of octacalcium phosphate/gelatin composites obtained through two-step crystal preparation method. <b>2017</b> , 105, 1029-1039	24
591	Comparisons among Mg, Zn, Sr, and Si doped nano-hydroxyapatite/chitosan composites for load-bearing bone tissue engineering applications. <b>2017</b> , 1, 900-910	38
590	Enhanced bone tissue regeneration using a 3D printed microstructure incorporated with a hybrid nano hydrogel. <b>2017</b> , 9, 5055-5062	81
589	Efficient In Situ Nucleophilic Thiol-yne Click Chemistry for the Synthesis of Strong Hydrogel Materials with Tunable Properties. <b>2017</b> , 6, 93-97	49

588	The Horizon of Materiobiology: A Perspective on Material-Guided Cell Behaviors and Tissue Engineering. <b>2017</b> , 117, 4376-4421	296
587	Natural-Based Hydrogels: From Processing to Applications. <b>2017</b> , 1-27	5
586	Electrophoretic deposition and characterization of chitosan/bioactive glass composite coatings on Mg alloy substrates. <b>2017</b> , 232, 456-464	64
585	Synthesis and characterization of polyvinyl alcohol- carboxymethyl tamarind gum based composite films. <b>2017</b> , 165, 159-168	25
584	Novel non-cytotoxic, bioactive and biodegradable hybrid materials based on polyurethanes/TiO for biomedical applications. <b>2017</b> , 75, 375-384	9
583	C NMR characterization of hydrated C labeled Bombyx mori silk fibroin sponges prepared using glycerin, poly(ethylene glycol diglycidyl ether) and poly(ethylene glycol) as porogens. <b>2017</b> , 5, 2152-2160	12
582	Small intestinal submucosa: A potential osteoconductive and osteoinductive biomaterial for bone tissue engineering. <b>2017</b> , 75, 149-156	31
581	Diamond-Graphite Nanoplatelet Surfaces as Conductive Substrates for the Electrical Stimulation of Cell Functions. <b>2017</b> , 9, 1331-1342	13
580	Constructing multi-component organic/inorganic composite bacterial cellulose-gelatin/hydroxyapatite double-network scaffold platform for stem cell-mediated bone tissue engineering. <b>2017</b> , 78, 130-140	48
579	Enhancing regenerative approaches with nanoparticles. <b>2017</b> , 14,	62
578	Biodegradation and biocompatibility of haloarchaea-produced poly(3-hydroxybutyrate-co-3-hydroxyvalerate) copolymers. <b>2017</b> , 139, 172-186	31
577	Controlled release of vancomycin hydrochloride from a composite structure of polymeric films and porous fibers on implants. <b>2017</b> , 325, 601-610	17
576	Via precise interface engineering towards bioinspired composites with improved 3D printing processability and mechanical properties. <b>2017</b> , 5, 5037-5047	22
575	Nanoparticles for bone tissue engineering. <b>2017</b> , 33, 590-611	98
574	Biomimetic collagen/phospholipid coatings improve formation of hydroxyapatite nanoparticles on titanium. <b>2017</b> , 77, 102-110	22
573	Rapid Recovery Double Cross-Linking Hydrogel with Stable Mechanical Properties and High Resilience Triggered by Visible Light. <b>2017</b> , 9, 13593-13601	35
572	The scaffold microenvironment for stem cell based bone tissue engineering. <b>2017</b> , 5, 1382-1392	78
571	Phenylboronic acid-incorporated elastin-like polypeptide nanoparticle drug delivery systems. <b>2017</b> , 8, 2105-2114	12

570	Nanomaterial-based bone regeneration. <b>2017</b> , 9, 4862-4874	69
569	Monodisperse selenium-substituted hydroxyapatite: Controllable synthesis and biocompatibility. <b>2017</b> , 73, 596-602	43
568	Construction of Bio-Inspired Composites for Bone Tissue Repair. <b>2017</b> , 153-167	1
567	Concise Review: Biomimetic Functionalization of Biomaterials to Stimulate the Endogenous Healing Process of Cartilage and Bone Tissue. <b>2017</b> , 6, 2186-2196	24
566	Novel biomaterial strategies for controlled growth factor delivery for biomedical applications. <b>2017</b> , 9, e435-e435	216
565	Colloidal nano-toolbox for molecularly regulated polymerization: chemorheology over 6 decades of viscoelasticity. <b>2017</b> , 4, 1165-1170	5
564	3D Printing of Polymers with Hierarchical Continuous Porosity. <b>2017</b> , 2, 1700145	27
563	Nanocomposite hydrogels stabilized by self-assembled multivalent bisphosphonate-magnesium nanoparticles mediate sustained release of magnesium ion and promote in-situ bone regeneration. <b>2017</b> , 64, 389-400	76
562	Gelatin based dynamic hydrogels via thiol-boronene reactions. <b>2017</b> , 8, 6741-6749	19
561	Arginine-Presenting Peptide Hydrogels Decorated with Hydroxyapatite as Biomimetic Scaffolds for Bone Regeneration. <b>2017</b> , 18, 3541-3550	57
560	A high modulus hydrogel obtained from hydrogen bond reconstruction and its application in vibration damper. <b>2017</b> , 7, 43755-43763	25
559	Bone Immobilization devices and consolidation mechanisms: Impact on healing time. <b>2017</b> , 5, 34-39	
558	Neural differentiation on aligned fullerene C nanowhiskers. <b>2017</b> , 53, 11024-11027	35
557	Biodegradable Composites: Properties and Uses. <b>2017</b> , 215-250	
556	From molecules to macrostructures: recent development of bioinspired hard tissue repair. <b>2017</b> , 5, 1435-1449	25
555	Nanocomposite Biomaterials. <b>2017</b> , 299-320	
554	Self-Assembled Injectable Nanocomposite Hydrogels Stabilized by Bisphosphonate-Magnesium (Mg <sup>2+</sup> ) Coordination Regulates the Differentiation of Encapsulated Stem Cells via Dual Crosslinking. <b>2017</b> , 27, 1701642	84
553	New approach in evaluation of ceramic-polymer composite bioactivity and biocompatibility. <b>2017</b> , 409, 5747-5755	6

552	Controlling Adult Stem Cell Behavior Using Nanodiamond-Reinforced Hydrogel: Implication in Bone Regeneration Therapy. <b>2017</b> , 7, 6577	56
551	Self-Healing Silk Fibroin-Based Hydrogel for Bone Regeneration: Dynamic Metal-Ligand Self-Assembly Approach. <b>2017</b> , 27, 1700591	134
550	Antibacterial activity and cytotoxicity of gelatine-conjugated lysine-based peptides. <b>2017</b> , 105, 3110-3126	3
549	Biocompatible and Biodegradable Bioplastics Constructed from Chitin via a Green Pathway for Bone Repair. <b>2017</b> , 5, 9126-9135	51
548	Biodegradable Polymers for Bone Tissue Engineering. <b>2017</b> , 47-74	7
547	Engineering Nanobiomaterials for Improved Tissue Regeneration. <b>2017</b> , 281-304	1
546	Biomimetic Materials and Fabrication Approaches for Bone Tissue Engineering. <b>2017</b> , 6, 1700612	113
545	3D Nanomanufacturing, 3D $\mu$ -Electronics and $\mu$ -Robotics. <b>2017</b> , 121-162	1
544	Rapid synthesis of citrate-zinc substituted hydroxyapatite using the ultrasonication-microwave method. <b>2017</b> , 43, 13308-13313	10
543	Novel superabsorbent membranes made of PVA and Ziziphus spina-christi cellulose for agricultural and horticultural applications. <b>2017</b> , 41, 9688-9700	17
542	Nanoengineered silica: Properties, applications and toxicity. <b>2017</b> , 109, 753-770	88
541	Incorporation of silver and strontium in hydroxyapatite coating on titanium surface for enhanced antibacterial and biological properties. <b>2017</b> , 71, 852-861	81
540	Effects of pectin structure and crosslinking method on the properties of crosslinked pectin nanofibers. <b>2017</b> , 157, 766-774	49
539	A Cooperative Copper Metal-Organic Framework-Hydrogel System Improves Wound Healing in Diabetes. <b>2017</b> , 27, 1604872	181
538	Macroporous hydrogels based on chitosan derivatives: Preparation, characterization, and in vitro evaluation. <b>2017</b> , 134,	14
537	Irreversible Phase Transition of Bistetramethylammonium Hydrogencyclotriphosphate. <b>2017</b> , 643, 1609-1614	2
536	Evidence of size-dependent effect of silica micro- and nano-particles on basal and specialized monocyte functions. <b>2017</b> , 8, 1035-1049	12
535	Biomimetic Orthopedic Materials. <b>2017</b> , 109-139	2

534	Innovative biodegradable poly(L-lactide)/collagen/hydroxyapatite composite fibrous scaffolds promote osteoblastic proliferation and differentiation. <b>2017</b> , 12, 7577-7588	31
533	Vascularization. <b>2017</b> , 367-383	1
532	Bone-Inspired Spatially Specific Piezoelectricity Induces Bone Regeneration. <b>2017</b> , 7, 3387-3397	44
531	Perspectives of bioinspired materials in regenerative medicine. <b>2017</b> , 139-175	
530	Engineering Niches for Bone Tissue Regeneration. <b>2017</b> , 499-516	1
529	2.11 Polymers of Biological Origin ?. <b>2017</b> , 228-252	14
528	Investigation of silk fibroin nanoparticle-decorated poly(l-lactic acid) composite scaffolds for osteoblast growth and differentiation. <b>2017</b> , 12, 1877-1890	76
527	Decellularized Bovine Articular Cartilage Matrix Reinforced by Carboxylated-SWCNT for Tissue Engineering Application. <b>2017</b> , 60,	2
526	Self-assembled supramolecular systems for bone engineering applications. <b>2018</b> , 35, 104-111	9
525	Adjustable delivery of pro-angiogenic FGF-2 by alginate:collagen microspheres. <b>2018</b> , 7,	13
524	Gellan Gum-Based Hydrogels for Osteochondral Repair. <b>2018</b> , 1058, 281-304	15
523	Bioceramics for Osteochondral Tissue Engineering and Regeneration. <b>2018</b> , 1058, 53-75	21
522	Cucurbit[n]uril Supramolecular Hydrogel Networks as Tough and Healable Adhesives. <b>2018</b> , 28, 1800848	67
521	Comparison of the osteogenic capability of rat bone mesenchymal stem cells on collagen, collagen/hydroxyapatite, hydroxyapatite and biphasic calcium phosphate. <b>2018</b> , 5, 93-103	25
520	Effect of nanoheat stimulation mediated by magnetic nanocomposite hydrogel on the osteogenic differentiation of mesenchymal stem cells. <b>2018</b> , 61, 448-456	21
519	Delicate Assembly of Ultrathin Hydroxyapatite Nanobelts with Nanoneedles Directed by Dissolved Cellulose. <b>2018</b> , 57, 4516-4523	15
518	Bioactive inorganic/organic nanocomposites for wound healing. <b>2018</b> , 11, 308-319	76
517	Cuttlebone as a Marine-Derived Material for Preparing Bone Grafts. <b>2018</b> , 20, 363-374	7



