Iva Pashkuleva

List of Publications by Year
in descending order

79 papers	3,061 citations	201658 27 h-index	161844 54 g-index
93 all docs	93 docs citations	93 times ranked	5074 citing authors

#	Article	IF	Citations
1	Controlling Cell Behavior Through the Design of Polymer Surfaces. Small, 2010, 6, 2208-2220.	10.0	289
2	Controlling Cancer Cell Fate Using Localized Biocatalytic Self-Assembly of an Aromatic Carbohydrate Amphiphile. Journal of the American Chemical Society, 2015, 137, 576-579.	13.7	260
3	Surface Modification of Electrospun Polycaprolactone Nanofiber Meshes by Plasma Treatment to Enhance Biological Performance. Small, 2009, 5, 1195-1206.	10.0	244
4	Sulfation of Glycosaminoglycans and Its Implications in Human Health and Disorders. Annual Review of Biomedical Engineering, 2017, 19, 1-26.	12.3	227
5	Plasma Surface Modification of Chitosan Membranes: Characterization and Preliminary Cell Response Studies. Macromolecular Bioscience, 2008, 8, 568-576.	4.1	131
6	Bioactive glass/polymer composite scaffolds mimicking bone tissue. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2654-2667.	4.0	115
7	Effect of chitosan membrane surface modification via plasma induced polymerization on the adhesion of osteoblast-like cells. Journal of Materials Chemistry, 2007, 17, 4064.	6.7	112
8	Water Absorption and Degradation Characteristics of Chitosan-Based Polyesters and Hydroxyapatite Composites. Macromolecular Bioscience, 2007, 7, 354-363.	4.1	97
9	Bacteria-responsive multilayer coatings comprising polycationic nanospheres for bacteria biofilm prevention on urinary catheters. Acta Biomaterialia, 2016, 33, 203-212.	8.3	84
10	Biomimetic supramolecular designs for the controlled release of growth factors in bone regeneration. Advanced Drug Delivery Reviews, 2015, 94, 63-76.	13.7	80
11	The Key Role of Sulfation and Branching on Fucoidan Antitumor Activity. Macromolecular Bioscience, 2017, 17, 1600340.	4.1	76
12	New biotextiles for tissue engineering: Development, characterization and in vitro cellular viability. Acta Biomaterialia, 2013, 9, 8167-8181.	8.3	65
13	Minimalistic supramolecular proteoglycan mimics by co-assembly of aromatic peptide and carbohydrate amphiphiles. Chemical Science, 2019, 10, 2385-2390.	7.4	60
14	Surface phosphorylation of chitosan significantly improves osteoblastcell viability, attachment and proliferation. Journal of Materials Chemistry, 2010, 20, 483-491.	6.7	59
15	A new route to produce starchâ€based fiber mesh scaffolds by wet spinning and subsequent surface modification as a way to improve cell attachment and proliferation. Journal of Biomedical Materials Research - Part A, 2010, 92A, 369-377.	4.0	58
16	The Effect of Chitosan on the In Vitro Biological Performance of Chitosanâ˘'Poly(butylene succinate) Blends. Biomacromolecules, 2008, 9, 1139-1145.	5.4	54
17	Plasma-induced polymerization as a tool for surface functionalization of polymer scaffolds for bone tissue engineering: An in vitro study. Acta Biomaterialia, 2010, 6, 3704-3712.	8.3	51
18	Surface modification of starch based biomaterials by oxygen plasma or UV-irradiation. Journal of Materials Science: Materials in Medicine, 2010, 21, 21-32.	3.6	48

