Sergey A Kozin

List of Publications by Year
in descending order

83 papers	2,161 citations	201385 27 h-index	253896 43 g-index
94 all docs	94 docs citations	94 times ranked	1553 citing authors

#	Article	IF	Citations
1	Structural Changes of Region 1-16 of the Alzheimer Disease Amyloid Î²-Peptide upon Zinc Binding and in Vitro Aging. Journal of Biological Chemistry, 2006, 281, 2151-2161.	1.6	284
2	Zinc Binding to Alzheimer's AÎ²(1â€“16) Peptide Results in Stable Soluble Complex. Biochemical and Biophysical Research Communications, 2001, 285, 959-964.	1.0	129
3	Minimal Zn2+ Binding Site of Amyloid-Î². Biophysical Journal, 2010, 99, L84-L86.	0.2	106
4	Interplay of histidine residues of the Alzheimerâ€™s disease AÎ² peptide governs its Zn-induced oligomerization. Scientific Reports, 2016, 6, 21734.	1.6	81
5	Zinc-induced dimerization of the amyloid-Î² metal-binding domain 1â€“16 is mediated by residues 11â€“14. Molecular BioSystems, 2011, 7, 1053.	2.9	72
6	Peripherally Applied Synthetic Peptide isoAsp7-AÎ²(1-42) Triggers Cerebral Î²-Amyloidosis. Neurotoxicity Research, 2013, 24, 370-376.	1.3	71
7	Isomerization of the Asp7 Residue Results in Zincâ€Induced Oligomerization of Alzheimerâ€™s Disease Amyloid Î²(1â€“16) Peptide. ChemBioChem, 2008, 9, 1564-1567.	1.3	68
8	Zinc binding properties of the amyloid fragment AÎ²(1â€“16) studied by electrospray-ionization mass spectrometry. International Journal of Mass Spectrometry, 2003, 228, 999-1016.	0.7	67
9	NMR Solution Structure of Rat AÎ²(1â€“16): Toward Understanding the Mechanism of Rats' Resistance to Alzheimer's Disease. Biophysical Journal, 2012, 102, 136-143.	0.2	56
10	The Nâ€domain of angiotensinâ€converting enzyme specifically hydrolyzes the Argâ€5â€His â€6 bond of Alzheimer's AÎ²â€(1â€16) peptide and its isoAspâ€7 analogue with different efficiency as evidenced by quantitative matrixâ€assisted laser desorption/ionization timeâ€ofâ€flight mass spectrometry. Rapid Communications in Mass Spectrometry, 2008, 22, 231-239.	0.7	55
11	Isomerization of Asp7 leads to increased toxic effect of amyloid-Î²42 on human neuronal cells. Cell Death and Disease, 2013, 4, e939-e939.	2.7	53
12	Amyloid Î² Modification: A Key to the Sporadic Alzheimer's Disease?. Frontiers in Genetics, 2017, 8, 58.	1.1	52
13	Phosphorylation of Ser8 promotes zinc-induced dimerization of the amyloid-Î² metal-binding domain. Molecular BioSystems, 2014, 10, 2590-2596.	2.9	49
14	The English (H6R) familial Alzheimer's disease mutation facilitates zinc-induced dimerization of the amyloid-Î² metal-binding domain. Metallomics, 2015, 7, 422-425.	1.0	38
15	Capabilities of MS for Analytical Quantitative Determination of the Ratio of Î±- and Î²Asp7 Isoforms of the Amyloid-Î² Peptide in Binary Mixtures. Analytical Chemistry, 2011, 83, 3205-3210.	3.2	35
16	Direct electrochemical oxidation of amyloid-Î² peptides via tyrosine, histidine, and methionine residues. Electrochemistry Communications, 2016, 65, 53-56.	2.3	35
17	Amyloid-Î² containing isoaspartate 7 as potential biomarker and drug target in Alzheimer's disease. Mendeleev Communications, 2016, 26, 269-275.	0.6	33
18	Phosphorylation of the Amyloid-Beta Peptide Inhibits Zinc-Dependent Aggregation, Prevents Na,K-ATPase Inhibition, and Reduces Cerebral Plaque Deposition. Frontiers in Molecular Neuroscience, 2018, 11, 302.	1.4	33

