Tatiana A Akopova

List of Publications by Year
in descending order

66 papers	809 citations	516215 16 h-index	610482 24 g-index
66 all docs	66 docs citations	66 times ranked	867 citing authors

#	Article	IF	Citations
1	The crystal structure of chitin and chitosan. Polymer Science - Series A, 2006, 48, 116-123.	0.4	79
2	DC discharge plasma modification of chitosan/gelatin/PLLA films: Surface properties, chemical structure and cell affinity. Surface and Coatings Technology, 2012, 207, 508-516.	2.2	48
3	Investigation of properties of chitosan obtained by solid-phase and suspension methods. Journal of Applied Polymer Science, 1998, 70, 927-933.	1.3	43
4	Polylactide-based microspheres prepared using solid-state copolymerized chitosan and d , l -lactide. Materials Science and Engineering C, 2016, 59, 333-338.	3.8	37
5	Solid state production of celluloseâ€“chitosan blends and their modification with the diglycidyl ether of oligo(ethylene oxide). Polymer Degradation and Stability, 2001, 73, 557-560.	2.7	30
6	DC Discharge Plasma Modification of Chitosan Films: An Effect of Chitosan Chemical Structure. Plasma Processes and Polymers, 2015, 12, 710-718.	1.6	27
7	Two-Photon-Induced Microstereolithography of Chitosan-g-Oligolactides as a Function of Their Stereochemical Composition. Polymers, 2017, 9, 302.	2.0	27
8	Nonâ€woven bilayered biodegradable chitosanâ€gelatinâ€polylactide scaffold for bioengineering of tracheal epithelium. Cell Proliferation, 2019, 52, e12598.	2.4	27
9	Solid-state synthesis of unsaturated chitosan derivatives to design 3D structures through two-photon-induced polymerization. Mendeleev Communications, 2015, 25, 280-282.	0.6	25
10	Compatibility of cells of the nervous system with structured biodegradable chitosan-based hydrogel matrices. Applied Biochemistry and Microbiology, 2016, 52, 508-514.	0.3	22
11	Nanocomposites based on modified chitosan and titanium oxide. Polymer Science - Series A, 2006, 48, 638-643.	0.4	18
12	From Aggregates to Porous Three-Dimensional Scaffolds through a Mechanochemical Approach to Design Photosensitive Chitosan Derivatives. Marine Drugs, 2019, 17, 48.	2.2	18
13	Chitosan-g-oligo(L,L-lactide) copolymer hydrogel for nervous tissue regeneration in glutamate excitotoxicity: <i>in vitro</i> feasibility evaluation. Biomedical Materials (Bristol), 2020, 15, 015011.	1.7	18
14	Chitosan-<i>g</i>-oligo(L,L-lactide) Copolymer Hydrogel Potential for Neural Stem Cell Differentiation. Tissue Engineering - Part A, 2020, 26, 953-963.	1.6	18
15	Solvent-free synthesis and characterization of allyl chitosan derivatives. RSC Advances, 2019, 9, 20968-20975.	1.7	17
16	A Novel Approach to Design Chitosan-Polyester Materials for Biomedical Applications. International Journal of Polymer Science, 2012, 2012, 1-10.	1.2	16
17	Nanocrystalline Cellulose from Flax Stalks: Preparation, Structure, and Use. Fibre Chemistry, 2016, 48, 199-201.	0.0	16
18	Plasma Treatment of Poly(ethylene terephthalate) Films and Chitosan Deposition: DC- vs. AC-Discharge. Materials, 2020, 13, 508.	1.3	16

