# Sarka Kubinova

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 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 | Mesenchymal Stem Cells in Treatment of Spinal Cord Injury and Amyotrophic Lateral Sclerosis. Frontiers in Cell and Developmental Biology, 2021, 9, 695900. | 3.7 | 32 |
| 2 | Thiolated poly(2-hydroxyethyl methacrylate) hydrogels as a degradable biocompatible scaffold for tissue engineering. Materials Science and Engineering C, 2021, 131, 112500. | 7.3 | 8 |
| 3 | The negative effect of magnetic nanoparticles with ascorbic acid on peritoneal macrophages. Neurochemical Research, 2020, 45, 159-170. | 3.3 | 6 |
| 4 | Biomaterials and Magnetic Stem Cell Delivery in the Treatment of Spinal Cord Injury. Neurochemical Research, 2020, 45, 171-179. | 3.3 | 15 |
| 5 | Light-induced modulation of the mitochondrial respiratory chain activity: possibilities and limitations. Cellular and Molecular Life Sciences, 2020, 77, 2815-2838. | 5.4 | 29 |
| 6 | Soft and rigid scaffolds for spinal cord injury regeneration. , 2020, , 105-127. | | 2 |
| 7 | Analyzing the mechanisms of iron oxide nanoparticles interactions with cells: A road from failure to success in clinical applications. Journal of Controlled Release, 2020, 328, 59-77. | 9.9 | 72 |
| 8 | Hepatic Tumor Cell Morphology Plasticity under Physical Constraints in 3D Cultures Driven by YAPâ€“mTOR Axis. Pharmaceuticals, 2020, 13, 430. | 3.8 | 5 |
| 9 | Critical Analysis of Non-Thermal Plasma-Driven Modulation of Immune Cells from Clinical Perspective. International Journal of Molecular Sciences, 2020, 21, 6226. | 4.1 | 17 |
| 10 | Analysis of Chondroitin/Dermatan Sulphate Disaccharides Using High-Performance Liquid Chromatography. Separations, 2020, 7, 49. | 2.4 | 1 |
| 11 | A Comparative Analysis of Multipotent Mesenchymal Stromal Cells derived from Different Sources, with a Focus on Neuroregenerative Potential. Scientific Reports, 2020, 10, 4290. | 3.3 | 111 |
| 12 | Tissue engineering and regenerative medicine in spinal cord injury repair. , 2020, , 291-332. | | 1 |
| 13 | Iron Oxide Nanoparticle-Induced Autophagic Flux Is Regulated by Interplay between p53-mTOR Axis and Bcl-2 Signaling in Hepatic Cells. Cells, 2020, 9, 1015. | 4.1 | 25 |
| 14 | Genipin and EDC crosslinking of extracellular matrix hydrogel derived from human umbilical cord for neural tissue repair. Scientific Reports, 2019, 9, 10674. | 3.3 | 86 |
| 15 | The Healing of Oxidative Injuries with Trehalose in UVB-Irradiated Rabbit Corneas. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-10. | 4.0 | 14 |
| 16 | The Effect of Wharton Jelly-Derived Mesenchymal Stromal Cells and Their Conditioned Media in the Treatment of a Rat Spinal Cord Injury. International Journal of Molecular Sciences, 2019, 20, 4516. | 4.1 | 30 |
| 17 | Clinically Relevant Solution for the Hypothermic Storage and Transportation of Human Multipotent Mesenchymal Stromal Cells. Stem Cells International, 2019, 2019, 1-11. | 2.5 | 24 |
| 18 | Nano-formulated curcumin (Lipodisqâ„¢) modulates the local inflammatory response, reduces glial scar and preserves the white matter after spinal cord injury in rats. Neuropharmacology, 2019, 155, 54-64. | 4.1 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | 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. Stem Cells Translational Medicine, 2019, 8, 535-547. | 3.3 | 32 |
| 20 | The preventive and therapeutic effects of molecular hydrogen in ocular diseases and injuries where oxidative stress is involved. Free Radical Research, 2019, 53, 237-247. | 3.3 | 12 |
