

# Petra Kovařková

## List of Publications by Year in descending order

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58  
papers

1,369  
citations

430442

18  
h-index

360668

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. <i>Antioxidants and Redox Signaling</i> , 2013, 18, 899-929.	2.5	267
2	Zinc(II) Thiosemicarbazone Complexes Are Localized to the Lysosomal Compartment Where They Transmetallate with Copper Ions to Induce Cytotoxicity. <i>Journal of Medicinal Chemistry</i> , 2016, 59, 4965-4984.	2.9	148
3	Comparison of Clinically Used and Experimental Iron Chelators for Protection against Oxidative Stress-Induced Cellular Injury. <i>Chemical Research in Toxicology</i> , 2010, 23, 1105-1114.	1.7	61
4	Synthesis and Initial <i>In Vitro</i> Evaluations of Novel Antioxidant Aroylhydrazone Iron Chelators with Increased Stability against Plasma Hydrolysis. <i>Chemical Research in Toxicology</i> , 2011, 24, 290-302.	1.7	52
5	Iron chelation with salicylaldehyde isonicotinoyl hydrazone protects against catecholamine autoxidation and cardiotoxicity. <i>Free Radical Biology and Medicine</i> , 2011, 50, 537-549.	1.3	42
6	Methyl and ethyl ketone analogs of salicylaldehyde isonicotinoyl hydrazone: Novel iron chelators with selective antiproliferative action. <i>Chemico-Biological Interactions</i> , 2012, 197, 69-79.	1.7	41
7	HPLC study of glimepiride under hydrolytic stress conditions. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2004, 36, 205-209.	1.4	38
8	Investigation of the stability of aromatic hydrazones in plasma and related biological material. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2008, 47, 360-370.	1.4	35
9	Comparison of various iron chelators used in clinical practice as protecting agents against catecholamine-induced oxidative injury and cardiotoxicity. <i>Toxicology</i> , 2011, 289, 122-131.	2.0	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. <i>Oncotarget</i> , 2015, 6, 42411-42428.	0.8	34
11	Development of high-performance liquid chromatographic determination of salicylaldehyde isonicotinoyl hydrazone in rabbit plasma and application of this method to <i>in vivo</i> study. <i>Journal of Separation Science</i> , 2005, 28, 1300-1306.	1.3	31
12	Dimethylamino Acid Esters as Biodegradable and Reversible Transdermal Permeation Enhancers: Effects of Linking Chain Length, Chirality and Polyfluorination. <i>Pharmaceutical Research</i> , 2009, 26, 811-821.	1.7	31
13	Aroylhydrazone iron chelators: Tuning antioxidant and antiproliferative properties by hydrazide modifications. <i>European Journal of Medicinal Chemistry</i> , 2016, 120, 97-110.	2.6	31
14	The retention behaviour of polar compounds on zirconia based stationary phases under hydrophilic interaction liquid chromatography conditions. <i>Journal of Chromatography A</i> , 2011, 1218, 6981-6986.	1.8	29
15	Investigation of novel dexrazoxane analogue JR-311 shows significant cardioprotective effects through topoisomerase IIbeta but not its iron chelating metabolite. <i>Toxicology</i> , 2017, 392, 1-10.	2.0	25
16	Clinically Translatable Prevention of Anthracycline Cardiotoxicity by Dexrazoxane Is Mediated by Topoisomerase II Beta and Not Metal Chelation. <i>Circulation: Heart Failure</i> , 2021, 14, e008209.	1.6	24
17	HPLC-DAD and MS/MS analysis of novel drug candidates from the group of aromatic hydrazones revealing the presence of geometric isomers. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2008, 48, 295-302.	1.4	23
18	Deferoxamine but not Dexrazoxane Alleviates Liver Injury Induced by Endotoxemia in Rats. <i>Shock</i> , 2014, 42, 372-379.	1.0	21

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19	Interface-free capillary electrophoresis-mass spectrometry system with nanospray ionization—Analysis of dexrazoxane in blood plasma. <i>Journal of Chromatography A</i> , 2016, 1466, 173-179.	1.8	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.	1.2	19
21	Photochemical stability of nimesulide. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2003, 31, 827-832.	1.4	18
22	HPLC study on stability of pyridoxal isonicotinoyl hydrazone. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2006, 40, 105-112.	1.4	18
23	Hydrophilic interaction liquid chromatography in the separation of a moderately lipophilic drug from its highly polar metabolites—the cardioprotectant dexrazoxane as a model case. <i>Journal of Chromatography A</i> , 2011, 1218, 416-426.	1.8	18
24	Determination of lipophilicity of novel potential antituberculous agents using HPLC on monolithic stationary phase and theoretical calculations. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2008, 48, 310-314.	1.4	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. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 309-321.	1.9	16
26	Structure-Activity Relationships of Novel Salicylaldehyde Isonicotinoyl Hydrazone (SIH) Analogs: Iron Chelation, Anti-Oxidant and Cytotoxic Properties. <i>PLoS ONE</i> , 2014, 9, e112059.	1.1	15
27	Pharmacokinetics of the Cardioprotective Drug Dexrazoxane and Its Active Metabolite ADR-925 with Focus on Cardiomyocytes and the Heart. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2018, 364, 433-446.	1.3	15
28	HPLC determination of a novel aroylhydrazone iron chelator (o-108) in rabbit plasma and its application to a pilot pharmacokinetic study. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2006, 838, 107-112.	1.2	14
29	Cardioprotective effects of iron chelator HAPI and ROS-activated boronate prochelator BHAPI against catecholamine-induced oxidative cellular injury. <i>Toxicology</i> , 2016, 371, 17-28.	2.0	14
30	Investigation of Structure-Activity Relationships of Dexrazoxane Analogs Reveals Topoisomerase II $\alpha$ Interaction as a Prerequisite for Effective Protection against Anthracycline Cardiotoxicity. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2020, 373, 402-415.	1.3	14
31	LC—UV/MS methods for the analysis of prochelator—Boronyl salicylaldehyde isonicotinoyl hydrazone (BSIH) and its active chelator salicylaldehyde isonicotinoyl hydrazone (SIH). <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2015, 105, 55-63.	1.4	13
32	Chromatographic methods for the separation of biocompatible iron chelators from their synthetic precursors and iron chelates. <i>Journal of Separation Science</i> , 2004, 27, 1503-1510.	1.3	12
33	Use of different stationary phases for separation of isoniazid, its metabolites and vitamin B6 forms. <i>Journal of Separation Science</i> , 2011, 34, 1357-1365.	1.3	12
34	Development and validation of HPLC-DAD methods for the analysis of two novel iron chelators with potent anti-cancer activity. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2007, 43, 1343-1351.	1.4	11
35	Development of an LC—MS/MS method for analysis of interconvertible Z/E isomers of the novel anticancer agent, Bp4eT. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 397, 161-171.	1.9	10
36	Enhanced Topical and Transdermal Delivery of Antineoplastic and Antiviral Acyclic Nucleoside Phosphonate cPr-PMEDAP. <i>Pharmaceutical Research</i> , 2011, 28, 3105-3115.	1.7	10

