Jiri Jiracek

List of Publications by Year in descending order

102 papers	2,668 citations	201674 27 h-index	206112 48 g-index
105 all docs	105 docs citations	105 times ranked	2693 citing authors

#	Article	IF	Citations
1	Functional stapled fragments of human preptin of minimised length. Organic and Biomolecular Chemistry, 2022, 20, 2446-2454.	2.8	3
2	Chiral analysis of Î²â€alanylâ€<scp>d,l</scp>â€tyrosine and its derivatives and estimation of binding constants of their complexes with 2â€hydroxypropylâ€Î²â€cyclodextrin by capillary electrophoresis. Journal of Separation Science, 2022, 45, 3328-3338.	2.5	5
3	Characterization of viral insulins reveals white adipose tissue-specific effects in mice. Molecular Metabolism, 2021, 44, 101121.	6.5	13
4	Multipodal insulin mimetics built on adamantane or proline scaffolds. Bioorganic Chemistry, 2021, 107, 104548.	4.1	3
5	Characterization of Viral Insulin-Like Peptides Reveals Unique White Adipose Tissue Specific Characteristics. Journal of the Endocrine Society, 2021, 5, A437-A438.	0.2	0
6	A radioligand receptor binding assay for measuring of insulin secreted by MIN6 cells after stimulation with glucose, arginine, ornithine, dopamine, and serotonin. Analytical and Bioanalytical Chemistry, 2021, 413, 4531-4543.	3.7	8
7	336-OR: Mandarin Fish Ranavirus Viral Insulin/IGF-Like Peptide Inhibits Human IGF-1 Receptor. Diabetes, 2021, 70, 336-OR.	0.6	0
8	Insulin Analogues with Altered Insulin Receptor Isoform Binding Specificities and Enhanced Aggregation Stabilities. Journal of Medicinal Chemistry, 2021, 64, 14848-14859.	6.4	7
9	Application of Capillary and Free-Flow Zone Electrophoresis for Analysis and Purification of Antimicrobial Î²-Alanyl-Tyrosine from Hemolymph of Fleshfly Neobellieria bullata. Molecules, 2021, 26, 5636.	3.8	5
10	The efficiency of insulin production and its content in insulin-expressing model Î²-cells correlate with their Zn ²⁺ levels. Open Biology, 2020, 10, 200137.	3.6	5
11	A radioligand binding assay for the insulin-like growth factor 2 receptor. PLoS ONE, 2020, 15, e0238393.	2.5	8
12	Radiolabeled hormones in insulin research, a minireview. Journal of Labelled Compounds and Radiopharmaceuticals, 2020, 63, 576-581.	1.0	3
13	Acidâ€Stable Ester Linkers for the Solidâ€Phase Synthesis of Immobilized Peptides. ChemPlusChem, 2020, 85, 1297-1306.	2.8	0
14	A radioligand binding assay for the insulin-like growth factor 2 receptor. , 2020, 15, e0238393.		0
15	A radioligand binding assay for the insulin-like growth factor 2 receptor. , 2020, 15, e0238393.		0
16	A radioligand binding assay for the insulin-like growth factor 2 receptor. , 2020, 15, e0238393.		0
17	A radioligand binding assay for the insulin-like growth factor 2 receptor. , 2020, 15, e0238393.		0
18	Mutations at hypothetical binding site 2 in insulin and insulin-like growth factors 1 and 2 result in receptor- and hormone-specific responses. Journal of Biological Chemistry, 2019, 294, 17371-17382.	3.4	21

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19	Cross-Linking/Mass Spectrometry Uncovers Details of Insulin-Like Growth Factor Interaction With Insect Insulin Binding Protein Imp-L2. Frontiers in Endocrinology, 2019, 10, 695.	3.5	3
20	Pressure assisted partial filling affinity capillary electrophoresis employed for determination of binding constants of human insulin hexamer complexes with serotonin, dopamine, arginine, and phenol. Analytica Chimica Acta, 2019, 1052, 170-178.	5.4	49