516	Fabrication and characterization of nanoengineered biocompatible n-HA/chitosan-tamarind seed polysaccharide: Bio-inspired nanocomposites for bone tissue engineering. <b>2018</b> , 111, 903-916	24
515	Observation of Endothelial Cell-Assisted Vascularization in Pancreatic Cancer Xenograft Engineering. <b>2018</b> , 15, 275-285	5
514	Non-crosslinked thermoplastic reticulated polymer foams from crystallization-induced structural heterogeneities. <b>2018</b> , 135, 185-192	25
513	Fabrication and characterization of highly porous barium titanate based scaffold coated by Gel/HA nanocomposite with high piezoelectric coefficient for bone tissue engineering applications. <b>2018</b> , 79, 195-202	46
512	A Cell-Engineered Small Intestinal Submucosa-Based Bone Mimetic Construct for Bone Regeneration. <b>2018</b> , 24, 1099-1111	18
511	Some Examples of 3D Bio-printed Tissues. <b>2018</b> , 169-215	
510	Engineering in-vitro stem cell-based vascularized bone models for drug screening and predictive toxicology. <b>2018</b> , 9, 112	42
509	Electrospinning: An enabling nanotechnology platform for drug delivery and regenerative medicine. <b>2018</b> , 132, 188-213	197
508	Recent biomedical applications of bio-sourced materials. <b>2018</b> , 1, 26-44	10
507	Deferoxamine loaded titania nanotubes substrates regulate osteogenic and angiogenic differentiation of MSCs via activation of HIF-1 $\beta$ signaling. <b>2018</b> , 91, 44-54	22
506	Structure and stability analysis of biocompatible hydroxyapatite reinforced chitosan nanocomposite. <b>2018</b> , 39, E573-E583	3
505	Commercial Products for Osteochondral Tissue Repair and Regeneration. <b>2018</b> , 1058, 415-428	10
504	Recent studies on electrospinning preparation of patterned, core-shell, and aligned scaffolds. <b>2018</b> , 135, 46570	17
503	Advances in osteobiologic materials for bone substitutes. <b>2018</b> , 12, 1448-1468	67
502	Bioactive composite scaffolds of carboxymethyl chitosan-silk fibroin containing chitosan nanoparticles for sustained release of ascorbic acid. <b>2018</b> , 103, 40-50	19
501	Bioactive glass sol as a dual function additive for chitosan-alginate hybrid scaffold. <b>2018</b> , 29, 395-398	10
500	Recent advances and remaining challenges for polymeric nanocomposites in healthcare applications. <b>2018</b> , 80, 1-38	113
499	Characterization and swelling-deswelling properties of porous superabsorbent hydrogel membranes made of PVA and Ziziphus spina-christi fibers reinforced with nanosilica manufactured by compression moulding process. <b>2018</b> , 75, 4977-4997	13

- 498 Collagenous matrix supported by a 3D-printed scaffold for osteogenic differentiation of dental pulp cells. **2018**, 34, 209-220 16
- 497 Scaffold-Based microRNA Therapies in Regenerative Medicine and Cancer. **2018**, 7, 1700695 40
- 496 Biomimetic Ion-Substituted Calcium Phosphates. **2018**, 333-353
- 495 Novel fluoridated silk fibroin/ TiO nanocomposite scaffolds for bone tissue engineering. **2018**, 82, 265-276 27
- 494 Synthesis and characterization of mechanically strong carboxymethyl cellulose/gelatin/hydroxyapatite nanocomposite for load-bearing orthopedic application. **2018**, 53, 230-246 20
- 493 In situ silica nanoparticles-reinforced biodegradable poly(citrate-siloxane) hybrid elastomers with multifunctional properties for simultaneous bioimaging and bone tissue regeneration. **2018**, 10, 153-163 28
- 492 Biomimetic Domain-Active Electrospun Scaffolds Facilitating Bone Regeneration Synergistically with Antibacterial Efficacy for Bone Defects. **2018**, 10, 3248-3259 38
- 491 The Role of Nanomechanics in Healthcare. **2018**, 7, 1700793 12
- 490 Preparation of dexamethasone-loaded biphasic calcium phosphate nanoparticles/collagen porous composite scaffolds for bone tissue engineering. **2018**, 67, 341-353 80
- 489 Microencapsulation of Color and Flavor in Confectionery Products. **2018**, 457-494 3
- 488 Design Redox-Sensitive Drug-Loaded Nanofibers for Bone Reconstruction. **2018**, 4, 240-247 22
- 487 Involvement of FAK-mediated BMP-2/Smad pathway in mediating osteoblast adhesion and differentiation on nano-HA/chitosan composite coated titanium implant under diabetic conditions. **2017**, 6, 225-238 30
- 486 Human acellular amniotic membrane: A potential osteoinductive biomaterial for bone regeneration. **2018**, 32, 754-764 19
- 485 Rational design of a high-strength bone scaffold platform based on in situ hybridization of bacterial cellulose/nano-hydroxyapatite framework and silk fibroin reinforcing phase. **2018**, 29, 107-124 15
- 484 Comparative hydrothermal synthesis of hydroxyapatite by using cetyltrimethylammonium bromide and hexamethylenetetramine as additives. **2018**, 44, 3658-3663 20
- 483 Synthesis of Film Nanocomposites under Laser Ablation and Drift Embedding of Nanoparticles into Polymer in Supercritical Carbon Dioxide. **2018**, 12, 1160-1165 5
- 482 Magnetothermal heating facilitates the cryogenic recovery of stem cell-laden alginate-FeO nanocomposite hydrogels. **2018**, 6, 3139-3151 14
- 481 A resilient and flexible chitosan/silk cryogel incorporated Ag/Sr co-doped nanoscale hydroxyapatite for osteoinductivity and antibacterial properties. **2018**, 6, 7427-7438 29

480	Synergistic combination of bioactive glasses and polymers for enhanced bone tissue regeneration. <b>2018</b> , 5, 15532-15539	21
479	Biomaterials for Regenerative Medicine: Historical Perspectives and Current Trends. <b>2018</b> , 1119, 1-19	10
478	Engineered Nanoparticles: Are They an Inestimable Achievement or a Health and Environmental Concern?. <b>2018</b> , 183-212	3
477	Poly(EAmino Esters): Synthesis, Formulations, and Their Biomedical Applications. <b>2019</b> , 8, e1801359	35
476	Aspartic and Glutamic Acid Templated Peptides Conjugation on Plasma Modified Nanofibers for Osteogenic Differentiation of Human Mesenchymal Stem Cells: A Comparative Study. <b>2018</b> , 8, 17620	16
475	Interactions of bioactive molecules with thin dendritic glycopolymer layers. <b>2018</b> , 13, 06D405	3
474	3D-printed scaffolds of mesoporous bioglass/gliadin/polycaprolactone ternary composite for enhancement of compressive strength, degradability, cell responses and new bone tissue ingrowth. <b>2018</b> , 13, 5433-5447	31
473	Porous Inorganic Carriers Based on Silica, Calcium Carbonate and Calcium Phosphate for Controlled/Modulated Drug Delivery: Fresh Outlook and Future Perspectives. <b>2018</b> , 10,	66
472	Interpenetrating network gelatin methacryloyl (GelMA) and pectin-g-PCL hydrogels with tunable properties for tissue engineering. <b>2018</b> , 6, 2938-2950	51
471	Mixed Peptide-Conjugated Chitosan Matrices as Multi-Receptor Targeted Cell-Adhesive Scaffolds. <b>2018</b> , 19,	11
470	The apatite forming ability of micro- and nanocomposites of Tricalcium phosphate/poly (D,L-lactide-co-glycolide). <b>2018</b> , 33, 803-809	1
469	Bioglass-Incorporated Methacrylated Gelatin Cryogel for Regeneration of Bone Defects. <b>2018</b> , 10,	36
468	Development of 3D scaffolds using nanochitosan/silk-fibroin/hyaluronic acid biomaterials for tissue engineering applications. <b>2018</b> , 120, 876-885	25
467	Electrospun poly (butylene succinate)/cellulose nanocrystals bio-nanocomposite scaffolds for tissue engineering: Preparation, characterization and in vitro evaluation. <b>2018</b> , 71, 101-109	57
466	Biologically inspired, catechol-coordinated, hierarchical organization of raspberry-like calcium phosphate nanospheres with high specific surface area. <b>2018</b> , 6, 3811-3819	13
465	Process-Driven Microstructure Control in Melt-Extrusion-Based 3D Printing for Tailorable Mechanical Properties in a Polycaprolactone Filament. <b>2018</b> , 303, 1800173	16
464	Biopolymers for Antitumor Implantable Drug Delivery Systems: Recent Advances and Future Outlook. <i>Advanced Materials</i> , <b>2018</b> , 30, e1706665	24 109
463	Nanocomposite scaffolds for tissue engineering; properties, preparation and applications. <b>2018</b> , 701-735	14

462	Synthesis, Characterization and Biocompatibility of Mesolamellar Calcium Phosphate Hybrids Prepared by Anionic Surfactant Templating. <b>2018</b> , 3, 6880-6891	2
461	Nanocomposite for transdermal drug delivery. <b>2018</b> , 353-389	6
460	Development of Organic/Inorganic Compatible and Sustainably Bioactive Composites for Effective Bone Regeneration. <b>2018</b> , 19, 3637-3648	34
459	Ceramic biomaterials for tissue engineering. <b>2018</b> , 95-116	4
458	Loading of Antibiotic into Biocoated Hydroxyapatite Nanoparticles: Smart Antitumor Platforms with Regulated Release. <b>2018</b> , 4, 3234-3245	18
457	Nanostructured biocompatible ceramics and glass-ceramics. <b>2018</b> , 97-118	1
456	PHBV wet-spun scaffold coated with ELR-REDV improves vascularization for bone tissue engineering. <b>2018</b> , 13, 055010	14
455	Protein-Based Fiber Materials in Medicine: A Review. <b>2018</b> , 8,	76
454	Engineered nanomaterials and human health: Part 2. Applications and nanotoxicology (IUPAC Technical Report). <b>2018</b> , 90, 1325-1356	17
453	Preparation of Icarin and Deferoxamine Functionalized Poly(l-lactide)/chitosan Micro/Nanofibrous Membranes with Synergistic Enhanced Osteogenesis and Angiogenesis.. <b>2018</b> , 1, 389-402	10
452	Thai silk fibroin gelation process enhancing by monohydric and polyhydric alcohols. <b>2018</b> , 118, 1726-1735	21
451	New approach for immobilization of 3-aminopropyltrimethoxysilane and TiO nanoparticles into cellulose for BJ1 skin cells proliferation. <b>2018</b> , 199, 193-204	11
450	Models of Disease. <b>2018</b> , 1059, 331-350	2
449	Multidrug-eluting bi-layered microparticle-mesh scaffolds for musculoskeletal tissue regeneration. <b>2018</b> , 6, 3340-3347	4
448	Advanced Materials for Capturing Particulate Matter: Progress and Perspectives. <b>2018</b> , 2, 1800012	52
447	Nanoparticles-Based Systems for Osteochondral Tissue Engineering. <b>2018</b> , 1059, 209-217	5
446	Bisphosphonate Functionalized Gadolinium Oxide Nanoparticles Allow Long-Term MRI/CT Multimodal Imaging of Calcium Phosphate Bone Cement. <b>2018</b> , 7, e1800202	15
445	Fabrication of heterogeneous porous bilayered nanofibrous vascular grafts by two-step phase separation technique. <b>2018</b> , 79, 168-181	34