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19	Molecular weight of surface immobilized hyaluronic acid influences CD44-mediated binding of gastric cancer cells. Scientific Reports, 2018, 8, 16058.	3.3	47
20	Surface modification of starch based blends using potassium permanganate-nitric acid system and its effect on the adhesion and proliferation of osteoblast-like cells. Journal of Materials Science: Materials in Medicine, 2005, 16, 81-92.	3.6	44
21	Carbohydrate amphiphiles for supramolecular biomaterials: Design, self-assembly, and applications. CheM, 2021, 7, 2943-2964.	11.7	42
22	Probing the biofunctionality of biotinylated hyaluronan and chondroitin sulfate by hyaluronidase degradation and aggrecan interaction. Acta Biomaterialia, 2013, 9, 8158-8166.	8.3	36
23	Surface-modified 3D starch-based scaffold for improved endothelialization for bone tissue engineering. Journal of Materials Chemistry, 2009, 19, 4091.	6.7	35
24	Sulfated Alginate as a Mimic of Sulfated Glycosaminoglycans: Binding of Growth Factors and Effect on Stem Cell Behavior. Advanced Biology, 2017, 1, e1700043.	3.0	34
25	Functional biopolymer-based matrices for modulation of chronic wound enzyme activities. Acta Biomaterialia, 2013, 9, 5216-5225.	8.3	32
26	Tunable layer-by-layer films containing hyaluronic acid and their interactions with CD44. Journal of Materials Chemistry B, 2020, 8, 3880-3885.	5.8	31
27	Co-localization and crosstalk between CD44 and RHAMM depend on hyaluronan presentation. Acta Biomaterialia, 2021, 119, 114-124.	8.3	30
28	Surface Structural Investigation of Starchâ€Based Biomaterials. Macromolecular Bioscience, 2008, 8, 210-219.	4.1	29
29	Sugars: burden or biomaterials of the future?. Journal of Materials Chemistry, 2010, 20, 8803.	6.7	28
30	GAGs-thiolated chitosan assemblies for chronic wounds treatment: control of enzyme activity and cell attachment. Journal of Materials Chemistry, 2012, 22, 19438.	6.7	27
31	Interactions between Exogenous FGF-2 and Sulfonic Groups: in Situ Characterization and Impact on the Morphology of Human Adipose-Derived Stem Cells. Langmuir, 2013, 29, 7983-7992.	3.5	26
32	Redox-Responsive Micellar Nanoparticles from Glycosaminoglycans for CD44 Targeted Drug Delivery. Biomacromolecules, 2018, 19, 2991-2999.	5.4	26
33	Highly porous and interconnected starch-based scaffolds: Production, characterization and surface modification. Materials Science and Engineering C, 2010, 30, 981-989.	7.3	25
34	Hydrophobicâˆ’Electrostatic Balance Driving the LCST Offset Aggregationâˆ’Redissolution Behavior of <i>N</i>-Alkylacrylamide-Based Ionic Terpolymers. Langmuir, 2010, 26, 5934-5941.	3.5	25
35	Sulfonic groups induce formation of filopodia in mesenchymal stem cells. Journal of Materials Chemistry, 2012, 22, 7172.	6.7	25
36	Tunable nano-carriers from clicked glycosaminoglycan block copolymers. Journal of Materials Chemistry B, 2014, 2, 4177-4184.	5.8	23

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37	Synthesis and functionalization of superparamagnetic poly- É› -caprolactone microparticles for the selective isolation of subpopulations of human adipose-derived stem cells. Journal of the Royal Society Interface, 2011, 8, 896-908.	3.4	22
38	Influence of the sulfation degree of glycosaminoglycans on their multilayer assembly with poly-l-lysine. Colloids and Surfaces B: Biointerfaces, 2016, 145, 567-575.	5.0	22
39	Design of protein delivery systems by mimicking extracellular mechanisms for protection of growth factors. Acta Biomaterialia, 2017, 63, 283-293.	8.3	21
40	Inhibiting cancer metabolism by aromatic carbohydrate amphiphiles that act as antagonists of the glucose transporter GLUT1. Chemical Science, 2020, 11, 3737-3744.	7.4	21
41	Adhesive and biodegradable membranes made of sustainable catechol-functionalized marine collagen and chitosan. Colloids and Surfaces B: Biointerfaces, 2022, 213, 112409.	5.0	20
42	Following the enzymatic digestion of chondroitin sulfate by a simple GPC analysis. Analytica Chimica Acta, 2015, 885, 207-213.	5.4	19
43	Influence of different surface modification treatments on silk biotextiles for tissue engineering applications. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 496-507.	3.4	19
44	Extracellular matrix-inspired assembly of glycosaminoglycanâ€“collagen fibers. Journal of Materials Chemistry B, 2017, 5, 3103-3106.	5.8	19
45	Bioinspired baroplastic glycosaminoglycan sealants for soft tissues. Acta Biomaterialia, 2019, 87, 108-117.	8.3	16
46	Expanding the Conformational Landscape of Minimalistic Tripeptides by Their <i>O</i>-Glycosylation. Journal of the American Chemical Society, 2021, 143, 19703-19710.	13.7	14
47	Adhesion of Adipose-Derived Mesenchymal Stem Cells to Glycosaminoglycan Surfaces with Different Protein Patterns. ACS Applied Materials & Interfaces, 2015, 7, 10034-10043.	8.0	13
48	Functionality of surface-coupled oxidised glycosaminoglycans towards fibroblast adhesion. Journal of Bioactive and Compatible Polymers, 2016, 31, 191-207.	2.1	13
49	Modulating cell adhesion to polybutylene succinate biotextile constructs for tissue engineering applications. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 2853-2863.	2.7	13
50	Bactericidal nanopatterns generated by block copolymer self-assembly. Acta Biomaterialia, 2020, 112, 174-181.	8.3	13
51	3D hydrogel mimics of the tumor microenvironment: the interplay among hyaluronic acid, stem cells and cancer cells. Biomaterials Science, 2021, 9, 252-260.	5.4	13
52	A SIMPLE AND EFFICIENT SYNTHESIS OF Î³-AMINOBUTYRIC ACID (GABA) DERIVATIVES. Organic Preparations and Procedures International, 1999, 31, 232-236.	1.3	9
53	Hyaluronic Acid of Low Molecular Weight Triggers the Invasive â€œHummingbirdâ€•Phenotype on Gastric Cancer Cells. Advanced Biology, 2020, 4, e2000122.	3.0	8
54	Aromatic carbohydrate amphiphile disrupts cancer spheroids and prevents relapse. Nanoscale, 2020, 12, 19088-19092.	5.6	8

