Impregnation of silver nanoparticles into bacterial cellulose for antimicrobial wound dressing

DOI: 10.1016/j.carbpol.2007.07.025
Carbohydrate Polymers, 2008, 72, 43-51.

#	Paper	IF	Citations
812	Antibacterial coatings for medical devices based on glass polyalkenoate cement chemistry. **2008**, 19, 3555-60		19
811	Behavior of freezable bound water in the bacterial cellulose produced by Acetobacter xylinum: an approach using thermoporosimetry. **2008**, 9, 701-7		32
810	. **2009**,		26
809	Storage of Ag nanoparticles in pore-arrays of SU-8 matrix for antibacterial applications. **2009**, 42, 135416		30
808	Evaluating Strategies For Risk Assessment of Nanomaterials. 459-498		
807	Essential oils and silver nanoparticles (SNP) as novel agents to extend vase-life of gerbera (Gerbera jamesonii cv. Dune) flowers. **2009**, 53, 155-158		76
806	Synthesis and characterization of silver nanoparticles impregnated into bacterial cellulose. **2009**, 63, 797-799		91
805	Silver nanoparticles as a new generation of antimicrobials. **2009**, 27, 76-83		3987
804	Preparation and antibacterial activity of electrospun chitosan/poly(ethylene oxide) membranes containing silver nanoparticles. **2009**, 287, 1425-1434		134
803	Capping antibacterial Ag nanorods aligned on Ti interlayer by mesoporous TiO2 layer. **2009**, 203, 3123-3128		68
802	Antibacterial activity of nanocomposites of silver and bacterial or vegetable cellulosic fibers. **2009**, 5, 2279-89		234
801	In situ synthesis of silver chloride nanoparticles into bacterial cellulose membranes. **2009**, 29, 1216-1219		133
800	The effect of chitosan on the migration of neutrophil-like HL60 cells, mediated by IL-8. **2009**, 30, 436-44		56
799	Noble metal nanoparticles for water purification: A critical review. **2009**, 517, 6441-6478		583
798	Ag+- and Zn2+-exchange kinetics and antimicrobial properties of 11 Å tobermorites. **2009**, 29, 1109-1117		36
797	Lasting antibacterial activities of Ag-TiO2/Ag/a-TiO2 nanocomposite thin film photocatalysts under solar light irradiation. **2009**, 336, 117-24		387
796	Bactericidal effects of Ag nanoparticles immobilized on surface of SiO2 thin film with high concentration. **2009**, 9, 1381-1385		114

795	Preparation and characterization of durable antibacterial cellulose biomaterials modified with triazine derivatives. *Carbohydrate Polymers*, **2009**, 75, 328-332	10.3	82
794	Antimicrobial activity of AgCl embedded in a silica matrix on cotton fabric. *Carbohydrate Polymers*, **2009**, 75, 618-626	10.3	116
793	In situ synthesis of CdS nanoparticles on bacterial cellulose nanofibers. *Carbohydrate Polymers*, **2009**, 76, 509-512	10.3	131
792	Nanoparticle catalysts. **2009**, 42, 233001		180
791	Growth, Structural, and Optical Characterization of ZnO-Coated Cellulosic Fibers. **2009**, 9, 386-390		55
790	. **2009**,		1
789	Preservation of aseptic conditions in absorbent pads by using silver nanotechnology. **2009**, 42, 1105-1112		105
788	Alloying process at the interface of silver nanoparticles deposited on Au(111) substrate due to the high-temperature treatments. **2009**, 481, 486-491		3
787	BC nanofibres: in vitro study of genotoxicity and cell proliferation. **2009**, 189, 235-41		104
786	Enhancement of antibacterial properties of Ag nanorods by electric field. **2009**, 10, 015003		69
785	Nanocellulose Materials Different Cellulose, Different Functionality. **2009**, 280, 60-71		154
784	Synthesis of biosurfactant-based silver nanoparticles with purified rhamnolipids isolated from Pseudomonas aeruginosa BS-161R. **2010**, 20, 1061-8		89
783	Antimicrobial effect of metallic and semiconductor nanoparticles. **2010**, 5, 277-289		21
782	Silver Voyage from Macro- to Nanoworld. **2010**, 87, 1094-1097		13
781	Biodegradation of silver functionalised cellulose fibres. *Carbohydrate Polymers*, **2010**, 80, 426-435	10.3	53
780	P(4-VP) based nanoparticles and composites with dual action as antimicrobial materials. **2010**, 79, 460-6		61
779	Characterization of bacteriostatic sausage casing: A composite of bacterial cellulose embedded with e-polylysine. **2010**, 19, 1479-1484		60
778	Modification and applications of bacterial celluloses in polymer science. **2010**, 18, 309-320		85

777	Development of novel chitin/nanosilver composite scaffolds for wound dressing applications. **2010**, 21, 807-13		291
776	The antimicrobial effect of open-cell silver foams. **2010**, 21, 1329-34		13
775	A review of the antibacterial effects of silver nanomaterials and potential implications for human health and the environment. **2010**, 12, 1531-1551		2021
774	Cellulose-silver nanoparticle hybrid materials to control spoilage-related microflora in absorbent pads located in trays of fresh-cut melon. **2010**, 142, 222-8		149
773	Therapeutic Window for Bioactive Nanocomposites Fabricated by Laser Ablation in Polymer-Doped Organic Liquids. **2010**, 12, B156-B162		19
772	Preparation, characterization, and antibacterial properties of electrospun polyacrylonitrile fibrous membranes containing silver nanoparticles. **2010**, 116, NA-NA		16
771	Synthesis, characterisation and antibacterial activity of PVA/TEOS/Ag-Np hybrid thin films. **2010**, 349, 77-85		100
770	Facile synthesis of ZnO nanoparticles based on bacterial cellulose. **2010**, 170, 88-92		70
769	Fabrication of Ag nanoparticles dispersed in PVA nanowire mats by microwave irradiation and electro-spinning. **2010**, 30, 944-950		45
768	Self-accumulated Ag nanoparticles on mesoporous TiO2 thin film with high bactericidal activities. **2010**, 204, 3676-3683		141
767	Immobilization of silver nanoparticles onto sulfonated polyethersulfone membranes as antibacterial materials. **2010**, 81, 555-62		128
766	Gum kondagogu (Cochlospermum gossypium): A template for the green synthesis and stabilization of silver nanoparticles with antibacterial application. *Carbohydrate Polymers*, **2010**, 82, 670-679	10.3	245
765	Morphology and antibacterial activity of carbohydrate-stabilized silver nanoparticles. **2010**, 345, 1767-73		81
764	Preparation and antibacterial activity of silver nanoparticles impregnated in bacterial cellulose. **2010**, 20, 72-77		72
763	Reduction of the spoilage-related microflora in absorbent pads by silver nanotechnology during modified atmosphere packaging of beef meat. **2010**, 73, 2263-9		89
762	Polymer-based Biomaterials as Dressings for Chronic Stagnating Wounds. **2010**, 294, 1-13		30
761	Magnetic antimicrobial nanocomposite based on bacterial cellulose and silver nanoparticles. **2010**, 20, 6948		243
760	Natural biopolymers: novel templates for the synthesis of nanostructures. **2010**, 26, 8497-502		148

759	Development and Characteristic of Bacterial Cellulose for Antimicrobial Wound Dressing. **2010**, 152-153, 978-987	7
758	Synthesis and functionalities of noble metal nanoparticles formed through simple all-inorganic photochemical procedures. **2010**, 5, 221-243	6
757	Novel carbonaceous nanocomposite pellicle based on bacterial cellulose. **2010**, 12, 1454	18
756	CF4 plasma and silver functionalized cotton. **2010**, 80, 2204-2213	45
755	Low-temperature sol-gel-derived nanosilver-embedded silane coating as biofilm inhibitor. **2011**, 22, 155602	23
754	Biomimetic calcium phosphate crystal mineralization on electrospun cellulose-based scaffolds. **2011**, 3, 681-9	125
753	Antimicrobial Bacterial Cellulose-Silver Nanoparticles Composite Membranes. **2011**, 2011, 1-8	151
752	Silver nanoparticles as real topical bullets for wound healing. **2011**, 3, 82-96	109
751	Silver nanoparticle□lay composites. **2011**, 21, 734-742	42
750	BACTERIAL CELLULOSE: A NATURAL NANOMATERIAL FOR BIOMEDICAL APPLICATIONS. **2011**, 11, 285-306	31
749	Tailoring surface properties of paper using nanosized precipitated calcium carbonate particles. **2011**, 3, 3725-31	16
748	Preparation and Characterization of Silver/Hydroxyapatite Nanoparticles. **2011**, 311-313, 1746-1750	6
747	Antibacterial performance of polydopamine-modified polymer surfaces containing passive and active components. **2011**, 3, 4602-10	283
746	Metal Nanoparticles in Microbiology. **2011**,	61
745	A novel one step synthesis of silver nanoparticles using room temperature ionic liquid and their biocidal activity. **2011**, 14, 1122-1127	16
744	Biogenic Silver Nanoparticles: Application in Medicines and Textiles and Their Health Implications. **2011**, 249-267	5
743	Cellulose nanomaterials review: structure, properties and nanocomposites. **2011**, 40, 3941-94	4087
742	Preparation, characterization and antimicrobial property of micro-nano sized Na-borosilicate glass powder with spherical shape. **2011**, 357, 116-120	7

741	Size-selective silver nanoparticles: future of biomedical devices with enhanced bactericidal properties. **2011**, 21, 12267		83
740	Bacterial Cellulose for Skin Repair Materials. **2011**,		15
739	Controlled Fabrication of Noble Metal Nanomaterials via Nanosphere Lithography and Their Optical Properties. **2011**,		4
738	Effects of silver nanoparticles (SNP) on Gerbera jamesonii cut flowers. **2011**, 2, 274		3
737	Utilization of hydroxypropyl cellulose for green and efficient synthesis of silver nanoparticles. *Carbohydrate Polymers*, **2011**, 86, 1615-1622	10.3	64
736	Facile fabrication of flexible magnetic nanohybrid membrane with amphiphobic surface based on bacterial cellulose. *Carbohydrate Polymers*, **2011**, 86, 1760-1767	10.3	54
735	Self-assembly and alignment of semiconductor nanoparticles on cellulose nanocrystals. **2011**, 46, 5672-5679		33
734	Never-dried bacterial cellulose/fibrin composites: preparation, morphology and mechanical properties. **2011**, 18, 631-641		22
733	Structure and properties of conducting bacterial cellulose-polyaniline nanocomposites. **2011**, 18, 1285-1294		111
732	Antimicrobial silver nanoparticles generated on cellulose nanocrystals. **2011**, 13, 1557-1562		144
731	Importance of poly(ethylene glycol) conformation for the synthesis of silver nanoparticles in aqueous solution. **2011**, 13, 3755-3764		44
730	Preparation and evaluation of a kind of bacterial cellulose dry films with antibacterial properties. *Carbohydrate Polymers*, **2011**, 84, 533-538	10.3	195
729	In situ deposition of silver nanoparticles on the cotton fabrics. **2011**, 12, 620-625		53
728	Facile preparation and formation mechanism of uniform silver nanoparticles ising OP-10 as emulsifier in reverse microemulsion. **2011**, 26, 38-42		3
727	Nanocellulosen: eine neue Familie naturbasierter Materialien. **2011**, 123, 5550-5580		85
726	Nanocelluloses: a new family of nature-based materials. **2011**, 50, 5438-66		2937
725	Rapid microwave-assisted preparation and characterization of cellulose/silver nanocomposites. *Carbohydrate Polymers*, **2011**, 83, 422-429	10.3	58
724	Phosphorylated bacterial cellulose for adsorption of proteins. *Carbohydrate Polymers*, **2011**, 83, 953-958	10.3	76

723	Solvent-free acetylation of bacterial cellulose under moderate conditions. *Carbohydrate Polymers*, **2011**, 83, 1575-1581	10.3	92
722	Effect of chitosan characteristics and solution conditions on gelation temperatures of chitosan/2-glycerophosphate/nanosilver hydrogels. *Carbohydrate Polymers*, **2011**, 84, 1337-1343	10.3	39
721	Synthesis of magnetic nanoparticle into bacterial cellulose matrix by ammonia gas-enhancing in situ co-precipitation method. *Carbohydrate Polymers*, **2011**, 86, 162-170	10.3	54
720	Solubility of bacteria cellulose in zinc chloride aqueous solutions. *Carbohydrate Polymers*, **2011**, 86, 239-244	10.3	73
719	Cellulose□silver nanocomposites: Microwave-assisted synthesis, characterization, their thermal stability, and antimicrobial property. *Carbohydrate Polymers*, **2011**, 86, 441-447	10.3	135
718	Ag colloids and Ag clusters over EDAPTMS-coated silica nanoparticles: synthesis, characterization, and antibacterial activity against Escherichia coli. **2011**, 7, 305-14		47
717	Bacterial cellulose□aponite clay nanocomposites. **2011**, 52, 157-163		55
716	Silver Nanoparticles in Cellulose Acetate Polymers: Rheological and Morphological Properties. **2011**, 50, 639-651		7
715	Chemical Modification of Polyester Fibers with Amide-Siloxane Film and its Antimicrobial Property by Electro-Less Silver Plating. **2011**, 304, 154-159		1
714	Bacterial Cellulose as a Template for the Formation of Polymer/Nanoparticle Nanocomposite. **2011**, 2,		6
713	A Critical Review on Biogenic Silver Nanoparticles and their Antimicrobial Activity. **2011**, 7, 531-544		53
712	A sweet killer: mesoporous polysaccharide confined silver nanoparticles for antibacterial applications. **2011**, 12, 5782-96		19
711	4 Bacterial cellulose.		
710	Studies on Surface Hydroxypropylation and Swellability of Bacterial Cellulose. **2012**, 601, 12-15		2
709	Composites of Cellulose and Metal Nanoparticles. **2012**,		27
708	Electrospun Poly(L-Lactic Acid)-co-Poly(?-Caprolactone) Nanofibres Containing Silver Nanoparticles for Skin-Tissue Engineering. **2012**, 23, 2337-52		30
707	Immobilisation of heparin on bacterial cellulose-chitosan nano-fibres surfaces via the cross-linking technique. **2012**, 6, 52-7		22
706	Fabrication of antimicrobial bacterial cellulose□Ag/AgCl nanocomposite using bacteria as versatile biofactory. **2012**, 14, 1		52

