Mikhail V Tsurkan

List of Publications by Citations

66 papers	2,898 citations	29 h-index	53 g-index
71 ext. papers	3,318 ext. citations	8.9 avg, IF	5.05 L-index

#	Paper	IF	Citations
66	Chitin and chitosan in selected biomedical applications. *Progress in Polymer Science*, **2014**, 39, 1644-1667	29.6	645
65	Glycosaminoglycan-based hydrogels to modulate heterocellular communication in in vitro angiogenesis models. *Scientific Reports*, **2014**, 4, 4414	4.9	150
64	Mineralization of the metre-long biosilica structures of glass sponges is templated on hydroxylated collagen. *Nature Chemistry*, **2010**, 2, 1084-8	17.6	132
63	Defined polymer-peptide conjugates to form cell-instructive starPEG-heparin matrices in situ. *Advanced Materials*, **2013**, 25, 2606-10	24	127
62	Bio-responsive polymer hydrogels homeostatically regulate blood coagulation. *Nature Communications*, **2013**, 4, 2168	17.4	108
61	Discovery of 505-million-year old chitin in the basal demosponge Vauxia gracilenta. *Scientific Reports*, **2013**, 3, 3497	4.9	102
60	Heparin desulfation modulates VEGF release and angiogenesis in diabetic wounds. *Journal of Controlled Release*, **2015**, 220, 79-88	11.7	80
59	Isolation and identification of chitin in three-dimensional skeleton of Aplysina fistularis marine sponge. *International Journal of Biological Macromolecules*, **2013**, 62, 94-100	7.9	80
58	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	3.4	71
57	Extreme biomimetic approach for developing novel chitin-GeO2 nanocomposites with photoluminescent properties. *Nano Research*, **2015**, 8, 2288-2301	10	63
56	Minimal peptide motif for non-covalent peptide-heparin hydrogels. *Journal of the American Chemical Society*, **2013**, 135, 2919-22	16.4	54
55	Two-tier hydrogel degradation to boost endothelial cell morphogenesis. *Biomaterials*, **2011**, 32, 9649-57	15.6	51
54	Modular StarPEG-Heparin Gels with Bifunctional Peptide Linkers. *Macromolecular Rapid Communications*, **2010**, 31, 1529-33	4.8	51
53	The multi-layered protective cuticle of Collembola: a chemical analysis. *Journal of the Royal Society Interface*, **2014**, 11,	4.1	50
52	Tackling Cell Transplantation Anoikis: An Injectable, Shape Memory Cryogel Microcarrier Platform Material for Stem Cell and Neuronal Cell Growth. *Small*, **2015**, 11, 5047-53	11	49
51	Express Method for Isolation of Ready-to-Use 3D Chitin Scaffolds from (Aplysineidae: Verongiida) Demosponge. *Marine Drugs*, **2019**, 17,	6	48
50	Enzymatically degradable heparin-polyethylene glycol gels with controlled mechanical properties. *Chemical Communications*, **2010**, 46, 1141-3	5.8	47

49	Recent Advances on Diverse Decarboxylative Reactions of Amino Acids. *Advanced Synthesis and Catalysis*, **2019**, 361, 2161-2214	5.6	41
48	Progress in chitin analytics. *Carbohydrate Polymers*, **2021**, 252, 117204	10.3	41
47	Isolation and identification of chitin from heavy mineralized skeleton of Suberea clavata (Verongida: Demospongiae: Porifera) marine demosponge. *International Journal of Biological Macromolecules*, **2017**, 104, 1706-1712	7.9	38
46	Biohybrid networks of selectively desulfated glycosaminoglycans for tunable growth factor delivery. *Biomacromolecules*, **2014**, 15, 4439-46	6.9	37
45	First report on chitinous holdfast in sponges (Porifera). *Proceedings of the Royal Society B: Biological Sciences*, **2013**, 280, 20130339	4.4	36
44	Combined influence of biophysical and biochemical cues on maintenance and proliferation of hematopoietic stem cells. *Biomaterials*, **2017**, 138, 108-117	15.6	34
43	Supercontinuum Generation in Naturally Occurring Glass Sponges Spicules. *Advanced Optical Materials*, **2016**, 4, 1608-1613	8.1	34
42	Marine biomaterials: Biomimetic and pharmacological potential of cultivated Aplysina aerophoba marine demosponge. *Materials Science and Engineering C*, **2020**, 109, 110566	8.3	33
41	Growth factor delivery from hydrogel particle aggregates to promote tubular regeneration after acute kidney injury. *Journal of Controlled Release*, **2013**, 167, 248-55	11.7	32
40	Macromolecular crowding for tailoring tissue-derived fibrillated matrices. *Acta Biomaterialia*, **2017**, 55, 109-119	10.8	31
39	New Source of 3D Chitin Scaffolds: The Red Sea Demosponge (Pseudoceratinidae, Verongiida). *Marine Drugs*, **2019**, 17,	6	31
38	Multiphase Biomineralization: Enigmatic Invasive Siliceous Diatoms Produce Crystalline Calcite. *Advanced Functional Materials*, **2016**, 26, 2503-2510	15.6	30
37	The demosponge Pseudoceratina purpurea as a new source of fibrous chitin. *International Journal of Biological Macromolecules*, **2018**, 112, 1021-1028	7.9	28
36	Naturally Prefabricated Marine Biomaterials: Isolation and Applications of Flat Chitinous 3D Scaffolds from (Demospongiae: Verongiida). *International Journal of Molecular Sciences*, **2019**, 20,	6.3	27
35	Modular GAG-matrices to promote mammary epithelial morphogenesis in vitro. *Biomaterials*, **2017**, 112, 20-30	15.6	27
34	Adaptive release of heparin from anticoagulant hydrogels triggered by different blood coagulation factors. *Biomaterials*, **2017**, 135, 53-61	15.6	26
33	Spider Chitin. The biomimetic potential and applications of Caribena versicolor tubular chitin. *Carbohydrate Polymers*, **2019**, 226, 115301	10.3	26
32	Naturally Drug-Loaded Chitin: Isolation and Applications. *Marine Drugs*, **2019**, 17,	6	26