21	From venom peptides to a potential diabetes treatment. ELife, 2019, 8, .	6.0	6
22	Converting Insulin-like Growth Factors 1 and 2 into High-Affinity Ligands for Insulin Receptor Isoform A by the Introduction of an Evolutionarily Divergent Mutation. Biochemistry, 2018, 57, 2373-2382.	2.5	16
23	A versatile insulin analog with high potency for both insulin and insulin-like growth factor 1 receptors: Structural implications for receptor binding. Journal of Biological Chemistry, 2018, 293, 16818-16829.	3.4	6
24	Can Arginine Inhibit Insulin Aggregation? A Combined Protein Crystallography, Capillary Electrophoresis, and Molecular Simulation Study. Journal of Physical Chemistry B, 2018, 122, 10069-10076.	2.6	28
25	Triâ€Orthogonal Scaffolds for the Solidâ€Phase Synthesis of Peptides. European Journal of Organic Chemistry, 2018, 2018, 5180-5192.	2.4	7
26	Probing Tripodal Peptide Scaffolds as Insulin and IGFâ€1 Receptor Ligands. European Journal of Organic Chemistry, 2018, 2018, 5193-5201.	2.4	2
27	Optimized syntheses of Fmoc azido amino acids for the preparation of azidopeptides. Journal of Peptide Science, 2017, 23, 202-214.	1.4	17
28	Computational and structural evidence for neurotransmitter-mediated modulation of the oligomeric states of human insulin in storage granules. Journal of Biological Chemistry, 2017, 292, 8342-8355.	3.4	18
29	Insulin-like Growth Factor 1 Analogs Clicked in the C Domain: Chemical Synthesis and Biological Activities. Journal of Medicinal Chemistry, 2017, 60, 10105-10117.	6.4	18
30	Structural Perspectives of Insulin Receptor Isoform-Selective Insulin Analogs. Frontiers in Endocrinology, 2017, 8, 167.	3.5	23
31	Probing Receptor Specificity by Sampling the Conformational Space of the Insulin-like Growth Factor II C-domain. Journal of Biological Chemistry, 2016, 291, 21234-21245.	3.4	22
32	Rational steering of insulin binding specificity by intra-chain chemical crosslinking. Scientific Reports, 2016, 6, 19431.	3.3	20
33	Synthesis and Evaluation of a Library of Trifunctional Scaffold-Derived Compounds as Modulators of the Insulin Receptor. ACS Combinatorial Science, 2016, 18, 710-722.	3.8	17
34	Insulinâ€“Insulin-like Growth Factors Hybrids as Molecular Probes of Hormone:Receptor Binding Specificity. Biochemistry, 2016, 55, 2903-2913.	2.5	24
35	The Development of a Versatile Trifunctional Scaffold for Biological Applications. European Journal of Organic Chemistry, 2015, 2015, 3689-3701.	2.4	23
36	A CuAACâ€“Hydrazoneâ€“CuAAC Trifunctional Scaffold for the Solid-Phase Synthesis of Trimodal Compounds: Possibilities and Limitations. Molecules, 2015, 20, 19310-19329.	3.8	13

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37	Structural and Functional Study of the GlnB22-Insulin Mutant Responsible for Maturity-Onset Diabetes of the Young. PLoS ONE, 2014, 9, e112883.	2.5	22
38	Specific potassium ion interactions facilitate homocysteine binding to betaine-homocysteineS-methyltransferase. Proteins: Structure, Function and Bioinformatics, 2014, 82, 2552-2564.	2.6	10
39	Human insulin analogues modified at the B26 site reveal a hormone conformation that is undetected in the receptor complex. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 2765-2774.	2.5	29
40	Mono-N-acyl-2,6-diaminopimelic acid derivatives: Analysis by electromigration and spectroscopic methods and examination of enzyme inhibitory activity. Analytical Biochemistry, 2014, 467, 4-13.	2.4	6