705	The influence of vat dyeing on the adsorption of synthesized colloidal silver onto cotton fabrics. **2012**, 82, 62-69		24
704	Electrically conducting nanocomposites: preparation and properties of polyaniline (PAni)-coated bacterial cellulose nanofibers (BC). **2012**, 19, 1645-1654		108
703	Antibacterial functionalization of cotton and polyester fabrics with a finishing agent based on silver-doped calcium phosphate powders. **2012**, 82, 1731-1742		20
702	One-pot synthesis of PVA-capped silver nanoparticles their characterization and biomedical application. **2012**, 3, 015013		36
701	Synthesis of methylcellulose-silver nanocomposite and investigation of mechanical and antimicrobial properties. *Carbohydrate Polymers*, **2012**, 90, 1818-25	10.3	46
700	Impacts of silver nanoparticle coating on the nitrification potential of Nitrosomonas europaea. **2012**, 46, 5387-95		108
699	Green Process for Impregnation of Silver Nanoparticles into Microcrystalline Cellulose and Their Antimicrobial Bionanocomposite Films. **2012**, 03, 371-376		51
698	Engineering Nanostructured Silver Coatings for Antimicrobial Applications. **2012**, 313-336		10
697	Antimicrobial Nanomaterials for Water Disinfection. **2012**, 465-494		5
696	Preparation, morphology, and antibacterial properties of polyacrylonitrile/montmorillonite/silver nanocomposites. **2012**, 136, 613-623		46
695	Polyhexamethylene biguanide functionalized cationic silver nanoparticles for enhanced antimicrobial activity. **2012**, 7, 267		35
694	Chapter 6:Biological Methods for Characterisation of Nano-Anti-Microbial Materials. **2012**, 153-192		1
693	The effect of alkali pre-treatment on formation and adsorption of silver nanoparticles on cotton surface. **2012**, 13, 1170-1178		19
692	Impregnation of silver sulfadiazine into bacterial cellulose for antimicrobial and biocompatible wound dressing. **2012**, 7, 065006		91
691	Synthesis, characterization, and antimicrobial activity of silver carbene complexes derived from 4,5,6,7-tetrachlorobenzimidazole against antibiotic resistant bacteria. **2012**, 41, 6500-6		33
690	Fabrication of Silver Nanoparticles with Cotton for Antibacterial Wound Dressing. **2012**, 1, 78-82		
689	Interactions between inorganic nanoparticles and cellulose nanofibrils. **2012**, 19, 779-792		31
688	Fabrication and evaluation of bacterial cellulose-polyaniline composites by interfacial polymerization. **2012**, 19, 1251-1258		63

687	Electrostatic assembly of Ag nanoparticles onto nanofibrillated cellulose for antibacterial paper products. **2012**, 19, 1425-1436		150
686	Cellulose/silver nanoparticles composite microspheres: eco-friendly synthesis and catalytic application. **2012**, 19, 1239-1249		100
685	Hydrophobic siloxane paper coatings: the effect of increasing methyl substitution. **2012**, 62, 441-452		24
684	Antimicrobial activity of silver nanoparticle impregnated bacterial cellulose membrane: Effect of fermentation carbon sources of bacterial cellulose. *Carbohydrate Polymers*, **2012**, 87, 839-845	10.3	165
683	In situ synthesis of nano silver on cotton using Tollens□reagent. *Carbohydrate Polymers*, **2012**, 87, 1706-1712	10.3	140
682	Hydrothermal synthesis of bacterial cellulose/AgNPs composite: A □green□route for antibacterial application. *Carbohydrate Polymers*, **2012**, 87, 2482-2487	10.3	120
681	Durable antibacterial and cross-linking cotton with colloidal silver nanoparticles and butane tetracarboxylic acid without yellowing. **2012**, 89, 196-202		109
680	Silver nanoparticles: the powerful nanoweapon against multidrug-resistant bacteria. **2012**, 112, 841-52		819
679	Applications of functionalized and nanoparticle-modified nanocrystalline cellulose. **2012**, 30, 283-90		306
678	Synthesis and characterization of nano silver based natural rubber latex foam for imparting antibacterial and anti-fungal properties. **2012**, 31, 586-592		63
677	The effect of acetylation on the crystallinity of BC/CNTs nanocomposite. **2012**, 87, 431-435		7
676	Synthesis, characterization, and antimicrobial activity of poly(acrylonitrile-co-methyl methacrylate) with silver nanoparticles. **2013**, 171, 643-54		18
675	Formation of nanocrystalline ZnO particles into bacterial cellulose pellicle by ultrasonic-assisted in situ synthesis. **2013**, 20, 1275-1292		78
674	Unique flexible silver dendrites thin films fabricated on cellulose dialysis cassettes. **2013**, 48, 6418-6425		5
673	Biosynthesis, production and applications of bacterial cellulose. **2013**, 20, 2191-2219		295
672	Antibacterial hybrid materials fabricated by nanocoating of microfibril bundles of cellulose substance with titania/chitosan/silver-nanoparticle composite films. **2013**, 1, 3477-3485		84
671	The Antimicrobial Activity Test on Luffa Sponge and Its Antifungal Finishing. **2013**, 10, 51-61		1
670	Preparation of carboxylated Ag nanoparticles as a coating material for medical devices and control of antibacterial activity. **2013**, 16, 451-7		8

669	Antimicrobial viscose fabric prepared by treatment in DBD and subsequent deposition of silver and copper ions□nvestigation of plasma aging effect. **2013**, 234, 92-99		33
668	Overview of bacterial cellulose composites: a multipurpose advanced material. *Carbohydrate Polymers*, **2013**, 98, 1585-98	10.3	445
667	In situ synthesis of silver nanoparticles on alkali-treated cotton fabrics. **2013**, 42, 459-474		37
666	The production of polysulfone (PS) membrane with silver nanoparticles (AgNP): Physical properties, filtration performances, and biofouling resistances of membranes. **2013**, 428, 620-628		132
665	Cellulose-polymer-Ag nanocomposite fibers for antibacterial fabrics/skin scaffolds. *Carbohydrate Polymers*, **2013**, 93, 553-60	10.3	112
664	Multifunctional hybrid nanopapers based on bacterial cellulose and sol□el synthesized titanium/vanadium oxide nanoparticles. **2013**, 20, 1301-1311		36
663	Antioxidant and Antibacterial Properties of Gelatin Films Incorporated with Carvacrol. **2013**, 33, 423-432		48
662	Nanocomposites of bacterial cellulose nanofibers and chitin nanocrystals: fabrication, characterization and bactericidal activity. **2013**, 15, 3404		104
661	Characterization and evaluation of acacia gum loaded PVA hybrid wound dressing. **2013**,		5
660	Treatments to impart antimicrobial activity to clothing and household cellulosic-textiles □why □Nano□silver?. **2013**, 39, 17-23		79
659	Present status and applications of bacterial cellulose-based materials for skin tissue repair. *Carbohydrate Polymers*, **2013**, 92, 1432-42	10.3	372
658	Effect of Particle Size on Silver Nanoparticle Deposition onto Dielectric Barrier Discharge (DBD) Plasma Functionalized Polyamide Fabric. **2013**, 10, 285-296		39
657	Eco-Friendly Phyto-Synthesis of Silver Nanoparticles Using Jatropha Seedcake Extract. **2013**, 30, 128103		7
656	Bacterial cellulose and bacterial cellulose-chitosan membranes for wound dressing applications. *Carbohydrate Polymers*, **2013**, 94, 603-11	10.3	411
655	Pine cone-mediated green synthesis of silver nanoparticles and their antibacterial activity against agricultural pathogens. **2013**, 97, 361-8		87
654	Synthesis of flexible magnetic nanohybrid based on bacterial cellulose under ultrasonic irradiation. **2013**, 33, 2407-12		46
653	Surface modification of cellulose via atmospheric pressure plasma processing in air and ammonia□itrogen gas. **2013**, 233, 108-118		42
652	Fabrication of superhydrophobic, antibacterial, and ultraviolet-blocking cotton fabric. **2013**, 104, 861-869		36

651	Antimicrobial porous hybrids consisting of bacterial nanocellulose and silver nanoparticles. **2013**, 20, 771-783		70
650	Antibacterial property and characterization of cotton fabric treated with chitosan/AgCl-TiO colloid. *Carbohydrate Polymers*, **2013**, 96, 326-31	10.3	50
649	Metal nanoantimicrobials for textile applications. **2013**, 2, 307-331		52
648	Mechanical, physical, antioxidant, and antimicrobial properties of gelatin films incorporated with thymol for potential use as nano wound dressing. **2013**, 78, E244-50		150
647	Synthesis of NOM-Capped Silver Nanoparticles: Size, Morphology, Stability, and NOM Binding Characteristics. **2013**, 1, 817-825		19
646	Synthesis and antibacterial effects of aqueous colloidal solutions of silver nanoparticles using aminocellulose as a combined reducing and capping reagent. **2013**, 15, 989		113
645	Preparation and performance evaluations of electrospun poly(caprolactone), poly(lactic acid), and their hybrid (50/50) nanofibrous mats containing thymol as an herbal drug for effective wound healing. **2013**, 129, 756-766		124
644	A new strategy for producing antibacterial textile surfaces using silver nanoparticles. **2013**, 228, 489-495		83
643	Preparation of Silver/Bacterial Cellulose Composite Membrane and Study on Its Antimicrobial Activity. **2013**, 43, 907-913		21
642	Bacterial cellulose-MMTs nanoreinforced composite films: novel wound dressing material with antibacterial properties. **2013**, 20, 589-596		127
641	Ni bacterial cellulose nanocomposite; a magnetically active inorganic organic hybrid gel. **2013**, 3, 12765		29
640	Cellulose Nanofibrils. **2013**, 1, 195-211		126
639	Antimicrobial Brazilian Propolis (EPP-AF) Containing Biocellulose Membranes as Promising Biomaterial for Skin Wound Healing. **2013**, 2013, 703024		57
638	Proteinate-Capped Silver Nanoparticle Transport in Water-Saturated Sand. **2013**, 139, 781-787		9
637	Nanotechnological Advances in Cutaneous Medicine. **2013**, 2013, 1-8		9
636	Noble Metal Nanoparticles. **2013**, 303-388		24
635	Antibacterial Applications of Silver Nanoparticles. **2013**, 754, 131-142		1
634	Nanostructured and Nanoparticulate Metals: Redefining the Field of Medical Devices. **2013**, 02,		

633	The effect of phytohormones on the growth, cellulose production and pellicle properties of Gluconacetobacter xylinus ATCC 53582. **2013**, 2, 7		4
632	Antibacterial activity of pH-dependent biosynthesized silver nanoparticles against clinical pathogen. **2014**, 2014, 725165		37
631	Aminated β-Cyclodextrin-Modified-Carboxylated Magnetic Cobalt/Nanocellulose Composite for Tumor-Targeted Gene Delivery. **2014**, 2014, 1-10		8
630	Facile fabrication of graphene oxide loaded with silver nanoparticles as antifungal materials. **2014**, 1, 045007		13
629	Activity of mesenchymal stem cells in therapies for chronic skin wound healing. **2014**, 10, 29-37		115
628	The Effect of Culture Age and Initial Silver Concentration on Biosynthesis of Ag Nanoparticles. **2014**, 13,		11
627	Overview of Bacterial Cellulose Production and Application. **2014**, 2, 113-119		223
626	Morphology and antibacterial properties of natural rubber composites based on biosynthesized nanosilver. **2014**, 131, n/a-n/a		2
625	Bacterial Cellulose and its Use in Renewable Composites. **2014**, 89-130		3
624	Bacterial Cellulose-Based Nanocomposites: Roadmap for Innovative Materials. **2014**, 17-64		3
623	Medical Applications of Cellulose and its Derivatives: Present and Future. **2014**, 437-477		12
622	Multifunctional Ternary Polymeric Nanocomposites Based on Cellulosic Nanoreinforcements. **2014**, 163-198		1
621	Morphology, drug release, antibacterial, cell proliferation, and histology studies of chamomile-loaded wound dressing mats based on electrospun nanofibrous poly(e-caprolactone)/polystyrene blends. **2014**, 102, 977-87		76
620	The effects of storage gases on the durability of ammonia plasma effects with respect to wound fluid absorption and the biostatic activity of viscose non-wovens. **2014**, 84, 751-763		3
619	Recent Advances on the Development of Antibacterial Polysaccharide-Based Materials. **2014**, 1-46		1
618	A novel biomaterial: bacterial cellulose and its new era applications. **2014**, 61, 101-10		129
617	Evaluation of bacterial cellulose/hyaluronan nanocomposite biomaterials. *Carbohydrate Polymers*, **2014**, 103, 496-501	10.3	41
616	Utilization of bacterial cellulose in food. **2014**, 35, 539-545		349

615	One-pot green fabrication and antibacterial activity of thermally stable corn-like CNC/Ag nanocomposites. **2014**, 16, 1		38
614	Silver□titanium dioxide nanocomposites as effective antimicrobial and antibiofilm agents. **2014**, 16, 1		27
613	High photocatalytic properties of zinc oxide nanoparticles with amidoximated bacterial cellulose nanofibers as templates. **2014**, 32, 169-176		25
612	Compare study cellulose/Ag hybrids using fructose and glucose as reducing reagents by hydrothermal method. *Carbohydrate Polymers*, **2014**, 106, 14-21	10.3	13
611	Synthesis and characterization of hydroxypropyl cellulose from bacterial cellulose. **2014**, 32, 439-448		16
610	Preparation, characterization, and antibacterial properties of pH-responsive P(MMA-co-MAA)/silver nanocomposite hydrogels. **2014**, 21, 1		20
609	Green Chemical Synthesis of Silver Nanoparticles and its Catalytic Activity. **2014**, 24, 401-406		24
608	Introduction of broad spectrum antibacterial properties to bacterial cellulose nanofibers via immobilising □polylysine nanocoatings. **2014**, 36, 204-211		71
607	Antimicrobial pullulan derivative prepared by grafting with 3-aminopropyltrimethoxysilane: Characterization and ability to ´form´transparent films. **2014**, 35, 247-252		45
606	Effects of essential oil on the water binding capacity, physico-mechanical properties, antioxidant and antibacterial activity of gelatin films. **2014**, 57, 556-561		86
605	Solvent-free acetylation of cellulose nanofibers for improving compatibility and dispersion. *Carbohydrate Polymers*, **2014**, 102, 369-75	10.3	111
604	Synthesis of regenerated bacterial cellulose-zinc oxide nanocomposite films for biomedical applications. **2014**, 21, 433-447		158
603	Investigation of mechanical properties, antibacterial features, and water vapor permeability of polyvinyl alcohol thin films reinforced by glutaraldehyde and multiwalled carbon nanotube. **2014**, 35, 1736-1743		29
602	Silver nanoparticle/bacterial cellulose gel membranes for antibacterial wound dressing: investigation in vitro and in vivo. **2014**, 9, 035005		125
601	Imparting antimicrobial properties to natural rubber latex foam via green synthesized silver nanoparticles. **2014**, 131, n/a-n/a		7
600	Nanomaterials. **2014**, 1-29		1
599	A facile and rapid method for the black pepper leaf mediated green synthesis of silver nanoparticles and the antimicrobial study. **2014**, 4, 809-818		59
598	In situ synthesis of silver-nanoparticles/bacterial cellulose composites for slow-released antimicrobial wound dressing. *Carbohydrate Polymers*, **2014**, 102, 762-71	10.3	345