444	Development of novel h-BNNS/PVA porous membranes via Pickering emulsion templating. <b>2018</b> , 20, 4319-4329	32
443	Nanoporous diopside modulates biocompatibility, degradability and osteogenesis of bioactive scaffolds of gliadin-based composites for new bone formation. <b>2018</b> , 13, 3883-3896	13
442	Embryonic-Like Mineralized Extracellular Matrix/Stem Cell Microspheroids as a Bone Graft Substitute. <b>2018</b> , 7, e1800705	6
441	Zinc-Modified Sulfonated Polyetheretherketone Surface with Immunomodulatory Function for Guiding Cell Fate and Bone Regeneration. <b>2018</b> , 5, 1800749	102
440	Poly-albumen: Bio-derived structural polymer from polymerized egg white. <b>2018</b> , 9, 73-79	6
439	Self-assembled sponge-like hydroxyapatite induced by modified articular cartilage membrane template. <b>2018</b> , 44, 16400-16406	4
438	POLYMERIC BIOMATERIALS FOR SCAFFOLD-BASED BONE REGENERATIVE ENGINEERING. <b>2019</b> , 5, 128-154	56
437	Natural Origin Materials for Bone Tissue Engineering: Properties, Processing, and Performance. <b>2019</b> , 535-558	5
436	Exosomes derived from miR-375-overexpressing human adipose mesenchymal stem cells promote bone regeneration. <b>2019</b> , 52, e12669	113
435	Development of chitosan/gelatin hydrogels incorporation of biphasic calcium phosphate nanoparticles for bone tissue engineering. <b>2019</b> , 30, 1636-1657	26
434	Nanocellulose/bioactive glass cryogels as scaffolds for bone regeneration. <b>2019</b> , 11, 19842-19849	51
433	Functions of hydroxyapatite in fabricating N-doped carbon for excellent catalysts and supercapacitors. <b>2019</b> , 9, 4952-4960	8
432	Pharmaceutical applications of natural polysaccharides. <b>2019</b> , 15-57	11
431	Marine polysaccharides for drug delivery in tissue engineering. <b>2019</b> , 513-530	4
430	Encapsulating doxorubicin-intercalated lamellar nanohydroxyapatite into PLGA nanofibers for sustained drug release. <b>2019</b> , 19, 1204-1210	9
429	A comparative study on agarose acetate and PDLLA scaffold for rabbit femur defect regeneration. <b>2019</b> , 14, 065007	1
428	The Role of Electrospun Fiber Scaffolds in Stem Cell Therapy for Skin Tissue Regeneration. <b>2019</b> , 4, e190002	12
427	Magnetoelectric 3D scaffolds for enhanced bone cell proliferation. <b>2019</b> , 16, 290-300	24

426	Bioinspired surface modification of orthopedic implants for bone tissue engineering. <b>2019</b> , 219, 119366		113
425	Further Example of Diphosphates: Synthesis and Characterization of K <sub>2</sub> Li <sub>2</sub> P <sub>2</sub> O <sub>7</sub> . <b>2019</b> , 645, 944-948		1
424	Biomimetic Nanosilica-Collagen Scaffolds for In Situ Bone Regeneration: Toward a Cell-Free, One-Step Surgery. <i>Advanced Materials</i> , <b>2019</b> , 31, e1904341	24	73
423	Synthesis and Characterization of pH-sensitive Poly(IA-co-AAc-co-AAm) Hydrogels via Frontal Polymerization. <b>2019</b> , 57, 2214-2221		3
422	Recent advances in functional nanostructured materials for bone-related diseases. <b>2019</b> , 7, 509-527		15
421	Biomedical Applications of Nanoparticles. <b>2019</b> , 113-132		10
420	Effects of calcium concentration on nonviral gene delivery to bone marrow-derived stem cells. <b>2019</b> , 13, 2256-2265		4
419	Bioinspired Three-Dimensional Magnetoactive Scaffolds for Bone Tissue Engineering. <b>2019</b> , 11, 45265-45275		56
418	Biodegradable polymer nanocomposites for tissue engineering: synthetic strategies and related applications. <b>2019</b> , 157-198		1
417	Nanoscale Technologies for Prevention and Treatment of Heart Failure: Challenges and Opportunities. <b>2019</b> , 119, 11352-11390		24
416	Deformable Biomaterials Based on Ultralong Hydroxyapatite Nanowires. <b>2019</b> , 5, 4951-4961		9
415	Space-Oriented Nanofibrous Scaffold with Silicon-Doped Amorphous Calcium Phosphate Nanocoating for Diabetic Wound Healing.. <b>2019</b> , 2, 787-795		16
414	Nanocomposite materials in orthopedic applications. <b>2019</b> , 13, 1-13		13
413	Fabrication of biocomposite scaffolds made with modified hydroxyapatite inclusion of chitosan-grafted-poly(methyl methacrylate) for bone tissue engineering. <b>2019</b> , 14, 025013		7
412	Thermodynamically Controlled Self-Assembly of Hierarchically Staggered Architecture as an Osteoinductive Alternative to Bone Autografts. <b>2019</b> , 29, 1806445		25
411	Biomedical Applications of Hydroxyapatite Nanocomposites. <b>2019</b> , 167-204		3
410	Biomaterial-assisted local and systemic delivery of bioactive agents for bone repair. <b>2019</b> , 93, 152-168		38
409	Self-mineralizing Ca-enriched methacrylated gellan gum beads for bone tissue engineering. <b>2019</b> , 93, 74-85		39

408	Enhanced bone regeneration of the silk fibroin electrospun scaffolds through the modification of the graphene oxide functionalized by BMP-2 peptide. <b>2019</b> , 14, 733-751	55
407	Synthesis and characterization of methylammonium phosphates as crystalline approximants for anhydrous, low melting phosphate glasses.. <b>2019</b> , 9, 1822-1830	0
406	Injectable Chitosan Scaffolds with Calcium $\beta$ -Glycerophosphate as the Only Neutralizing Agent. <b>2019</b> , 7, 297	3
405	Tunable Hybrid Biopolymeric Hydrogel Scaffolds Based on Atomic Force Microscopy Characterizations for Tissue Engineering. <b>2019</b> , 18, 597-610	5
404	imaging techniques for bone tissue engineering. <b>2019</b> , 10, 2041731419854586	20
403	Tissue engineering scaffolds: future perspectives. <b>2019</b> , 165-185	5
402	A porous collagen-carboxymethyl cellulose/hydroxyapatite composite for bone tissue engineering by bi-molecular template method. <b>2019</b> , 137, 45-53	23
401	Boxception: Impact Resistance Structure Using 3D Printing. <b>2019</b> , 21, 1900167	6
400	Bioinspired extracellular vesicles embedded with black phosphorus for molecular recognition-guided biomineralization. <b>2019</b> , 10, 2829	68
399	Polysaccharide-based Scaffolds for Bone Marrow Regeneration: Recent Work and Commercial Utility (Patent). <b>2019</b> , 4, 29-35	4
398	Oxidative Destruction of Chitosan and Its Stability. <b>2019</b> , 61, 189-199	1
397	Self-Healing Hydrogels: The Next Paradigm Shift in Tissue Engineering?. <b>2019</b> , 6, 1801664	160
396	Enhanced bone regeneration capability of chitosan sponge coated with TiO nanoparticles. <b>2019</b> , 24, e00350	24
395	Production and Characterization of Porous Polymeric Membranes of PLA/PCL Blends with the Addition of Hydroxyapatite. <b>2019</b> , 3, 45	14
394	Sulfated polysaccharide-based scaffolds for orthopaedic tissue engineering. <b>2019</b> , 214, 119214	58
393	Preparation and characterization of dithiol-modified graphene oxide nanosheets reinforced alginate nanocomposite as bone scaffold. <b>2019</b> , 1, 1	14
392	Fish Collagen and Hydroxyapatite Reinforced Poly(lactide- co-glycolide) Fibrous Membrane for Guided Bone Regeneration. <b>2019</b> , 20, 2058-2067	44
391	Ultrasonication-Induced Modification of Hydroxyapatite Nanoparticles onto a 3D Porous Poly(lactic acid) Scaffold with Improved Mechanical Properties and Biocompatibility. <b>2019</b> , 304, 1900081	8

- 390 Facile preparation of bioactive nanoparticle/poly( $\epsilon$ -caprolactone) hierarchical porous scaffolds via 3D printing of high internal phase Pickering emulsions. **2019**, 545, 104-115 51
- 389 Supramolecular assembly of tetronic $\beta$ -damantane and poly( $\beta$ -cyclodextrin) as injectable shear-thinning hydrogels. **2019**, 7, 3374-3382 22
- 388 Robust methylcellulose hydrogels reinforced with chitin nanocrystals. **2019**, 213, 311-319 18
- 387 Egg source natural proteins LBL modified cellulose nanofibrous mats and their cellular compatibility. **2019**, 213, 329-337 14
- 386 Bioprinting a Synthetic Smectic Clay for Orthopedic Applications. **2019**, 8, e1900158 22
- 385 La-Doped biomimetic scaffolds facilitate bone remodelling by synchronizing osteointegration and phagocytic activity of macrophages. **2019**, 7, 3066-3074 13
- 384 Sinapic acid-loaded chitosan nanoparticles in polycaprolactone electrospun fibers for bone regeneration in vitro and in vivo. **2019**, 216, 1-16 43
- 383 Modification of 3-D Porous Hydroxyapatite/Thermoplastic Polyurethane Composite Scaffolds for Reinforcing Interfacial Adhesion by Polydopamine Surface Coating. **2019**, 4, 6382-6391 15
- 382 Fabrication of Bone Scaffolds from Cockle Shell Waste. **2019**, 42, 1757-1763 1
- 381 Tunable nonenzymatic degradability of  $\alpha$ -substituted polyaspartamide main chain by amine protonation and alkyl spacer length in side chains for enhanced messenger RNA transfection efficiency. **2019**, 20, 105-115 9
- 380 A Safe-by-Design Strategy towards Safer Nanomaterials in Nanomedicines. *Advanced Materials*, **2019**, 31, e1805391 24 70
- 379 Mesoporous silica/organosilica nanoparticles: Synthesis, biological effect and biomedical application. **2019**, 137, 66-105 74
- 378 Impact of Nanoparticle Shape, Size, and Properties of Silver Nanocomposites and Their Applications. **2019**, 1067-1091 5
- 377 In vitro evaluation of barium titanate nanoparticle/alginate 3D scaffold for osteogenic human stem cell differentiation. **2019**, 14, 035011 9
- 376 Toxicological Evaluations of Nanocomposites with Special Reference to Cancer Therapy. **2019**, 1093-1119
- 375 Natural polymers for bone repair. **2019**, 199-232 5
- 374 Poly(L-Lactide) Bionanocomposites. **2019**,
- 373 Degradation versus resorption. **2019**, 1-18



