Mikhail V Tsurkan

List of Publications by Year
in descending order

70 papers	3,716 citations	117453 34 h-index	128067 60 g-index
71 all docs	71 docs citations	71 times ranked	5013 citing authors

#	Article	IF	Citations
1	Chitin and chitosan in selected biomedical applications. Progress in Polymer Science, 2014, 39, 1644-1667.	11.8	780
2	Glycosaminoglycan-based hydrogels to modulate heterocellular communication in in vitro angiogenesis models. Scientific Reports, 2014, 4, 4414.	1.6	179
3	Mineralization of the metre-long biosilica structures of glass sponges is templated on hydroxylated collagen. Nature Chemistry, 2010, 2, 1084-1088.	6.6	149
4	Defined Polymerâ€“Peptide Conjugates to Form Cellâ€instructive starPEGâ€“Heparin Matrices In Situ. Advanced Materials, 2013, 25, 2606-2610.	11.1	141
5	Bio-responsive polymer hydrogels homeostatically regulate blood coagulation. Nature Communications, 2013, 4, 2168.	5.8	132
6	Discovery of 505-million-year old chitin in the basal demosponge Vauxia gracilenta. Scientific Reports, 2013, 3, 3497.	1.6	123
7	Progress in chitin analytics. Carbohydrate Polymers, 2021, 252, 117204.	5.1	110
8	Heparin desulfation modulates VEGF release and angiogenesis in diabetic wounds. Journal of Controlled Release, 2015, 220, 79-88.	4.8	100
9	Isolation and identification of chitin in three-dimensional skeleton of Aplysina fistularis marine sponge. International Journal of Biological Macromolecules, 2013, 62, 94-100.	3.6	91
10	Identification and first insights into the structure and biosynthesis of chitin from the freshwater sponge Spongilla lacustris. Journal of Structural Biology, 2013, 183, 474-483.	1.3	88
11	Extreme biomimetic approach for developing novel chitin-GeO2 nanocomposites with photoluminescent properties. Nano Research, 2015, 8, 2288-2301.	5.8	71
12	Recent Advances on Diverse Decarboxylative Reactions of Amino Acids. Advanced Synthesis and Catalysis, 2019, 361, 2161-2214.	2.1	67
13	The multi-layered protective cuticle of Collembola: a chemical analysis. Journal of the Royal Society Interface, 2014, 11, 20140619.	1.5	65
14	Express Method for Isolation of Ready-to-Use 3D Chitin Scaffolds from Aplysina archeri (Aplysineidae:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.2	65
15	Minimal Peptide Motif for Non-covalent Peptideâ€“Heparin Hydrogels. Journal of the American Chemical Society, 2013, 135, 2919-2922.	6.6	62
16	Tackling Cell Transplantation Anoikis: An Injectable, Shape Memory Cryogel Microcarrier Platform Material for Stem Cell and Neuronal Cell Growth. Small, 2015, 11, 5047-5053.	5.2	62
17	Two-tier hydrogel degradation to boost endothelial cell morphogenesis. Biomaterials, 2011, 32, 9649-9657.	5.7	58
18	Marine biomaterials: Biomimetic and pharmacological potential of cultivated Aplysina aerophoba marine demosponge. Materials Science and Engineering C, 2020, 109, 110566.	3.8	53