597	Antimicrobial activity of silver nanoparticles in situ growth on TEMPO-mediated oxidized bacterial cellulose. **2014**, 21, 4557-4567		47
596	Impregnation of the bacterial cellulose membrane with biologically produced silver nanoparticles. **2014**, 69, 785-93		23
595	Reinforcement of biodegradable poly(3-hydroxybutyrate-co-3-hydroxyvalerate) with cellulose nanocrystal/silver nanohybrids as bifunctional nanofillers. **2014**, 2, 8479-8489		86
594	Fabrication of collagen scaffolds impregnated with sago starch capped silver nanoparticles suitable for biomedical applications and their physicochemical studies. **2014**, 16, 20175-83		33
593	Promising low cost antimicrobial composite material based on bacterial cellulose and polyhexamethylene guanidine hydrochloride. **2014**, 60, 247-254		48
592	Surface-independent antibacterial coating using silver nanoparticle-generating engineered mussel glue. **2014**, 6, 20242-53		77
591	Fabrication of silver nanoparticles□polypyrrole composite modified electrode for electrocatalytic oxidation of hydrazine. **2014**, 195, 234-240		45
590	Nanocellulose in biomedicine: Current status and future prospect. **2014**, 59, 302-325		1013
589	Synthesis of poly(3-hydroxybutyrate-co-4-hydroxybutyrate)/chitosan/silver nanocomposite material with enhanced antimicrobial activity. **2014**, 30, 1469-79		10
588	Cellulose nanofibrils improve dispersibility and stability of silver nanoparticles and induce production of bacterial extracellular polysaccharides. **2014**, 2, 6226-6235		38
587	Microwave-assisted incorporation of silver nanoparticles in paper for point-of-use water purification. **2014**, 1, 367-378		48
586	Cationic release behaviour of antimicrobial cellulose/silver nanocomposites. **2014**, 21, 3551-3560		9
585	Controlled release of amoxicillin from bacterial cellulose membranes. **2014**, 12, 962-967		18
584	Do bacterial cellulose membranes have potential in drug-delivery systems?. **2014**, 11, 1113-24		58
583	Production of antibacterial colored viscose fibers using in situ prepared spherical Ag nanoparticles. *Carbohydrate Polymers*, **2014**, 110, 148-55	10.3	96
582	Influence of thickness and coatings morphology in the antimicrobial performance of zinc oxide coatings. **2014**, 307, 548-557		52
581	Fabrication of a flexible UV band-pass filter using surface plasmon metal-polymer nanocomposite films for promising laser applications. **2014**, 6, 8407-14		19
580	Nanotechnologies to Promote Skin Tissue Regeneration. **2014**, 343-366		1

579	Nanocellulose: Biomedical Nanomaterial Applications. **2015**, 5077-5100		1
578	The Application of Bactericidal Silver Nanoparticles in Wound Treatment. **2015**, 5, 23		43
577	Bacterial cellulose composites: Synthetic strategies and multiple applications in bio-medical and electro-conductive fields. **2015**, 10, 1847-61		93
576	Characterization of Bacterial Cellulose by Gluconacetobacter hansenii CGMCC 3917. **2015**, 80, E2217-27		41
575	Preparation and Characterization of Cellulose-Silver Nanocomposites by in situ Reduction with Alkalis as Activation Reagent. **2015**, 11,		2
574	Contribution of TEMPO-Oxidized Cellulose Gel in the Formation of Flower-Like Zinc Oxide Superstructures: Characterization of the TOCgel/ZnO Composite Films. **2015**, 5, 1164-1183		13
573	Development of Chitosan/Bacterial Cellulose Composite Films Containing Nanodiamonds as a Potential Flexible Platform for Wound Dressing. **2015**, 8, 6401-6418		64
572	Microbial Cellulose Biosynthesis Mechanisms and Medical Applications. **2015**,		7
571	Preliminary Study on Biosynthesis of Bacterial Nanocellulose Tubes in a Novel Double-Silicone-Tube Bioreactor for Potential Vascular Prosthesis. **2015**, 2015, 560365		24
570	Antibacterial Activity and Cytocompatibility of PLGA/CuO Hybrid Nanofiber Scaffolds Prepared by Electrospinning. **2015**, 2015, 1-10		42
569	Synthesis of surface bound silver nanoparticles on cellulose fibers using lignin as multi-functional agent. *Carbohydrate Polymers*, **2015**, 131, 134-41	10.3	50
568	Bacterial cellulose in the field of wound healing and regenerative medicine of skin: recent trends and future prospectives. **2015**, 72, 2399-2419		88
567	Synthesis, characterization and antibacterial effect of poly(acrylonitrile/maleic acid)Silver nanocomposite. **2015**, 57, 154-159		23
566	A fast green synthesis of Ag nanoparticles in carboxymethyl cellulose (CMC) through UV irradiation technique for antibacterial applications. **2015**, 75, 530-540		43
565	Antimicrobial Models in Nanotechnology. **2015**, 19-38		3
564	Silver-reinforced cellulose hybrids with enhanced antibacterial activity: synthesis, characterization, and mechanism. **2015**, 5, 97359-97366		16
563	Ag-nanogel blended polymeric membranes with antifouling, hemocompatible and bactericidal capabilities. **2015**, 3, 9295-9304		32
562	Reproducible preparation of a stable polypyrrole-coated-silver nanoparticles decorated polypyrrole-coated-polycaprolactone-nanofiber-based cloth electrode for electrochemical sensor application. **2015**, 26, 445704		7

561	Investigation of Nano Bacterial Cellulose Coated by Sesamum Oil for Wound Dressing Application. **2015**, 11, 212-216		11
560	In vitro effect of biogenic silver nanoparticles on sterilisation of tobacco leaf explants and for higher yield of protoplasts. **2015**, 9, 239-45		10
559	Facilely green synthesis of silver nanoparticles into bacterial cellulose. **2015**, 22, 373-383		59
558	Applications of bacterial cellulose and its composites in biomedicine. **2015**, 99, 2491-511		215
557	The bioactive composite film prepared from bacterial cellulose and modified by hydrolyzed gelatin peptide. **2015**, 29, 1428-38		6
556	Bacterial cellulose-titanium dioxide nanocomposites: nanostructural characteristics, antibacterial mechanism, and biocompatibility. **2015**, 22, 565-579		118
555	Matrix effect of montmorillonite and MCM-41 matrices on the antibacterial activity of Ag2CO3 nanoparticles. **2015**, 105-106, 217-224		12
554	Bio-derived materials as a green route for precious & critical metal recovery and re-use. **2015**, 17, 1951-1965		171
553	Antibacterial Activity Evaluation of Silver Nanoparticles Entrapped in Silica Matrix Functionalized with Antibiotics. **2015**, 25, 869-878		6
552	Antibacterial effects of gum kondagogu reduced/stabilized silver nanoparticles in combination with various antibiotics: a mechanistic approach. **2015**, 5, 535-543		28
551	Preparation and evaluation of nanocellulose-gold nanoparticle nanocomposites for SERS applications. **2015**, 140, 5640-9		65
550	Synthesis, structural characterization and microbial activity of 2D Ag(I)-5-aminoisophthalate coordination polymer with a new coordination mode. **2015**, 1099, 108-113		6
549	Bacterial cellulose as a material for wound treatment: Properties and modifications. A review. **2015** , 33, 1547-71		247
548	Efficient degradation of organic dyes by heterogeneous cefdinir derived silver nanocatalyst. **2015**, 31, 216-222		13
547	Green in-situ synthesized silver nanoparticles embedded in bacterial cellulose nanopaper as a bionanocomposite plasmonic sensor. **2015**, 74, 353-9		95
546	Development of silver sulfadiazine loaded bacterial cellulose/sodium alginate composite films with enhanced antibacterial property. *Carbohydrate Polymers*, **2015**, 132, 351-8	10.3	97
545	Bioactive prodigiosin-impregnated cellulose matrix for the removal of pathogenic bacteria from aqueous solution. **2015**, 5, 68621-68631		14
544	Controlled antiseptic/eosin release from chitosan-based hydrogel modified fibrous substrates. *Carbohydrate Polymers*, **2015**, 131, 306-14	10.3	16

543	Functionalization of medical cotton by direct incorporation of silver nanoparticles. **2015**, 78, 249-56	80
542	Porous membranes designed from bi-phasic polymeric blends containing silver decorated reduced graphene oxide synthesized via a facile one-pot approach. **2015**, 5, 32441-32451	40
541	Preparation and characterization of cellulose/Ag nanocomposites. **2015**, 36, 2220-2229	6
540	A facile synthesis of high antibacterial polymer nanocomposite containing uniformly dispersed silver nanoparticles. **2015**, 293, 1997-2008	11
539	Bacterial cellulose membrane supported three-dimensionally dispersed silver nanoparticles used as membrane electrode for oxygen reduction reaction in phosphate buffered saline. **2015**, 750, 43-48	16
538	pH-responsive release behavior and anti-bacterial activity of bacterial cellulose-silver nanocomposites. **2015**, 76, 209-17	64
537	Interaction and effectiveness of antimicrobials along with healing-promoting agents in a novel biocellulose wound dressing. **2015**, 55, 95-104	41
536	Development and characterization of an electrospun mat from Eri silk fibroin and PLA blends for wound dressing application. **2015**, 5, 31352-31364	19
535	Combined bactericidal activity of silver nanoparticles and hexadecylpyridinium salicylate ionic liquid. **2015**, 17, 1	7
534	Electrospun egg albumin-PVA nanofibers containing tetracycline hydrochloride: Morphological, drug release, antibacterial, thermal and mechanical properties. **2015**, 16, 2184-2192	26
533	Antibacterial effect, structural characterization, and some applications of silver chiral nano-flower sculptured thin films. **2015**, 9, 193-200	6
532	Photocatalytic disinfection of water by bacterial cellulose/N□ co-doped TiO2 under fluorescent light. **2015**, 22, 3321-3335	31
531	Antimicrobial functionalization of bacterial nanocellulose by loading with polihexanide and povidone-iodine. **2015**, 26, 245	53
530	Synthesis, Chemistry, and Medical Application of Bacterial Cellulose Nanocomposites. **2015**, 399-437	12
529	In vitro and in vivo investigation of bacterial cellulose dressing containing uniform silver sulfadiazine nanoparticles for burn wound healing. **2015**, 25, 197-203	66
528	Evaluation of AgHAP-containing polyurethane foam dressing for wound healing: synthesis, characterization, in vitro and in vivo studies. **2015**, 3, 7752-7763	40
527	Adsorption Behavior of Cellulose and Its Derivatives toward Ag(I) in Aqueous Medium: An AFM, Spectroscopic, and DFT Study. **2015**, 31, 12390-400	29
526	Efficient antibacterial silver nanoparticles composite using lignin as a template. **2015**, 49, 2329-2335	17

525	Antimicrobial properties of nano-silver: a cautionary approach to ionic interference. **2015**, 443, 56-64		30
524	Green synthesis of highly concentrated aqueous colloidal solutions of large starch-stabilised silver nanoplatelets. **2015**, 46, 530-7		23
523	Plasma Treatment in Textile Industry. **2015**, 12, 98-131		143
522	Toxicity of Metal and Metal Oxide Nanoparticles. **2015**, 75-112		22
521	Development of silver nanoparticles-loaded calcium alginate beads embedded in gelatin scaffolds for use as wound dressings. **2015**, 64, 275-283		26
520	Synthesis, characterization and antimicrobial properties of grafted sugarcane bagasse/silver nanocomposites. *Carbohydrate Polymers*, **2015**, 115, 276-84	10.3	26
519	In situ development of nanosilver-impregnated bacterial cellulose for sustainable released antimicrobial wound dressing. **2016**, 14, e53-8		12
518	Green Biosynthesis of Silver Nanoparticles Using Marine Red Algae Acanthophora specifera and its Antibacterial Activity. **2016**, 07,		8
517	The importance of preventing and controlling biofilm in wounds. **2016**, 79-105		3
516	Synthesis of SiC/Ag/Cellulose Nanocomposite and Its Antibacterial Activity by Reactive Oxygen Species Generation. **2016**, 6,		12
515	Current status and future prospects of nanobiomaterials in drug delivery. **2016**, 147-170		8
514	Highly Absorbent Antibacterial Hemostatic Dressing for Healing Severe Hemorrhagic Wounds. **2016**, 9,		18
513	Antimicrobial potential of green synthesized CeO nanoparticles from leaf extract. **2016**, 11, 5015-5025		90
512	Preparation, characterization, and antibacterial properties of silver nanoparticles embedded into cellulose aerogels. **2016**, 37, 1137-1142		28
511	Three-layered electrospun PVA/PCL/PVA nanofibrous mats containing tetracycline hydrochloride and phenytoin sodium: A case study on sustained control release, antibacterial, and cell culture properties. **2016**, 133, n/a-n/a		14
510	Zinc impregnated cellulose nanocomposites: Synthesis, characterization and applications. **2016**, 98, 174-182		50
509	Natural polymers supported copper nanoparticles for pollutants degradation. **2016**, 387, 1154-1161		94
508	Cellulose effects on morphology and elasticity of biofilms. **2016**, 2, 1		25

