Joanna Chwiej

List of Publications by Year
in descending order

41	732	516710 16	580821 25
papers	citations	h-index	g-index

43	43	43	642
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biomolecular investigation of human substantia nigra in Parkinsonâ€™s disease by synchrotron radiation Fourier transform infrared microspectroscopy. Archives of Biochemistry and Biophysics, 2007, 459, 241-248.	3.0	78
2	Preparation of tissue samples for X-ray fluorescence microscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 1531-1537.	2.9	63
3	Synchrotron FTIR micro-spectroscopy study of the rat hippocampal formation after pilocarpine-evoked seizures. Journal of Chemical Neuroanatomy, 2010, 40, 140-147.	2.1	43
4	Investigations of differences in iron oxidation state inside single neurons from substantia nigra of Parkinsonâ€™s disease and control patients using the micro-XANES technique. Journal of Biological Inorganic Chemistry, 2007, 12, 204-211.	2.6	35
5	Implementation of X-ray Fluorescence Microscopy for Investigation of Elemental Abnormalities in Amyotrophic Lateral Sclerosis. Neurochemical Research, 2006, 31, 321-331.	3.3	31
6	The role of trace elements in the pathogenesis and progress of pilocarpine-induced epileptic seizures. Journal of Biological Inorganic Chemistry, 2008, 13, 1267-1274.	2.6	31
7	X-ray fluorescence analysis of long-term changes in the levels and distributions of trace elements in the rat brain following mechanical injury. Journal of Biological Inorganic Chemistry, 2011, 16, 275-283.	2.6	29
8	Progress of elemental anomalies of hippocampal formation in the pilocarpine model of temporal lobe epilepsyâ€”an X-ray fluorescence microscopy study. Analytical and Bioanalytical Chemistry, 2012, 404, 3071-3080.	3.7	29
9	Neuroprotective action of FK-506 (tacrolimus) after seizures induced with pilocarpine: quantitative and topographic elemental analysis of brain tissue. Journal of Biological Inorganic Chemistry, 2010, 15, 283-289.	2.6	28
10	The assessment of the usability of selected instrumental techniques for the elemental analysis of biomedical samples. Scientific Reports, 2021, 11, 3704.	3.3	26
11	Intraneuronal investigations of organic components and trace elements with the use of synchrotron radiation. X-Ray Spectrometry, 2005, 34, 514-520.	1.4	25
12	Study of Cu chemical state inside single neurons from Parkinson's disease and control substantia nigra using the micro-XANES technique. Journal of Trace Elements in Medicine and Biology, 2008, 22, 183-188.	3.0	20
13	Synchrotron radiation Fourier-transform infrared and Raman microspectroscopy study showing an increased frequency of creatine inclusions in the rat hippocampal formation following pilocarpine-induced seizures. Analytical and Bioanalytical Chemistry, 2012, 402, 2267-2274.	3.7	20
14	Classification of Nerve Cells from Substantia Nigra of Patients with Parkinson's Disease and Amyotrophic Lateral Sclerosis with the Use of X-ray Fluorescence Microscopy and Multivariate Methods. Analytical Chemistry, 2005, 77, 2895-2900.	6.5	19
15	Variations in elemental compositions of rat hippocampal formation between acute and latent phases of pilocarpine-induced epilepsy: an X-ray fluorescence microscopy study. Journal of Biological Inorganic Chemistry, 2012, 17, 731-739.	2.6	19
16	The biochemical changes in hippocampal formation occurring in normal and seizure experiencing rats as a result of a ketogenic diet. Analyst, The, 2015, 140, 2190-2204.	3.5	19
17	FTIR microspectroscopy revealed biochemical changes in liver and kidneys as a result of exposure to low dose of iron oxide nanoparticles. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 236, 118355.	3.9	18
18	Research in quantitative microscopic X-ray fluorescence analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2004, 59, 1517-1521.	2.9	16