41	Insight into the Structural and Biological Relevance of the T/R Transition of the N-Terminus of the B-Chain in Human Insulin. Biochemistry, 2014, 53, 3392-3402.	2.5	33
42	Quantification of homocysteineâ€related metabolites and the role of betaineâ€“homocysteine Sâ€methyltransferase in HepG2 cells. Biomedical Chromatography, 2013, 27, 111-121.	1.7	20
43	Effects of hyperhomocysteinemia and betaineâ€“homocysteine S-methyltransferase inhibition on hepatocyte metabolites and the proteome. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 1596-1606.	2.3	7
44	Simplified syntheses of the water-soluble chiral shift reagents Sm-(R)-pdta and Sm-(S)-pdta. Tetrahedron Letters, 2013, 54, 6296-6297.	1.4	3
45	How insulin engages its primary binding site on the insulin receptor. Nature, 2013, 493, 241-245.	27.8	364
46	The development of a new class of inhibitors for betaine-homocysteine S-methyltransferase. European Journal of Medicinal Chemistry, 2013, 65, 256-275.	5.5	17
47	Structural Integrity of the B24 Site in Human Insulin Is Important for Hormone Functionality*. Journal of Biological Chemistry, 2013, 288, 10230-10240.	3.4	38
48	Insulin and Insulin-like Growth Factor II Differentially Regulate Endocytic Sorting and Stability of Insulin Receptor Isoform A. Journal of Biological Chemistry, 2012, 287, 11422-11436.	3.4	76
49	Double-Headed Sulfur-Linked Amino Acids As First Inhibitors for Betaine-Homocysteine S-Methyltransferase 2. Journal of Medicinal Chemistry, 2012, 55, 6822-6831.	6.4	4
50	S1 pocket fingerprints of human and bacterial methionine aminopeptidases determined using fluorogenic libraries of substrates and phosphorus based inhibitors. Biochimie, 2012, 94, 704-710.	2.6	19
51	The synthesis of phosphonic acids derived from homocysteine via transesterification reactions. Arkivoc, 2012, 2012, 80-99.	0.5	0
52	Unusual activity pattern of leucine aminopeptidase inhibitors based on phosphorus containing derivatives of methionine and norleucine. Journal of Enzyme Inhibition and Medicinal Chemistry, 2011, 26, 155-161.	5.2	11
53	Non-equivalent Role of Inter- and Intramolecular Hydrogen Bonds in the Insulin Dimer Interface. Journal of Biological Chemistry, 2011, 286, 36968-36977.	3.4	31
54	Capillary electrophoresis applied to analysis and characterization of mono-N-acyl-2,6-diaminopimelic acid derivatives. , 2011, , .		0

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55	Synthesis of N-Succinyl-L,L-Diaminopimelic Acid Mimetics Via Selective Protection. Protein and Peptide Letters, 2010, 17, 405-409.	0.9	5
56	Inhibitors of N Î±-acetyl-l-ornithine deacetylase: synthesis, characterization and analysis of their inhibitory potency. Amino Acids, 2010, 38, 1155-1164.	2.7	8
57	Synthesis of Î±-carboxyphosphinopeptides derived from norleucine. Amino Acids, 2010, 39, 1265-1280.	2.7	3
58	Changes in the proteomes of the hemocytes and fat bodies of the flesh fly Sarcophaga bullata larvae after infection by Escherichia coli. Proteome Science, 2010, 8, 1.	1.7	71
59	Implications for the active form of human insulin based on the structural convergence of highly active hormone analogues. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1966-1970.	7.1	48
60	Dietary intake of S-(Î±-carboxybutyl)-dl-homocysteine induces hyperhomocysteinemia in rats. Nutrition Research, 2010, 30, 492-500.	2.9	23
61	Efficient synthesis of phosphonodepsipeptides derived from norleucine. Tetrahedron, 2009, 65, 6090-6103.	1.9	14