507	Preparation of silver nanoparticles at low temperature. **2016**,		
506	Bacterial Cellulose. **2016**, 384-399		3
505	Engineered Nanomaterials for Infection Control and Healing Acute and Chronic Wounds. **2016**, 8, 10049-69		150
504	Synthesis of copper–silver bimetallic nanopowders for a biomedical approach; study of their antibacterial properties. **2016**, 6, 50933-50940		18
503	Advances in biomedical and pharmaceutical applications of functional bacterial cellulose-based nanocomposites. *Carbohydrate Polymers*, **2016**, 150, 330-52	10.3	185
502	Pulmonary surfactant mitigates silver nanoparticle toxicity in human alveolar type-I-like epithelial cells. **2016**, 145, 167-175		25
501	Nanocellulose based functional membranes for water cleaning: Tailoring of mechanical properties, porosity and metal ion capture. **2016**, 514, 418-428		138
500	Direct synthesis of silver nanoparticles in ionic liquid. **2016**, 18, 1		15
499	Fabrication of bacterial cellulose-ZnO composite via solution plasma process for antibacterial applications. *Carbohydrate Polymers*, **2016**, 148, 335-44	10.3	88
498	The structure and composition of iron nanoparticles stabilized by carboxymethyl chitin resulting from ultrasonic irradiation. **2016**, 52, 66-73		1
497	Nanocellulose, a tiny fiber with huge applications. **2016**, 39, 76-88		530
496	Convenient fabrication of carboxymethyl cellulose electrospun nanofibers functionalized with silver nanoparticles. **2016**, 23, 1899-1909		37
495	Silver coated anionic cellulose nanofiber composites for an efficient antimicrobial activity. *Carbohydrate Polymers*, **2016**, 149, 51-9	10.3	59
494	Producing ultrapure wood cellulose nanofibrils and evaluating the cytotoxicity using human skin cells. *Carbohydrate Polymers*, **2016**, 150, 65-73	10.3	69
493	Morphological, physical, antimicrobial and release properties of ZnO nanoparticles-loaded bacterial cellulose films. *Carbohydrate Polymers*, **2016**, 149, 8-19	10.3	182
492	Preparation of cellulose composites with in situ generated copper nanoparticles using leaf extract and their properties. *Carbohydrate Polymers*, **2016**, 150, 32-9	10.3	61
491	Effect of molecular weight of PEG or PVA as reducing-stabilizing agent in the green synthesis of silver-nanoparticles. **2016**, 83, 265-277		31
490	Extremophiles: Applications in Nanotechnology. **2016**,		19

489	Application of Nanoparticles. **2016**, 163-193		5
488	Silver Nanoparticles: Newly Emerging Antimicrobials in 21st Century. **2016**, 103-139		
487	Improving properties of Hanji by coating chitosan-silver nanoparticle solution. **2016**, 93, 933-939		7
486	Bio-based Nanomaterials and Their Bionanocomposites. **2016**, 255-330		7
485	Differential biological activities of silver nanoparticles against Gram-negative and Gram-positive bacteria. **2016**, 193-227		6
484	Spectroscopic study of silver halides in montmorillonite and their antibacterial activity. **2016**, 163, 150-5		16
483	High-Value Utilization of Natural Cellulose: Cellulose-Based Biocomposite Materials. **2016**, 132-173		
482	A multipurpose natural and renewable polymer in medical applications: Bacterial cellulose. *Carbohydrate Polymers*, **2016**, 153, 406-420	10.3	199
481	Polymer Inorganic Nanocomposites: A Sustainable Antimicrobial Agents. **2016**, 265-289		0
480	Wound Care: Natural BioPolymer Applications. **2016**, 8245-8257		0
479	Characterisation and in vitro antimicrobial activity of biosynthetic silver-loaded bacterial cellulose hydrogels. **2016**, 33, 725-734		21
478	Antimicrobial Activity of Silver Nanoparticles in Polycaprolactone Nanofibers against Gram-Positive and Gram-Negative Bacteria. **2016**, 55, 12532-12538		68
477	Contact-active antibacterial aerogels from cellulose nanofibrils. **2016**, 146, 415-22		23
476	Isolation and identification of cellulose-producing strain Komagataeibacter intermedius from fermented fruit juice. *Carbohydrate Polymers*, **2016**, 151, 827-833	10.3	29
475	Silver Nanoparticle-Induced Autophagic-Lysosomal Disruption and NLRP3-Inflammasome Activation in HepG2 Cells Is Size-Dependent. **2016**, 150, 473-87		122
474	Facile synthesis of a biocompatible silver nanoparticle derived tripeptide supramolecular hydrogel for antibacterial wound dressings. **2016**, 40, 2036-2043		21
473	Green and ecofriendly synthesis of silver nanoparticles: Characterization, biocompatibility studies and gel formulation for treatment of infections in burns. **2016**, 155, 109-15		62
472	Silver-nanoparticle-impregnated cellulose nanofiber coating for packaging paper. **2016**, 23, 557-570		72

471	Controlled growth of Cu2O nanoparticles bound to cotton fibres. *Carbohydrate Polymers*, **2016**, 141, 229-37	10.3	63
470	Fabrication of cellulose fine fiber based membranes embedded with silver nanoparticles via Forcespinning. **2016**, 36, 269-278		18
469	Novel Cu@SiO2/bacterial cellulose nanofibers: Preparation and excellent performance in antibacterial activity. **2016**, 62, 656-61		38
468	In situ synthesis of a bio-cellulose/titanium dioxide nanocomposite by using a cell-free system. **2016**, 6, 22424-22435		48
467	Design and development of a novel cellulose/Fe2O3/Ag nanocomposite: a potential green catalyst and antibacterial agent. **2016**, 6, 13657-13665		78
466	Preparation, antibacterial activity and pH-responsive release behavior of silver sulfadiazine loaded bacterial cellulose for wound dressing applications. **2016**, 63, 404-410		28
465	Preparation and properties of cellulose/silver nanoparticle composites with in situ-generated silver nanoparticles using Ocimum sanctum leaf extract. **2016**, 21, 408-416		56
464	Preparation and characterization of antibacterial films based on polyvinyl alcohol/quaternized cellulose. **2016**, 101, 90-98		27
463	Characterisation of morphological, antimicrobial and leaching properties of in situ prepared polyurethane nanofibres doped with silver behenate. **2016**, 6, 23816-23826		4
462	Novel nano polymeric system containing biosynthesized core shell silver/silica nanoparticles for functionalization of cellulosic based material. **2016**, 22, 979-992		36
461	Construction of cellulose/nanosilver sponge materials and their antibacterial activities for infected wounds healing. **2016**, 23, 749-763		69
460	Biological production of silver nanoparticles by soil isolated bacteria and preliminary study of their cytotoxicity and cutaneous wound healing efficiency in rat. **2016**, 34, 22-31		35
459	Hydrogels based on cellulose and chitin: fabrication, properties, and applications. **2016**, 18, 53-75		406
458	Electrospun cellulose acetate supported Ag@AgCl composites with facet-dependent photocatalytic properties on degradation of organic dyes under visible-light irradiation. *Carbohydrate Polymers*, **2016**, 136, 322-8	10.3	76
457	Silver nanoparticles in aquatic environments: Physiochemical behavior and antimicrobial mechanisms. **2016**, 88, 403-427		201
456	Improvement of antimicrobial activity of graphene oxide/bacterial cellulose nanocomposites through the electrostatic modification. *Carbohydrate Polymers*, **2016**, 136, 1152-60	10.3	36
455	Eco-friendly green synthesis of silver nanoparticles using salmalia malabarica: synthesis, characterization, antimicrobial, and catalytic activity studies. **2016**, 6, 681-689		47
454	Long-term disinfection performance of silver nanoparticles impregnated membranes. **2016**, 57, 4906-4912		4

453	Environmentally friendly procedure for in-situ coating of regenerated cellulose fibres with silver nanoparticles. *Carbohydrate Polymers*, **2017**, 163, 92-100	10.3	25
452	Bacterial cellulose-zinc oxide nanocomposites as a novel dressing system for burn wounds. *Carbohydrate Polymers*, **2017**, 164, 214-221	10.3	203
451	Application of Wet Nanostructured Bacterial Cellulose as a Novel Hydrogel Bioanode for Microbial Fuel Cells. **2017**, 4, 648-654		41
450	Development of Nano-Antimicrobial Biomaterials for Biomedical Applications. **2017**, 479-545		22
449	Characterisation of bacterial cellulose from diverse Komagataeibacter strains and their application to construct plant cell wall analogues. **2017**, 24, 1211-1226		17
448	Antibacterial cotton fabric with in situ generated silver nanoparticles by one-step hydrothermal method. **2017**, 22, 275-279		34
447	Antimicrobial textiles: Biogenic silver nanoparticles against Candida and Xanthomonas. **2017**, 75, 582-589		73
446	Active Nanocomposites in Food Contact Materials. **2017**, 1-44		3
445	Development of multifunctional nano/ultrafiltration membrane based on a chitosan thin film on alginate electrospun nanofibres. **2017**, 156, 470-479		55
444	Green synthesis, characterization and biological activities of silver nanoparticles from alkalinized Cymbopogon citratus Stapf. **2017**, 8, 015017		37
443	Therapeutic nanomaterials: from a drug delivery perspective. **2017**, 1-61		
442	Nanocellulose and Nanogels as Modern Drug Delivery Systems. **2017**, 209-269		6
441	Cellulose–halloysite nanotube composite hydrogels for curcumin delivery. **2017**, 24, 2861-2875		57
440	Inhibition of disinfection by-product formation in silver nanoparticle-humic acid water treatment. **2017**, 184, 158-167		8
439	High-fidelity bioelectronic muscular actuator based on porous carboxylate bacterial cellulose membrane. **2017**, 250, 402-411		32
438	Deposition of gold-cellulose hybrid nanofiller on a polyelectrolyte membrane constructed using guar gum and poly(vinyl alcohol) for transdermal drug delivery. **2017**, 539, 344-357		30
437	Application of Materials as Medical Devices with Localized Drug Delivery Capabilities for Enhanced Wound Repair. **2017**, 89, 392-410		62
436	Synergistic Antimicrobial Effects of Silver/Transition-metal Combinatorial Treatments. **2017**, 7, 903		42

435	Composites of Bacterial Cellulose and Small Molecule-Decorated Gold Nanoparticles for Treating Gram-Negative Bacteria-Infected Wounds. **2017**, 13, 1700130		76
434	Bacterial cellulose in biomedical applications: A review. **2017**, 104, 97-106		336
433	Life Cycle Assessment and Release Studies for 15 Nanosilver-Enabled Consumer Products: Investigating Hotspots and Patterns of Contribution. **2017**, 51, 7148-7158		54
432	Carboxylated-nanoncellulose as a template for the synthesis of silver nanoprism. **2017**, 422, 32-38		13
431	Silver Alginate Hydrogel Micro- and Nanocontainers for Theranostics: Synthesis, Encapsulation, Remote Release, and Detection. **2017**, 9, 21949-21958		47
430	Electrospun HSiWO/cellulose acetate composite nanofibrous membrane for photocatalytic degradation of tetracycline and methyl orange with different mechanism. *Carbohydrate Polymers*, **2017**, 168, 153-162	10.3	53
429	Silver Nanoparticles and Metallic Silver Interfere with the Griess Reaction: Reduction of Azo Dye Formation via a Competing Sandmeyer-Like Reaction. **2017**, 30, 1030-1037		8
428	Bistable thermo-chromic and magnetic spin crossover microcrystals embedded in nata de coco bacterial cellulose biofilm. **2017**, 24, 2205-2213		8
427	Gelatin scaffolds functionalized by silver nanoparticle-containing calcium alginate beads for wound care applications. **2017**, 28, 849-858		9
426	Green synthetic approach to prepare silver nanoparticles using longan (Dimocarpus longan) peel extract and evaluation of their antibacterial activities. **2017**, 4, 6317-6325		6
425	Comparative analysis of the effect of silver nanoparticle and silver nitrate on morphological and anatomical parameters of banana under in vitro conditions. **2017**, 47, 1530-1536		6
424	Chalcone dendrimer stabilized core□shell nanoparticles□ comparative study on Co@TiO2, Ag@TiO2 and Co@AgCl nanoparticles for antibacterial and antifungal activity. **2017**, 4, 105046		8
423	Bacterial cellulose□TiO2 nanocomposites promote healing and tissue regeneration in burn mice model. **2017**, 7, 47662-47668		97
422	Novel dextran modified bacterial cellulose hydrogel accelerating cutaneous wound healing. **2017**, 24, 4927-4937		56
421	Silver Nanocluster-Embedded Zein Films as Antimicrobial Coating Materials for Food Packaging. **2017**, 9, 35297-35304		57
420	Functional Coatings. **2017**, 480-487		
419	Nanocellulose as a sustainable biomass material: structure, properties, present status and future prospects in biomedical applications. **2017**, 9, 14758-14781		150
418	Immobilization of antimicrobial peptides onto cellulose nanopaper. **2017**, 105, 741-748		9

417	Preparation and characterization of a photocatalytic antibacterial material: Graphene oxide/TiO/bacterial cellulose nanocomposite. *Carbohydrate Polymers*, **2017**, 174, 1078-1086	10.3	52
416	Sedentary behavior and altered metabolic activity by AgNPs ingestion in Drosophila melanogaster. **2017**, 7, 15617		31
415	Characterization of pea starch-guar gum biocomposite edible films enriched by natural antimicrobial agents for active food packaging. **2017**, 105, 51-63		35
414	Fabrication of PLA/Ag nanofibers by green synthesis method using Momordica charantia fruit extract for wound dressing applications. **2017**, 529, 771-782		64
413	Silver-Functionalized Bacterial Cellulose as Antibacterial Membrane for Wound-Healing Applications. **2017**, 2, 3632-3639		109
412	Alcohol Recognition by Flexible, Transparent and Highly Sensitive Graphene-Based Thin-Film Sensors. **2017**, 7, 4317		23
411	Increased water content in bacterial cellulose synthesized under rotating magnetic fields. **2017**, 36, 192-201		19
410	Experimental Investigation of Cellulose/Silver Nanocomposites Using In Situ Generation Method. **2017**, 25, 1021-1032		27
409	Preparation and properties of cellulose nanocomposite films with in situ generated copper nanoparticles using Terminalia catappa leaf extract. **2017**, 95, 1064-1071		51
408	Production of nanocellulose in miniature-bioreactor: Optimization and characterization. **2017**, 47, 371-378		6
407	Novel Functional Materials Based on Cellulose. **2017**,		13
406	Titanium tetrachloride for silver nanoparticle-humic acid composite contaminant removal in coagulation-ultrafiltration hybrid process: floc property and membrane fouling. **2017**, 24, 1757-1768		11
405	Nanocellulose-Based Functional Materials. **2017**, 69-87		1
404	Date Fruits-Assisted Synthesis and Biocompatibility Assessment of Nickel Oxide Nanoparticles Anchored onto Graphene Sheets for Biomedical Applications. **2017**, 181, 725-734		9
403	Cellulose nanofibers coated with silver nanoparticles as a SERS platform for detection of pesticides in apples. *Carbohydrate Polymers*, **2017**, 157, 643-650	10.3	96
402	In situ functionalized nanobiocomposites dressings of bamboo cellulose nanocrystals and silver nanoparticles for accelerated wound healing. *Carbohydrate Polymers*, **2017**, 155, 152-162	10.3	91
401	Wound healing applications of sericin/chitosan-capped silver nanoparticles incorporated hydrogel. **2017**, 7, 77-88		76
400	Synthesis of Ag-NPs impregnated cellulose composite material: its possible role in wound healing and photocatalysis. **2017**, 11, 477-484		16

