

# Sarka Kubinova

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

3,490  
citations

94433

37  
h-index

149698

56  
g-index

81  
all docs

81  
docs citations

81  
times ranked

6107  
citing authors

#	ARTICLE	IF	CITATIONS
1	The therapeutic potential of three-dimensional multipotent mesenchymal stromal cell spheroids. <i>Stem Cell Research and Therapy</i> , 2017, 8, 94.	5.5	179
2	Injectable Extracellular Matrix Hydrogels as Scaffolds for Spinal Cord Injury Repair. <i>Tissue Engineering - Part A</i> , 2016, 22, 306-317.	3.1	134
3	The interplay between biological and physical scenarios of bacterial death induced by non-thermal plasma. <i>Biomaterials</i> , 2016, 82, 71-83.	11.4	124
4	A Comparative Analysis of Multipotent Mesenchymal Stromal Cells derived from Different Sources, with a Focus on Neuroregenerative Potential. <i>Scientific Reports</i> , 2020, 10, 4290.	3.3	111
5	Human Mesenchymal Stem Cells Modulate Inflammatory Cytokines after Spinal Cord Injury in Rat. <i>International Journal of Molecular Sciences</i> , 2014, 15, 11275-11293.	4.1	97
6	Nanofibers prepared by needleless electrospinning technology as scaffolds for wound healing. <i>Journal of Materials Science: Materials in Medicine</i> , 2012, 23, 931-941.	3.6	96
7	An effective strategy of magnetic stem cell delivery for spinal cord injury therapy. <i>Nanoscale</i> , 2015, 7, 3954-3958.	5.6	89
8	The use of superporous Ac-CGGASIKVAVS-OH-modified PHEMA scaffolds to promote cell adhesion and the differentiation of human fetal neural precursors. <i>Biomaterials</i> , 2010, 31, 5966-5975.	11.4	88
9	Nanotechnologies in regenerative medicine. <i>Minimally Invasive Therapy and Allied Technologies</i> , 2010, 19, 144-156.	1.2	86
10	Genipin and EDC crosslinking of extracellular matrix hydrogel derived from human umbilical cord for neural tissue repair. <i>Scientific Reports</i> , 2019, 9, 10674.	3.3	86
11	Morphological Characterization of Nanofibers: Methods and Application in Practice. <i>Journal of Nanomaterials</i> , 2012, 2012, 1-14.	2.7	84
12	Suppression of alkali-induced oxidative injury in the cornea by mesenchymal stem cells growing on nanofiber scaffolds and transferred onto the damaged corneal surface. <i>Experimental Eye Research</i> , 2013, 116, 312-323.	2.6	84
13	Treatment of Ocular Surface Injuries by Limbal and Mesenchymal Stem Cells Growing on Nanofiber Scaffolds. <i>Cell Transplantation</i> , 2010, 19, 1281-1290.	2.5	79
14	Nanotechnology for treatment of stroke and spinal cord injury. <i>Nanomedicine</i> , 2010, 5, 99-108.	3.3	75
15	Highly efficient magnetic targeting of mesenchymal stem cells in spinal cord injury. <i>International Journal of Nanomedicine</i> , 2012, 7, 3719.	6.7	73
16	Extracellular Matrix Hydrogel Derived from Human Umbilical Cord as a Scaffold for Neural Tissue Repair and Its Comparison with Extracellular Matrix from Porcine Tissues. <i>Tissue Engineering - Part C: Methods</i> , 2017, 23, 333-345.	2.1	73
17	Analyzing the mechanisms of iron oxide nanoparticles interactions with cells: A road from failure to success in clinical applications. <i>Journal of Controlled Release</i> , 2020, 328, 59-77.	9.9	72
18	A Comparative Study of Three Different Types of Stem Cells for Treatment of Rat Spinal Cord Injury. <i>Cell Transplantation</i> , 2017, 26, 585-603.	2.5	69