| 21 | Remote Actuation of Apoptosis in Liver Cancer Cells via Magneto-Mechanical Modulation of Iron Oxide Nanoparticles. Cancers, 2019, 11, 1873. | 3.7 | 40 |
| 22 | A Critical Review on Selected External Physical Cues and Modulation of Cell Behavior: Magnetic Nanoparticles, Non-thermal Plasma and Lasers. Journal of Functional Biomaterials, 2019, 10, 2. | 4.4 | 16 |
| 23 | Targeting the mTOR Signaling Pathway Utilizing Nanoparticles: A Critical Overview. Cancers, 2019, 11, 82. | 3.7 | 34 |
| 24 | Trehalose in ophthalmology. Histology and Histopathology, 2019, 34, 611-618. | 0.7 | 6 |
| 25 | Non-Thermal Plasma, as a New Physicochemical Source, to Induce Redox Imbalance and Subsequent Cell Death in Liver Cancer Cell Lines. Cellular Physiology and Biochemistry, 2019, 52, 119-140. | 1.6 | 33 |
| 26 | Laser irradiation induces mitochondrial dysfunction in hepatic cells. , 2019, , . | | 1 |
| 27 | Injectable hydroxyphenyl derivative of hyaluronic acid hydrogel modified with RGD as scaffold for spinal cord injury repair. Journal of Biomedical Materials Research - Part A, 2018, 106, 1129-1140. | 4.0 | 59 |
| 28 | Dynamics of tissue ingrowth in SIKVAV-modified highly superporous PHEMA scaffolds with oriented pores after bridging a spinal cord transection. Journal of Materials Science: Materials in Medicine, 2018, 29, 89. | 3.6 | 23 |
| 29 | Manipulating the mitochondria activity in human hepatic cell line Huh7 by low-power laser irradiation. Biomedical Optics Express, 2018, 9, 1283. | 2.9 | 21 |
| 30 | The Effect of Human Mesenchymal Stem Cells Derived from Whartonâ€™s Jelly in Spinal Cord Injury Treatment Is Dose-Dependent and Can Be Facilitated by Repeated Application. International Journal of Molecular Sciences, 2018, 19, 1503. | 4.1 | 46 |
| 31 | Modified Methacrylate Hydrogels Improve Tissue Repair after Spinal Cord Injury. International Journal of Molecular Sciences, 2018, 19, 2481. | 4.1 | 28 |
| 32 | The Current State of Advanced Therapy Medicinal Products in the Czech Republic. Human Gene Therapy Clinical Development, 2018, 29, 132-147. | 3.1 | 2 |
| 33 | Anti-inflammatory compound curcumin and mesenchymal stem cells in the treatment of spinal cord injury in rats. Acta Neurobiologiae Experimentalis, 2018, 78, 358-374. | 0.7 | 28 |
| 34 | Does combined therapy of curcumin and epigallocatechin gallate have a synergistic neuroprotective effect against spinal cord injury?. Neural Regeneration Research, 2018, 13, 119. | 3.0 | 26 |
| 35 | Anti-inflammatory compound curcumin and mesenchymal stem cells in the treatment of spinal cord injury in rats. Acta Neurobiologiae Experimentalis, 2018, 78, 358-374. | 0.7 | 10 |
| 36 | Targeted neural differentiation of murine mesenchymal stem cells by a protocol simulating the inflammatory site of neural injury. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1588-1597. | 2.7 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Chemically different non-thermal plasmas target distinct cell death pathways. Scientific Reports, 2017, 7, 600. | 3.3 | 36 |
| 38 | The therapeutic potential of three-dimensional multipotent mesenchymal stromal cell spheroids. Stem Cell Research and Therapy, 2017, 8, 94. | 5.5 | 179 |
| 39 | Extracellular Matrix Hydrogel Derived from Human Umbilical Cord as a Scaffold for Neural Tissue Repair and Its Comparison with Extracellular Matrix from Porcine Tissues. Tissue Engineering - Part C: Methods, 2017, 23, 333-345. | 2.1 | 73 |
| 40 | A Comparative Study of Three Different Types of Stem Cells for Treatment of Rat Spinal Cord Injury. Cell Transplantation, 2017, 26, 585-603. | 2.5 | 69 |