399	Antibacterial activity and in´vitro cytotoxicity evaluation of alginate-AgNP fibers. **2017**, 87, 1377-1386	5
398	Silver nanoparticles in the environment: Sources, detection and ecotoxicology. **2017**, 575, 231-246	308
397	New Insights on Bacterial Cellulose. **2017**, 213-249	11
396	Preliminary study on biosynthesis and characterization of bacteria cellulose films from coconut water. **2017**, 101, 012010	7
395	Cu/dioxidine hybrid nanocomposites: cryochemical synthesis and antibacterial activity. **2017**, 72, 224-226	4
394	Fabricating multifunctional silver nanoparticles-coated cotton fabric. **2017**, 10, S2355-S2362	53
393	Antibacterial activity against Escherichia coli and characterization of ZnO and ZnO□Al 2 O 3 mixed oxide nanoparticles. **2017**, 10, S230-S235	16
392	4. Bacterial cellulose. **2017**, 193-220	
391	Antimicrobial Treatment of Polymeric Medical Devices by Silver Nanomaterials and Related Technology. **2017**, 18,	59
390	Raw Materials for Production of Nanocellulose. **2017**, 15-25	1
389	N-Halamine Biocidal Materials with Superior Antimicrobial Efficacies for Wound Dressings. **2017**, 22,	35
388	Review of Silver Nanoparticles (AgNPs)-Cellulose Antibacterial Composites. **2017**, 13,	17
387	Antimicrobial Polymers in the Nano-World. **2017**, 7,	95
386	Production and Status of Bacterial Cellulose in Biomedical Engineering. **2017**, 7,	135
385	Multifunctional antimicrobial nanocomposites for food packaging applications. **2017**, 265-303	7
384	Electrospun Polycaprolactone/Aloe Vera_Chitosan Nanofibrous Asymmetric Membranes Aimed for Wound Healing Applications. **2017**, 9,	104
383	Nanostructured coatings for biomaterials. **2017**, 191-210	1
382	Surface Functionalization of □Rajshahi Silk□Using Green Silver Nanoparticles. **2017**, 5, 35	43

381	Power and Time Dependent Microwave Assisted Fabrication of Silver Nanoparticles Decorated Cotton (SNDC) Fibers for Bacterial Decontamination. **2017**, 8, 330		19
380	Dual Role of a Ricinoleic Acid Derivative in the Aqueous Synthesis of Silver Nanoparticles. **2017**, 2017, 1-8		6
379	Dose-dependent effect of silver nanoparticles (AgNPs) on fertility and survival of Drosophila: An in-vivo study. **2017**, 12, e0178051		41
378	Nanocellulose as a template for the production of advanced nanostructured material. **2017**, 427-454		3
377	Liquid-phase synthesis of Ni nanowire/cellulose hybrid structure. **2018**, 57, 02CA09		2
376	Nanosilver leverage on reactive dyeing of cellulose fibers: Color shading, color fastness and biocidal potentials. *Carbohydrate Polymers*, **2018**, 186, 310-320	10.3	62
375	Materials chemistry and the futurist eco-friendly applications of nanocellulose: Status and prospect. **2018**, 22, 949-978		158
374	Synthesis of cellulose impregnated copper nanoparticles as an efficient heterogeneous catalyst for CN coupling reactions under mild conditions. *Carbohydrate Polymers*, **2018**, 195, 189-198	10.3	39
373	Production and characterization of bacterial cellulose produced by Gluconacetobacter xylinus isolated from Chinese persimmon vinegar. *Carbohydrate Polymers*, **2018**, 194, 200-207	10.3	47
372	Recent advances on silver nanoparticle and biopolymer-based biomaterials for wound healing applications. **2018**, 115, 165-175		148
371	TEMPO-Oxidized Bacterial Cellulose Pellicle with Silver Nanoparticles for Wound Dressing. **2018**, 19, 544-554		118
370	Synthesis and antimicrobial effects of highly dispersed, cellulose-stabilized silver/cellulose nanocomposites.. **2018**, 8, 3646-3656		16
369	Solid-State Synthesis of Metal Nanoparticles Supported on Cellulose Nanocrystals and Their Catalytic Activity. **2018**, 6, 3974-3983		81
368	Graphene oxide/silver nanohybrid: Optimization, antibacterial activity and its impregnation on bacterial cellulose as a potential wound dressing based on GO-Ag nanocomposite-coated BC. **2018**, 18, 298-307		33
367	Wound dressings from naturally-occurring polymers: A review on homopolysaccharide-based composites. *Carbohydrate Polymers*, **2018**, 189, 379-398	10.3	170
366	Surface modification of nanosatrch using nano silver: a potential antibacterial for food package coating. **2018**, 55, 899-904		15
365	Cellulose nanocrystal (CNC)-inorganic hybrid systems: synthesis, properties and applications. **2018**, 6, 864-883		94
364	Morin incorporated polysaccharide-protein (psyllium-keratin) hydrogel scaffolds accelerate diabetic wound healing in Wistar rats.. **2018**, 8, 2305-2314		28

363	Transparent nontoxic antibacterial wound dressing based on silver nano particle/bacterial cellulose nano composite synthesized in the presence of tripolyphosphate. **2018**, 44, 244-253		46
362	Recent Advances in the Development of Antimicrobial Nanoparticles for Combating Resistant Pathogens. **2018**, 7, e1701400		72
361	AgBr and AgCl nanoparticle doped TEMPO-oxidized microfiber cellulose as a starting material for antimicrobial filter. *Carbohydrate Polymers*, **2018**, 191, 266-279	10.3	15
360	Preparation of nano-sized particles from bacterial cellulose using ultrasonication and their characterization. *Carbohydrate Polymers*, **2018**, 191, 161-167	10.3	60
359	Modification of Bacterial Cellulose with Quaternary Ammonium Compounds Based on Fatty Acids and Amino Acids and the Effect on Antimicrobial Activity. **2018**, 19, 1528-1538		42
358	Green synthesis of plant supported CuAg and CuNi bimetallic nanoparticles in the reduction of nitrophenols and organic dyes for water treatment. **2018**, 260, 78-91		124
357	In situ and ex situ modifications of bacterial cellulose for applications in tissue engineering. **2018**, 82, 372-383		123
356	Nanofibrous Electrospun Heart Decellularized Extracellular Matrix-Based Hybrid Scaffold as Wound Dressing for Reducing Scarring in Wound Healing. **2018**, 24, 830-848		26
355	Broad-spectrum antimicrobial activity of bacterial cellulose silver nanocomposites with sustained release. **2018**, 53, 1596-1609		52
354	Physicochemical properties and antimicrobial activity of biocompatible carboxymethylcellulose-silver nanoparticle hybrids for wound dressing and epidermal repair. **2018**, 135, 45812		24
353	Hydrothermal synthesis of bacterial cellulose-copper oxide nanocomposites and evaluation of their antimicrobial activity. *Carbohydrate Polymers*, **2018**, 179, 341-349	10.3	68
352	Preparing high-adhesion silver coating on APTMS modified polyethylene with excellent anti-bacterial performance. **2018**, 436, 117-124		14
351	Enhanced bacterial cellulose production by Gluconacetobacter xylinus via expression of Vitreoscilla hemoglobin and oxygen tension regulation. **2018**, 102, 1155-1165		41
350	Influence of hemicelluloses and lignin content on structure and sorption properties of flax fibers (Linum usitatissimum L.). **2018**, 25, 697-709		33
349	Flexible Metal□Organic Framework-Bacterial Cellulose Nanocomposite for Iodine Capture. **2018**, 18, 356-363		35
348	Antibacterial properties of films of cellulose composites with silver nanoparticles and antibiotics. **2018**, 65, 54-68		61
347	Antimicrobial wound dressing film utilizing cellulose nanocrystal as drug delivery system for curcumin. **2018**, 25, 631-638		59
346	Antibacterial surface modified of novel nanocomposite sulfonated polyethersulfone/polyrhodanine membrane. **2018**, 427, 17-28		30

345	Synthesis, characterization, and antibacterial property of eco-friendly Ag/cellulose nanocomposite film. **2018**, 67, 420-426	13
344	Application and Curative Effect of Silver Nanoparticles in Treating Allergic Rhinitis. **2018**, 452, 022154	
343	. **2018**,	5
342	Nanocellulose-Based Composites in Biomedical Applications. **2018**, 369-401	1
341	Silver-Incorporated Nanocellulose Fibers for Antibacterial Hydrogels. **2018**, 3, 16150-16157	33
340	Green approach for the synthesis of carboxycoumarins by using a highly active magnetically recyclable nanobiocomposite via sustainable catalysis. **2018**, 13, 591-594	18
339	Synthesis and Applications of Carbohydrate-Based Hydrogels. **2018**, 1-24	1
338	Phytochemical Process for the Functionalization of Materials with Metal Nanoparticles: Current Trends and Future Perspectives. **2018**, 3, 13561-13585	6
337	Novel Bacterial Cellulose-Poly (Acrylic Acid) Hybrid Hydrogels with Controllable Antimicrobial Ability as Dressings for Chronic Wounds. **2018**, 10,	25
336	Benefits of Renewable Hydrogels over Acrylate- and Acrylamide-Based Hydrogels. **2018**, 1-47	1
335	Green synthesis of antibacterial bimetallic Ag□u nanoparticles for catalytic reduction of persistent organic pollutants. **2018**, 29, 20840-20855	27
334	Grown Ultrathin Bacterial Cellulose Mats for Optical Applications. **2018**, 19, 4576-4584	7
333	Silver-coated gold nanorods as a promising antimicrobial agent in the treatment of cancer-related infections. **2018**, 13, 6575-6583	2
332	Metal nanoparticle-hydrogel nanocomposites for biomedical applications □An atmospheric pressure plasma synthesis approach. **2018**, 15, 1800112	21
331	EVALUATION OF BACTERIAL CELLULOSE-SODIUM ALGINATE FORWARD OSMOSIS MEMBRANE FOR WATER RECOVERY. **2018**, 80,	
330	Advances in bionanocomposites for biomedical applications. **2018**, 379-399	1
329	Cellulose-based hydrogel materials: chemistry, properties and their prospective applications. **2018**, 7, 153-174	184
328	Developing Antibacterial Nanocrystalline Cellulose Using Natural Antibacterial Agents. **2018**, 10, 33827-33838	63

327	Luminescent-Magnetic Cellulose Fibers, Modified with Lanthanide-Doped Core/Shell Nanostructures. **2018**, 3, 10383-10390		19
326	Biogenic Synthesis and Characterization of Silver Nanoparticles Using Some Medical Plants and Evaluation of Their Antibacterial and Toxicity Potential. **2018**, 101, 1905-1912		4
325	Antarctic rhizobacteria improve salt tolerance and physiological performance of the Antarctic vascular plants. **2018**, 41, 1973-1982		16
324	Toward flexible and antibacterial piezoresistive porous devices for wound dressing and motion detectors. **2018**, 56, 1063-1072		17
323	Embedding of Bacterial Cellulose Nanofibers within PHEMA Hydrogel Matrices: Tunable Stiffness Composites with Potential for Biomedical Applications. **2018**, 2018, 1-11		30
322	Chitosan based hydrogels and their applications for drug delivery in wound dressings: A review. *Carbohydrate Polymers*, **2018**, 199, 445-460	10.3	366
321	Antimicrobial Food Pads Containing Bacterial Cellulose and Polysaccharides. **2018**, 1-36		3
320	Injectable polysaccharide hydrogel embedded with hydroxyapatite and calcium carbonate for drug delivery and bone tissue engineering. **2018**, 118, 1257-1266		92
319	A novel strategy for rapid detection of bacteria in water by the combination of three-dimensional surface-enhanced Raman scattering (3D SERS) and laser induced breakdown spectroscopy (LIBS). **2018**, 1043, 64-71		33
318	Polymer Gels. **2018**,		2
317	Novel bionanocellulose based membrane protected with covalently bounded thin silicone layer as promising wound dressing material. **2018**, 459, 80-85		3
316	A light-weight and high-efficacy antibacterial nanocellulose-based sponge via covalent immobilization of gentamicin. *Carbohydrate Polymers*, **2018**, 200, 595-601	10.3	27
315	Biogenic Nanosilver against Multidrug-Resistant Bacteria (MDRB). **2018**, 7,		57
314	Metal-Adapted Bacteria Isolated From Wastewaters Produce Biofilms by Expressing Proteinaceous Curli Fimbriae and Cellulose Nanofibers. **2018**, 9, 1334		42
313	Biomedical Potential of Ultrafine Ag Nanoparticles Coated on Poly (Gamma-Glutamic Acid) Hydrogel with Special Reference to Wound Healing. **2018**, 8,		23
312	The Effect of Impregnated Alpha-Cellulose Nanofibers with Ciprofloxacin Hydrochloride on Staphylococcus aureus In Vitro and Healing Process of Wound in Rat. **2018**, 4, 247-256		8
311	Catalytic reduction of picric acid, nitrophenols and organic azo dyes via green synthesized plant supported Ag nanoparticles. **2018**, 268, 87-101		96
310	Activated charcoal as a capture material for silver nanoparticles in environmental water samples. **2018**, 645, 356-362		8