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55	Surfaces Mimicking Glycosaminoglycans Trigger Different Response of Stem Cells via Distinct Fibronectin Adsorption and Reorganization. ACS Applied Materials & Interfaces, 2016, 8, 28428-28436.	8.0	7
56	Starâ€Like Glycosaminoglycans with Superior Bioactivity Assemble with Proteins into Microfibers. Chemistry - A European Journal, 2018, 24, 14341-14345.	3.3	7
57	Multilayer platform to model the bioactivity of hyaluronic acid in gastric cancer. Materials Science and Engineering C, 2021, 119, 111616.	7.3	7
58	Liposomes embedded in layer by layer constructs as simplistic extracellular vesicles transfer model. Materials Science and Engineering C, 2021, 121, 111813.	7.3	7
59	Influence of Hyaluronan Density on the Behavior of Breast Cancer Cells with Different CD44 Expression. Advanced Healthcare Materials, 2022, 11, e2101309.	7.6	7
60	Preparation of Ethyl Esters of Protected 3-Aryl-2,3-Diaminopropanoic Acids by Reaction of Ethyl N-(Diphenylmethylene)glycinate and Azomethines¹. Synthetic Communications, 1997, 27, 1849-1856.	2.1	6
61	Tuning the Stiffness of Surfaces by Assembling Genetically Engineered Polypeptides with Tailored Amino Acid Sequence. Biomacromolecules, 2018, 19, 3401-3411.	5.4	6
62	Mineralization of Layer-by-Layer Ultrathin Films Containing Microfluidic-Produced Hydroxyapatite Nanorods. Crystal Growth and Design, 2019, 19, 6351-6359.	3.0	6
63	RHAMM expression tunes the response of breast cancer cell lines to hyaluronan. Acta Biomaterialia, 2022, 146, 187-196.	8.3	6
64	Antithrombotic and hemocompatible properties of nanostructured coatings assembled from block copolymers. Journal of Colloid and Interface Science, 2022, 608, 1608-1618.	9.4	5
65	Glycosaminoglycans as polyelectrolytes: implications in bioactivity and assembly of biomedical devices. International Materials Reviews, 2022, 67, 765-795.	19.3	5
66	Effect of Processing Conditions on Mechanical Properties of Pretreated Gelatin Samples. International Journal of Polymeric Materials and Polymeric Biomaterials, 2002, 51, 103-132.	3.4	4
67	Surface Treatments and Pre-Calcification Routes to Enhance Cell Adhesion and Proliferation. , 2002, , 183-217.		4
68	Temperature as a Single Onâ€Off Parameter Controlling Nanoparticles Growing, Stabilization and Fast Disentanglement. Advanced Materials, 2010, 22, 4288-4292.	21.0	3
69	Surface microstructuring and protein patterning using hyaluronan derivatives. Microelectronic Engineering, 2013, 106, 21-26.	2.4	3
70	Bioorthogonal Labeling Reveals Different Expression of Glycans in Mouse Hippocampal Neuron Cultures during Their Development. Molecules, 2020, 25, 795.	3.8	3
71	Hydrogel Nanomaterials for Cancer Diagnosis and Therapy. , 2018, , 170-183.		3
72	Phase-transfer Catalysed Reactions of Mono- and disubstituted N-(benzylidene)-benzylamines with cinnamic acid derivatives. Journal of Chemical Research, 2000, 2000, 103-105.	1.3	2

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73	Sweet building blocks for self-assembling biomaterials with molecular recognition. , 2018, , 79-94.		2
74	Gelatin microâ€•and nanocapsules obtained via sonochemical method. Journal of Applied Polymer Science, 2020, 137, 49584.	2.6	2
75	Synthesis and Stereochemistry of 1,2,4,5-tetraarylimidazolidines. Journal of Chemical Research, 2001, 2001, 457-459.	1.3	1
76	Learning from Nature How to Design Biomimetic Calcium-Phosphate Coatings. , 2004, , 123-150.		1
77	Surface modification for natural-based biomedical polymers. , 2008, , 165-192.		1
78	Research Highlights: Highlights from the latest articles in nanomedicine. Nanomedicine, 2014, 9, 573-576.	3.3	0
79	Biomimetics: Sulfated Alginate as a Mimic of Sulfated Glycosaminoglycans: Binding of Growth Factors and Effect on Stem Cell Behavior (Adv. Biosys. 7/2017). Advanced Biology, 2017, 1, .	3.0	0