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19	Biocompatible Smart Microcapsules Based on Chitosanâ€Poly(vinyl alcohol) Copolymers for Cultivation of Animal Cells. Advanced Engineering Materials, 2011, 13, B493.	1.6	14
20	Macroporous hydrogels based on chitosan derivatives: Preparation, characterization, and <i>in vitro</i> evaluation. Journal of Applied Polymer Science, 2017, 134, .	1.3	14
21	The study of the interaction between chitosan and 2,2-bis(hydroxymethyl)propionic acid during solid-phase synthesis. Polymer Science - Series B, 2011, 53, 358-370.	0.3	13
22	Preparation of Poly(L,L-Lactide) Microparticles via Pickering Emulsions Using Chitin Nanocrystals. Advances in Materials Science and Engineering, 2018, 2018, 1-8.	1.0	13
23	Solid-state synthesis of amphiphilic chitosan-polyethylene systems by the maleinization of both components. Polymer Science - Series B, 2009, 51, 124-134.	0.3	12
24	Hybrid nanocomposites based on graft copolymer of chitosan with poly(vinyl alcohol) and titanium oxide. Nanotechnologies in Russia, 2009, 4, 331-339.	0.7	12
25	Amphiphilic systems based on polysaccharides produced by solid-phase synthesis â˘' A review. Fibre Chemistry, 2012, 44, 217-220.	0.0	12
26	Reactions of chitosan with solid carbonyl-containing compounds under shearing deformation conditions. Mendeleev Communications, 1998, 8, 107-109.	0.6	11
27	Modification of the chitosan structure and properties using high-energy chemistry methods. High Energy Chemistry, 2014, 48, 293-302.	0.2	11
28	Chitosanâ€gâ€Polyester Microspheres: Effect of Length and Composition of Grafted Chains. Macromolecular Materials and Engineering, 2019, 304, 1900203.	1.7	11
29	Chitosan-g-oligo/polylactide copolymer non-woven fibrous mats containing protein: from solid-state synthesis to electrospinning. RSC Advances, 2019, 9, 37652-37659.	1.7	11
30	Biodegradable Microparticles for Regenerative Medicine: A State of the Art and Trends to Clinical Application. Polymers, 2022, 14, 1314.	2.0	11
31	Immobilization of trypsin on polysaccharides upon intense mechanical treatment. Russian Chemical Bulletin, 2003, 52, 2073-2077.	0.4	10
32	Novel Biocompatible Material Based on Solid-State Modified Chitosan for Laser Stereolithography. Sovremennye Tehnologii V Medicine, 2015, 7, 20-31.	0.4	10
33	Solid state synthesis of chitosan and its unsaturated derivatives for laser microfabrication of 3D scaffolds. IOP Conference Series: Materials Science and Engineering, 2015, 87, 012079.	0.3	9
34	Biodegradable Cell Microcarriers Based on Chitosan/Polyester Graft-Copolymers. Molecules, 2020, 25, 1949.	1.7	9
35	Effect of direct-current discharge treatment on the surface properties of chitosan-poly(L,L-lactide)-gelatin composite films. High Energy Chemistry, 2012, 46, 60-64.	0.2	8
36	Chitosan-g-lactide copolymers for fabrication of 3D scaffolds for tissue engineering. IOP Conference Series: Materials Science and Engineering, 2015, 87, 012074.	0.3	7

