Katalin Prokai-Tatrai

List of Publications by Year
in descending order

79 papers	1,766 citations	257450 24 h-index	302126 39 g-index
80 all docs	80 docs citations	80 times ranked	1732 citing authors

#	Article	IF	Citations
1	Mass spectrometryâ€based retina proteomics. Mass Spectrometry Reviews, 2023, 42, 1032-1062.	5.4	2
2	Proteomics Complementation of the Rat Uterotrophic Assay for Estrogenic Endocrine Disruptors: A Roadmap of Advancing High Resolution Mass Spectrometry-Based Shotgun Survey to Targeted Biomarker Quantifications. International Journal of Molecular Sciences, 2021, 22, 1686.	4.1	2
3	[Î²-Glu2]TRH Is a Functional Antagonist of Thyrotropin-Releasing Hormone (TRH) in the Rodent Brain. International Journal of Molecular Sciences, 2021, 22, 6230.	4.1	1
4	Proteomics-Based Retinal Target Engagement Analysis and Retina-Targeted Delivery of 17Î²-Estradiol by the DHED Prodrug for Ocular Neurotherapy in Males. Pharmaceutics, 2021, 13, 1392.	4.5	5
5	The Antagonist pGlu-Î²Glu-Pro-NH2 Binds to an Allosteric Site of the Thyrotropin-Releasing Hormone Receptor. Molecules, 2021, 26, 5397.	3.8	6
6	Breakthroughs in Medicinal Chemistry: New Targets and Mechanisms, New Drugs, New Hopesâ€“6. Molecules, 2020, 25, 119.	3.8	8
7	Retina-Targeted Delivery of 17Î²-Estradiol by the Topically Applied DHED Prodrug. Pharmaceutics, 2020, 12, 456.	4.5	8
8	Brain-Selective Estrogen Therapy Prevents Androgen Deprivation-Associated Hot Flushes in a Rat Model. Pharmaceuticals, 2020, 13, 119.	3.8	5
9	Topical Estrogen Therapy for Hyperopia Correction in Vivo. , 2020, 61, 55.		5
10	Breakthroughs in Medicinal Chemistry: New Targets and Mechanisms, New Drugs, New Hopesâ€“7. Molecules, 2020, 25, 2968.	3.8	5
11	17Î²-Estradiol Delivered in Eye Drops: Evidence of Impact on Protein Networks and Associated Biological Processes in the Rat Retina through Quantitative Proteomics. Pharmaceutics, 2020, 12, 101.	4.5	7
12	Breakthroughs in Medicinal Chemistry: New Targets and Mechanisms, New Drugs, New Hopesâ€“5. Molecules, 2019, 24, 2415.	3.8	5
13	Brain Delivery of Thyrotropin-Releasing Hormone via a Novel Prodrug Approach. Pharmaceutics, 2019, 11, 349.	4.5	7
14	CNS-Selective Estrogen Therapy. Proceedings (mdpi), 2019, 22, .	0.2	0
15	A Novel Prodrug Approach for Central Nervous System-Selective Estrogen Therapy. Molecules, 2019, 24, 4197.	3.8	17
16	Breakthroughs in Medicinal Chemistry: New Targets and Mechanisms, New Drugs, New Hopesâ€“4. Molecules, 2019, 24, 130.	3.8	4
17	An exploratory investigation of brain-selective estrogen treatment in males using a mouse model of Alzheimer's disease. Hormones and Behavior, 2018, 98, 16-21.	2.1	21
18	10Î²,17Î±-Dihydroxyestra-1,4-dien-3-one: A Bioprecursor Prodrug Preferentially Producing 17Î±-Estradiol in the Brain for Targeted Neurotherapy. ACS Chemical Neuroscience, 2018, 9, 2528-2533.	3.5	12