309	Achieving Long-Term Biocompatible Silicone via Covalently Immobilized S-Nitroso-N-acetylpenicillamine (SNAP) That Exhibits 4 Months of Sustained Nitric Oxide Release. **2018**, 10, 27316-27325	35
308	Recent Advances of Multifunctional Cellulose-Based Hydrogels. **2018**, 1-28	
307	Facile synthesis of elemental silver by the seed nucleus embedding method for antibacterial applications. **2018**, 25, 5289-5296	6
306	Human Skin-Like, Robust Waterproof, and Highly Breathable Fibrous Membranes with Short Perfluorobutyl Chains for Eco-Friendly Protective Textiles. **2018**, 10, 30887-30894	44
305	Enhanced Antibacterial Performance and Cytocompatibility of Silver Nanoparticles Stabilized by Cellulose Nanocrystal Grafted with Chito-Oligosaccharides. **2018**, 11,	11
304	Biopolymers: Applications in wound healing and skin tissue engineering. **2018**, 45, 2857-2867	131
303	Silver nanoparticles in building materials for environment protection against microorganisms. **2019**, 16, 1239-1248	5
302	Laccase/TEMPO-mediated bacterial cellulose functionalization: production of paper-silver nanoparticles composite with antimicrobial activity. **2019**, 26, 8655-8668	14
301	Bacterial cellulose/montmorillonite bionanocomposites prepared by immersion and in-situ methods: structural, mechanical, thermal, swelling and dehydration properties. **2019**, 26, 7847-7861	9
300	Biocompatible silver nanoparticles/poly(vinyl alcohol) electrospun nanofibers for potential antimicrobial food packaging applications. **2019**, 21, 100379	39
299	Hydrophilic Silver Nanoparticles Loaded into Niosomes: Physical-Chemical Characterization in View of Biological Applications. **2019**, 9,	15
298	Poly(4-vinylaniline)/Polyaniline Bilayer-Functionalized Bacterial Cellulose for Flexible Electrochemical Biosensors. **2019**, 35, 10354-10366	20
297	Facile microwave synthesis of silver nanoplates: optical plasmonic and antimicrobial activity. **2019**, 6, 095073	1
296	Synthesis of super hydrophilic cellulose-alpha zirconium phosphate ion exchange membrane via surface coating for the removal of heavy metals from wastewater. **2019**, 690, 167-180	46
295	Bacterial nanocellulose: Present status, biomedical applications and future perspectives. **2019**, 104, 109963	78
294	Bioinspired mechanically active adhesive dressings to accelerate wound closure. **2019**, 5, eaaw3963	189
293	Green nanotechnology: a review on green synthesis of silver nanoparticles - an ecofriendly approach. **2019**, 14, 5087-5107	160
292	Nanocellulose Composite Biomaterials in Industry and Medicine. **2019**, 693-784	4

291	A facile green approach for fabricating bacterial cellulose scaffold with macroporous structure and cell affinity. **2019**, 34, 442-452		1
290	Silver-doped carbon fibers at low loading capacity that display high antibacterial properties. **2019**, 94, 1628-1637		2
289	Transdermal Delivery of Crocin Using Bacterial Nanocellulose Membrane. **2019**, 20, 2025-2031		15
288	ZrO-ZnO Nanoparticles as Antibacterial Agents. **2019**, 4, 19216-19224		27
287	Antibacterial PLA Fibers Containing Thiazolium Groups as Wound Dressing Materials.. **2019**, 2, 4714-4719		12
286	Antimicrobial Activity of Composite Consisting of Cellulose Nanofibers and Silver Nanoparticles. **2019**, 4, 12164-12169		5
285	Nanocellulose isolation characterization and applications: a journey from non-remedial to biomedical claims. **2019**, 2, 187-212		21
284	Combination of the Silver-Ethylene Interaction and 3D Printing To Develop Antibacterial Superporous Hydrogels for Wound Management. **2019**, 11, 33734-33747		42
283	Preparation and properties of cotton nanocomposite fabrics with in situ generated copper nanoparticles using Red sanders powder extract as a reducing agent. **2019**, 49, 343-348		9
282	Cellulose nanofibrils for biomaterial applications. **2019**, 16, 1959-1968		13
281	The use of bacterial polysaccharides in bioprinting. **2019**, 37, 107448		52
280	ZCIS/ZnS QDs fluorescent aerogels with tunable emission prepared from porous 3D nanofibrillar bacterial cellulose. *Carbohydrate Polymers*, **2019**, 224, 115173	10.3	4
279	Bacterial Cellulose: Production, Modification and Perspectives in Biomedical Applications. **2019**, 9,		140
278	Hierarchical Ag Nanostructures Fabricated from Silver Coordination Polymers for Antibacterial Surface. **2019**, 11,		5
277	Durable antibacterial and hydrophobic cotton fabrics utilizing enamine bonds. *Carbohydrate Polymers*, **2019**, 211, 173-180	10.3	48
276	Potential of Biocellulose Carrier Impregnated with Essential Oils to Fight Against Biofilms Formed on Hydroxyapatite. **2019**, 9, 1256		13
275	Water Treatment Devices Based on Zero-Valent Metal and Metal Oxide Nanomaterials. **2019**, 187-225		4
274	The use of Epiprotect , an advanced wound dressing, to heal paediatric patients with burns: A pilot study. **2019**, 3, 103-107		9

273	Highly transparent, highly flexible composite membrane with multiple antimicrobial effects used for promoting wound healing. *Carbohydrate Polymers*, **2019**, 222, 114985	10.3	41
272	A concise review on drug-loaded electrospun nanofibres as promising wound dressings. **2019**, 43, 38-47		19
271	Designing heterogeneous hierarchical material systems: a holistic approach to structural and materials design. **2019**, 9, 628-636		6
270	The antibacterial stability of poly(dopamine) in-situ reduction and chelation nano-Ag based on bacterial cellulose network template. **2019**, 491, 383-394		37
269	Modification of bacterial cellulose/keratin nanofibrous mats by a tragacanth gum-conjugated hydrogel for wound healing. **2019**, 134, 280-289		28
268	Robust Synthesis of Size-Dispersal Triangular Silver Nanoprisms via Chemical Reduction Route and Their Cytotoxicity. **2019**, 9,		6
267	Silver nanoparticles stabilized with a silicon nanocrystal shell and their antimicrobial activity.. **2019**, 9, 15171-15176		2
266	Cellulose Nanocrystals: Production, Functionalization and Advanced Applications. **2019**, 58, 1-16		35
265	Green and scalable synthesis of nanosilver loaded silica microparticles by spray-drying: application as antibacterial agent, catalyst and SERS substrate. **2019**, 9, 1925-1937		6
264	Nanotechnology and Plant Tissue Culture. **2019**, 333-370		4
263	Controllable synthesis uniform spherical bacterial cellulose and their potential applications. **2019**, 26, 8325-8336		1
262	Composites based on bioderived polymers: potential role in tissue engineering: Vol VI: resorbable polymer fibers. **2019**, 259-296		0
261	In vitro and in vivo performance of a propolis-coated polyurethane wound dressing with high porosity and antibacterial efficacy. **2019**, 178, 177-184		33
260	Antibacterial cotton fabrics with in situ generated silver and copper bimetallic nanoparticles using red sanders powder extract as reducing agent. **2019**, 24, 346-354		14
259	Strategies to Explore Biomedical Application of Nanocellulose. **2019**, 349-395		4
258	Antimicrobial performance of polyethylene nanocomposite monofilaments reinforced with metal nanoparticles decorated montmorillonite. **2019**, 178, 87-93		17
257	Bio-based Polymers and Nanocomposites. **2019**,		6
256	Ammonia-sensing ability of differently structured hydroxyapatite blended cellulose nanofibril composite films. **2019**, 26, 3325-3337		17

255	Bioinspired scaffold induced regeneration of neural tissue. **2019**, 114, 98-108	15
254	Gold nanoparticle-carboxymethyl cellulose nanocolloids for detection of human immunodeficiency virus type-1 (HIV-1) using laser light scattering immunoassay. **2019**, 177, 377-388	14
253	A Study of the Physical and Mechanical Properties of Aerogels Obtained from Bacterial Cellulose. **2019**, 20, 1401-1411	22
252	A simple method for improving the properties of the sago starch films prepared by using ultrasonication treatment. **2019**, 93, 276-283	132
251	Impact of Nanoparticle Shape, Size, and Properties of the Sustainable Nanocomposites. **2019**, 313-336	9
250	Bacterial Cellulose Nanocomposites. **2019**, 87-105	1
249	Wood-Based Mesoporous Filter Decorated with Silver Nanoparticles for Water Purification. **2019**, 7, 5134-5141	50
248	Microwave assisted green synthesis of ZnO and Ag doped ZnO nanoparticles as antifungal and antibacterial agents using Colocasia esculenta leaf extract. **2019**, 11, 239	1
247	Insights of Bacterial Cellulose: Bio and Nano-Polymer Composites Toward Industrial Application. **2019**, 339-356	
246	Surface-modified cellulose in biomedical engineering. **2019**, 215-261	2
245	. **2019**,	2
244	Janus Ag/AgS beads as efficient photothermal agents for the eradication of inflammation and artery stenosis. **2019**, 11, 20324-20332	11
243	Green synthesis of nanoparticles of copper and its oxides in a nanoporous carbon matrix. **2019**, 27, 967-977	5
242	Synthesis of silver particles stabilized by a bifunctional SiH -NH -PMHS oligomer as recyclable nanocatalysts for the catalytic reduction of 4-nitrophenol.. **2019**, 9, 31013-31020	3
241	Antimicrobial characteristics and biocompatibility of the surgical sutures coated with biosynthesized silver nanoparticles. **2019**, 86, 254-258	61
240	The production and application of hydrogels for wound management: A review. **2019**, 111, 134-151	106
239	Photodynamic Antimicrobial Cellulosic Material Through Covalent Linkage of Protoporphyrin IX onto Lyocell Fibers. **2019**, 39, 57-74	10
238	Synthesis and characterization of stable silver nanoparticles, Ag-NPs: Discussion on the applications of Ag-NPs as antimicrobial agents. **2019**, 554, 21-30	28

237	Development of novel three-dimensional scaffolds based on bacterial nanocellulose for tissue engineering and regenerative medicine: Effect of processing methods, pore size, and surface area. **2019**, 107, 348-359		25
236	Development of modified montmorillonite-bacterial cellulose nanocomposites as a novel substitute for burn skin and tissue regeneration. *Carbohydrate Polymers*, **2019**, 206, 548-556	10.3	62
235	Bacterial cellulose nanocomposites: An all-nano type of material. **2019**, 98, 1277-1293		98
234	Benefits of Renewable Hydrogels over Acrylate- and Acrylamide-Based Hydrogels. **2019**, 197-243		1
233	Antimicrobial Food Pads Containing Bacterial Cellulose and Polysaccharides. **2019**, 1303-1338		1
232	Synthesis and Applications of Carbohydrate-Based Hydrogels. **2019**, 1491-1514		
231	Recent Advances of Multifunctional Cellulose-Based Hydrogels. **2019**, 37-64		1
230	Enhancing Localized Pesticide Action through Plant Foliage by Silver-Cellulose Hybrid Patches. **2019**, 5, 413-419		13
229	A novel antibacterial acellular porcine dermal matrix cross-linked with oxidized chitosan oligosaccharide and modified by in situ synthesis of silver nanoparticles for wound healing applications. **2019**, 94, 1020-1036		22
228	Controlled Release and Long-Term Antibacterial Activity of Dialdehyde Nanofibrillated Cellulose/Silver Nanoparticle Composites. **2019**, 7, 1146-1158		61
227	Responses of flocculated activated sludge to bimetallic Ag-Fe nanoparticles toxicity: Performance, activity enzymatic, and bacterial community shift. **2019**, 366, 114-123		25
226	Development of regenerative and flexible fibroin-based wound dressings. **2019**, 107, 7-18		19
225	Removal of silver nanoparticles coated with different stabilizers from aqueous medium by electrocoagulation. **2020**, 41, 1139-1150		0
224	Biocompatible pure ZnO nanoparticles-3D bacterial cellulose biointerfaces with antibacterial properties. **2020**, 13, 3521-3533		36
223	Synthesis of antimicrobial cellulosic derivative and its catalytic activity. **2020**, 32, 436-442		41
222	Processing and Properties of Nanofibrous Bacterial Cellulose-Containing Polymer Composites: A Review of Recent Advances for Biomedical Applications. **2020**, 60, 144-170		66
221	Evaluation of biological and cytocompatible properties in nano silver-clay based polyethylene nanocomposites. **2020**, 384, 121309		12
220	Application of bacterial cellulose–silver nanoprism composite for detoxification of endosulfan and inactivation of Escherichia coli cells. **2020**, 17, 1713-1726		8

219	Effects of silver nanoparticles, chemical treatments and herbal essential oils on the vase life of cut alstroemeria (Alstroemeria Summer Sky) flowers. **2020**, 95, 175-182		3
218	Preparation and characterization of collagen/chitosan composites with silver nanoparticles. **2020**, 41, 951-957		10
217	Properties and antimicrobial activity of polyvinyl alcohol-modified bacterial nanocellulose packaging films incorporated with silver nanoparticles. **2020**, 100, 105411		68
216	Ag impregnated sub-micrometer crystalline jute cellulose particles: Catalytic and antibacterial properties. *Carbohydrate Polymers*, **2020**, 233, 115842	10.3	25
215	Green Synthesis and Biomedical Properties of Novel Hydroxypropyl Cellulose-g-Polytetrahydrofuran Graft Copolymers with Silver Nanoparticles. **2020**, 59, 732-742		6
214	Fabrication of hybrid thin film based on bacterial cellulose nanocrystals and metal nanoparticles with hydrogen sulfide gas sensor ability. *Carbohydrate Polymers*, **2020**, 230, 115566	10.3	26
213	Multifunctional organic cotton fabric based on silver nanoparticles green synthesized from sodium alginate. **2020**, 90, 1224-1236		34
212	Atmospheric pressure microplasma for antibacterial silver nanoparticle/chitosan nanocomposites with tailored properties. **2020**, 186, 107911		23
211	Antibacterial Activity of pH-Sensitive Silver(I)/Poly(2-hydroxyethyl acrylate/itaconic acid) Hydrogels. **2020**, 28, 382-389		8
210	Ongoing inflammation enhances the toxicity of engineered nanomaterials: Application of an in vitro co-culture model of the healthy and inflamed intestine. **2020**, 63, 104738		20
209	Preparation, Characterization, and Cytotoxicity Evaluation of Zinc Oxide Bacterial Cellulose Chitosan Hydrogels for Antibacterial Dressing. **2020**, 221, 2000257		5
208	Disinfection by-products in drinking water: Occurrence, toxicity and abatement. **2020**, 267, 115474		40
207	Enzymically attaching oligosaccharide-linked 'cargoes' to cellulose and other commercial polysaccharides via stable covalent bonds. **2020**, 164, 4359-4369		4
206	Plant celluloses, hemicelluloses, lignins, and volatile oils for the synthesis of nanoparticles and nanostructured materials. **2020**, 12, 22845-22890		46
205	Development and evaluation of a novel beneficent antimicrobial bioscaffold based on animal waste-fish swim bladder (FSB) doped with silver nanoparticles. **2020**, 188, 109823		6
204	Current research on the blends of chitosan as new biomaterials. **2020**, 247-283		3
203	Nanocellulose in Drug Delivery and Antimicrobially Active Materials. **2020**, 12,		33
202	Self-Assembly of Mechanoplasmonic Bacterial Cellulose Metal Nanoparticle Composites. **2020**, 30, 2004766		13