62	Structureâ^'Activity Study of New Inhibitors of Human Betaine-Homocysteine S-Methyltransferase. Journal of Medicinal Chemistry, 2009, 52, 3652-3665.	6.4	10
63	Analogues of Orn and DAP as potential inhibitors of bacterial enzymes ArgE and DapE. , 2009, , .		0
64	Synthesis of norleucine-derived phosphonopeptides. Tetrahedron Letters, 2008, 49, 4366-4368.	1.4	9
65	Mapping the peptide and protein immune response in the larvae of the fleshfly Sarcophaga bullata. Journal of Peptide Science, 2008, 14, 670-682.	1.4	15
66	Evaluation of carrier ampholyteâ€based capillary electrophoresis for separation of peptides and peptide mimetics. Electrophoresis, 2008, 29, 3759-3767.	2.4	11
67	Synthesis of methionine- and norleucine-derived phosphinopeptides. Tetrahedron Letters, 2008, 49, 5629-5631.	1.4	16
68	Two-dimensional electrophoretic comparison of metastatic and non-metastatic human breast tumors using in vitrocultured epithelial cells derived from the cancer tissues. BMC Cancer, 2008, 8, 107.	2.6	16
69	Insulin Analogues with Modifications at Position B26. Divergence of Binding Affinity and Biological Activity. Biochemistry, 2008, 47, 5858-5868.	2.5	30
70	2-DE analysis of breast cancer cell lines 1833 and 4175 with distinct metastatic organ-specific potentials: comparison with parental cell line MDA-MB-231. Oncology Reports, 2008, 19, 1237-44.	2.6	13
71	The use of Fmoc-Lys(Pac)-OH and penicillin G acylase in the preparation of novel semisynthetic insulin analogs. Journal of Peptide Science, 2007, 13, 334-341.	1.4	16
72	2-DE analysis of a new human cell line EM-G3 derived from breast cancer progenitor cells and comparison with normal mammary epithelial cells. Proteomics, 2007, 7, 1549-1559.	2.2	21

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73	Activation of Murine RNase L by Isopolar 2â€˜-Phosphonate Analogues of 2â€˜,5â€˜ Oligoadenylates. Journal of Medicinal Chemistry, 2006, 49, 3955-3962.	6.4	13
74	S-Alkylated Homocysteine Derivatives:Â New Inhibitors of Human Betaine-HomocysteineS-Methyltransferase. Journal of Medicinal Chemistry, 2006, 49, 3982-3989.	6.4	28
75	Inhibition of Betaine-Homocysteine S-Methyltransferase Causes Hyperhomocysteinemia in Mice. Journal of Nutrition, 2006, 136, 1493-1497.	2.9	51
76	A new colorimetric assay for methionyl aminopeptidases: Examination of the binding of a new class of pseudopeptide analog inhibitors. Analytical Biochemistry, 2006, 357, 43-49.	2.4	13
77	Determination of pKa values of diastereomers of phosphinic pseudopeptides by CZE. Electrophoresis, 2006, 27, 4648-4657.	2.4	28
78	The role of betaineâ€homocysteine Sâ€methyltransferase (BHMT) in the regulation of plasma total homocysteine (tHcy). FASEB Journal, 2006, 20, A859.	0.5	0
79	ABEI-labeled 2-5A: A way to chemiluminescent imaging of RNase L binding process. , 2005, , .		0
80	New inhibitors of human betaine-homocysteine S-methyltransferase. , 2005, , .		0
81	Preparation and characterization of two LysB29 specifically labelled fluorescent derivatives of human insulin. Journal of Peptide Science, 2004, 10, 470-478.	1.4	6
82	Shortened Insulin Analogues:Â Marked Changes in Biological Activity Resulting from Replacement of TyrB26 and N-Methylation of Peptide Bonds in the C-Terminus of the B-Chainâ€. Biochemistry, 2004, 43, 2323-2331.	2.5	23
83	Dissecting the Catalytic Mechanism of Betaineâ€'HomocysteineS-Methyltransferase by Use of Intrinsic Tryptophan Fluorescence and Site-Directed Mutagenesisâ€. Biochemistry, 2004, 43, 5341-5351.	2.5	31