372	High-performance porous PLLA-based scaffolds for bone tissue engineering: Preparation, characterization, and in vitro and in vivo evaluation. <b>2019</b> , 180, 121707	55
371	Three-dimensional (3D) printing based on controlled melt electrospinning in polymeric biomedical materials. <b>2019</b> , 159-172	
370	Direct 3D printing of a tough hydrogel incorporated with carbon nanotubes for bone regeneration. <b>2019</b> , 7, 7207-7217	35
369	Biological Role of Gellan Gum in Improving Scaffold Drug Delivery, Cell Adhesion Properties for Tissue Engineering Applications. <b>2019</b> , 24,	29
368	Poly(Dopamine) Coating on 3D-Printed Poly-Lactic-Co-Glycolic Acid/Tricalcium Phosphate Scaffolds for Bone Tissue Engineering. <b>2019</b> , 24,	22
367	PLA-Collagen Composite Scaffold Fabrication by Vacuum Pressure Impregnation. <b>2019</b> , 25, 742-747	5
366	Sustainable Nanostructural Materials for Tissue Engineering. <b>2019</b> , 75-100	
365	One-step fabrication of apatite-chitosan scaffold as a potential injectable construct for bone tissue engineering. <b>2019</b> , 203, 60-70	29
364	The innovative fabrication and applications of carvacrol nanoemulsions, carboxymethyl chitosan microgels and their composite films. <b>2019</b> , 175, 688-696	29
363	Microfluidic-enabled bottom-up hydrogels from annealable naturally-derived protein microbeads. <b>2019</b> , 192, 560-568	61
362	Enhanced Osteogenesis of Bone Marrow-Derived Mesenchymal Stem Cells by a Functionalized Silk Fibroin Hydrogel for Bone Defect Repair. <b>2019</b> , 8, e1801043	36
361	Dextran-based hydrogel with enhanced mechanical performance via covalent and non-covalent cross-linking units carrying adipose-derived stem cells toward vascularized bone tissue engineering. <b>2019</b> , 107, 1120-1131	7
360	Novel Hierarchical Nitrogen-Doped Multiwalled Carbon Nanotubes/Cellulose/Nanohydroxyapatite Nanocomposite As an Osteoinductive Scaffold for Enhancing Bone Regeneration. <b>2019</b> , 5, 294-307	18
359	Investigation of morphological, mechanical and biological properties of cellulose nanocrystal reinforced electrospun gelatin nanofibers. <b>2019</b> , 124, 411-417	42
358	Osteoconductive 3D porous composite scaffold from regenerated cellulose and cuttlebone-derived hydroxyapatite. <b>2019</b> , 33, 876-890	9
357	Ultrafast bone-like apatite formation on bioactive tricalcium silicate cement using mussel-inspired polydopamine. <b>2019</b> , 45, 3033-3043	13
356	Osteoinductivity of Porous Biphasic Calcium Phosphate Ceramic Spheres with Nanocrystalline and Their Efficacy in Guiding Bone Regeneration. <b>2019</b> , 11, 3722-3736	36
355	Development of 3D-printed PLGA/TiO nanocomposite scaffolds for bone tissue engineering applications. <b>2019</b> , 96, 105-113	72

354	Biodegradable polymer matrix nanocomposites for bone tissue engineering. <b>2019</b> , 1-37	19
353	Tuning the properties of magnesium phosphate-based bone cements: Effect of powder to liquid ratio and aqueous solution concentration. <b>2019</b> , 95, 248-255	15
352	Hybrid polymer biomaterials for bone tissue regeneration. <b>2019</b> , 13, 189-201	43
351	Characterisation and swelling/ deswelling properties of superabsorbent membranes made of PVA and cellulose nanocrystals. <b>2019</b> , 76, 118-135	9
350	Manufacturing of superabsorbent membranes of PVA and rice husk fibres reinforced with nanosilica for agricultural and horticultural applications. <b>2019</b> , 76, 150-167	1
349	Nanoengineered biomaterials for bone/dental regeneration. <b>2019</b> , 13-38	3
348	An introduction to bone tissue engineering. <b>2020</b> , 43, 69-86	37
347	Recent advances in the application of mesoporous silica-based nanomaterials for bone tissue engineering. <b>2020</b> , 107, 110267	84
346	Alginate hydrogels for bone tissue engineering, from injectables to bioprinting: A review. <b>2020</b> , 229, 115514	157
345	Biomimetic bioactive multifunctional poly(citrate-siloxane)-based nanofibrous scaffolds enable efficient multidrug-resistant bacterial treatment/non-invasive tracking in vitro/in vivo. <b>2020</b> , 383, 123078	12
344	Dendrite-free cross-link network using bio-inspired ion-conducting membrane. <b>2020</b> , 595, 117519	
343	Silk fibroin/alumina nanoparticle scaffold using for osteogenic differentiation of rabbit adipose-derived stem cells. <b>2020</b> , 9, 100518	12
342	Biom mineralization of poly-l-lactide spongy bone scaffolds obtained by freeze-extraction method. <b>2020</b> , 108, 868-879	6
341	Stimuliresponsive, auf Biomoleklen basierende Hydrogele und ihre Anwendungen. <b>2020</b> , 132, 15458-15496	10
340	Electroactive composite scaffold with locally expressed osteoinductive factor for synergistic bone repair upon electrical stimulation. <b>2020</b> , 230, 119617	100
339	Preparation and physicochemical properties of an injectable alginate-based hydrogel by the regulated release of divalent ions via the hydrolysis of d-glucono-lactone. <b>2020</b> , 34, 891-901	0
338	A method to visually observe the degradation-diffusion-reconstruction behavior of hydroxyapatite in the bone repair process. <b>2020</b> , 101, 554-564	13
337	Stimuli-Responsive Biomolecule-Based Hydrogels and Their Applications. <b>2020</b> , 59, 15342-15377	110

336	In vitro and in vivo biocompatibility assessment of free radical scavenging nanocomposite scaffolds for bone tissue regeneration. <b>2020</b> , 108, 301-315	12
335	Collagen/bioceramic-based composite bioink to fabricate a porous 3D hASCs-laden structure for bone tissue regeneration. <b>2019</b> , 12, 015007	37
334	Influence of silk fibroin/sodium alginate coatings on the mineralization of silk fibroin fiber artificial ligament prototypes. <b>2020</b> , 90, 1590-1601	3
333	Terminal Group Modification of Carbon Nanotubes Determines Covalently Bound Osteogenic Peptide Performance. <b>2020</b> , 6, 865-878	5
332	Gene Delivering Alginate/Galactosylated Chitosan Sponge Scaffold for Three-Dimensional Coculture of Hepatocytes/3T3 Cells. <b>2020</b> , 39, 451-458	3
331	Nanotechnology Scaffolds for Alveolar Bone Regeneration. <b>2020</b> , 13,	33
330	Polymeric nanocomposites reinforced with nanowhiskers: Design, development, and emerging applications. <b>2020</b> , 36, 312-333	6
329	Progress on particulate matter filtration technology: basic concepts, advanced materials, and performances. <b>2020</b> , 12, 437-453	61
328	A novel multifunctional carbon aerogel-coated platform for osteosarcoma therapy and enhanced bone regeneration. <b>2020</b> , 8, 368-379	30
327	Recent advances in tough and self-healing nanocomposite hydrogels for shape morphing and soft actuators. <b>2020</b> , 124, 109448	19
326	Organization of liver organoids using Raschig ring-like micro-scaffolds and triple co-culture: Toward modular assembly-based scalable liver tissue engineering. <b>2020</b> , 76, 69-78	6
325	Bioinspired Mineral/Organic Bone Adhesives for Stable Fracture Fixation and Accelerated Bone Regeneration. <b>2020</b> , 30, 1908381	58
324	A biomimetic nano-hydroxyapatite/chitosan/poly(methyl vinyl ether-alt-maleic anhydride) composite with excellent biocompatibility. <b>2020</b> , 261, 127102	3
323	Preparation and properties of biomimetic hydroxyapatite-based nanocomposite utilizing bamboo fiber. <b>2020</b> , 27, 2069-2083	3
322	Bioinspired materials and tissue engineering approaches applied to the regeneration of musculoskeletal tissues. <b>2020</b> , 73-105	
321	Therapeutic "Tool" in Reconstruction and Regeneration of Tissue Engineering for Osteochondral Repair. <b>2020</b> , 191, 785-809	8
320	Nanotextured silk fibroin/hydroxyapatite biomimetic bilayer tough structure regulated osteogenic/chondrogenic differentiation of mesenchymal stem cells for osteochondral repair. <b>2020</b> , 53, e12917	9
319	Transglutaminase release and activity from novel poly( $\epsilon$ -caprolactone)-based composites prepared by foaming with supercritical CO <sub>2</sub> . <b>2020</b> , 166, 105031	3

318	Porous Gelatin Membranes Obtained from Pickering Emulsions Stabilized with h-BNNS: Application for Polyelectrolyte-Enhanced Ultrafiltration. <b>2020</b> , 10,	1
317	Three-Dimensional Electrodeposition of Calcium Phosphates on Porous Nanofibrous Scaffolds and Their Controlled Release of Calcium for Bone Regeneration. <b>2020</b> , 12, 32503-32513	12
316	Advances in Biodegradable 3D Printed Scaffolds with Carbon-Based Nanomaterials for Bone Regeneration. <b>2020</b> , 13,	11
315	Chitosan Composite Biomaterials for Bone Tissue Engineering Review. <b>2020</b> , 1	5
314	Development and evaluation of Chondroitin sulfate based polymeric hybrid nanocomposite scaffolds for bone tissue engineering.. <b>2020</b> , 10, 40529-40542	25
313	Biodegradable materials for bone defect repair. <b>2020</b> , 7, 54	27
312	Integrated design and fabrication strategies for biomechanically and biologically functional PLA/β-TCP nanofiber reinforced GelMA scaffold for tissue engineering applications. <b>2020</b> , 164, 976-985	9
311	ZIF-8-Modified Multifunctional Bone-Adhesive Hydrogels Promoting Angiogenesis and Osteogenesis for Bone Regeneration. <b>2020</b> , 12, 36978-36995	33
310	Temperature-responsive chromatography for bioseparations: A review. <b>2020</b> , 1138, 191-212	10
309	Bottom-Up Self-assembled Hydrogel-Mineral Composites Regenerate Rabbit Ulna Defect without Added Growth Factors.. <b>2020</b> , 3, 5652-5663	1
308	In vitro Apatite Mineralization, Degradability, Cytocompatibility and in vivo New Bone Formation and Vascularization of Bioactive Scaffold of Polybutylene Succinate/Magnesium Phosphate/Wheat Protein Ternary Composite. <b>2020</b> , 15, 7279-7295	7
307	Poly (β-amino esters) based potential drug delivery and targeting polymer; an overview and perspectives (review). <b>2020</b> , 141, 110097	8
306	Fabrication and characterization of three-dimensional porous cornstarch/n-HAp biocomposite scaffold. <b>2020</b> , 43, 1	4
305	Inspired by nature: facile design of nanoclay-organic hydrogel bone sealant with multifunctional properties for robust bone regeneration. <b>2020</b> , 30, 2003717	28
304	ZnO/Nanocarbons-Modified Fibrous Scaffolds for Stem Cell-Based Osteogenic Differentiation. <b>2020</b> , 16, e2003010	28
303	The Intersection of Mechanotransduction and Regenerative Osteogenic Materials. <b>2020</b> , 9, e2000709	5
302	An insight into cell-laden 3D-printed constructs for bone tissue engineering. <b>2020</b> , 8, 9836-9862	10
301	Chitin-Based Double-Network Hydrogel as Potential Superficial Soft-Tissue-Repairing Materials. <b>2020</b> , 21, 4220-4230	10