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19	Cholesterol-modified superporous poly(2-hydroxyethyl methacrylate) scaffolds for tissue engineering. <i>Biomaterials</i> , 2009, 30, 4601-4609.	11.4	68
20	SIKVAV-modified highly superporous PHEMA scaffolds with oriented pores for spinal cord injury repair. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015, 9, 1298-1309.	2.7	66
21	Regenerative medicine for the treatment of spinal cord injury: more than just promises?. <i>Journal of Cellular and Molecular Medicine</i> , 2012, 16, 2564-2582.	3.6	64
22	Cell death induced by ozone and various non-thermal plasmas: therapeutic perspectives and limitations. <i>Scientific Reports</i> , 2014, 4, 7129.	3.3	62
23	Effect of elevated K <sup>+</sup> , hypotonic stress, and cortical spreading depression on astrocyte swelling in GFAP-deficient mice. <i>Glia</i> , 2001, 35, 189-203.	4.9	61
24	The relationship between changes in intrinsic optical signals and cell swelling in rat spinal cord slices. <i>NeuroImage</i> , 2003, 18, 214-230.	4.2	60
25	Injectable hydroxyphenyl derivative of hyaluronic acid hydrogel modified with RGD as scaffold for spinal cord injury repair. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 1129-1140.	4.0	59
26	Biomaterials combined with cell therapy for treatment of spinal cord injury. <i>Regenerative Medicine</i> , 2012, 7, 207-224.	1.7	55
27	Controlled gentamicin release from multi-layered electrospun nanofibrous structures of various thicknesses. <i>International Journal of Nanomedicine</i> , 2012, 7, 5315.	6.7	51
28	Characterization of human adipose tissue-derived stromal cells isolated from diabetic patient's distal limbs with critical ischemia. <i>Cell Biochemistry and Function</i> , 2014, 32, 597-604.	2.9	49
29	The Anti-Inflammatory Compound Curcumin Enhances Locomotor and Sensory Recovery after Spinal Cord Injury in Rats by Immunomodulation. <i>International Journal of Molecular Sciences</i> , 2016, 17, 49.	4.1	48
30	Reductively Degradable Poly(2-hydroxyethyl methacrylate) Hydrogels with Oriented Porosity for Tissue Engineering Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 10544-10553.	8.0	47
31	Chromium-doped DLC for implants prepared by laser-magnetron deposition. <i>Materials Science and Engineering C</i> , 2015, 46, 381-386.	7.3	46
32	The Effect of Human Mesenchymal Stem Cells Derived from Wharton's Jelly in Spinal Cord Injury Treatment Is Dose-Dependent and Can Be Facilitated by Repeated Application. <i>International Journal of Molecular Sciences</i> , 2018, 19, 1503.	4.1	46
33	Life on Magnets: Stem Cell Networking on Micro-Magnet Arrays. <i>PLoS ONE</i> , 2013, 8, e70416.	2.5	46
34	Cyclosporine A-loaded and stem cell-seeded electrospun nanofibers for cell-based therapy and local immunosuppression. <i>Journal of Controlled Release</i> , 2011, 156, 406-412.	9.9	44
35	A green tea polyphenol epigallocatechin-3-gallate enhances neuroregeneration after spinal cord injury by altering levels of inflammatory cytokines. <i>Neuropharmacology</i> , 2017, 126, 213-223.	4.1	41
36	Remote Actuation of Apoptosis in Liver Cancer Cells via Magneto-Mechanical Modulation of Iron Oxide Nanoparticles. <i>Cancers</i> , 2019, 11, 1873.	3.7	40

