Ekaterina Igorevna Shishatskaya

List of Publications by Year
in descending order

47 papers	1,569 citations	394286 19 h-index	302012 39 g-index
50 all docs	50 docs citations	50 times ranked	2079 citing authors

#	Article	IF	Citations
1	Polyhydroxyalkanoates (PHA) for therapeutic applications. Materials Science and Engineering C, 2018, 86, 144-150.	3.8	182
2	Results of biomedical investigations of PHB and PHB/PHV fibers. Biochemical Engineering Journal, 2003, 16, 125-133.	1.8	134
3	Emerging aspects of nanotoxicology in health and disease: From agriculture and food sector to cancer therapeutics. Food and Chemical Toxicology, 2016, 91, 42-57.	1.8	107
4	Cell growth and accumulation of polyhydroxyalkanoates from CO 2 and H 2 of a hydrogen-oxidizing bacterium, Cupriavidus eutrophus B-10646. Bioresource Technology, 2013, 146, 215-222.	4.8	89
5	Microbial Degradation of Polyhydroxyalkanoates with Different Chemical Compositions and Their Biodegradability. Microbial Ecology, 2017, 73, 353-367.	1.4	87
6	Antibacterial properties of films of cellulose composites with silver nanoparticles and antibiotics. Polymer Testing, 2018, 65, 54-68.	2.3	86
7	Battle of GLP-1 delivery technologies. Advanced Drug Delivery Reviews, 2018, 130, 113-130.	6.6	84
8	Experimental wound dressings of degradable PHA for skin defect repair. Journal of Materials Science: Materials in Medicine, 2016, 27, 165.	1.7	67
9	Production and properties of bacterial cellulose by the strain Komagataeibacter xylinus B-12068. Applied Microbiology and Biotechnology, 2018, 102, 7417-7428.	1.7	64
10	Biocompatibility of polyhydroxybutyrate microspheres: inÂvitro and inÂvivo evaluation. Journal of Materials Science: Materials in Medicine, 2008, 19, 2493-2502.	1.7	62
11	A Glucose-Utilizing Strain, Cupriavidus euthrophus B-10646: Growth Kinetics, Characterization and Synthesis of Multicomponent PHAs. PLoS ONE, 2014, 9, e87551.	1.1	55
12	Electrospinning of polyhydroxyalkanoate fibrous scaffolds: effects on electrospinning parameters on structure and properties. Journal of Biomaterials Science, Polymer Edition, 2014, 25, 370-393.	1.9	51
13	Properties of PHA bi-, ter-, and quarter-polymers containing 4-hydroxybutyrate monomer units. International Journal of Biological Macromolecules, 2018, 111, 1019-1026.	3.6	32
14	Constructing herbicide metribuzin sustained-release formulations based on the natural polymer poly-3-hydroxybutyrate as a degradable matrix. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2016, 51, 113-125.	0.7	30
15	Manipulation of Ralstonia eutropha Carbon Storage Pathways to Produce Useful Bio-Based Products. Sub-Cellular Biochemistry, 2012, 64, 343-366.	1.0	28
16	Polyhydroxyalkanoate synthesis based on glycerol and implementation of the process under conditions of pilot production. Applied Microbiology and Biotechnology, 2019, 103, 225-237.	1.7	28
17	An in vivo study of osteoplastic properties of resorbable poly-3-hydroxybutyrate in models of segmental osteotomy and chronic osteomyelitis. Artificial Cells, Nanomedicine and Biotechnology, 2014, 42, 344-355.	1.9	24
18	Constructing Slow-Release Fungicide Formulations Based on Poly(3-hydroxybutyrate) and Natural Materials as a Degradable Matrix. Journal of Agricultural and Food Chemistry, 2019, 67, 9220-9231.	2.4	24