300	Nanomaterial-based scaffolds for bone tissue engineering and regeneration. <b>2020</b> , 15, 1995-2017	15
299	Influence of Hydroxyapatite Nanoparticles and Surface Plasma Treatment on Bioactivity of Polycaprolactone Nanofibers. <b>2020</b> , 12,	6
298	Natural-Based Hydrogels for Tissue Engineering Applications. <b>2020</b> , 25,	22
297	Injectable hydrogels based on gellan gum promotes in situ mineralization and potential osteogenesis. <b>2020</b> , 141, 110091	3
296	Biocompatible in situ-forming glycopolypeptide hydrogels. <b>2020</b> , 63, 992-1004	4
295	Antibacterial, drug delivery, and osteoinduction abilities of bioglass/chitosan scaffolds for dental applications. <b>2020</b> , 57, 101757	11
294	A study on bone tissue engineering: Injectable chitosan-g-stearic acid putty. <b>2020</b> , 28, 227-239	2
293	Bioinspired Fabrication of Calcium-Doped TiP Coating with Nanofibrous Microstructure to Accelerate Osseointegration. <b>2020</b> , 31, 1641-1650	7
292	Adjuvant Drug-Assisted Bone Healing: Advances and Challenges in Drug Delivery Approaches. <b>2020</b> , 12,	13
291	Bio-Based Antimicrobial Ionic Materials Fully Composed of Natural Products for Elevated Air Purification. <b>2020</b> , 4, 2000046	2
290	Improved efficacy of bio-mineralization of human mesenchymal stem cells on modified PLLA nanofibers coated with bioactive materials via enhanced expression of integrin $\alpha 1$ . <b>2020</b> , 31, 2325	0
289	Calcium alendronate-coated composite scaffolds promote osteogenesis of ADSCs via integrin and FAK/ERK signalling pathways. <b>2020</b> , 8, 6912-6924	4
288	Metal OxideBased Nanocomposites as Antimicrobial and Biomedical Agents. <b>2020</b> , 287-323	6
287	Lignin-Based Micro- and Nanomaterials and their Composites in Biomedical Applications. <b>2020</b> , 13, 4266-4283	52
286	Factors Influencing the Interactions in Gelatin/Hydroxyapatite Hybrid Materials. <b>2020</b> , 8, 489	0
285	Mineralized DNA-collagen complex-based biomaterials for bone tissue engineering. <b>2020</b> , 161, 1127-1139	7
284	Engineered macroporous hydrogel scaffolds via pickering emulsions stabilized by MgO nanoparticles promote bone regeneration. <b>2020</b> , 8, 6100-6114	7
283	A comprehensive review on polymeric hydrogel and its composite: Matrices of choice for bone and cartilage tissue engineering. <b>2020</b> , 89, 58-82	20

282	Tracking the interaction of drug molecules with individual mesoporous amorphous calcium phosphate/ATP nanocomposites - an X-ray spectromicroscopy study. <b>2020</b> , 22, 13108-13117	1
281	Nanopatterned silk-coated AZ31 magnesium alloy with enhanced antibacterial and corrosion properties. <b>2020</b> , 116, 111173	8
280	Recent progress in the development of nanocomposite membranes. <b>2020</b> , 29-67	3
279	Ultrasound-assisted synthesis of nanocrystallized silicocarnotite biomaterial with improved sinterability and osteogenic activity. <b>2020</b> , 8, 3092-3103	4
278	Role of active nanoliposomes in the surface and bulk mechanical properties of hybrid hydrogels. <b>2020</b> , 6, 100046	11
277	Effects of Nanofillers on the Hydrolytic Degradation of Polyesters. <b>2020</b> , 26, 484-495	4
276	Biomaterial-Based Scaffolds as Antibacterial Suture Materials. <b>2020</b> , 6, 3154-3161	8
275	Osteogenic, Angiogenic, and Antibacterial Bioactive Nano-Hydroxyapatite Co-Synthesized Using EPolyglutamic Acid and Copper. <b>2020</b> , 6, 1920-1930	5
274	Efficient mineralization and osteogenic gene overexpression of mesenchymal stem cells on decellularized spinach leaf scaffold. <b>2020</b> , 757, 144852	9
273	Effect of zirconia-mullite incorporated biphasic calcium phosphate/biopolymer composite scaffolds for bone tissue engineering. <b>2020</b> , 6, 055004	
272	Biological responses to physicochemical properties of biomaterial surface. <b>2020</b> , 49, 5178-5224	78
271	Borocarbonitrides nanosheets engineered 3D-printed scaffolds for integrated strategy of osteosarcoma therapy and bone regeneration. <b>2020</b> , 401, 125989	16
270	Natural polymers as constituents of bionanocomposites. <b>2020</b> , 55-85	4
269	Dental Stem Cell-Derived Secretome/Conditioned Medium: The Future for Regenerative Therapeutic Applications. <b>2020</b> , 2020, 7593402	40
268	In Situ Precipitation of Cluster and Acicular Hydroxyapatite onto Porous Poly(Ebenzyl-L-glutamate) Microcarriers for Bone Tissue Engineering. <b>2020</b> , 12, 12468-12477	12
267	Minimally invasive implantation and decreased inflammation reduce osteoinduction of biomaterial. <b>2020</b> , 10, 3533-3545	8
266	Three-dimensional porous composite scaffolds for in vitro marrow microenvironment simulation to screen leukemia drug. <b>2020</b> , 15, 035016	3
265	3D printing of hydrogels: Rational design strategies and emerging biomedical applications. <b>2020</b> , 140, 100543	241

264	Self-Assemblable Polymer Smart-Blocks for Temperature-Induced Injectable Hydrogel in Biomedical Applications. <b>2020</b> , 8, 19	20
263	Phosphorylated Chitosan Hydrogels Inducing Osteogenic Differentiation of Osteoblasts via JNK and p38 Signaling Pathways. <b>2020</b> , 6, 1500-1509	13
262	Accelerating bone defects healing in calvarial defect model using 3D cultured bone marrow-derived mesenchymal stem cells on demineralized bone particle scaffold. <b>2020</b> , 14, 563-574	
261	Nanomaterials for Angiogenesis in Skin Tissue Engineering. <b>2020</b> , 26, 203-216	23
260	Mineralization of ytterbium-doped hydroxyapatite nanorod arrays in magnetic chitosan scaffolds improves osteogenic and angiogenic abilities for bone defect healing. <b>2020</b> , 387, 124166	25
259	Gelatin Nanoparticle-Injectable Platelet-Rich Fibrin Double Network Hydrogels with Local Adaptability and Bioactivity for Enhanced Osteogenesis. <b>2020</b> , 9, e1901469	26
258	Recent trends in the application of widely used natural and synthetic polymer nanocomposites in bone tissue regeneration. <b>2020</b> , 110, 110698	160
257	Polyhedral Oligomeric Silsesquioxane-Incorporated Gelatin Hydrogel Promotes Angiogenesis during Vascularized Bone Regeneration. <b>2020</b> , 12, 22410-22425	32
256	Electrophoretic processing of chitosan based composite scaffolds with Nb-doped bioactive glass for bone tissue regeneration. <b>2020</b> , 31, 43	10
255	Biomaterial-induced microenvironment and host reaction in bone regeneration. <b>2020</b> , 105-181	2
254	Engineering cartilage and other structural tissues: principals of bone and cartilage reconstruction. <b>2020</b> , 979-987	
253	Robust and nanostructured chitosan-silica hybrids for bone repair application. <b>2020</b> , 8, 5042-5051	6
252	3D Printing of Bioinspired Biomaterials for Tissue Regeneration. <b>2020</b> , 9, e2000208	16
251	In vitro and in vivo studies of biaxially electrospun poly(caprolactone)/gelatin nanofibers, reinforced with cellulose nanocrystals, for wound healing applications. <b>2020</b> , 27, 5179-5196	20
250	Macro-Microporous Surface with Sulfonic Acid Groups and Micro-Nano Structures of PEEK/Nano Magnesium Silicate Composite Exhibiting Antibacterial Activity and Inducing Cell Responses. <b>2020</b> , 15, 2403-2417	2
249	Biologically Inspired Collagen/Apatite Composite Biomaterials for Potential Use in Bone Tissue Regeneration-A Review. <b>2020</b> , 13,	28
248	Neuron-like cell differentiation of hADSCs promoted by a copper sulfide nanostructure mediated plasmonic effect driven by near-infrared light. <b>2020</b> , 12, 9833-9841	4
247	Poly(Caprolactone Fumarate) and Oligo[Poly(Ethylene Glycol) Fumarate]: Two Decades of Exploration in Biomedical Applications. <b>2021</b> , 61, 319-356	6

246	Biodegradable antibacterial branched glycerol-polypeptide with efficient in vitro/in vitro miRNA-29b delivery for promoting osteogenic differentiation of stem cells and bone regeneration. <b>2021</b> , 405, 127085	6
245	Reviewing the recent advances in application of pectin for technical and health promotion purposes: From laboratory to market. <b>2021</b> , 254, 117324	27
244	3D-printed bioactive and biodegradable hydrogel scaffolds of alginate/gelatin/cellulose nanocrystals for tissue engineering. <b>2021</b> , 167, 644-658	39
243	Photo-crosslinkable hydrogel and its biological applications. <b>2021</b> , 32, 1603-1614	15
242	Natural and Synthetic Biopolymers in Drug Delivery and Tissue Engineering. <b>2021</b> , 265-356	
241	Regulating surface roughness of electrospun poly( $\epsilon$ -caprolactone)/ $\beta$ -tricalcium phosphate fibers for enhancing bone tissue regeneration. <b>2021</b> , 143, 110201	2
240	A fast on-demand preparation of injectable self-healing nanocomposite hydrogels for efficient osteoinduction. <b>2021</b> , 32, 2159-2163	6
239	A bioinspired mineral-organic composite hydrogel as a self-healable and mechanically robust bone graft for promoting bone regeneration. <b>2021</b> , 413, 127512	7
238	Translational Studies of Nanofibers-Based Scaffold for Skin and Bone Tissue Regeneration. <b>2021</b> , 129-172	
237	Application of polymer nanocomposites in food and bioprocessing industries. <b>2021</b> , 201-236	3
236	Lignin-based materials for drug and gene delivery. <b>2021</b> , 327-370	0
235	PCL-based bionanocomposites in tissue engineering and regenerative medicine. <b>2021</b> , 465-480	
234	Cellulose-based bionanocomposites in tissue engineering and regenerative medicine. <b>2021</b> , 451-463	
233	Biodegradable natural materials in dentistry: fiction or real?. <b>2021</b> , 77-88	
232	Fabrication and characterization of 3D printable nanocellulose-based hydrogels for tissue engineering.. <b>2021</b> , 11, 7466-7478	11
231	Polymer-Based Biomaterials: An Emerging Electrochemical Sensor. <b>2021</b> , 1309-1327	0
230	Living Materials for Regenerative Medicine. <b>2021</b> , 2, 96-104	11
229	Advances in Growth Factor Delivery for Bone Tissue Engineering. <b>2021</b> , 22,	24