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37	Characterization of cytoprotective and toxic properties of iron chelator SIH, prochelator BSIH and their degradation products. <i>Toxicology</i> , 2016, 350-352, 15-24.	2.0	10
38	A UHPLC-UV-QTOF study on the stability of carfilzomib, a novel proteasome inhibitor. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 124, 365-373.	1.4	10
39	Electromembrane extraction of anthracyclines from plasma: Comparison with conventional extraction techniques. <i>Talanta</i> , 2021, 223, 121748.	2.9	10
40	Determination of the lipophilicity of potential antituberculosic compounds by RP-TLC. <i>Journal of Planar Chromatography - Modern TLC</i> , 2006, 19, 422-426.	0.6	10
41	Development of LC-MS/MS method for the simultaneous analysis of the cardioprotective drug dexrazoxane and its metabolite ADR-925 in isolated cardiomyocytes and cell culture medium. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2013, 76, 243-251.	1.4	9
42	Zirconia-A stationary phase capable of the separation of polar markers of myocardial metabolism in hydrophilic interaction chromatography. <i>Journal of Separation Science</i> , 2014, 37, 1089-1093.	1.3	9
43	Prodrug of ICRF-193 provides promising protective effects against chronic anthracycline cardiotoxicity in a rabbit model <i>in vivo</i> . <i>Clinical Science</i> , 2021, 135, 1897-1914.	1.8	8
44	Advanced microextraction techniques for the analysis of amphetamines in human breast milk and their comparison with conventional methods. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2022, 210, 114549.	1.4	8
45	Simultaneous determination of the novel thiosemicarbazone anti-cancer agent, Bp4eT, and its main phase I metabolites in plasma: Application to a pilot pharmacokinetic study in rats. <i>Biomedical Chromatography</i> , 2014, 28, 621-629.	0.8	7
46	2,6-Dihydroxybenzaldehyde Analogues of the Iron Chelator Salicylaldehyde Isonicotinoyl Hydrazone: Increased Hydrolytic Stability and Cytoprotective Activity against Oxidative Stress. <i>Chemical Research in Toxicology</i> , 2018, 31, 1151-1163.	1.7	7
47	The first chiral HPLC separation of dicarba-nido-undecaborate anions and their chromatographic behavior. <i>Talanta</i> , 2021, 222, 121652.	2.9	7
48	In Vitro Characterization of the Pharmacological Properties of the Anti-Cancer Chelator, Bp4eT, and Its Phase I Metabolites. <i>PLoS ONE</i> , 2015, 10, e0139929.	1.1	7
49	Identification of in vitro metabolites of the novel anti-tumor thiosemicarbazone, DpC, using ultra-high performance liquid chromatography-quadrupole-time-of-flight mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 1651-1661.	1.9	6
50	Development of water-soluble prodrugs of the bisdioxopiperazine topoisomerase II <sup>β</sup> inhibitor ICRF-193 as potential cardioprotective agents against anthracycline cardiotoxicity. <i>Scientific Reports</i> , 2021, 11, 4456.	1.6	6
51	The electromembrane extraction of pharmaceutical compounds from animal tissues. <i>Analytica Chimica Acta</i> , 2021, 1177, 338742.	2.6	6
52	Structure-Activity Relationships of Nitro-Substituted Aroylhydrazone Iron Chelators with Antioxidant and Antiproliferative Activities. <i>Chemical Research in Toxicology</i> , 2018, 31, 435-446.	1.7	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. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 2383-2394.	1.9	5
54	Development and Validation of an LC-ESI-MS Ion-Trap Method for Analysis of Impurities in Transkarbam 12, a Novel Transdermal Accelerant. <i>Chromatographia</i> , 2009, 69, 977-983.	0.7	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. <i>Scientific Reports</i> , 2019, 9, 4524.	1.6	2
56	Are cardioprotective effects of NO-releasing drug molsidomine translatable to chronic anthracycline cardiotoxicity settings?. <i>Toxicology</i> , 2016, 372, 52-63.	2.0	1
57	ANTHRACYCLINE CARDIOTOXICITY: THE PHARMACOKINETICS AND PHARMACODYNAMICS OF DEXRAZOXANE AND ITS OPEN RING METABOLITE. <i>Heart</i> , 2014, 100, A7.1-A7.	1.2	0
58	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