84	Physicochemical characterization of phosphinic pseudopeptides by capillary zone electrophoresis in highly acidic background electrolytes. Electrophoresis, 2003, 24, 774-781.	2.4	49
85	Separation of diastereomers of phosphinic pseudopeptides by capillary zone electrophoresis and reverse phase high-performance liquid chromatography. Journal of Separation Science, 2003, 26, 653-660.	2.5	16
86	Combining Combinatorial Chemistry and Affinity Chromatography. Chemistry and Biology, 2003, 10, 113-122.	6.0	28
87	Betaine-Homocysteine Methyltransferase. Structure, 2002, 10, 1159-1171.	3.3	113
88	Analysis and characterization of phosphinic pseudopeptides by capillary zone electrophoresis. Electrophoresis, 2002, 23, 215-222.	2.4	20
89	Determination of dissociation constant of phosphinate group in phosphinic pseudopeptides by capillary zone electrophoresis. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2002, 770, 145-154.	2.3	38
90	Side reactions during photochemical cleavage of an ?-methyl-6-nitroveratryl-based photolabile linker. Journal of Peptide Science, 2000, 6, 355-365.	1.4	29

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91	Phosphinic Acid Compounds in Biochemistry, Biology and Medicine. Current Medicinal Chemistry, 2000, 7, 629-647.	2.4	186
92	RXP 407, a phosphinic peptide, is a potent inhibitor of angiotensin I converting enzyme able to differentiate between its two active sites. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 4330-4335.	7.1	168
93	Theory of the correlation between capillary and free-flow zone electrophoresis and its use for the conversion of analytical capillary separations to continuous free-flow preparative processes. Journal of Chromatography A, 1998, 796, 211-220.	3.7	51
94	Examination of the role of endopeptidase 3.4.24.15 in AÎ² secretion by human transfected cells. British Journal of Pharmacology, 1997, 121, 556-562.	5.4	37
95	Effect of a novel selective and potent phosphinic peptide inhibitor of endopeptidase 3.4.24.16 on neurotensin-induced analgesia and neuronal inactivation. British Journal of Pharmacology, 1997, 121, 705-710.	5.4	34
96	Protection of the Hydroxyphosphinyl Function of Phosphinic Dipeptides by Adamantyl. Application to the Solid-Phase Synthesis of Phosphinic Peptides. Journal of Organic Chemistry, 1996, 61, 6601-6605.	3.2	78
97	Development of the First Potent and Selective Inhibitor of the Zinc Endopeptidase Neurolysin Using a Systematic Approach Based on Combinatorial Chemistry of Phosphinic Peptides. Journal of Biological Chemistry, 1996, 271, 19606-19611.	3.4	86
98	Development of Highly Potent and Selective Phosphinic Peptide Inhibitors of Zinc Endopeptidase 24-15 Using Combinatorial Chemistry. Journal of Biological Chemistry, 1995, 270, 21701-21706.	3.4	104
99	Semisynthetic Insulin Analogues Modified in Positions B24, B25 and B29. Biological Chemistry Hoppe-Seyler, 1994, 375, 373-378.	1.4	13
100	Purification of Penicillin Amidohydrolase, an Enzyme for Semisynthetic Procedures. Collection of Czechoslovak Chemical Communications, 1992, 57, 2187-2191.	1.0	4
101	Isolation of rabbit insulin. Collection of Czechoslovak Chemical Communications, 1990, 55, 1372-1379.	1.0	0
102	2-DE analysis of breast cancer cell lines 1833 and 4175 with distinct metastatic organ-specific potentials: Comparison with parental cell line MDA-MB-231. Oncology Reports, 0, , .	2.6	9