228	Polymer Nanocomposite Characterization and Applications. <b>2021</b> , 725-745	1
227	Composites Based on Shape Memory Materials. <b>2021</b> , 603-637	0
226	Bioinspiration and Biomimicry in Lifestyle. <b>2021</b> , 9-29	0
225	Engineering next-generation bioinks with nanoparticles: moving from reinforcement fillers to multifunctional nanoelements. <b>2021</b> , 9, 5025-5038	12
224	A pure molecular drug hydrogel for post-surgical cancer treatment. <b>2021</b> , 265, 120403	11
223	Effect of Hydrothermal Media on the in-situ Whisker Growth on Biphasic Calcium Phosphate Ceramics. <b>2021</b> , 16, 147-159	5
222	Constructing a biomimetic nanocomposite with the deposition of spherical hydroxyapatite nanoparticles to induce bone regeneration. <b>2021</b> , 9, 2469-2482	6
221	Biomaterials for Hard Tissue Engineering: Concepts, Methods, and Applications. <b>2021</b> , 347-380	
220	Dextran and pullulan-based hybrid materials for tissue engineering applications. <b>2021</b> , 131-154	
219	Electrospun fibers based on botanical, seaweed, microbial, and animal sourced biomacromolecules and their multidimensional applications. <b>2021</b> , 171, 130-149	15
218	Bioactive MAO/CS composite coatings on Mg-Zn-Ca alloy for orthopedic applications. <b>2021</b> , 152, 106112	5
217	Peptide-Chitosan Engineered Scaffolds for Biomedical Applications. <b>2021</b> , 32, 448-465	6
216	Applications of Bacterial Cellulose as a Natural Polymer in Tissue Engineering. <b>2021</b> , 67, 709-720	3
215	Fabrication and Characterization of Biodegradable Gelatin Methacrylate/Biphasic Calcium Phosphate Composite Hydrogel for Bone Tissue Engineering. <b>2021</b> , 11,	6
214	Multifunctional SDF-1-loaded hydroxyapatite/polylactic acid membranes promote cell recruitment, immunomodulation, angiogenesis, and osteogenesis for biomimetic bone regeneration. <b>2021</b> , 22, 100942	3
213	Investigations on the poly(hydroxybutyric acid)-based hydrogels containing gold nanoparticles. <b>2021</b> , 26, 381-395	
212	Scaffold Fabrication Technologies and Structure/Function Properties in Bone Tissue Engineering. <b>2021</b> , 31, 2010609	82
211	Investigations of Graphene and Nitrogen-Doped Graphene Enhanced Polycaprolactone 3D Scaffolds for Bone Tissue Engineering. <b>2021</b> , 11,	4

210	A bioactive magnesium phosphate cement incorporating chondroitin sulfate for bone regeneration. <b>2021</b> , 16,	6
209	Triblock Copolymer Bioinks in Hydrogel Three-Dimensional Printing for Regenerative Medicine: A Focus on Pluronic F127. <b>2021</b> ,	5
208	Bioactivity Performance of Pure Mg after Plasma Electrolytic Oxidation in Silicate-Based Solutions. <b>2021</b> , 26,	2
207	An investigation to study the combined effect of different infill pattern and infill density on the impact strength of 3D printed polylactic acid parts. <b>2021</b> , 24, 100605	13
206	Current progress of self-healing polymers for medical applications in tissue engineering. <b>2021</b> , 1	1
205	Combined Analytical Approaches to Standardize and Characterize Biomaterials Formulations: Application to Chitosan-Gelatin Cross-Linked Hydrogels. <b>2021</b> , 11,	3
204	Characterization, in vitro bioactivity and biological studies of sol-gel-derived TiO <sub>2</sub> substituted 58S bioactive glass. <b>2021</b> , 18, 1430-1441	7
203	Construction of Bio-Piezoelectric Platforms: From Structures and Synthesis to Applications. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008452	24 25
202	A Biomimetic Macroporous Hybrid Scaffold with Sustained Drug Delivery for Enhanced Bone Regeneration. <b>2021</b> , 22, 2460-2471	7
201	Human Periodontal Ligament Stem Cells Transplanted with Nanohydroxyapatite/Chitosan/Gelatin 3D Porous Scaffolds Promote Jaw Bone Regeneration in Swine. <b>2021</b> , 30, 548-559	0
200	Recent Trends in the Development of Bone Regenerative Biomaterials. <b>2021</b> , 9, 665813	13
199	Preparation of Alginate-Based Biomaterials and Their Applications in Biomedicine. <b>2021</b> , 19,	43
198	Targeting reactive oxygen species in stem cells for bone therapy. <b>2021</b> , 26, 1226-1244	3
197	High-modulus nanocomposite scaffold based on waterborne polyurethane grafted collagen polypeptide/hydroxyapatite for potential bone healing. <b>2021</b> , 27, 102222	3
196	Structurally Dynamic Hydrogels for Biomedical Applications: Pursuing a Fine Balance between Macroscopic Stability and Microscopic Dynamics. <b>2021</b> , 121, 11149-11193	30
195	Electroactive Biomaterials and Systems for Cell Fate Determination and Tissue Regeneration: Design and Applications. <i>Advanced Materials</i> , <b>2021</b> , 33, e2007429	24 34
194	The influence of process parameters on the impact resistance of 3D printed PLA specimens under water-absorption and heat-treated conditions. <b>2021</b> , 27, 1108-1123	7
193	Natural cellulose-based scaffold for improvement of stem cell osteogenic differentiation. <b>2021</b> , 63, 102453	1

192	Effect of interfacial area on the dielectric properties of ceramic-polymer nanocomposites using coupling agent blended matrix. <b>2021</b> , 32, 17568-17579	0
191	Controlled release of resveratrol from a composite nanofibrous scaffold: Effect of resveratrol on antioxidant activity and osteogenic differentiation. <b>2022</b> , 110, 21-30	5
190	Bioceramic fibrous scaffolds built with calcium silicate/hydroxyapatite nanofibers showing advantages for bone regeneration. <b>2021</b> , 47, 18920-18930	5
189	Porous aligned ZnSr-doped $\beta$ -TCP/silk fibroin scaffolds using ice-templating method for bone tissue engineering applications. <b>2021</b> , 32, 1966-1982	4
188	Bioengineered 3D nanocomposite based on gold nanoparticles and gelatin nanofibers for bone regeneration: in vitro and in vivo study. <b>2021</b> , 11, 13877	15
187	Biopolymers/Ceramic-Based Nanocomposite Scaffolds for Drug Delivery in Bone Tissue Engineering. <b>2022</b> , 337-376	
186	Combining Biocompatible and Biodegradable Scaffolds and Cold Atmospheric Plasma for Chronic Wound Regeneration. <b>2021</b> , 22,	2
185	Physicochemical Interactions in Nanofunctionalized Alginate/GelMA IPN Hydrogels. <b>2021</b> , 11,	0
184	On mechanical properties of nanocomposite hydrogels: Searching for superior properties. <b>2021</b> ,	6
183	Plasma-assisted multiscale topographic scaffolds for soft and hard tissue regeneration. <b>2021</b> , 6, 52	5
182	Additive Manufacturing of Biopolymers for Tissue Engineering and Regenerative Medicine: An Overview, Potential Applications, Advancements, and Trends. <b>2021</b> , 2021, 1-20	24
181	A novel delivery nanobiotechnology: engineered miR-181b exosomes improved osteointegration by regulating macrophage polarization. <b>2021</b> , 19, 269	5
180	In vitro biomineralization and osteogenesis of <i>Cissus quadrangularis</i> stem extracts: An osteogenic regulator for bone tissue engineering. <b>2021</b> , 46, 1	1
179	Preparation and characterization of a dual cross-linking injectable hydrogel based on sodium alginate and chitosan quaternary ammonium salt. <b>2021</b> , 507, 108389	5
178	Osteoblast-derived extracellular matrix coated PLLA/silk fibroin composite nanofibers promote osteogenic differentiation of bone mesenchymal stem cells. <b>2021</b> ,	2
177	Study on the cytocompatibility, mechanical and antimicrobial properties of 3D printed composite scaffolds based on PVA/ Gold nanoparticles (AuNP)/ Ampicillin (AMP) for bone tissue engineering. <b>2021</b> , 28, 102458	3
176	Novel chitosan-poly(vinyl acetate) biomaterial suitable for additive manufacturing and bone tissue engineering applications. 088391152110432	0
175	Visible-Light-Sensitive Triazine-Coated Silica Nanoparticles: A Dual Role Approach to Polymer Nanocomposite Materials with Enhanced Properties. <b>2021</b> , 13, 46033-46042	1

174	Break monopoly of polarization: CD301b+ macrophages play positive roles in osteoinduction of calcium phosphate ceramics. <b>2021</b> , 24, 101111	1
173	Nanofiltration membrane embedded with hydroxyapatite nanowires as interlayer towards enhanced separation performance. <b>2021</b> , 626, 127001	3
172	Manufacturing of porous magnesium scaffolds for bone tissue engineering by 3D gel-printing. <b>2021</b> , 209, 109948	2
171	Three-dimensional (3D), macroporous, elastic, and biodegradable nanocomposite scaffold for in situ bone regeneration: Toward structural, biophysical, and biochemical cues integration. <b>2021</b> , 225, 109270	9
170	The Application of Nanomaterials in Angiogenesis. <b>2021</b> , 16, 74-82	2
169	Multifunctional GelMA platforms with nanomaterials for advanced tissue therapeutics. <b>2022</b> , 8, 267-295	30
168	Co-delivery of simvastatin and demineralized bone matrix hierarchically from nanosheet-based supramolecular hydrogels for osteogenesis. <b>2021</b> , 9, 7741-7750	1
167	Monitoring tissue implants by field-cycling H-MRI the detection of changes in the N-quadrupolar-peak from imidazole moieties incorporated in a "smart" scaffold material. <b>2021</b> , 9, 4863-4872	1
166	Konjac glucomannan-based nanomaterials in drug delivery and biomedical applications. <b>2021</b> , 119-141	0
165	Nanobased Biodegradable Hydrogel for Biomedical Application. <b>2021</b> , 81-107	
164	Applications of oxidized alginate in regenerative medicine. <b>2021</b> , 9, 2785-2801	7
163	3D-printed HA15-loaded $\beta$ -Tricalcium Phosphate/Poly (Lactic-co-glycolic acid) Bone Tissue Scaffold Promotes Bone Regeneration in Rabbit Radial Defects. <b>2021</b> , 7, 317	6
162	Chapter 3: Biomimetic and Collagen-based Biomaterials for Biomedical Applications. <b>2021</b> , 61-87	1
161	Marine origin materials on biomaterials and advanced therapies to cartilage tissue engineering and regenerative medicine. <b>2021</b> , 9, 6718-6736	6
160	Long non-coding RNA (LncRNA) HOTAIR regulates BMP9-induced osteogenic differentiation by targeting the proliferation of mesenchymal stem cells (MSCs). <b>2021</b> , 13, 4199-4214	7
159	Induction of Bone Formation by 3D Biologically Active Scaffolds Containing RGD-NPs, BMP2, and NtMPCs. <b>2021</b> , 4, 2000245	2
158	Tissue engineering applications. <b>2021</b> , 323-347	
157	Integrated Design of a Mussel-Inspired Hydrogel Biofilm Composite Structure to Guide Bone Regeneration. <b>2020</b> , 305, 2000064	4