| 41 | Reductively Degradable Poly(2-hydroxyethyl methacrylate) Hydrogels with Oriented Porosity for Tissue Engineering Applications. ACS Applied Materials & Interfaces, 2017, 9, 10544-10553. | 8.0 | 47 |
| 42 | A green tea polyphenol epigallocatechin-3-gallate enhances neuroregeneration after spinal cord injury by altering levels of inflammatory cytokines. Neuropharmacology, 2017, 126, 213-223. | 4.1 | 41 |
| 43 | Nanoparticle core stability and surface functionalization drive the mTOR signaling pathway in hepatocellular cell lines. Scientific Reports, 2017, 7, 16049. | 3.3 | 38 |
| 44 | Extracellular matrix based biomaterials for central nervous system tissue repair: the benefits and drawbacks. Neural Regeneration Research, 2017, 12, 1430. | 3.0 | 16 |
| 45 | The Anti-Inflammatory Compound Curcumin Enhances Locomotor and Sensory Recovery after Spinal Cord Injury in Rats by Immunomodulation. International Journal of Molecular Sciences, 2016, 17, 49. | 4.1 | 48 |
| 46 | Modulation of collective cell behaviour by geometrical constraints. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38 | 1.3 | 17 |
| 47 | RGDS- and SIKVAVS-Modified Superporous Poly(2-hydroxyethyl methacrylate) Scaffolds for Tissue Engineering Applications. Macromolecular Bioscience, 2016, 16, 1621-1631. | 4.1 | 25 |
| 48 | Towards the understanding of non-thermal air plasma action: effects on bacteria and fibroblasts. RSC Advances, 2016, 6, 25286-25292. | 3.6 | 13 |
| 49 | Injectable Extracellular Matrix Hydrogels as Scaffolds for Spinal Cord Injury Repair. Tissue Engineering - Part A, 2016, 22, 306-317. | 3.1 | 134 |
| 50 | The interplay between biological and physical scenarios of bacterial death induced by non-thermal plasma. Biomaterials, 2016, 82, 71-83. | 11.4 | 124 |
| 51 | Current developments in cell- and biomaterial-based approaches for stroke repair. Expert Opinion on Biological Therapy, 2016, 16, 43-56. | 3.1 | 29 |
| 52 | Hybrid Laser Technology for Creation of Doped Biomedical Layers. Journal of Materials Science and Chemical Engineering, 2016, 04, 98-104. | 0.4 | 0 |
| 53 | An effective strategy of magnetic stem cell delivery for spinal cord injury therapy. Nanoscale, 2015, 7, 3954-3958. | 5.6 | 89 |
| 54 | New trends in spinal cord tissue engineering. Future Neurology, 2015, 10, 129-145. | 0.5 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Chromium-doped DLC for implants prepared by laser-magnetron deposition. Materials Science and Engineering C, 2015, 46, 381-386. | 7.3 | 46 |
| 56 | SIKVAV-modified highly superporous PHEMA scaffolds with oriented pores for spinal cord injury repair. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 1298-1309. | 2.7 | 66 |
| 57 | Human Mesenchymal Stem Cells Modulate Inflammatory Cytokines after Spinal Cord Injury in Rat. International Journal of Molecular Sciences, 2014, 15, 11275-11293. | 4.1 | 97 |
| 58 | Characterization of human adipose tissueâ€derived stromal cells isolated from diabetic patient's distal limbs with critical ischemia. Cell Biochemistry and Function, 2014, 32, 597-604. | 2.9 | 49 |
| 59 | The use of new surfaceâ€modified poly(2â€hydroxyethyl methacrylate) hydrogels in tissue engineering: Treatment of the surface with fibronectin subunits versus Acâ€CGGASIKVAVSâ€OH, cysteine, and 2â€mercaptoethanol modification. Journal of Biomedical Materials Research - Part A, 2014, 102, 2315-2323. | 4.0 | 13 |
| 60 | Cell death induced by ozone and various non-thermal plasmas: therapeutic perspectives and limitations. Scientific Reports, 2014, 4, 7129. | 3.3 | 62 |