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37	Hydrophobic Modification of Chitosan via Reactive Solvent-Free Extrusion. Polymers, 2021, 13, 2807.	2.0	7
38	Chitosan impregnation with biologically active tryaryl imidazoles in supercritical carbon dioxide. Journal of Materials Science: Materials in Medicine, 2016, 27, 141.	1.7	6
39	Fabrication of microstructured materials based on chitosan and D,L-lactide copolymers using laser-induced microstereolithography. High Energy Chemistry, 2016, 50, 389-394.	0.2	6
40	Materials Based on Guar and Hydroxypropylguar Filled with Nanocrystalline Polysaccharides. Fibre Chemistry, 2017, 49, 188-194.	0.0	6
41	3D printing biodegradable scaffolds with chitosan materials for tissue engineering. IOP Conference Series: Materials Science and Engineering, 2018, 347, 012009.	0.3	6
42	Coating of polylactide films by chitosan: Comparison of methods. Journal of Applied Polymer Science, 2020, 137, 48287.	1.3	6
43	Polysaccharides as Stabilizers for Polymeric Microcarriers Fabrication. Polymers, 2021, 13, 3045.	2.0	6
44	Materials Based on Chitosan and Polylactide: From Biodegradable Plastics to Tissue Engineering Constructions. Polymer Science - Series C, 2021, 63, 219-226.	0.8	6
45	Investigation of interaction of chitosan with solid organic acids and anhydrides under conditions of shear deformation. Journal of Applied Polymer Science, 2000, 76, 616-622.	1.3	5
46	Electrospinning of nanofibers from water-soluble products from solid-phase grafting of polyvinyl alcohol to chitosan. Fibre Chemistry, 2012, 44, 149-152.	0.0	5
47	Fabrication of microstructured materials based on chitosan and its derivatives using two-photon polymerization. High Energy Chemistry, 2015, 49, 300-303.	0.2	5
48	Multicomponent Non-Woven Fibrous Mats with Balanced Processing and Functional Properties. Polymers, 2020, 12, 1911.	2.0	5
49	Polylactide microparticles stabilized by chitosan graft-copolymer as building blocks for scaffold fabrication via surface-selective laser sintering. Journal of Materials Research, 2022, 37, 933-942.	1.2	5
50	Study of cellulose-chitosan composites. Solid-phase modification, rheology, films. Fibre Chemistry, 2000, 32, 402-406.	0.0	4
51	Thermostimulated processes in starch-bis(hydroxymethyl)propionic acid mixtures subjected to high-pressure plastic deformation. Polymer Science - Series A, 2010, 52, 835-841.	0.4	4
52	Vacuum deposition of chitosan thin films by electron beam sputtering. High Energy Chemistry, 2015, 49, 213-215.	0.2	4
53	Solid-State Synthesis of Water-Soluble Chitosan-g-Hydroxyethyl Cellulose Copolymers. Polymers, 2020, 12, 611.	2.0	4
54	The Evolution of Surface-Selective Laser Sintering: Modifying and Forming 3D Structures for Tissue Engineering. Bulletin of the Russian Academy of Sciences: Physics, 2020, 84, 1315-1320.	0.1	4

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55	A biocompatible nanocomposite based on allyl chitosan and vinyltriethoxysilane for tissue engineering. Polymer Science - Series B, 2017, 59, 97-108.	0.3	3
56	Application of micro- and nanocrystalline cellulose. IOP Conference Series: Materials Science and Engineering, 2018, 347, 012006.	0.3	3
57	Deformation-Strength Properties of Films Derived from Hydroxyethylcellulose Filled with Micro- and Nanocrystalline Cellulose. Fibre Chemistry, 2020, 51, 340-345.	0.0	3
58	Effect of the Chemical Structure of Chitosan Copolymers with Oligolactides on the Morphology and Properties of Macroporous Hydrogels Based on Them. Polymer Science - Series B, 2021, 63, 536-543.	0.3	3
59	Title is missing!. Fibre Chemistry, 2003, 35, 21-26.	0.0	1
60	Supercritical Fluid Treatment of Three-Dimensional Hydrogel Matrices Obtained from Allylchitosan by Laser Stereolithography. Russian Journal of Physical Chemistry B, 2018, 12, 1144-1151.	0.2	1
61	Materials based on protein-contained chitosan-g-oligo-/polylactide copolymers synthesized through mechanochemical approach. Materials Today: Proceedings, 2020, 25, 490-492.	0.9	1
62	Polysaccharides modified in solid state as promising components for advanced materials. Materials Today: Proceedings, 2019, 12, 86-89.	0.9	0
63	Effect of Plasma Treatment on the Solubility of Chitosan Films. High Energy Chemistry, 2019, 53, 493-495.	0.2	0
64	Water-soluble copolymer compositions of polysaccharides for electrospinning of biomaterials. Materials Today: Proceedings, 2020, 25, 395-397.	0.9	0
65	Modification of the Chemical Structure, Morphology, and Cytocompatibility of Chitosan Films via Low-Frequency Plasma Treatment. Applied Biochemistry and Microbiology, 2022, 58, 118-125.	0.3	0
66	Laser Technology of Directional Microstructuring of Biodegradable Nonwovens. High Energy Chemistry, 2022, 56, 138-144.	0.2	0