156	Nanomaterials for Regenerative Medicine. <b>2019</b> , 1-45	3
155	Structural Applications of Graphene Based Biopolymer Nanocomposites. <b>2021</b> , 61-81	1
154	Nanostructured metal oxides and its hybrids for photocatalytic and biomedical applications. <b>2020</b> , 281, 102178	118
153	An injectable bioactive magnesium phosphate cement incorporating carboxymethyl chitosan for bone regeneration. <b>2020</b> , 160, 101-111	9
152	Advanced hybrid nanomaterials for biomedical applications. <b>2020</b> , 114, 100686	54
151	Biofunctional Ionic-Doped Calcium Phosphates: Silk Fibroin Composites for Bone Tissue Engineering Scaffolding. <b>2017</b> , 204, 150-163	28
150	Role of Hydrogels in Bone Tissue Engineering: How Properties Shape Regeneration. <b>2020</b> , 16, 1667-1686	7
149	Structure, Properties, and In Vitro Behavior of Heat-Treated Calcium Sulfate Scaffolds Fabricated by 3D Printing. <b>2016</b> , 11, e0151216	47
148	A bioglass sustained-release scaffold with ECM-like structure for enhanced diabetic wound healing. <b>2020</b> , 15, 2241-2253	5
147	Poly(Evalerolactone)/Poly(ethylene-co-vinylalcohol)/ $\beta$ -Tri-calcium Phosphate Composite as Scaffolds: Preparation, Properties, and In Vitro Amoxicillin Release. <b>2020</b> , 13,	0
146	An Insight of Skeletal Networks Analysis for Smart Hydrogels. 2108489	1
145	Tumor Diagnosis and Therapy Mediated by Metal Phosphorus-Based Nanomaterials. <i>Advanced Materials</i> , <b>2021</b> , 33, e2103936	24 6
144	Integrated Perspective of Scaffold Designing and Multiscale Mechanics in Cardiac Bioengineering. <b>2021</b> , 1, 2100075	2
143	Biodegradable Polymers for Tissue Engineering : Review Article. <b>2015</b> , 36, 251-263	1
142	Composites Based on Shape Memory Materials. <b>2019</b> , 1-35	
141	Marine-Derived Biologically Active Compounds for the Potential Treatment of Rheumatoid Arthritis. <b>2020</b> , 19,	1
140	Naturally prefabricated 3D chitinous skeletal scaffold of marine demosponge origin, biomineralized ex vivo as a functional biomaterial. <b>2022</b> , 275, 118750	2
139	Rare earth-based materials for bone regeneration: Breakthroughs and advantages. <b>2022</b> , 450, 214236	2

- 138 Magnetically anchored antibody-coupled nanocomposite as  $\alpha$ -Amylase inhibitor for long-time protection against glycemic variability. **2022**, 430, 132984 0
- 137 Biomineralization. **2021**, 137 0
- 136 Recent advances in regenerative medicine. **2020**, 367-412 0
- 135 Polymer-Based Biomaterials: An Emerging Electrochemical Sensor. **2020**, 1-19 0
- 134 Nanobiomaterials in musculoskeletal regeneration. **2020**, 43-76 0
- 133 Hybrid conducting alginate-based hydrogel for hydrogen peroxide detection from enzymatic oxidation of lactate. **2021**, 193, 1237-1237 0
- 132 Nanobiomaterials in Craniofacial Bone Regeneration. **2021**, 25-52 0
- 131 Electrospun nanofibrous membrane of fish collagen/polycaprolactone for cartilage regeneration. **2020**, 12, 3754-3766 2
- 130 Bone tissue engineering. **2022**, 587-644 0
- 129 Nanoscale design in biomineralization for developing new biomaterials. **2022**, 345-384 0
- 128 Engineering of Extracellular Matrix-Like Biomaterials at Nano- and Macroscale toward Fabrication of Hierarchical Scaffolds for Bone Tissue Engineering. 2100116 0
- 127 Scalable Fabrication of Microcellular Open-Cell Polymer Foam. 1
- 126 Functionalized Nanocellulose Drives Neural Stem Cells toward Neuronal Differentiation. **2021**, 12, 126 1
- 125 Nanocomposites of Chitosan/Graphene Oxide/Titanium Dioxide Nanoparticles/Blackberry Waste Extract as Potential Bone Substitutes. **2021**, 13, 125 2
- 124 Poly (vinyl alcohol)-alginate as potential matrix for various applications: A focused review. **2022**, 277, 118881 5
- 123 Vascularization in tissue engineering: The architecture cues of pores in scaffolds. **2021**, 123 3
- 122 Porous silicon-polymer composites for cell culture and tissue engineering. **2021**, 447-492 0
- 121 Biomimetic Hydroxyapatite Nanorods Promote Bone Regeneration Accelerating Osteogenesis of BMSCs through T Cell-Derived IL-22.. **2022**, 121 5

120	Biocomposites and Bioceramics in Tissue Engineering: Beyond the Next Decade. <b>2022</b> , 319-350	0
119	3D-bulk to nanoforms of modified hydroxyapatite: Characterization and osteogenic potency in an in vitro 3D bone model system.. <b>2021</b> ,	0
118	Self-assembled gel tubes, filaments and 3D-printing with metal nanoparticle formation and enhanced stem cell growth.. <b>2022</b> , 13, 1972-1981	5
117	Photo-Activated Nanofibrous Membrane with Self-Rechargeable Antibacterial Function for Stubborn Infected Cutaneous Regeneration.. <b>2022</b> , e2105988	3
116	Morphological Evolution from Open Cells to Reticulated Structures in Moderately Branched Polybutylene Terephthalate Foamed Using Supercritical CO <sub>2</sub> . 2101102	0
115	Scaffold-Free Spheroids with Two-Dimensional Heteronano-Layers (2DHNL) Enabling Stem Cell and Osteogenic Factor Codelivery for Bone Repair.. <b>2022</b> ,	0
114	Photoresponsive DNA materials and their applications.. <b>2022</b> ,	8
113	Rapid Carbon Dioxide Foaming of 3D Printed Thermoplastic Polyurethane Elastomers. <b>2022</b> , 4, 1497-1511	1
112	3D gel-printed porous magnesium scaffold coated with dibasic calcium phosphate dihydrate for bone repair in vivo.. <b>2022</b> , 33, 13-23	0
111	Drug delivery systems for cancer treatment: a review of marine-derived polysaccharides.. <b>2022</b> ,	1
110	Advances in biomineralization-inspired materials for hard tissue repair. <b>2021</b> , 13, 42	8
109	Medical applications of polymer/functionalized nanoparticle composite systems, renewable polymers, and polymer/metal oxide composites. <b>2022</b> , 129-164	
108	Nanomedicine and Its Potential Therapeutic and Diagnostic Applications in Human Pathologies. <b>2022</b> , 315-342	
107	Emerging polymeric biomaterials and manufacturing techniques in regenerative medicine.	1
106	Visible-Light-Mediated Nano-biomineralization of Customizable Tough Hydrogels for Biomimetic Tissue Engineering.. <b>2022</b> ,	3
105	Cellulosic-Based Conductive Hydrogels for Electro-Active Tissues: A Review Summary.. <b>2022</b> , 8,	1
104	Bone-targeted nanoplatform enables efficient modulation of bone tumor microenvironment for prostate cancer bone metastasis treatment.. <b>2022</b> , 29, 889-905	0
103	Oxygen-Carrying and Antibacterial Fluorinated Nano-hydroxyapatite Incorporated Hydrogels for Enhanced Bone Regeneration.. <b>2022</b> , e2102540	4

102	Fracture repair by IOX2: Regulation of the hypoxia inducible factor-1 signaling pathway and BMSCs.. <b>2022</b> , 921, 174864	0
101	Icariin self-crosslinked network functionalized strontium-doped bioceramic scaffolds synergistically enhanced the healing of osteoporotic bone defects. <b>2022</b> , 235, 109759	1
100	Development of a Modular Reinforced Bone Tissue Engineering Scaffold with Enhanced Mechanical Properties.. <b>2022</b> , 318,	0
99	CD301b macrophages mediate angiogenesis of calcium phosphate bioceramics by CaN/NFATc1/VEGF axis.. <b>2022</b> , 15, 446-455	1
98	Multi-stage controllable degradation of strontium-doped calcium sulfate hemihydrate-tricalcium phosphate microsphere composite as a substitute for osteoporotic bone defect repairing: degradation behavior and bone response.. <b>2021</b> , 17,	1
97	A novel gene-activated matrix composed of PEI/plasmid-BMP2 complexes and hydroxyapatite/chitosan-microspheres promotes bone regeneration. 1	1
96	Nanohydroxyapatite-Protein Interface in Composite Sintered Scaffold Influences Bone Regeneration in Rabbit Ulnar Segmental Defect.. <b>2022</b> , 33, 36	
95	Orsellinic acid-loaded chitosan nanoparticles in gelatin/nanohydroxyapatite scaffolds for bone formation in vitro.. <b>2022</b> , 299, 120559	1
94	Current Trends and Future Outlooks of Dental Stem-Cell-Derived Secretome/Conditioned Medium in Regenerative Medicine. <b>2022</b> , 1-37	
93	A Study on the Correlation between the Oxidation Degree of Oxidized Sodium Alginate on Its Degradability and Gelation.. <b>2022</b> , 14,	1
92	Controlled Silylation of Polysaccharides: Attractive Building Blocks for Biocompatible Foams and Cell-Laden Hydrogels.	1
91	Bi-layered PLGA electrospun membrane with occlusive and osteogenic properties for periodontal regeneration. 088391152210952	
90	Non-Invasive Thermal Therapy for Tissue Engineering and Regenerative Medicine.. <b>2022</b> , e2107705	5
89	The Osteoinductivity of Calcium Phosphate-Based Biomaterials: A Tight Interaction With Bone Healing. <b>2022</b> , 10,	1
88	Recent Advancements on Three-Dimensional Electrospun Nanofiber Scaffolds for Tissue Engineering.	2
87	Constructing an electrical microenvironment based on electroactive polymers in the field of bone tissue engineering. 1-31	
86	Using different unit-cell geometries to generate bone tissue scaffolds by additive manufacturing technology.. <b>2022</b> , 9544119221099786	0
85	Tough and strong waterborne polyurethane network combined with sub-nanoscaled calcium phosphate oligomers for protective coating. 2200181	0