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19	The use of cluster and discriminant analysis in the investigations of the role of trace metals in the pathogenesis of Parkinsonâ€™s disease. Journal of Trace Elements in Medicine and Biology, 2010, 24, 78-88.	3.0	16
20	Differences in the hippocampal frequency of creatine inclusions between the acute and latent phases of pilocarpine model defined using synchrotron radiation-based FTIR microspectroscopy. Analytical and Bioanalytical Chemistry, 2013, 405, 7337-7345.	3.7	12
21	Elemental anomalies in the hippocampal formation after repetitive electrical stimulation: an X-ray fluorescence microscopy study. Journal of Biological Inorganic Chemistry, 2014, 19, 1209-1220.	2.6	12
22	Biochemical Changes Indicate Developmental Stage in the Hippocampal Formation. ACS Chemical Neuroscience, 2019, 10, 628-635.	3.5	12
23	The elemental changes occurring in the rat liver after exposure to PEG-coated iron oxide nanoparticles: total reflection x-ray fluorescence (TXRF) spectroscopy study. Nanotoxicology, 2017, 11, 1225-1236.	3.0	11
24	Comparison of ultrasmall IONPs and Fe salts biocompatibility and activity in multi-cellular in vitro models. Scientific Reports, 2020, 10, 15447.	3.3	11
25	The influence of the ketogenic diet on the elemental and biochemical compositions of the hippocampal formation. Epilepsy and Behavior, 2015, 49, 40-46.	1.7	10
26	Low Doses of Polyethylene Glycol Coated Iron Oxide Nanoparticles Cause Significant Elemental Changes within Main Organs. Chemical Research in Toxicology, 2018, 31, 876-884.	3.3	10
27	The influence of high fat diets with different ketogenic ratios on the hippocampal accumulation of creatine â€“ FTIR microspectroscopy study. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 184, 13-22.	3.9	9
28	Pollution from Transport: Detection of Tyre Particles in Environmental Samples. Energies, 2022, 15, 2816.	3.1	9
29	Elemental changes in the hippocampal formation following two different formulas of ketogenic diet: an X-ray fluorescence microscopy study. Journal of Biological Inorganic Chemistry, 2015, 20, 1277-1286.	2.6	8
30	Ketogenic diet impairs neurological development of neonatal rats and affects biochemical composition of maternal brains: evidence of functional recovery in pups. Brain Structure and Function, 2022, 227, 1099-1113.	2.3	8
31	Various ketogenic diets can differently support brain resistance against experimentally evoked seizures and seizure-induced elemental anomalies of hippocampal formation. Journal of Trace Elements in Medicine and Biology, 2017, 42, 50-58.	3.0	7
32	Comparison of Elemental Anomalies Following Implantation of Different Cell Lines of Glioblastoma Multiforme in the Rat Brain: A Total Reflection X-ray Fluorescence Spectroscopy Study. ACS Chemical Neuroscience, 2020, 11, 4447-4459.	3.5	7
33	The methods of vibrational microspectroscopy reveals long-term biochemical anomalies within the region of mechanical injury within the rat brain. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 263, 120214.	3.9	7
34	The influence of IONPs core size on their biocompatibility and activity in in vitro cellular models. Scientific Reports, 2021, 11, 21808.	3.3	7
35	Implementation of X-ray fluorescence microscopy for investigation of elemental abnormalities in central nervous system tissue. Journal of Alloys and Compounds, 2005, 401, 184-188.	5.5	6
36	Elemental changes of hippocampal formation occurring during postnatal brain development. Journal of Trace Elements in Medicine and Biology, 2018, 49, 1-7.	3.0	6

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37	The Use of Fourier Transform Infrared Microspectroscopy for the Determination of Biochemical Anomalies of the Hippocampal Formation Characteristic for the Kindling Model of Seizures. ACS Chemical Neuroscience, 2021, 12, 4564-4579.	3.5	5
38	Altered Elemental Distribution in Male Rat Brain Tissue as a Predictor of Glioblastoma Multiforme Growthâ€"Studies Using SR-XRF Microscopy. International Journal of Molecular Sciences, 2022, 23, 703.	4.1	5
39	Intravenously administered <scp>d</scp>-mannitol-coated maghemite nanoparticles cause elemental anomalies in selected rat organs. Metallomics, 2020, 12, 1811-1821.	2.4	2
40	Biochemical changes of macrophages and U87MG cells occurring as a result of the exposure to iron oxide nanoparticles detected with the Raman microspectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 278, 121337.	3.9	2
41	Organ Metallome Processed with Chemometric Methods Enable the Determination of Elements that May Serve as Markers of Exposure to Iron Oxide Nanoparticles in Male Rats. Biological Trace Element Research, 2020, 198, 602-616.	3.5	1