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19	Breakthroughs in Medicinal Chemistry: New Targets and Mechanisms, New Drugs, New Hopes-3. Molecules, 2018, 23, 1596.	3.8	1
20	Breakthroughs in Medicinal Chemistry: New Targets and Mechanisms, New Drugs, New Hopesâ€“2. Molecules, 2018, 23, 65.	3.8	2
21	Treatment with an orally bioavailable prodrug of 17Î²-estradiol alleviates hot flushes without hormonal effects in the periphery. Scientific Reports, 2016, 6, 30721.	3.3	19
22	A comparative evaluation of treatments with 17Î²-estradiol and its brain-selective prodrug in a double-transgenic mouse model of Alzheimer's disease. Hormones and Behavior, 2016, 83, 39-44.	2.1	30
23	Non-Feminizing Estrogens Do Not Exhibit Antidepressant-like Activity. Journal of Pharmaceutics and Drug Research, 2016, 1, 1-6.	3.0	2
24	The prodrug DHED selectively delivers 17Î²-estradiol to the brain for treating estrogen-responsive disorders. Science Translational Medicine, 2015, 7, 297ra113.	12.4	51
25	Selective chemoprecipitation to enrich nitropeptides from complex proteomes for mass-spectrometric analysis. Nature Protocols, 2014, 9, 882-895.	12.0	7
26	Application of Screening Experimental Designs to Assess Chromatographic Isotope Effect upon Isotope-Coded Derivatization for Quantitative Liquid Chromatographyâ€“Mass Spectrometry. Analytical Chemistry, 2014, 86, 7033-7040.	6.5	32
27	Separation of dansylated 17Î²-estradiol, 17Î±-estradiol, and estrone on a single HPLC column for simultaneous quantitation by LCâ€“MS/MS. Analytical and Bioanalytical Chemistry, 2013, 405, 3399-3406.	3.7	33
28	Quantitative Structure-Activity Relationships Predicting the Antioxidant Potency of 17Î²-Estradiol-Related Polycyclic Phenols to Inhibit Lipid Peroxidation. International Journal of Molecular Sciences, 2013, 14, 1443-1454.	4.1	15
29	17Î²-Estradiol Eye Drops Protect the Retinal Ganglion Cell Layer and Preserve Visual Function in an in Vivo Model of Glaucoma. Molecular Pharmaceutics, 2013, 10, 3253-3261.	4.6	73
30	Design and Exploratory Neuropharmacological Evaluation of Novel Thyrotropin-Releasing Hormone Analogs and Their Brain-Targeting Bioprecursor Prodrugs. Pharmaceutics, 2013, 5, 318-328.	4.5	5
31	Relative quantitation of protein nitration by liquid chromatographyâ€“mass spectrometry using isotope-coded dimethyl labeling and chemoprecipitation. Journal of Chromatography A, 2012, 1232, 266-275.	3.7	13
32	Capture of the volatile carbonyl metabolite of flecainide on 2,4-dinitrophenylhydrazine cartridge for quantitation by stable-isotope dilution mass spectrometry coupled with chromatography. Journal of Chromatography A, 2012, 1232, 281-287.	3.7	19
33	Selective Chemoprecipitation and Subsequent Release of Tagged Species for the Analysis of Nitropeptides by Liquid Chromatographyâ€“Tandem Mass Spectrometry. Molecular and Cellular Proteomics, 2011, 10, M110.002923.	3.8	31
34	Prodrug Design for Brain Delivery of Small- and Medium-Sized Neuropeptides. Methods in Molecular Biology, 2011, 789, 313-336.	0.9	12
35	â€œAll in the Mindâ€? Brain-Targeting Chemical Delivery System of 17Î²-Estradiol (Estredox) Produces Significant Uterotrophic Side Effect. Pharmaceutica Analytica Acta, 2011, Suppl 7, .	0.2	12
36	Simultaneous Measurement of 17Î²-Estradiol, 17Î±-Estradiol and Estrone by GCâ€“Isotope Dilution MSâ€“MS. Chromatographia, 2010, 71, 311-315.	1.3	14

