Petra KovaÅÃ-kovÃ¡

List of Publications by Year
in descending order

58 papers	1,369 citations	430874 18 h-index	361022 35 g-index
58 all docs	58 docs citations	58 times ranked	1974 citing authors

#	Article	IF	Citations
1	Oxidative Stress, Redox Signaling, and Metal Chelation in Anthracycline Cardiotoxicity and Pharmacological Cardioprotection. Antioxidants and Redox Signaling, 2013, 18, 899-929.	5.4	267
2	Zinc(II)â€“Thiosemicarbazone Complexes Are Localized to the Lysosomal Compartment Where They Transmetallate with Copper Ions to Induce Cytotoxicity. Journal of Medicinal Chemistry, 2016, 59, 4965-4984.	6.4	148
3	Comparison of Clinically Used and Experimental Iron Chelators for Protection against Oxidative Stress-Induced Cellular Injury. Chemical Research in Toxicology, 2010, 23, 1105-1114.	3.3	61
4	Synthesis and Initial in Vitro Evaluations of Novel Antioxidant Aroylhydrazone Iron Chelators with Increased Stability against Plasma Hydrolysis. Chemical Research in Toxicology, 2011, 24, 290-302.	3.3	52
5	Iron chelation with salicylaldehyde isonicotinoyl hydrazone protects against catecholamine autoxidation and cardiotoxicity. Free Radical Biology and Medicine, 2011, 50, 537-549.	2.9	42
6	Methyl and ethyl ketone analogs of salicylaldehyde isonicotinoyl hydrazone: Novel iron chelators with selective antiproliferative action. Chemico-Biological Interactions, 2012, 197, 69-79.	4.0	41
7	HPLC study of glimepiride under hydrolytic stress conditions. Journal of Pharmaceutical and Biomedical Analysis, 2004, 36, 205-209.	2.8	38
8	Investigation of the stability of aromatic hydrazones in plasma and related biological material. Journal of Pharmaceutical and Biomedical Analysis, 2008, 47, 360-370.	2.8	35
9	Comparison of various iron chelators used in clinical practice as protecting agents against catecholamine-induced oxidative injury and cardiotoxicity. Toxicology, 2011, 289, 122-131.	4.2	35
10	Novel and potent anti-tumor and anti-metastatic di-2-pyridylketone thiosemicarbazones demonstrate marked differences in pharmacology between the first and second generation lead agents. Oncotarget, 2015, 6, 42411-42428.	1.8	34
11	Development of high-performance liquid chromatographic determination of salicylaldehyde isonicotinoyl hydrazone in rabbit plasma and application of this method to anin vivo study. Journal of Separation Science, 2005, 28, 1300-1306.	2.5	31
12	Dimethylamino Acid Esters as Biodegradable and Reversible Transdermal Permeation Enhancers: Effects of Linking Chain Length, Chirality and Polyfluorination. Pharmaceutical Research, 2009, 26, 811-821.	3.5	31
13	Aroylhydrazone iron chelators: Tuning antioxidant and antiproliferative properties by hydrazide modifications. European Journal of Medicinal Chemistry, 2016, 120, 97-110.	5.5	31
14	The retention behaviour of polar compounds on zirconia based stationary phases under hydrophilic interaction liquid chromatography conditions. Journal of Chromatography A, 2011, 1218, 6981-6986.	3.7	29
15	Investigation of novel dexrazoxane analogue JR-311 shows significant cardioprotective effects through topoisomerase IIbeta but not its iron chelating metabolite. Toxicology, 2017, 392, 1-10.	4.2	25
16	Clinically Translatable Prevention of Anthracycline Cardiotoxicity by Dexrazoxane Is Mediated by Topoisomerase II Beta and Not Metal Chelation. Circulation: Heart Failure, 2021, 14, e008209.	3.9	24
17	HPLC-DAD and MS/MS analysis of novel drug candidates from the group of aromatic hydrazones revealing the presence of geometric isomers. Journal of Pharmaceutical and Biomedical Analysis, 2008, 48, 295-302.	2.8	23
18	Deferoxamine but not Dexrazoxane Alleviates Liver Injury Induced by Endotoxemia in Rats. Shock, 2014, 42, 372-379.	2.1	21