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19	Modular StarPEGâ€Heparin Gels with Bifunctional Peptide Linkers. Macromolecular Rapid Communications, 2010, 31, 1529-1533.	2.0	52
20	Enzymatically degradable heparin-polyethylene glycol gels with controlled mechanical properties. Chemical Communications, 2010, 46, 1141-1143.	2.2	50
21	Combined influence of biophysical and biochemical cues on maintenance and proliferation of hematopoietic stem cells. Biomaterials, 2017, 138, 108-117.	5.7	47
22	Growth factor delivery from hydrogel particle aggregates to promote tubular regeneration after acute kidney injury. Journal of Controlled Release, 2013, 167, 248-255.	4.8	45
23	Isolation and identification of chitin from heavy mineralized skeleton of Suberea clavata (Verongida:) Tj ETQq1 1 0.784314 rgBT /Over 2017, 104, 1706-1712.	3.6	44
24	Biohybrid Networks of Selectively Desulfated Glycosaminoglycans for Tunable Growth Factor Delivery. Biomacromolecules, 2014, 15, 4439-4446.	2.6	43
25	Naturally Drug-Loaded Chitin: Isolation and Applications. Marine Drugs, 2019, 17, 574.	2.2	42
26	Supercontinuum Generation in Naturally Occurring Glass Sponges Spicules. Advanced Optical Materials, 2016, 4, 1608-1613.	3.6	41
27	First report on chitinous holdfast in sponges (Porifera). Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130339.	1.2	40
28	Naturally Prefabricated Marine Biomaterials: Isolation and Applications of Flat Chitinous 3D Scaffolds from Ianthella labyrinthus (Demospongiae: Verongiida). International Journal of Molecular Sciences, 2019, 20, 5105.	1.8	40
29	Macromolecular crowding for tailoring tissue-derived fibrillated matrices. Acta Biomaterialia, 2017, 55, 109-119.	4.1	38
30	Heparin-based hydrogels induce human renal tubulogenesis in vitro. Acta Biomaterialia, 2017, 57, 59-69.	4.1	38
31	In situ-forming, cell-instructive hydrogels based on glycosaminoglycans with varied sulfation patterns. Biomaterials, 2018, 181, 227-239.	5.7	38
32	Multiphase Biomineralization: Enigmatic Invasive Siliceous Diatoms Produce Crystalline Calcite. Advanced Functional Materials, 2016, 26, 2503-2510.	7.8	37
33	Modular GAG-matrices to promote mammary epithelial morphogenesis inÂvitro. Biomaterials, 2017, 112, 20-30.	5.7	37
34	Nano-biosupercapacitors enable autarkic sensor operation in blood. Nature Communications, 2021, 12, 4967.	5.8	37
35	New Source of 3D Chitin Scaffolds: The Red Sea Demosponge Pseudoceratina arabica (Pseudoceratinidae, Verongiida). Marine Drugs, 2019, 17, 92.	2.2	36
36	Adaptive release of heparin from anticoagulant hydrogels triggered by different blood coagulation factors. Biomaterials, 2017, 135, 53-61.	5.7	35

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37	Spider Chitin: An Ultrafast Microwave-Assisted Method for Chitin Isolation from Caribena versicolor Spider Molt Cuticle. Molecules, 2019, 24, 3736.	1.7	35
38	Spider Chitin. The biomimetic potential and applications of Caribena versicolor tubular chitin. Carbohydrate Polymers, 2019, 226, 115301.	5.1	33
39	The demosponge Pseudoceratina purpurea as a new source of fibrous chitin. International Journal of Biological Macromolecules, 2018, 112, 1021-1028.	3.6	31
40	Discovery of chitin in skeletons of non-verongiid Red Sea demosponges. PLoS ONE, 2018, 13, e0195803.	1.1	31
41	Surface-Dependent Osteoblasts Response to TiO2 Nanotubes of Different Crystallinity. Nanomaterials, 2020, 10, 320.	1.9	30
42	Glycosaminoglycan-based hydrogels with programmable host reactions. Biomaterials, 2020, 228, 119557.	5.7	29
43	Heparin-Modified Polyethylene Glycol Microparticle Aggregates for Focal Cancer Chemotherapy. ACS Biomaterials Science and Engineering, 2016, 2, 2287-2293.	2.6	26
44	First Report on Chitin in a Non-Verongiid Marine Demosponge: The Mycale euplectellioides Case. Marine Drugs, 2018, 16, 68.	2.2	26
45	Metal-Mediated Peptide Assembly:â€‰ Use of Metal Coordination to Change the Oligomerization State of an Î±-Helical Coiled-Coil. Inorganic Chemistry, 2007, 46, 6849-6851.	1.9	23
46	Formation of Peptide Nanospheres and Nanofibrils by Metal Coordination. Biomacromolecules, 2007, 8, 3908-3913.	2.6	23
47	Selfâ€Assembling Hydrogels Crosslinked Solely by Receptorâ€“Ligand Interactions: Tunability, Rationalization of Physical Properties, and 3D Cell Culture. Chemistry - A European Journal, 2015, 21, 3178-3182.	1.7	23
48	New family and genus of a Dendrilla-like sponge with characters of Verongiida. Part II. Discovery of chitin in the skeleton of Ernstilla lacunosa. Zoologischer Anzeiger, 2019, 280, 21-29.	0.4	23
49	Photopatterning of Multifunctional Hydrogels to Direct Adult Neural Precursor Cells. Advanced Healthcare Materials, 2015, 4, 516-521.	3.9	22
50	Metal-peptide nanoassemblies. Chemical Communications, 2004, , 2092.	2.2	21
51	Multiphasicmicrogel-in-gelmaterials to recapitulate cellular mesoenvironmentsin vitro. Biomaterials Science, 2020, 8, 101-108.	2.6	20
52	Cell-instructive starPEG-heparin-collagen composite matrices. Acta Biomaterialia, 2017, 53, 70-80.	4.1	19
53	Electrochemical Approach for Isolation of Chitin from the Skeleton of the Black Coral Cirrhipathes sp. (Antipatharia). Marine Drugs, 2020, 18, 297.	2.2	19
54	In Silico Evaluation of Antifungal Compounds from Marine Sponges against COVID-19-Associated Mucormycosis. Marine Drugs, 2022, 20, 215.	2.2	18