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37	Identification of carbonylation sites in apomyoglobin after exposure to 4â€hydroxyâ€2â€nonenal by solidâ€phase enrichment and liquid chromatographyâ€“electrospray ionization tandem mass spectrometry. Journal of Mass Spectrometry, 2010, 45, 398-410.	1.6	29
38	[Glu2]TRH dose-dependently attenuates TRH-evoked analeptic effect in mice. Brain Research Bulletin, 2010, 82, 83-86.	3.0	5
39	Phenolic Compounds Protect Cultured Hippocampal Neurons against Ethanol-Withdrawal Induced Oxidative Stress. International Journal of Molecular Sciences, 2009, 10, 1773-1787.	4.1	14
40	Prodrugs of Thyrotropin-Releasing Hormone and Related Peptides as Central Nervous System Agents. Molecules, 2009, 14, 633-654.	3.8	19
41	Characterization of 4-Hydroxy-2-nonenal-Modified Peptides by Liquid Chromatographyâ^'Tandem Mass Spectrometry Using Data-Dependent Acquisition: Neutral Loss-Driven MS³ versus Neutral Loss-Driven Electron Capture Dissociation. Analytical Chemistry, 2009, 81, 782-789.	6.5	52
42	Targets for covalent protein modification by 4â€hydroxynonenal/4â€hydroxyhexenalâ€mediated carbonyl stress in the mitochondria. FASEB Journal, 2009, 23, .	0.5	0
43	Mechanistic investigations on the antioxidant action of a neuroprotective estrogen derivative. Steroids, 2008, 73, 280-288.	1.8	65
44	Factors That Contribute to the Misidentification of Tyrosine Nitration by Shotgun Proteomics. Molecular and Cellular Proteomics, 2008, 7, 2442-2451.	3.8	55
45	A Facile Microwave-Assisted Synthesis of p-Quinols by Lead(IV) Acetate Oxidation. Letters in Organic Chemistry, 2007, 4, 265-267.	0.5	11
46	Exploratory neuropharmacological evaluation of a conformationally constrained thyrotropin-releasing hormone analogue. Brain Research Bulletin, 2007, 73, 103-107.	3.0	5
47	Comparison of estrogen-derived ortho-quinone and para-quinol concerning induction of oxidative stress. Journal of Steroid Biochemistry and Molecular Biology, 2007, 105, 71-75.	2.5	12
48	Cardiovascular effects of neuropeptide FF antagonists. Peptides, 2006, 27, 1015-1019.	2.4	14
49	Impact of Metabolism on the Safety of Estrogen Therapy. Annals of the New York Academy of Sciences, 2005, 1052, 243-257.	3.8	26
50	Mechanistic insights into the direct antioxidant effects of estrogens. Drug Development Research, 2005, 66, 118-125.	2.9	53
51	Screening of Combinatorial Libraries for Substrate Preference by Mass Spectrometry. Analytical Chemistry, 2005, 77, 698-701.	6.5	10
52	Hydroxy Metabolites of the Alzheimer's Drug Candidate 3-[(2,4-Dimethoxy)Benzylidene]-Anabaseine Dihydrochloride (GTS-21): Their Molecular Properties, Interactions with Brain Nicotinic Receptors, and Brain Penetration. Molecular Pharmacology, 2004, 65, 56-67.	2.3	106
53	Centrally Acting and Metabolically Stable Thyrotropin-Releasing Hormone Analogues by Replacement of Histidine with Substituted Pyridinium. Journal of Medicinal Chemistry, 2004, 47, 6025-6033.	6.4	32
54	Prodrugs to enhance central nervous system effects of the TRH-like peptide pGlu-Glu-Pro-NH2. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 1011-1014.	2.2	25