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19	Interface-free capillary electrophoresis-mass spectrometry system with nanospray ionizationâ€"Analysis of dexrazoxane in blood plasma. Journal of Chromatography A, 2016, 1466, 173-179.	3.7	20
20	HPLC methods for determination of two novel thiosemicarbazone anti-cancer drugs (N4mT and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7 Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2009, 877, 316-322.	2.3	19
21	Photochemical stability of nimesulide. Journal of Pharmaceutical and Biomedical Analysis, 2003, 31, 827-832.	2.8	18
22	HPLC study on stability of pyridoxal isonicotinoyl hydrazone. Journal of Pharmaceutical and Biomedical Analysis, 2006, 40, 105-112.	2.8	18
23	Hydrophilic interaction liquid chromatography in the separation of a moderately lipophilic drug from its highly polar metabolitesâ€"the cardioprotectant dexrazoxane as a model case. Journal of Chromatography A, 2011, 1218, 416-426.	3.7	18
24	Determination of lipophilicity of novel potential antituberculotic agents using HPLC on monolithic stationary phase and theoretical calculations. Journal of Pharmaceutical and Biomedical Analysis, 2008, 48, 310-314.	2.8	17
25	LC-MS/MS identification of the principal in vitro and in vivo phase I metabolites of the novel thiosemicarbazone anti-cancer drug, Bp4eT. Analytical and Bioanalytical Chemistry, 2012, 403, 309-321.	3.7	16
26	Structure-Activity Relationships of Novel Salicylaldehyde Isonicotinoyl Hydrazone (SIH) Analogs: Iron Chelation, Anti-Oxidant and Cytotoxic Properties. PLoS ONE, 2014, 9, e112059.	2.5	15
27	Pharmacokinetics of the Cardioprotective Drug Dexrazoxane and Its Active Metabolite ADR-925 with Focus on Cardiomyocytes and the Heart. Journal of Pharmacology and Experimental Therapeutics, 2018, 364, 433-446.	2.5	15
28	HPLC determination of a novel aroylhydrazone iron chelator (o-108) in rabbit plasma and its application to a pilot pharmacokinetic study. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2006, 838, 107-112.	2.3	14
29	Cardioprotective effects of iron chelator HAPI and ROS-activated boronate prochelator BHAPI against catecholamine-induced oxidative cellular injury. Toxicology, 2016, 371, 17-28.	4.2	14
30	Investigation of Structure-Activity Relationships of Dexrazoxane Analogs Reveals Topoisomerase IIÎ²Interaction as a Prerequisite for Effective Protection against Anthracycline Cardiotoxicity. Journal of Pharmacology and Experimental Therapeutics, 2020, 373, 402-415.	2.5	14
31	LCâ€"UV/MS methods for the analysis of prochelatorâ€"Boronyl salicylaldehyde isonicotinoyl hydrazone (BSIH) and its active chelator salicylaldehyde isonicotinoyl hydrazone (SIH). Journal of Pharmaceutical and Biomedical Analysis, 2015, 105, 55-63.	2.8	13
32	Chromatographic methods for the separation of biocompatible iron chelators from their synthetic precursors and iron chelates. Journal of Separation Science, 2004, 27, 1503-1510.	2.5	12
33	Use of different stationary phases for separation of isoniazid, its metabolites and vitamin B6 forms. Journal of Separation Science, 2011, 34, 1357-1365.	2.5	12
34	Development and validation of HPLC-DAD methods for the analysis of two novel iron chelators with potent anti-cancer activity. Journal of Pharmaceutical and Biomedical Analysis, 2007, 43, 1343-1351.	2.8	11
35	Development of an LCâ€"MS/MS method for analysis of interconvertible Z/E isomers of the novel anticancer agent, Bp4eT. Analytical and Bioanalytical Chemistry, 2010, 397, 161-171.	3.7	10
36	Enhanced Topical and Transdermal Delivery of Antineoplastic and Antiviral Acyclic Nucleoside Phosphonate cPr-PMEDAP. Pharmaceutical Research, 2011, 28, 3105-3115.	3.5	10