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37	Nanoparticle core stability and surface functionalization drive the mTOR signaling pathway in hepatocellular cell lines. <i>Scientific Reports</i> , 2017, 7, 16049.	3.3	38
38	Highly superporous cholesterol- $\epsilon$ -modified poly(2-hydroxyethyl methacrylate) scaffolds for spinal cord injury repair. <i>Journal of Biomedical Materials Research - Part A</i> , 2011, 99A, 618-629.	4.0	36
39	Chemically different non-thermal plasmas target distinct cell death pathways. <i>Scientific Reports</i> , 2017, 7, 600.	3.3	36
40	Targeting the mTOR Signaling Pathway Utilizing Nanoparticles: A Critical Overview. <i>Cancers</i> , 2019, 11, 82.	3.7	34
41	Nano-formulated curcumin (Lipidisc <sup>®</sup> , $\epsilon$ ) modulates the local inflammatory response, reduces glial scar and preserves the white matter after spinal cord injury in rats. <i>Neuropharmacology</i> , 2019, 155, 54-64.	4.1	33
42	Non-Thermal Plasma, as a New Physicochemical Source, to Induce Redox Imbalance and Subsequent Cell Death in Liver Cancer Cell Lines. <i>Cellular Physiology and Biochemistry</i> , 2019, 52, 119-140.	1.6	33
43	A Combination of Intrathecal and Intramuscular Application of Human Mesenchymal Stem Cells Partly Reduces the Activation of Necroptosis in the Spinal Cord of SOD1G93A Rats. <i>Stem Cells Translational Medicine</i> , 2019, 8, 535-547.	3.3	32
44	Mesenchymal Stem Cells in Treatment of Spinal Cord Injury and Amyotrophic Lateral Sclerosis. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 695900.	3.7	32
45	High extracellular K <sup>+</sup> evokes changes in voltage-dependent K <sup>+</sup> and Na <sup>+</sup> currents and volume regulation in astrocytes. <i>Pflugers Archiv European Journal of Physiology</i> , 2007, 453, 839-849.	2.8	30
46	The Effect of Wharton Jelly-Derived Mesenchymal Stromal Cells and Their Conditioned Media in the Treatment of a Rat Spinal Cord Injury. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4516.	4.1	30
47	Current developments in cell- and biomaterial-based approaches for stroke repair. <i>Expert Opinion on Biological Therapy</i> , 2016, 16, 43-56.	3.1	29
48	Light-induced modulation of the mitochondrial respiratory chain activity: possibilities and limitations. <i>Cellular and Molecular Life Sciences</i> , 2020, 77, 2815-2838.	5.4	29
49	Modified Methacrylate Hydrogels Improve Tissue Repair after Spinal Cord Injury. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2481.	4.1	28
50	Anti-inflammatory compound curcumin and mesenchymal stem cells in the treatment of spinal cord injury in rats. <i>Acta Neurobiologiae Experimentalis</i> , 2018, 78, 358-374.	0.7	28
51	Does combined therapy of curcumin and epigallocatechin gallate have a synergistic neuroprotective effect against spinal cord injury?. <i>Neural Regeneration Research</i> , 2018, 13, 119.	3.0	26
52	RGDS- and SIKVAVS-Modified Superporous Poly(2-hydroxyethyl methacrylate) Scaffolds for Tissue Engineering Applications. <i>Macromolecular Bioscience</i> , 2016, 16, 1621-1631.	4.1	25
53	Iron Oxide Nanoparticle-Induced Autophagic Flux Is Regulated by Interplay between p53-mTOR Axis and Bcl-2 Signaling in Hepatic Cells. <i>Cells</i> , 2020, 9, 1015.	4.1	25
54	Clinically Relevant Solution for the Hypothermic Storage and Transportation of Human Multipotent Mesenchymal Stromal Cells. <i>Stem Cells International</i> , 2019, 2019, 1-11.	2.5	24