84	Development of fish collagen in tissue regeneration and drug delivery. <b>2022,</b>	4
83	Highly elastic and bioactive bone biomimetic scaffolds based on platelet lysate and biomineralized cellulose nanocrystals. <b>2022,</b> 292, 119638	0
82	Progress in Gelatin as Biomaterial for Tissue Engineering. <b>2022,</b> 14, 1177	6
81	Fabrication and biological evaluation of polyether ether ketone(PEEK)/bioceramic composites. <b>2022,</b>	0
80	Mechanism of selective hydrolysis of alginates under hydrothermal conditions. <b>2022,</b>	0
79	Rational Design of Electrically Conductive Biomaterials toward Excitable Tissues Regeneration. <b>2022,</b> 101573	1
78	Biomaterials for medical and healthcare products. <b>2022,</b> 43-86	
77	Hydrogel Nanocomposites Derived from Renewable Resources. 269-285	
76	Factors influencing poor medication adherence amongst patients with chronic disease in low-and-middle-income countries: A systematic scoping review. <b>2022,</b> 8, e09716	0
75	Hybrid ceramics-based cancer theranostics.	0
74	Role of Phosphorus-Containing Molecules on the Formation of Nano-Sized Calcium Phosphate for Bone Therapy. 10,	0
73	Photo-Crosslinkable Hydrogels for 3D Bioprinting in the Repair of Osteochondral Defects: A Review of Present Applications and Future Perspectives. <b>2022,</b> 13, 1038	1
72	Regeneration of Critical-Sized Grade II Furcation Using a Novel Injectable Melatonin-Loaded Scaffold.	1
71	Microbial biopolymers in articular cartilage tissue engineering. <b>2022,</b> 29,	1
70	ECM-mimetic immunomodulatory hydrogel for methicillin-resistant Staphylococcus aureus infected chronic skin wound healing. <b>2022,</b> 8,	6
69	CuO-SiO <sub>2</sub> based nanocomposites: Synthesis, characterization, photocatalytic, antileishmanial, and antioxidant studies.	1
68	Preparation and characterization of electrospun PLGA-SF nanofibers as a potential drug delivery system. <b>2022,</b> 289, 126452	2
67	Cellulose-based composite scaffolds for bone tissue engineering and localized drug delivery. <b>2023,</b> 20, 137-163	2

66	Enzyme-driven oxygen-fuelled pathway selectivity of tyrosine-containing peptide oxidation evolution. <b>2022</b> , 450, 138293	1
65	Nanomaterial integrated 3D printing for biomedical applications.	2
64	Advancement in Garbage In Biomaterials Out (GIBO) concept to develop biomaterials from agricultural waste for tissue engineering and biomedical applications.	0
63	Surface modification of silk fibroin composite bone scaffold with polydopamine coating to enhance mineralization ability and biological activity for bone tissue engineering.	0
62	Microfluidic-assisted preparation of nano and microscale chitosan based 3D composite materials: Comparison with conventional methods.	
61	Construction of magnetic nanochains to achieve magnetic energy coupling in scaffold. <b>2022</b> , 26,	1
60	Nanocomposites-Based Biodegradable Polymers. <b>2022</b> , 285-316	1
59	Effect of chitosan on the interactions between phospholipid DOPC, cyclosporine A and lauryl gallate in the Langmuir monolayers. <b>2022</b> , 652, 129843	1
58	The effect of pore size on cell behavior in mesoporous bioglass scaffolds for bone regeneration. <b>2022</b> , 29, 101607	1
57	Self-assembly hydrogels of therapeutic agents for local drug delivery. <b>2022</b> , 350, 898-921	1
56	3D bioprinting: Materials, processes, and applications. <b>2022</b> , 71, 577-597	0
55	Nanoparticles for Tissue Engineering: Type, Properties, and Characterization. <b>2022</b> , 1-19	0
54	Switchable and dynamic G-quadruplexes and their applications. <b>2022</b> , 51, 7631-7661	4
53	Biocompatibility of Nanomaterials Reinforced Polymer-Based Nanocomposites. <b>2022</b> , 1-41	0
52	Biom mineralization of bone tissue: calcium phosphate-based inorganics in collagen fibrillar organic matrices. <b>2022</b> , 26,	4
51	Nonmulberry silk fibroin-based biomaterials: Impact on cell behavior regulation and tissue regeneration. <b>2022</b> ,	1
50	Bone Implants (Bone Regeneration and Bone Cancer Treatments). <b>2022</b> , 265-321	0
49	Impact of Agarose Hydrogels as Cell Vehicles for Neo Retinal Pigment Epithelium Formation: In Vitro Study.	0

48	Scaffolds for bone-tissue engineering. <b>2022</b> , 5, 2722-2759	3
47	Bone regeneration materials and their application over 20 years: A bibliometric study and systematic review. 10,	0
46	Silylated biomolecules: Versatile components for bioinks. 10,	1
45	Effect of chitosan/inorganic nanomaterial scaffolds on bone regeneration and related influencing factors in animal models: A systematic review. 10,	0
44	Stability of Biomimetically Functionalised Alginate Microspheres as 3D Support in Cell Cultures. <b>2022</b> , 14, 4282	1
43	Nanocomposite Biomaterials for Tissue Engineering and Regenerative Medicine Applications.	0
42	Carrier systems for bone morphogenetic proteins: An overview of biomaterials used for dentoalveolar and maxillofacial bone regeneration. <b>2022</b> , 58, 316-327	0
41	NIR-responsive composite nanofibers provide oxygen and mineral elements to promote osteogenesis. <b>2022</b> , 224, 111285	0
40	Current Trends and Future Outlooks of Dental Stem-Cell-Derived Secretome/Conditioned Medium in Regenerative Medicine. <b>2022</b> , 1035-1070	0
39	Cell-scaffold interactions in tissue engineering for oral and craniofacial reconstruction. <b>2023</b> , 23, 16-44	2
38	Recent advances on injectable nanocomposite hydrogels towards bone tissue rehabilitation.	0
37	Triple-Networked Hybrid Hydrogels Reinforced with Montmorillonite Clay and Graphene Nanoplatelets for Soft and Hard Tissue Regeneration. <b>2022</b> , 23, 14158	0
36	The role of the immune microenvironment in bone, cartilage, and soft tissue regeneration: from mechanism to therapeutic opportunity. <b>2022</b> , 9,	0
35	Nanochitin preparation and its application in polymer nanocomposites: a review.	0
34	Biomaterialized dipeptide self-assembled hydrogel with ultrahigh mechanical strength and osteoinductivity for bone regeneration. <b>2023</b> , 657, 130622	0
33	Osteoclast-derived extracellular miR-106a-5p promotes osteogenic differentiation and facilitates bone defect healing. <b>2023</b> , 102, 110549	0
32	Suppressing thermal stress in the vicinity of a circular nano-inhomogeneity via the mechanism of size effects. 108128652211396	0
31	Tunable Self-Assembled Peptide Hydrogel Sensor for Pharma Cold Supply Chain. <b>2022</b> , 14, 55392-55401	0

30	A New, Biomimetic Collagen/Apatite Wound-Healing Composite with a Potential Regenerative and Anti-Hemorrhagic Effect in Dental Surgery. <b>2022</b> , 15, 8888	0
29	Electrospun hybrid nanofibers: Fabrication, characterization, and biomedical applications. 10,	0
28	Recent advancement of nanotherapeutics in accelerating chronic wound healing process for surgical wounds and diabetic ulcers. 1-29	1
27	Nanocomposites Based on Biodegradable Polymers for Biomedical Applications. <b>2023</b> , 317-337	0
26	PCL-based 3D nanofibrous structure with well-designed morphology and enhanced specific surface area for tissue engineering application.	0
25	High-strength hydrogels: Fabrication, reinforcement mechanisms, and applications.	1
24	Multifunctional barrier membranes promote bone regeneration by scavenging H <sub>2</sub> O <sub>2</sub> , generating O <sub>2</sub> , eliminating inflammation, and regulating immune response. <b>2023</b> , 222, 113147	0
23	Auxetic metamaterials for bone-implanted medical devices: Recent advances and new perspectives. <b>2023</b> , 98, 104905	1
22	Fabrication of Biodegradable and Biocompatible Functional Polymers for Anti-Infection and Augmenting Wound Repair. <b>2023</b> , 15, 120	1
21	Composite Cement Materials Based on $\beta$ -Tricalcium Phosphate, Calcium Sulfate, and a Mixture of Polyvinyl Alcohol and Polyvinylpyrrolidone Intended for Osteogenesis. <b>2023</b> , 15, 210	1
20	Osteogenic and anti-inflammatory effect of the multifunctional bionic hydrogel scaffold loaded with aspirin and nano-hydroxyapatite. 11,	0
19	ECM-Inspired Hydrogels with ADSCs Encapsulation for Rheumatoid Arthritis Treatment. 2206253	0
18	Polymeric Nanocomposite Hydrogel Scaffolds in Craniofacial Bone Regeneration: A Comprehensive Review. <b>2023</b> , 13, 205	0
17	Alginate Based Micro Particulate Systems for Drug Delivery. <b>2023</b> , 19-59	0
16	Bioinspired strontium magnesium phosphate cement prepared utilizing the precursor method for bone tissue engineering. 11,	0
15	Bone/cartilage organoid on-chip: Construction strategy and application. <b>2023</b> , 25, 29-41	0
14	Thermodynamic 2D Silicene for Sequential and Multistage Bone Regeneration. 2203107	0
13	Genetically engineered cell membrane-coated nanoparticles for antibacterial and immunoregulatory dual-function treatment of ligature-induced periodontitis. 11,	0

- 12 Evaluation of bone-like apatite biomineralization on biomimetic graphene oxide/hydroxyapatite nanocomposite. **2023**, 149, 110450 ○
- 11 On the evaluation of polysaccharideBased nanofibrous membranes as suitable scaffolds for tissue engineering applications. ○
- 10 Nanomaterial-based biohybrid hydrogel in bioelectronics. **2023**, 10, ○
- 9 A 3D biomimetic optoelectronic scaffold repairs cranial defects. **2023**, 9, ○
- 8 Nanofibers and Nanomembranes of Biopolymers. **2023**, 1-27 ○
- 7 Recent advances in nano-scaffolds for tissue engineering applications: Toward natural therapeutics. ○
- 6 Bioorthogonal Click ChemistryBone Cement with Bioinspired Natural Mimicking Microstructures for Bone Repair. **2023**, 9, 1585-1597 ○
- 5 Biocompatibility of Nanomaterials Reinforced Polymer-Based Nanocomposites. **2023**, 351-390 ○
- 4 Recent Trends in Metallic Nanocomposites for Sensing and Electrochemical Devices. **2023**, 237-271 ○
- 3 Intrafibrillar Mineralization and Immunomodulatory for Synergetic Enhancement of Bone Regeneration via Calcium Phosphate Nanocluster Scaffold. 2201548 ○
- 2 Customizable Low-Friction Tough Hydrogels for Potential Cartilage Tissue Engineering by a Rapid Orthogonal Photoreactive 3D-Printing Design. ○
- 1 Bioglass-polymer composite scaffolds for bone tissue regeneration: a review of current trends. 1-20 ○