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37	Characterization of cytoprotective and toxic properties of iron chelator SIH, prochelator BSIH and their degradation products. Toxicology, 2016, 350-352, 15-24.	4.2	10
38	A UHPLC-UV-QTOF study on the stability of carfilzomib, a novel proteasome inhibitor. Journal of Pharmaceutical and Biomedical Analysis, 2016, 124, 365-373.	2.8	10
39	Electromembrane extraction of anthracyclines from plasma: Comparison with conventional extraction techniques. Talanta, 2021, 223, 121748.	5.5	10
40	Determination of the lipophilicity of potential antituberculotic compounds by RP-TLC. Journal of Planar Chromatography - Modern TLC, 2006, 19, 422-426.	1.2	10
41	Development of LCâ€“MS/MS method for the simultaneous analysis of the cardioprotective drug dexrazoxane and its metabolite ADR-925 in isolated cardiomyocytes and cell culture medium. Journal of Pharmaceutical and Biomedical Analysis, 2013, 76, 243-251.	2.8	9
42	Zirconia-A stationary phase capable of the separation of polar markers of myocardial metabolism in hydrophilic interaction chromatography. Journal of Separation Science, 2014, 37, 1089-1093.	2.5	9
43	Prodrug of ICRF-193 provides promising protective effects against chronic anthracycline cardiotoxicity in a rabbit modelin vivo. Clinical Science, 2021, 135, 1897-1914.	4.3	8
44	Advanced microextraction techniques for the analysis of amphetamines in human breast milk and their comparison with conventional methods. Journal of Pharmaceutical and Biomedical Analysis, 2022, 210, 114549.	2.8	8
45	Simultaneous determination of the novel thiosemicarbazone antiâ€cancer agent, Bp4eT, and its main phase I metabolites in plasma: Application to a pilot pharmacokinetic study in rats. Biomedical Chromatography, 2014, 28, 621-629.	1.7	7
46	2,6-Dihydroxybenzaldehyde Analogues of the Iron Chelator Salicylaldehyde Isonicotinoyl Hydrazone: Increased Hydrolytic Stability and Cytoprotective Activity against Oxidative Stress. Chemical Research in Toxicology, 2018, 31, 1151-1163.	3.3	7
47	The first chiral HPLC separation of dicarba-nido-undecarborate anions and their chromatographic behavior. Talanta, 2021, 222, 121652.	5.5	7
48	In Vitro Characterization of the Pharmacological Properties of the Anti-Cancer Chelator, Bp4eT, and Its Phase I Metabolites. PLoS ONE, 2015, 10, e0139929.	2.5	7
49	Identification of in vitro metabolites of the novel anti-tumor thiosemicarbazone, DpC, using ultra-high performance liquid chromatographyâ€“quadrupole-time-of-flight mass spectrometry. Analytical and Bioanalytical Chemistry, 2013, 405, 1651-1661.	3.7	6
50	Development of water-soluble prodrugs of the bisdioxopiperazine topoisomerase IIÎ² inhibitor ICRF-193 as potential cardioprotective agents against anthracycline cardiotoxicity. Scientific Reports, 2021, 11, 4456.	3.3	6
51	The electromembrane extraction of pharmaceutical compounds from animal tissues. Analytica Chimica Acta, 2021, 1177, 338742.	5.4	6
52	Structureâ€“Activity Relationships of Nitro-Substituted Aroylhydrazone Iron Chelators with Antioxidant and Antiproliferative Activities. Chemical Research in Toxicology, 2018, 31, 435-446.	3.3	5
53	Novel SPME fibers based on a plastic support for determination of plasma protein binding of thiosemicarbazone metal chelators: a case example of DpC, an anti-cancer drug that entered clinical trials. Analytical and Bioanalytical Chemistry, 2019, 411, 2383-2394.	3.7	5
54	Development and Validation of an LCâ€“ESI-MS Ion-Trap Method for Analysis of Impurities in Transkarbam 12, a Novel Transdermal Accelerant. Chromatographia, 2009, 69, 977-983.	1.3	2

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55	UHPLC-MS/MS method for analysis of sobuzoxane, its active form ICRF-154 and metabolite EDTA-diamide and its application to bioactivation study. Scientific Reports, 2019, 9, 4524.	3.3	2
56	Are cardioprotective effects of NO-releasing drug molsidomine translatable to chronic anthracycline cardiotoxicity settings?. Toxicology, 2016, 372, 52-63.	4.2	1
57	ANTHRACYCLINE CARDIOTOXICITY: THE PHARMACOKINETICS AND PHARMACODYNAMICS OF DEXRAZOXANE AND ITS OPEN RING METABOLITE. Heart, 2014, 100, A7.1-A7.	2.9	0
58	79â€...Effective cardioprotection against anthracycline cardiotoxicity in isolated cardiomyocytes and rabbits is based on dexrazoxane interaction with topoisomerase II beta instead of iron chelation by its metabolite ADR-925. , 2019, , .		0