31	Heparin-based hydrogels induce human renal tubulogenesis in vitro. *Acta Biomaterialia*, **2017**, 57, 59-69	10.8	25
30	In situ-forming, cell-instructive hydrogels based on glycosaminoglycans with varied sulfation patterns. *Biomaterials*, **2018**, 181, 227-239	15.6	25
29	Discovery of chitin in skeletons of non-verongiid Red Sea demosponges. *PLoS ONE*, **2018**, 13, e0195803	3.7	24
28	Spider Chitin: An Ultrafast Microwave-Assisted Method for Chitin Isolation from Spider Molt Cuticle. *Molecules*, **2019**, 24,	4.8	24
27	First Report on Chitin in a Non-Verongiid Marine Demosponge: The Mycale euplectellioides Case. *Marine Drugs*, **2018**, 16,	6	23
26	Surface-Dependent Osteoblasts Response to TiO Nanotubes of Different Crystallinity. *Nanomaterials*, **2020**, 10,	5.4	22
25	Metal-mediated peptide assembly: use of metal coordination to change the oligomerization state of an alpha-helical coiled-coil. *Inorganic Chemistry*, **2007**, 46, 6849-51	5.1	22
24	Photopatterning of multifunctional hydrogels to direct adult neural precursor cells. *Advanced Healthcare Materials*, **2015**, 4, 516-21	10.1	21
23	Self-assembling hydrogels crosslinked solely by receptor-ligand interactions: tunability, rationalization of physical properties, and 3D cell culture. *Chemistry - A European Journal*, **2015**, 21, 3178-82	4.8	20
22	Heparin-Modified Polyethylene Glycol Microparticle Aggregates for Focal Cancer Chemotherapy. *ACS Biomaterials Science and Engineering*, **2016**, 2, 2287-2293	5.5	20
21	Formation of peptide nanospheres and nanofibrils by metal coordination. *Biomacromolecules*, **2007**, 8, 3908-13	6.9	19
20	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	1.1	18
19	Metal-peptide nanoassemblies. *Chemical Communications*, **2004**, 2092-3	5.8	18
18	Glycosaminoglycan-based hydrogels with programmable host reactions. *Biomaterials*, **2020**, 228, 119557	15.6	17
17	Cell-instructive starPEG-heparin-collagen composite matrices. *Acta Biomaterialia*, **2017**, 53, 70-80	10.8	12
16	Bottom-Up Structuring and Site-Selective Modification of Hydrogels Using a Two-Photon [2+2] Cycloaddition of Maleimide. *Advanced Materials*, **2017**, 29, 1603327	24	12
15	Multiphasic microgel-in-gel materials to recapitulate cellular mesoenvironments in vitro. *Biomaterials Science*, **2019**, 8, 101-108	7.4	12
14	Nano-biosupercapacitors enable autarkic sensor operation in blood. *Nature Communications*, **2021**, 12, 4967	17.4	12

13	Chemoselective peptide functionalization of starPEG-GAG hydrogels. *Bioconjugate Chemistry*, **2014**, 25, 1942-50	6.3	10
12	Forbidden Chemistry: Two-Photon Pathway in [2+2] Cycloaddition of Maleimides. *Journal of the American Chemical Society*, **2017**, 139, 10184-10187	16.4	10
11	Stromal fibroblasts regulate microvascular-like network architecture in a bioengineered breast tumour angiogenesis model. *Acta Biomaterialia*, **2020**, 114, 256-269	10.8	9
10	Biosignatures in Subsurface Filamentous Fabrics (SFF) from the Deccan Volcanic Province, India. *Minerals (Basel, Switzerland)*, **2020**, 10, 540	2.4	7
9	Investigation of Sustained BMP Delivery in the Prevention of Medication-Related Osteonecrosis of the Jaw (MRONJ) in a Rat Model. *Macromolecular Bioscience*, **2019**, 19, e1900226	5.5	7
8	Electrochemical Approach for Isolation of Chitin from the Skeleton of the Black Coral sp. (Antipatharia). *Marine Drugs*, **2020**, 18,	6	6
7	Changing growth of neurites of sensory ganglion by terahertz radiation **2012**,		6
6	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	7.9	5
5	Defined Geldrop Cultures Maintain Neural Precursor Cells. *Scientific Reports*, **2018**, 8, 8433	4.9	5
4	Techniques for RNA extraction from cells cultured in starPEG-heparin hydrogels. *Open Biology*, **2021**, 11, 200388	7	0
3	Conformational changes of GDNF-derived peptide induced by heparin, heparan sulfate, and sulfated hyaluronic acid - Analysis by circular dichroism spectroscopy and molecular dynamics simulation. *International Journal of Biological Macromolecules*, **2021**, 182, 2144-2150	7.9	0
2	Computer vision spectrofluorometer-assisted detection of common nitro-explosive components with -type PAH-based chemosensors.. *RSC Advances*, **2021**, 11, 25850-25857	3.7	0
1	Metal-Mediated Peptide Assembly. *ACS Symposium Series*, **2009**, 167-182	0.4	