#	Article	IF	Citations
19	Toxic effects of the fungicide tebuconazole on the root system of fusarium-infected wheat plants. Plant Physiology and Biochemistry, 2018, 132, 400-407.	2.8	22
20	Biomedical Investigations of Biodegradable PHAs. Macromolecular Symposia, 2008, 269, 65-81.	0.4	20
21	Bacterial Cellulose (BC) and BC Composites: Production and Properties. Nanomaterials, 2022, 12, 192.	1.9	20
22	Characterization of biodegradable poly-3-hydroxybutyrate films and pellets loaded with the fungicide tebuconazole. Environmental Science and Pollution Research, 2016, 23, 5243-5254.	2.7	19
23	Efficacy of tebuconazole embedded in biodegradable polyâ€3â€hydroxybutyrate to inhibit the development of Fusarium moniliforme in soil microecosystems. Pest Management Science, 2017, 73, 925-935.	1.7	18
24	Constructing sustainedâ€release herbicide formulations based on polyâ€3â€hydroxybutyrate and natural materials as a degradable matrix. Pest Management Science, 2020, 76, 1772-1785.	1.7	18
25	Poly(3-hydroxybutyrate)/metribuzin formulations: characterization, controlled release properties, herbicidal activity, and effect on soil microorganisms. Environmental Science and Pollution Research, 2016, 23, 23936-23950.	2.7	17
26	Herbicidal activity of slow-release herbicide formulations in wheat stands infested by weeds. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2017, 52, 729-735.	0.7	17
27	Properties of Degradable Polyhydroxyalkanoates (PHAs) Synthesized by a New Strain, Cupriavidus necator IBP/SFU-1, from Various Carbon Sources. Polymers, 2021, 13, 3142.	2.0	17
28	Biocompatibility and Resorption of Intravenously Administered Polymer Microparticles in Tissues of Internal Organs of Laboratory Animals. Journal of Biomaterials Science, Polymer Edition, 2011, 22, 2185-2203.	1.9	15
29	Synthesis of Polyhydroxyalkanoates by Hydrogen-Oxidizing Bacteria in a Pilot Production Process. Biomacromolecules, 2019, 20, 3261-3270.	2.6	15
30	Sugar Beet Molasses as a Potential C-Substrate for PHA Production by Cupriavidus necator. Bioengineering, 2022, 9, 154.	1.6	15
31	Development and characterization of ceftriaxone-loaded P3HB-based microparticles for drug delivery. Drying Technology, 2019, 37, 1131-1142.	1.7	14
32	Efficacy of Slow-Release Formulations of Metribuzin and Tribenuron Methyl Herbicides for Controlling Weeds of Various Species in Wheat and Barley Stands. ACS Omega, 2020, 5, 25135-25147.	1.6	12
33	Properties of a novel quaterpolymer P(3HB/4HB/3HV/3HHx). Polymer, 2016, 101, 67-74.	1.8	11
34	Novel spray-dried PHA microparticles for antitumor drug release. Drying Technology, 2018, 36, 1387-1398.	1.7	8
35	Synthesis of poly(3-hydroxybutyrate) by the autotrophic CO-oxidizing bacterium Seliberia carboxydohydrogena Z-1062. Journal of Industrial Microbiology and Biotechnology, 2015, 42, 1377-1387.	1.4	7
36	Laser Processing of Polymer Films Fabricated from PHAs Differing in Their Monomer Composition. Polymers, 2021, 13, 1553.	2.0	7

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37	Short-term culture of monocytes as an inÂvitro evaluation system for bionanomaterials designated for medical use. Food and Chemical Toxicology, 2016, 96, 302-308.	1.8	6
38	The effect of the chemical composition and structure of polymer films made from resorbable polyhydroxyalkanoates on blood cell response. International Journal of Biological Macromolecules, 2019, 141, 765-775.	3.6	6
39	Polymer Films of Poly-3-hydroxybutyrate Synthesized by Cupriavidus necator from Different Carbon Sources. Journal of Polymers and the Environment, 2021, 29, 837-850.	2.4	6
40	A study of the properties and efficacy of microparticles based on P(<scp>3HB</scp>) and P(<scp>3HB</scp>/<scp>3HV</scp>) loaded with herbicides. Journal of Applied Polymer Science, 2022, 139, 51756.	1.3	6
41	Biosynthesis and properties of P(3HBâ€coâ€3HVâ€coâ€3H4MV) produced by using the wildâ€type strain Cupriavidus eutrophus Bâ€10646. Journal of Chemical Technology and Biotechnology, 2019, 94, 195-203.	1.6	5
42	Screening of biopolymeric materials for cardiovascular surgery toxicityâ€"Evaluation of their surface relief with assessment of morphological aspects of monocyte/macrophage polarization in atherosclerosis patients. Toxicology Reports, 2019, 6, 74-90.	1.6	5
43	Development of Biodegradable Delivery Systems Containing Novel 1,2,4-Trioxolane Based on Bacterial Polyhydroxyalkanoates. Advances in Polymer Technology, 2022, 2022, 1-14.	0.8	3
44	The Morphology and Phenotype of Monocyte-Macrophages When Cultured on Bionanofilms Substrates with Different Surface Relief Profiles. Biomolecules, 2020, 10, 65.	1.8	2
45	Assessment of the efficacy of slow-release formulations of the tribenuron-methyl herbicide in field-grown spring wheat. Environmental Science and Pollution Research, 2022, 29, 20249-20264.	2.7	2
46	Collagen conjugation to carboxyl-modified poly(3-hydroxybutyrate) microparticles: preparation, characterization and evaluation in vitro. Journal of Polymer Research, 2022, 29, .	1.2	2
47	A study of synthesis and properties of polyâ€3â€hydroxybutyrate/diethylene glycol copolymers. Biotechnology Progress, 2016, 32, 1017-1028.	1.3	1