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55	Quinol-based cyclic antioxidant mechanism in estrogen neuroprotection. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 11741-11746.	7.1	155
56	QUINOL-BASED METABOLIC CYCLE FOR ESTROGENS IN RAT LIVER MICROSOMES. Drug Metabolism and Disposition, 2003, 31, 701-704.	3.3	24
57	Modifying peptide properties by prodrug design for enhanced transport into the CNS. , 2003, 61, 155-188.		16
58	Neuroprotective Effects of a Novel Nonâ€“Receptor-Binding Estrogen Analogue. Stroke, 2002, 33, 2485-2491.	2.0	61
59	Design, synthesis, and biological evaluation of novel, centrally-Acting thyrotropin-Releasing hormone analogues. Bioorganic and Medicinal Chemistry Letters, 2002, 12, 2171-2174.	2.2	24
60	Combinatorial Lead Optimization of a Neuropeptide FF Antagonist. Journal of Medicinal Chemistry, 2001, 44, 1623-1626.	6.4	24
61	Synthesis and Biological Evaluation of 17Î²-Alkoxyestra-1,3,5(10)-trienes as Potential Neuroprotectants Against Oxidative Stress. Journal of Medicinal Chemistry, 2001, 44, 110-114.	6.4	35
62	Integration of mass spectrometry into early-phase discovery and development of central nervous system agents. Journal of Mass Spectrometry, 2001, 36, 1211-1219.	1.6	17
63	Exploratory pharmacokinetics and brain distribution study of a neuropeptide FF antagonist by liquid chromatography/atmospheric pressure ionization tandem mass spectrometry. Rapid Communications in Mass Spectrometry, 2000, 14, 2412-2418.	1.5	24
64	Targeting drugs to the brain by redox chemical delivery systems. Medicinal Research Reviews, 2000, 20, 367-416.	10.5	124
65	Metabolism-based drug design and drug targeting. Pharmaceutical Science & Technology Today, 1999, 2, 457-462.	0.7	5
66	Metabolism-Based Brain-Targeting System for a Thyrotropin-Releasing Hormone Analogueâ€. Journal of Medicinal Chemistry, 1999, 42, 4563-4571.	6.4	35
67	Synthesis and behavioral evaluation of a chemical brain-targeting system for a thyrotropin-releasing hormone analogue. European Journal of Medicinal Chemistry, 1998, 33, 879-886.	5.5	11
68	PREPARATION OF O-(3,3,8,10,10-PENTAMETHYL-1,2-DITHIA-5,8-DIAZACYCLODECAN-5-YL)ETHYL O-PIVALOYLOXYMETHYL PHENYLPHOSPHONATE. Organic Preparations and Procedures International, 1998, 30, 485-488.	1.3	2
69	Brain-Targeted Delivery of a Leucine-enkephalin Analogue by Retrometabolic Designâ€. Journal of Medicinal Chemistry, 1996, 39, 4775-4782.	6.4	63
70	Synthesis and conformational analysis of a bridged anabasine and related compounds. A nuclear magnetic resonance spectroscopy and molecular modeling study.. Tetrahedron, 1994, 50, 9909-9918.	1.9	7
71	PREPARATION OF REDOX DERIVATIVES OF 3Î±-HYDROXY-5Î±-PREGNANE-11,20-DIONE. Organic Preparations and Procedures International, 1994, 26, 379-382.	1.3	4
72	ANALOGS OF TRYPTOPHAN. Organic Preparations and Procedures International, 1994, 26, 687-690.	1.3	6

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73	Novel Redox Derivatives of Tryptophan. Heterocycles, 1994, 38, 2051.	0.7	5
74	Fast atom bombardment and tandem mass spectrometry of quaternary pyridinium salt-type tryptophan derivatives. Organic Mass Spectrometry, 1993, 28, 707-715.	1.3	7
75	Long Range Transmission of Polar Effects in Cholinergic 3-Arylideneanabaseines. Conformations Calculated by Molecular Modelling. Heterocycles, 1993, 35, 171.	0.7	45
76	Redox Derivatives of Tranylcypromine: Syntheses, Properties, and Monoamine Oxidase Inhibitor Activity of Some Chemical Delivery Systems. Journal of Pharmaceutical Sciences, 1991, 80, 255-261.	3.3	13
77	Application of a brain-targeting chemical delivery system to 9-amino-1,2,3,4-tetrahydroacridine. Pharmaceutical Research, 1990, 07, 658-664.	3.5	13
78	Improved delivery through biological membranes. 50. Antihypertensive activity of redox derivatives of tryptophan. Journal of Medicinal Chemistry, 1990, 33, 2216-2221.	6.4	18
79	17Î²-Estradiol as a Neuroprotective Agent. , 0, , .		3