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55	Effect of osmotic stress on potassium accumulation around glial cells and extracellular space volume in rat spinal cord slices. <i>Journal of Neuroscience Research</i> , 2001, 65, 129-138.	2.9	23
56	Dynamics of tissue ingrowth in SIKVAV-modified highly superporous PHEMA scaffolds with oriented pores after bridging a spinal cord transection. <i>Journal of Materials Science: Materials in Medicine</i> , 2018, 29, 89.	3.6	23
57	Manipulating the mitochondria activity in human hepatic cell line Huh7 by low-power laser irradiation. <i>Biomedical Optics Express</i> , 2018, 9, 1283.	2.9	21
58	Modulation of collective cell behaviour by geometrical constraints. <i>Integrative Biology (United Kingdom)</i> , 2019, 11, 1131-1137.	1.3	17
59	Critical Analysis of Non-Thermal Plasma-Driven Modulation of Immune Cells from Clinical Perspective. <i>International Journal of Molecular Sciences</i> , 2020, 21, 6226.	4.1	17
60	A Critical Review on Selected External Physical Cues and Modulation of Cell Behavior: Magnetic Nanoparticles, Non-thermal Plasma and Lasers. <i>Journal of Functional Biomaterials</i> , 2019, 10, 2.	4.4	16
61	Extracellular matrix based biomaterials for central nervous system tissue repair: the benefits and drawbacks. <i>Neural Regeneration Research</i> , 2017, 12, 1430.	3.0	16
62	Transplantation of embryonic neuroectodermal progenitor cells into the site of a photochemical lesion: Immunohistochemical and electrophysiological analysis. <i>Journal of Neurobiology</i> , 2006, 66, 1084-1100.	3.6	15
63	Biomaterials and Magnetic Stem Cell Delivery in the Treatment of Spinal Cord Injury. <i>Neurochemical Research</i> , 2020, 45, 171-179.	3.3	15
64	The Healing of Oxidative Injuries with Trehalose in UVB-Irradiated Rabbit Corneas. <i>Oxidative Medicine and Cellular Longevity</i> , 2019, 2019, 1-10.	4.0	14
65	The use of new surface-modified poly(2-hydroxyethyl methacrylate) hydrogels in tissue engineering: Treatment of the surface with fibronectin subunits versus Ac-GASIKVAVS-OH, cysteine, and 2-mercaptoethanol modification. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 2315-2323.	4.0	13
66	Towards the understanding of non-thermal air plasma action: effects on bacteria and fibroblasts. <i>RSC Advances</i> , 2016, 6, 25286-25292.	3.6	13
67	The preventive and therapeutic effects of molecular hydrogen in ocular diseases and injuries where oxidative stress is involved. <i>Free Radical Research</i> , 2019, 53, 237-247.	3.3	12
68	New trends in spinal cord tissue engineering. <i>Future Neurology</i> , 2015, 10, 129-145.	0.5	11
69	Anti-inflammatory compound curcumin and mesenchymal stem cells in the treatment of spinal cord injury in rats. <i>Acta Neurobiologiae Experimentalis</i> , 2018, 78, 358-374.	0.7	10
70	Thiolated poly(2-hydroxyethyl methacrylate) hydrogels as a degradable biocompatible scaffold for tissue engineering. <i>Materials Science and Engineering C</i> , 2021, 131, 112500.	7.3	8
71	Targeted neural differentiation of murine mesenchymal stem cells by a protocol simulating the inflammatory site of neural injury. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017, 11, 1588-1597.	2.7	7
72	The negative effect of magnetic nanoparticles with ascorbic acid on peritoneal macrophages. <i>Neurochemical Research</i> , 2020, 45, 159-170.	3.3	6

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73	Trehalose in ophthalmology. <i>Histology and Histopathology</i> , 2019, 34, 611-618.	0.7	6
74	Hepatic Tumor Cell Morphology Plasticity under Physical Constraints in 3D Cultures Driven by YAP/mTOR Axis. <i>Pharmaceuticals</i> , 2020, 13, 430.	3.8	5
75	The Current State of Advanced Therapy Medicinal Products in the Czech Republic. <i>Human Gene Therapy Clinical Development</i> , 2018, 29, 132-147.	3.1	2
76	Soft and rigid scaffolds for spinal cord injury regeneration. , 2020, , 105-127.		2
77	Analysis of Chondroitin/Dermatan Sulphate Disaccharides Using High-Performance Liquid Chromatography. <i>Separations</i> , 2020, 7, 49.	2.4	1
78	Tissue engineering and regenerative medicine in spinal cord injury repair. , 2020, , 291-332.		1
79	Laser irradiation induces mitochondrial dysfunction in hepatic cells. , 2019, , .		1
80	Hybrid Laser Technology for Creation of Doped Biomedical Layers. <i>Journal of Materials Science and Chemical Engineering</i> , 2016, 04, 98-104.	0.4	0