201	Antibacterial Activity of Silver Nanoparticles (AgNP) Confined to Mesostructured, Silica-Based Calcium Phosphate Against Methicillin-Resistant (MRSA). **2020**, 10,	8
200	Iodine Impregnated Poly(N-Vinylpyrrolidone) Grafted Antibacterial Cotton Gauze for Wound Dressing Applications. **2020**, 21, 1411-1421	3
199	Scalable synthesis of robust and stretchable composite wound dressings by dispersing silver nanowires in continuous bacterial cellulose. **2020**, 199, 108259	45
198	Active biodegradable films based on the whole potato peel incorporated with bacterial cellulose and curcumin. **2020**, 150, 480-491	37
197	Utilizing Semi-Natural Antibacterial Cellulose to Prepare Safe Azo Disperse Dyes and Their Application in Textile Printing. **2020**, 21, 1293-1299	4
196	Nano-food Engineering. **2020**,	1
195	In Situ and Ex Situ Designed Hydroxyapatite: Bacterial Cellulose Materials with Biomedical Applications. **2020**, 13,	4
194	Robust nanofibrillated cellulose composite SERS substrate for capillary preconcentration and trace level detection of organic molecules. **2020**, 27, 10119-10137	1
193	Enhancement in the antibacterial activity of cephalexin by its delivery through star-shaped poly(ε-caprolactone)-block-poly(ethylene oxide) coated silver nanoparticles. **2020**, 7, 201097	
192	Development of biocomposites based on bacterial cellulose reinforced delignified rice husk-PVA plasticized with glycerol. **2020**, 27, 1	16
191	Silver Nanomaterials for Wound Dressing Applications. **2020**, 12,	30
190	Doubly crosslinked biodegradable hydrogels based on gellan gum and chitosan for drug delivery and wound dressing. **2020**, 164, 2204-2214	19
189	Plant Biostimulants, Seaweeds Extract as a Model (Article Review). **2020**, 553, 012015	6
188	Development of bacterial cellulose nanocomposites: An overview of the synthesis of bacterial cellulose nanocomposites with metallic and metallic-oxide nanoparticles by different methods and techniques for biomedical applications. **2020**, 152808372097720	3
187	Plant mediated synthesis of AgNPs and its applications: an overview. **2020**, 1-17	5
186	Transparent, Pliable, Antimicrobial Hydrogels for Ocular Wound Dressings. **2020**, 10, 7548	2
185	Fabrication of Bacterial Cellulose-Curcumin Nanocomposite as a Novel Dressing for Partial Thickness Skin Burn. **2020**, 8, 553037	26
184	An Overview of the Algae-Mediated Biosynthesis of Nanoparticles and Their Biomedical Applications. **2020**, 10,	55

183	An Overview of Bacterial Cellulose in Flexible Electrochemical Energy Storage. **2020**, 13, 3731		12
182	CoNxC active sites-rich three-dimensional porous carbon nanofibers network derived from bacterial cellulose and bimetal-ZIFs as efficient multifunctional electrocatalyst for rechargeable Zn–air batteries. **2020**, 51, 323-332		12
181	Bacterial Cellulose as a Versatile Platform for Research and Development of Biomedical Materials. **2020**, 8, 624		28
180	Bacterial cellulose matrix with in situ impregnation of silver nanoparticles via catecholic redox chemistry for third degree burn wound healing. *Carbohydrate Polymers*, **2020**, 245, 116573	10.3	27
179	Morphology engineering of ZnO nanorod arrays to hierarchical nanoflowers for enhanced photocatalytic activity and antibacterial action against Escherichia coli. **2020**, 44, 11796-11807		6
178	Nature-Inspired Bacterial Cellulose/Methylglyoxal (BC/MGO) Nanocomposite for Broad-Spectrum Antimicrobial Wound Dressing. **2020**, 20, e2000070		13
177	Synthesis of bioactive silver nanoparticles using alginate, fucoidan and laminaran from brown algae as a reducing and stabilizing agent. *Carbohydrate Polymers*, **2020**, 245, 116547	10.3	41
176	Wearable and Flexible Ozone Generating System for Treatment of Infected Dermal Wounds. **2020**, 8, 458		4
175	Lignocellulosic Materials for Biomedical Applications. **2020**, 209-248		0
174	Green Nanomaterials. **2020**,		3
173	Release Kinetic Model and Antimicrobial Activity of Freeze-Dried Curcumin-loaded Bacterial Nanocellulose Composite. **2020**, 62, 218-227		2
172	Nanocomposites of Bacterial Cellulose Nanofibrils and Zein Nanoparticles for Food Packaging. **2020**, 3, 2899-2910		19
171	The in situ synthesis of silver nanoclusters inside a bacterial cellulose hydrogel for antibacterial applications. **2020**, 8, 4846-4850		18
170	Biotemplated synthesis of Ag-ZnO nanoparticles/bacterial cellulose nanocomposites for photocatalysis application. **2020**, 59, 1292-1299		5
169	Plant and bacterial nanocellulose: production, properties and applications in medicine, food, cosmetics, electronics and engineering. A review. **2020**, 18, 851-869		75
168	Silver nanoparticles for delivery purposes. **2020**, 347-371		13
167	Efficient loading of silver nanoparticles on graphene oxide and its antibacterial properties. **2020**, 1, 010041		4
166	An Engineered Infected Epidermis Model for In Vitro Study of the Skin's Pro-Inflammatory Response. **2020**, 11,		8

165	Silver Nanoparticles-Composing Alginate/Gelatine Hydrogel Improves Wound Healing In Vivo. **2020**, 10,		79
164	Ultralight, flexible carbon hybrid aerogels from bacterial cellulose for strong microwave absorption. **2020**, 162, 283-291		36
163	Physical and bioactivities of biopolymeric films incorporated with cellulose, sodium alginate and copper oxide nanoparticles for food packaging application. **2020**, 153, 207-214		67
162	Adsorption Characteristics of Ag Nanoparticles on Cellulose Nanofibrils with Different Chemical Compositions. **2020**, 12,		10
161	Poly(2-Hydroxyethyl Methacrylate) Sponges Doped with Ag Nanoparticles as Antibacterial Agents. **2020**, 3, 1630-1639		11
160	Low cost membrane of wood nanocellulose obtained by mechanical defibrillation for potential applications as wound dressing. **2020**, 27, 10765-10779		11
159	In situ generation of antibacterial copper nanocomposite fabrics by bioreduction with Moringa oliefiera leaf extract. **2021**, 51, 259-266		3
158	Regenerated cellulose nanofibers from cellulose acetate: Incorporating hydroxyapatite (HAp) and silver (Ag) nanoparticles (NPs), as a scaffold for tissue engineering applications. **2021**, 118, 111547		26
157	Aerogels from copper (II)-cellulose nanofibers and carbon nanotubes as absorbents for the elimination of toxic gases from air. **2021**, 582, 950-960		14
156	Improving bacterial cellulose films by ex-situ and in-situ modifications: A review. **2021**, 113, 106514		22
155	Homogeneous and efficient production of a bacterial nanocellulose-lactoferrin-collagen composite under an electric field as a matrix to promote wound healing. **2021**, 9, 930-941		8
154	Potential applications of bacterial cellulose and its composites for cancer treatment. **2021**, 168, 301-309		14
153	Influence of hydrogen sulfide gas concentrations on LOD and LOQ of thermal spray coated hybrid-bacterial cellulose film for intelligent meat label. *Carbohydrate Polymers*, **2021**, 254, 117442	10.3	7
152	Analysis of adsorption isotherms of Ag+, Co+2, and Cu+2 onto zeolites using computational intelligence models. **2021**, 9, 104960		9
151	Flexible bacterial cellulose-based BC-SiO2-TiO2-Ag membranes with self-cleaning, photocatalytic, antibacterial and UV-shielding properties as a potential multifunctional material for combating infections and environmental applications. **2021**, 9, 104708		15
150	Green synthesis of silver nanoparticles by using various extracts: a review. **2021**, 51, 744-755		26
149	Innovative preparation of bacterial cellulose/silver nanocomposite hydrogels: In situ green synthesis, characterization, and antibacterial properties. **2021**, 138, 49824		14
148	New hybrid materials for wound cover dressings. **2021**, 203-245		2

147	Biopolymers and biocomposites: Nature tools for wound healing and tissue engineering. **2021**, 573-630	1
146	An introduction to biopolymer-based nanofilms, their applications, and limitations. **2021**, 3-17	1
145	Bacterial cellulose: Trends in synthesis, characterization, and applications. **2021**, 923-974	3
144	Bacterial nanocellulose production and biomedical applications. **2021**, 35, 310-317	9
143	Nanoparticle-impregnated biopolymers as novel antimicrobial nanofilms. **2021**, 269-309	4
142	From natural cellulose to functional nanocomposites for environmental applications. **2021**, 111-151	0
141	Hybrid nanocomposites based on cellulose nanocrystals/nanofibrils and silver nanoparticles: Antibacterial applications. **2021**, 99-114	
140	Waterproof and Moisture permeable Nanofibrous Membranes with Cross-Linked Structure. **2021**, 1790, 012069	1
139	Influence of drying methods on the structure and properties of cellulose formate and its application as a reducing agent. **2021**, 170, 397-405	4
138	Green Synthesis of Silver Nanoparticles via Phormidium sp. nov. (Cyanophyceae): Amelioration, Characterization and Assessment of the Antibacterial Potential Against Methicillin Resistant Staphylococcus aureus. **2021**, 13, 209-216	0
137	Nanoscale Zerovalent Iron Immobilized on Functionalized Nonwoven Cotton Fabric for As(V) Adsorption. **2021**, 232, 1	1
136	Green synthesized Silver Nanoparticles as Silver Lining in Antimicrobial Resistance: A Review. **2021**,	1
135	Biocompatibility and selective antibacterial activity of a bismuth phosphinato-nanocellulose hydrogel. **2021**, 28, 4701-4718	4
134	In vitro antibacterial response of ZnO-MgO nanocomposites at various compositions. **2021**, 18, 1417-1429	3
133	A review of functionalised bacterial cellulose for targeted biomedical fields. **2021**, 36, 648-681	3
132	Cellulose: A Contribution for the Zero e-Waste Challenge. 2000994	22
131	Probiotic cellulose: Antibiotic-free biomaterials with enhanced antibacterial activity. **2021**, 124, 244-253	11
130	In-situ synthesis and immobilization of silver nanoparticles on microfibrillated cellulose for long-term antibacterial applications. **2021**, 28, 6287	0

129	Drug-Eluting Medical Textiles: From Fiber Production and Textile Fabrication to Drug Loading and Delivery. **2021**, 21, e2100021		5
128	Evaluation of Bacterial Nanocellulose Membranes Loaded or Not with Nisin as a Complementary Treatment in Surgical Dehorning Wounds in Bovines. **2021**, 13,		1
127	Multifunctional carbon nanofiber-SiC nanowire aerogel films with superior microwave absorbing performance. 1		20
126	Sprayable antibacterial Persian gum-silver nanoparticle dressing for wound healing acceleration. **2021**, 27, 102225		11
125	Versatile nanocellulose-based nanohybrids: A promising-new class for active packaging applications. **2021**, 182, 1915-1930		7
124	Fabrication of polyvinylidene fluoride/silver nanofiber membrane with antibacterial and anti-yellowing property. **2021**, 11, 075310		0
123	A novel approach for efficient fabrication of chitosan nanoparticles-embedded bacterial nanocellulose conduits. *Carbohydrate Polymers*, **2021**, 264, 118002	10.3	3
122	Evolution of Structural and Magnetic Properties of Fe-Co Wire-like Nanochains Caused by Annealing Atmosphere. **2021**, 14,		
121	Recent Advances in Cellulose-Based Structures as the Wound-Healing Biomaterials: A Clinically Oriented Review. **2021**, 11, 7769		2
120	EXTENDING VASE LIFE OF CUT Strelitzia reginae Aiton FLOWERS BY COBALT CHLORIDE, CERIUM NITRATE, SILVER NANOPARTICLES AND NANOSIL. **2021**, 20, 89-99		
119	Therapeutic potential of Moringa oleifera seed polysaccharide embedded silver nanoparticles in wound healing. **2021**, 184, 144-158		11
118	Effect of AgNP distribution on the cotton fiber on the durability of antibacterial cotton fabrics. **2021**, 28, 9489-9504		2
117	FTIR analysis of polyethylene glycol treated bacterial cellulose pellicle. **2021**, 847, 012007		
116	Patterning Bacterial Cellulose Films with Iron Oxide Nanoparticles and Magnetic Resonance Imaging Monitoring.		0
115	Silver Nanoparticles Impregnated Wound Dressings: Recent Progress and Future Challenges.		1
114	Effect of silver nano particles and 8-hydroxyquinoline citrate on the longer life of cut Gerbera (Gerbera jamesonii) 'Sunway' flowers. **2021**, 289, 110474		1
113	Mechanical properties of cellulose nanofibril papers and their bionanocomposites: A review. *Carbohydrate Polymers*, **2021**, 273, 118507	10.3	4
112	Multicriteria Analysis in the Selection of Agro-Industrial Waste for the Production of Biopolymers. **2021**, 335-356		1