| 61 | Suppression of alkali-induced oxidative injury in the cornea by mesenchymal stem cells growing on nanofiber scaffolds and transferred onto the damaged corneal surface. Experimental Eye Research, 2013, 116, 312-323. | 2.6 | 84 |
| 62 | Life on Magnets: Stem Cell Networking on Micro-Magnet Arrays. PLoS ONE, 2013, 8, e70416. | 2.5 | 46 |
| 63 | Controlled gentamicin release from multi-layered electrospun nanofibrous structures of various thicknesses. International Journal of Nanomedicine, 2012, 7, 5315. | 6.7 | 51 |
| 64 | Morphological Characterization of Nanofibers: Methods and Application in Practice. Journal of Nanomaterials, 2012, 2012, 1-14. | 2.7 | 84 |
| 65 | Biomaterials combined with cell therapy for treatment of spinal cord injury. Regenerative Medicine, 2012, 7, 207-224. | 1.7 | 55 |
| 66 | Regenerative medicine for the treatment of spinal cord injury: more than just promises?. Journal of Cellular and Molecular Medicine, 2012, 16, 2564-2582. | 3.6 | 64 |
| 67 | Highly efficient magnetic targeting of mesenchymal stem cells in spinal cord injury. International Journal of Nanomedicine, 2012, 7, 3719. | 6.7 | 73 |
| 68 | Nanofibers prepared by needleless electrospinning technology as scaffolds for wound healing. Journal of Materials Science: Materials in Medicine, 2012, 23, 931-941. | 3.6 | 96 |
| 69 | Cyclosporine A-loaded and stem cell-seeded electrospun nanofibers for cell-based therapy and local immunosuppression. Journal of Controlled Release, 2011, 156, 406-412. | 9.9 | 44 |
| 70 | Highly superporous cholesterolâ€modified poly(2â€hydroxyethyl methacrylate) scaffolds for spinal cord injury repair. Journal of Biomedical Materials Research - Part A, 2011, 99A, 618-629. | 4.0 | 36 |
| 71 | Treatment of Ocular Surface Injuries by Limbal and Mesenchymal Stem Cells Growing on Nanofiber Scaffolds. Cell Transplantation, 2010, 19, 1281-1290. | 2.5 | 79 |
| 72 | The use of superporous Ac-CGGASIKVAVS-OH-modified PHEMA scaffolds to promote cell adhesion and the differentiation of human fetal neural precursors. Biomaterials, 2010, 31, 5966-5975. | 11.4 | 88 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Nanotechnologies in regenerative medicine. Minimally Invasive Therapy and Allied Technologies, 2010, 19, 144-156. | 1.2 | 86 |
| 74 | Nanotechnology for treatment of stroke and spinal cord injury. Nanomedicine, 2010, 5, 99-108. | 3.3 | 75 |
| 75 | Cholesterol-modified superporous poly(2-hydroxyethyl methacrylate) scaffolds for tissue engineering. Biomaterials, 2009, 30, 4601-4609. | 11.4 | 68 |
| 76 | High extracellular K+ evokes changes in voltage-dependent K+ and Na+ currents and volume regulation in astrocytes. Pflugers Archiv European Journal of Physiology, 2007, 453, 839-849. | 2.8 | 30 |
| 77 | Transplantation of embryonic neuroectodermal progenitor cells into the site of a photochemical lesion: Immunohistochemical and electrophysiological analysis. Journal of Neurobiology, 2006, 66, 1084-1100. | 3.6 | 15 |
| 78 | The relationship between changes in intrinsic optical signals and cell swelling in rat spinal cord slices. NeuroImage, 2003, 18, 214-230. | 4.2 | 60 |
| 79 | Effect of osmotic stress on potassium accumulation around glial cells and extracellular space volume in rat spinal cord slices. Journal of Neuroscience Research, 2001, 65, 129-138. | 2.9 | 23 |
| 80 | Effect of elevated K+, hypotonic stress, and cortical spreading depression on astrocyte swelling in GFAP-deficient mice. Glia, 2001, 35, 189-203. | 4.9 | 61 |