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55	Forbidden Chemistry: Two-Photon Pathway in [2+2] Cycloaddition of Maleimides. Journal of the American Chemical Society, 2017, 139, 10184-10187.	6.6	17
56	Stromal fibroblasts regulate microvascular-like network architecture in a bioengineered breast tumour angiogenesis model. Acta Biomaterialia, 2020, 114, 256-269.	4.1	17
57	Investigation of Sustained BMP Delivery in the Prevention of Medicationâ€Related Osteonecrosis of the Jaw (MRONJ) in a Rat Model. Macromolecular Bioscience, 2019, 19, e1900226.	2.1	16
58	Changing growth of neurites of sensory ganglion by terahertz radiation. Proceedings of SPIE, 2012, , .	0.8	15
59	Bottomâ€Up Structuring and Siteâ€Selective Modification of Hydrogels Using a Twoâ€Photon [2+2] Cycloaddition of Maleimide. Advanced Materials, 2017, 29, 1603327.	11.1	15
60	Chemoselective Peptide Functionalization of starPEG-GAG Hydrogels. Bioconjugate Chemistry, 2014, 25, 1942-1950.	1.8	13
61	Identification and first insights into the structure of chitin from the endemic freshwater demosponge Ochridaspongia rotunda (Arndt, 1937). International Journal of Biological Macromolecules, 2020, 162, 1187-1194.	3.6	9
62	Biosignatures in Subsurface Filamentous Fabrics (SFF) from the Deccan Volcanic Province, India. Minerals (Basel, Switzerland), 2020, 10, 540.	0.8	7
63	Conformational changes of GDNF-derived peptide induced by heparin, heparan sulfate, and sulfated hyaluronic acid â€“ Analysis by circular dichroism spectroscopy and molecular dynamics simulation. International Journal of Biological Macromolecules, 2021, 182, 2144-2150.	3.6	7
64	Defined Geldrop Cultures Maintain Neural Precursor Cells. Scientific Reports, 2018, 8, 8433.	1.6	5
65	Computer vision vs. spectrofluorometer-assisted detection of common nitro-explosive components with bola-type PAH-based chemosensors. RSC Advances, 2021, 11, 25850-25857.	1.7	5
66	Techniques for RNA extraction from cells cultured in starPEGâ€“heparin hydrogels. Open Biology, 2021, 11, 200388.	1.5	2
67	Metal-Mediated Peptide Assembly. ACS Symposium Series, 2009, , 167-182.	0.5	0
68	Situation-adjusted anticoagulant release can simulate feedback responsive behavior of the blood vessel wall. Frontiers in Bioengineering and Biotechnology, 0, 4, .	2.0	0
69	Hydrogel-based kidney tubulogenesis model for drug toxicity applications. Frontiers in Bioengineering and Biotechnology, 0, 4, .	2.0	0
70	A modular glycosaminoglycan-based hydrogel platform to establish models of cancer angiogenesis. Frontiers in Bioengineering and Biotechnology, 0, 4, .	2.0	0