111	Antimicrobial bacterial cellulose composites as textile materials. **2021**, 513-556	1
110	High performance fully paper-based all-solid-state supercapacitor fabricated by a papermaking process with silver nanoparticles and reduced graphene oxide-modified pulp fibers. **2021**, 3, e12076	16
109	Emerging Sustainable Nanostructured Materials Facilitated by Herbal Bioactive Agents for Edible Food Packaging. **2020**, 259-285	2
108	Recent Advances on the Development of Antibacterial Polysaccharide-Based Materials. **2015**, 1751-1803	5
107	Biosynthesis of Silver Nanoparticles Using Turmeric Extract and Evaluation of Its Anti-Bacterial Activity and Catalytic Reduction of Methylene Blue. **2017**, 257-265	3
106	Tissue Engineering Applications of Bacterial Cellulose Based Nanofibers. **2020**, 319-346	6
105	Cellulose-Based Antimicrobial Materials. **2021**, 61-85	2
104	One-step fabrication of multi-scaled, inter-connected hierarchical fibrous membranes for directional moisture transport. **2020**, 577, 207-216	21
103	Raman and FT-IR Spectroscopy investigation the cellulose structural differences from bacteria Gluconacetobacter sucrofermentans during the different regimes of cultivation on a molasses media. **2020**, 10, 84	14
102	T□nicas de fermentaci□ y aplicaciones de la celulosa bacteriana: una revisi□. **2012**, 8, 307-335	5
101	Chemical and Biological Properties of Trachyspermum ammiEncapsulated in Gelatin Nanofilms. **2014**, 1,	4
100	Fabrication of Gelatin Nano-Capsules Incorporate Ferula assa-foetida Essential Oil With Antibacterial and Antioxidant. **2015**, 17,	2
99	ADVANCED FUNCTIONAL MATERIALS BASED ON CELLULOSE. **2010**, 00, 1376-1398	21
98	PREPARATION AND CHARACTERIZATION OF BACTERIAL CELLULOSE/POLYACRYLAMIDE HYDROGEL. **2011**, 011, 602-607	13
97	Natural Material Source of Bagasse Cellulose and Their Application to Hydrogel Films. **2017**, 19-43	1
96	Antimicrobial Properties of Glass Surface Functionalized with Silver-doped Terminal-alkynyl Monolayers. **2014**, 35, 39-44	2
95	Bacterial cellulose and its potential for biomedical applications. **2021**, 53, 107856	6
94	Bacterial Cellulose: Potential and Challenge. 405-420	

93	Evaluation of water holding property for applying a cosmetic moisturizer from oil palm trunk CNF. **2016**, 48, 91-98	0
92	Cellulose Nanofibers for Biomedical Applications. **2016**, 213-232	1
91	Polysaccharide induced production of silver nanoparticles (ag-nps) and their antibacterial Efficacy against selected bacterial pathogens. **2017**, 8,	
90	Wound Care: Natural Biopolymer Applications. **2017**, 1607-1619	
89	Polysaccharide-Based Polymer Gels. **2018**, 147-229	0
88	Bakteriyel Sel□lozlar□ □retimi ve □zellikleri ile G□da ve G□da D□□ Uygulamalarda Kullan□m□ 241-251	1
87	FARKLI METODLARLA ELDE ED□LEN NANO G□M□ PAR□ACIKLI/BAKTER□YEL SEL□OZ (AG/BS) NANOKOMPOZITIN ANTBAKTER□YEL □ZELL□N□N BEL□RLENMES□ **2019**, 7, 161-166	
86	U□cu Yag lar Kullan□larak Antibakteriyel Selu lozik Membranlar□ □retilmesi.	
85	Investigation on nano microbial cellulose/honey composite for medical application. **2020**, 7, 085003	4
84	Recent advancement in 3-D printing: nanocomposites with added functionality. 1	3
83	Roles of ROS and cell cycle arrest in the genotoxicity induced by gold nanorod core/silver shell nanostructure. **2020**, 15, 224	3
82	Preparation of gels of chitosan through a hydrothermal reaction in the presence of malonic acid and cinnamaldehyde: characterization and antibacterial activity.	1
81	Application of Biogenic and Non-biogenic Synthesized Metal Nanoparticles on Longevity of Agricultural Crops. **2020**, 205-220	
80	Nanocellulose as sustainable biomaterials for drug delivery. **2021**, 3, 100135	15
79	Strategies, Challenges, and Advancement in Immobilizing Silver Nanomaterials. **2021**, 597-643	
78	Silver nanoparticles on UiO-66 (Zr) metal-organic frameworks for water disinfection application. **2022**, 11, 269-276	1
77	Integration of Nanotechnology in Plant Tissue Culture. **2021**, 17,	
76	Nano-silver functionalized polysaccharides as a platform for wound dressings: A review. **2021**,	6

75	Incorporations of gold, silver and carbon nanomaterials to kombucha-derived bacterial cellulose: Development of antibacterial leather-like materials. **2021**, 99, 100278		1
74	A Facile Green Fabrication and Characterization of Cellulose-Silver Nanoparticle Composite Sheets for an Antimicrobial Food Packaging.. **2021**, 8, 778310		0
73	Bacteria as an Efficient Bacteriosystem for the Synthesis of Nanoparticles: A Bibliometric Analysis.		1
72	Dual-charge bacterial cellulose as a potential 3D printable material for soft tissue engineering. **2022**, 231, 109598		3
71	Direct Synthesis of Photosensitizable Bacterial Cellulose as Engineered Living Material for Skin Wound Repair.. **2022**, e2109010		3
70	Antimicrobial Finishing of Metals, Metal Oxides, and Metal Composites on Textiles: A Systematic Review. **2022**, 61, 86-101		1
69	Bacterial Cellulose-A Remarkable Polymer as a Source for Biomaterials Tailoring.. **2022**, 15,		3
68	Pharmaceutical applications of nanocellulose. **2022**, 163-173		
67	Novel functionalized cellulose derivatives fabricated with Cu nanoparticles: synthesis, characterization and degradation of organic pollutants. **2022**, 29, 1911		0
66	Functionalization of cellulosic hydrogels with CuO@CuO nanospheres: Toward antifouling applications.. *Carbohydrate Polymers*, **2022**, 282, 119136	10.3	1
65	Biopolymer starch-gelatin embedded with silver nanoparticle based hydrogel composites for antibacterial application. 1		8
64	Algal-Mediated Biosynthesis of Nanoparticles and Their Potential Therapeutic Applications. **2021**, 171-210		
63	Production of bio-cellulose from renewable resources: Properties and applications. **2022**, 307-339		0
62	A Comparative Study of Cellulose Nanocomposite Derived from Algae and Bacteria and Its Applications. **2022**, 151-187		
61	Enhancement of physico-chemical, optical, dielectric and antimicrobial properties of polyvinyl alcohol/carboxymethyl cellulose blend films by addition of silver doped hydroxyapatite nanoparticles. **2022**, 29, 1		2
60	Green synthesis of silver nanoparticles loaded into bacterial cellulose for antimicrobial application. 1-13		2
59	A New Medical Dressing with Silver Nanoparticles to Treat Diabetic Foot Patient. **2022**, 33, 1-5		
58	An Overview for the Design of Antimicrobial Polymers: From Standard Antibiotic-Release Systems to Topographical and Smart Materials. **2022**, 52,		0

57	Study on antibacterial wood coatings with soybean protein isolate nano-silver hydrosol.. **2022**, 106766	5
56	Engineering Biomimetic Extracellular Matrix with Silica Nanofibers: From 1D Material to 3D Network.. **2022**,	0
55	Functionalization of spray coated cellulose nanofiber sheet with montmorillonite (MMT) and silver nanoparticles (AgNPs) to biomedical nanocomposite as wound regeneration scaffold. **2022**, 166, 106782	4
54	Upscaled engineered functional microfibrillated cellulose flat sheet membranes for removing charged water pollutants. **2022**, 289, 120745	1
53	Prospects and environmental sustainability of phyconanotechnology: A review on algae-mediated metal nanoparticles synthesis and mechanism.. **2022**, 113140	3
52	Advanced Materials in Cancer Therapy. **2021**, 7, 01-17	
51	Low-Cost High Performance Polyamide Thin Film Composite (Cellulose Triacetate/Graphene Oxide) Membranes for Forward Osmosis Desalination from Palm Fronds.. **2021**, 12,	1
50	Cold Plasma Treatment in Wet Chemical Textile Processing. **2020**, 28, 118-126	3
49	Facile route of synthesis of silver nanoparticles templated bacterial cellulose, characterization, and its antibacterial application. **2022**, 11, 361-372	
48	Gold modified bacterial cellulose from coconut water waste and its antibacterial activity.	
47	Image_1.JPEG. **2018**,	
46	Table_1.DOCX. **2018**,	
45	Data_Sheet_1.docx. **2020**,	
44	Full ultraviolet shielding potency of highly durable cotton via self- implantation of palladium nanoclusters. **2022**, 29, 4787-4804	1
43	Synthesis of sericin coated silver nanoparticles (Ag-Ser) by modified Tollens method and evaluation of colloidal stability. **2022**, 128, 1	0
42	The Antimicrobial Effects of Bacterial Cellulose Produced by Komagataeibacter intermedius in Promoting Wound Healing in Diabetic Mice. **2022**, 23, 5456	0
41	Cellulose-Based Nanomaterials Advance Biomedicine: A Review. **2022**, 23, 5405	7
40	Controlled doping of electrocatalysts through engineering impurities.. **2022**, e2203030	2

39	Preparation and characterization of ZnO nanoparticles incorporated by mechanical milling into cellulose for electrical insulator applications. **2022**, 17, 579-588	
38	Preparation of a novel curdlan/bacterial cellulose/cinnamon essential oil blending film for food packaging application. **2022**, 212, 211-219	3
37	Innovativeness and sustainability of polymer nanocomposites. **2022**, 515-535	
36	Fibrillation effect on bacterial cellulose properties after freeze-drying. **2022**,	
35	Natural polymer based hydrogel systems for wound management. **2022**, 129-165	
34	A Review of Properties of Nanocellulose, Its Synthesis, and Potential in Biomedical Applications. **2022**, 12, 7090	2
33	Fabrication of silver nanoparticles from marine macro algae Caulerpa sertularioides: Characterization, antioxidant and antimicrobial activity. **2022**,	0
32	Wearable adjunct ozone and antibiotic therapy system for treatment of Gram-negative dermal bacterial infection. **2022**, 12,	0
31	Biopolymer coating for particle surface engineering and their biomedical applications. **2022**, 100407	
30	High-performance medical-grade resin radically reinforced with cellulose nanofibers for 3D printing. **2022**, 134, 105408	3
29	Bacterial cellulose: A promising biopolymer with interesting properties and applications. **2022**, 220, 435-461	5
28	Novel multifunctional papers based on chemical modified cellulose fibers derived from waste bagasse. **2022**, 297, 120013	
27	N-vinylpyrrolidone antimicrobial polymers: Current trends and emerging perspectives. **2022**, 180, 111590	0
26	Cellulose composites containing active constituents of coffee and tea: a prospective novel wound dressing.	0
25	Green chemistry inspired formation of bioactive stable colloidal nanosilver and its wide-spectrum functionalised properties for sustainable industrial escalation. **2022**, 4, 100533	1
24	Future direction of wound dressing research: Evidence From the bibliometric analysis. **2022**, 52, 152808372211305	3
23	Pisonia Alba Assisted Synthesis of Nanosilver for Wound Healing Activity. **2022**, 2022, 1-8	0
22	Physical, Rheological and Mechanical Properties of Alkali Activated Hydrogels Based on Nanofibrillated Cellulose. 1-13	0

21	Preparation and Application of In-Situ Loaded Silver Nanoparticles Antibacterial Fresh-Keeping Composite Paper. **2022**, 14, 3798	0
20	Enhanced Antimicrobial Activity of Biocompatible Bacterial Cellulose Films via Dual Synergistic Action of Curcumin and Triangular Silver Nanoplates. **2022**, 23, 12198	0
19	Nanotechnology-Based Dressings for Wound Management. **2022**, 15, 1286	0
18	Effect of blue light and nanosilver on vase life, antioxidant enzymes and some other physiologic parameters of Alstroemeria Napoli cut flowers. **2022**, 21, 111-122	0
17	Enhancement of Antimicrobial and Dyeing Properties of Cellulosic Fabrics via Chitosan Nanoparticles. **2022**, 14, 4211	0
16	Antibacterial activity of chitosan-polyethylene oxide nanofibers containing silver nanoparticles against aerobic and anaerobic bacteria. **2023**, 1274, 134304	0
15	Controllability, antiproliferative activity, Ag+ release, and flow behavior of silver nanoparticles deposited onto cellulose nanocrystals. **2022**,	0
14	Fabrication and novel applications of polymeric biomaterials for tissue scaffolds. **2022**,	0
13	Composite of silver-bacterial cellulose from cassava (Manihot esculenta) and its antibacterial activity. **2023**,	0
12	The effect of adding polyethylene glycol to the structure of bacterial cellulose membrane made from pineapple peel waste. **2023**,	0
11	Bacterial nanocellulose membranes for codelivery of carvacrol and thymol: physico-chemical characterization and in vitro studies.	0
10	Interdisciplinary Undergraduate Laboratory for an Integrated Chemistry/Biology Program: Synthesis of Silver Nanoparticles (AgNPs)-Cellulose Composite Materials with Antimicrobial Activity. **2023**, 100, 1446-1454	0
9	Synergistic Antimicrobial Activity of Magnetite and Vancomycin-Loaded Mesoporous Silica Embedded in Alginate Films. **2023**, 9, 295	0
8	Opportunities for bacterial nanocellulose in biomedical applications: Review on biosynthesis, modification and challenges. **2023**, 231, 123316	0
7	Bacterial nanocellulose: A novel nanostructured bio-adsorbent for green remediation technology. **2023**,	0
6	Bacterial Nanocellulose (BNCs) Supported Inorganic Nanomaterials for Catalytic Applications. **2023**, 1-34	0
5	Overview and summary of antimicrobial wound dressings and its biomedical applications. **2023**, 1-20	0
4	High microbiostatic and microbicidal efficiencies of bacterial cellulose-ZnO nanocomposites for in vivo microbial inhibition and filtering.	0

3	Formulating silver nanoparticles from Syzygium Samagense flower buds extract. **2023**, 1155, 012005	0
2	Versatile Silver-Nanoparticle-Impregnated Membranes for Water Treatment: A Review. **2023**, 13, 432	0
1	Sustainable Bioconversion of Industrial Wastes into Bacterial Cellulose for Diverse Applications: A Way Towards Pollution Control and Abatement.	0