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19	Sheep Prion Protein Synthetic Peptide Spanning Helix 1 and Î²-Strand 2 (Residues 142â€“166) Shows Î²-Hairpin Structure in Solution. Journal of Biological Chemistry, 2001, 276, 46364-46370.	1.6	32
20	Tyrosine Based Electrochemical Analysis of Amyloid-Î² Fragment (1-16) Binding to Metal(II) Ions. Electrochimica Acta, 2015, 179, 93-99.	2.6	31
21	The Effects of Endogenous Non-Peptide Molecule Isatin and Hydrogen Peroxide on Proteomic Profiling of Rat Brain Amyloid-Î² Binding Proteins: Relevance to Alzheimerâ€™s Disease?. International Journal of Molecular Sciences, 2015, 16, 476-495.	1.8	31
22	Protein interactomics based on direct molecular fishing on paramagnetic particles: Practical realization and further SPR validation. Proteomics, 2014, 14, 2261-2274.	1.3	30
23	Supermetallization of peptides and proteins during electrospray ionization. Journal of Mass Spectrometry, 2015, 50, 1079-1087.	0.7	29
24	Anti-amyloid Therapy of Alzheimerâ€™s Disease: Current State and Prospects. Biochemistry (Moscow), 2018, 83, 1057-1067.	0.7	29
25	Intracerebral Injection of Metal-Binding Domain of AÎ² Comprising the Isomerized Asp7 Increases the Amyloid Burden in Transgenic Mice. Neurotoxicity Research, 2016, 29, 551-557.	1.3	28
26	Zinc-induced heterodimer formation between metal-binding domains of intact and naturally modified amyloid-beta species: implication to amyloid seeding in Alzheimerâ€™s disease?. Journal of Biomolecular Structure and Dynamics, 2016, 34, 2317-2326.	2.0	28
27	Zinc binding agonist effect on the recognition of the Î²-amyloid (4â€“10) epitope by anti-Î²-amyloid antibodies. Biochemical and Biophysical Research Communications, 2004, 321, 324-328.	1.0	27
28	Roles of zinc ions and structural polymorphism of Î²-amyloid in the development of Alzheimerâ€™s disease. Molecular Biology, 2015, 49, 217-230.	0.4	27
29	Chronic Administration of Dimebon does not Ameliorate Amyloid-Î² Pathology in 5xFAD Transgenic Mice. Journal of Alzheimer's Disease, 2013, 36, 589-596.	1.2	26
30	Isomerization of Asp7 in Beta-Amyloid Enhances Inhibition of the Î±7 Nicotinic Receptor and Promotes Neurotoxicity. Cells, 2019, 8, 771.	1.8	26
31	Possible role of region 152-156 in the structural duality of a peptide fragment from sheep prion protein. Protein Science, 2009, 13, 3151-3160.	3.1	25
32	HSP70 protects human neuroblastoma cells from apoptosis and oxidative stress induced by amyloid peptide isoAsp7-AÎ²(1â€“42). Cell Death and Disease, 2015, 6, e1977-e1977.	2.7	25
33	A Binuclear Zinc Interaction Fold Discovered in the Homodimer of Alzheimer's Amyloidâ€Î² Fragment with Taiwanese Mutation D7H. Angewandte Chemie - International Edition, 2017, 56, 11734-11739.	7.2	25
34	Amyloid-Î² with isomerized Asp7 cytotoxicity is coupled to protein phosphorylation. Scientific Reports, 2018, 8, 3518.	1.6	24
35	A review of the biomedical innovations for healthy longevity. Aging, 2017, 9, 7-25.	1.4	18
36	Extracellular GAPDH Promotes Alzheimer Disease Progression by Enhancing Amyloid-Î² Aggregation and Cytotoxicity. , 2021, 12, 1223.		16

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37	Intravenously Injected Amyloid-Î² Peptide With Isomerized Asp7 and Phosphorylated Ser8 Residues Inhibits Cerebral Î²-Amyloidosis in AÎ²PP/PS1 Transgenic Mice Model of Alzheimerâ€™s Disease. Frontiers in Neuroscience, 2018, 12, 518.	1.4	15
38	Zinc-Induced Interaction of the Metal-Binding Domain of Amyloid-Î² Peptide with DNA. Journal of Alzheimer's Disease, 2013, 36, 633-636.	1.2	14
39	Peripherally Applied Synthetic Tetrapeptides HAEE and RADD Slow Down the Development of Cerebral Î²-Amyloidosis in AÎ²PP/PS1 Transgenic Mice. Journal of Alzheimer's Disease, 2015, 46, 849-853.	1.2	14
40	The Convergence of Alzheimerâ€™s Disease Pathogenesis Concepts. Molecular Biology, 2019, 53, 896-903.	0.4	14
41	Compressibility and uncoupling of cytochrome P450cam: high pressure FTIR and activity studies. Biochemical and Biophysical Research Communications, 2003, 312, 197-203.	1.0	12
42	ESI-MS identification of the minimal zinc-binding center in natural isoforms of Î²-amyloid domain 1â€“16. Molecular Biology, 2013, 47, 440-445.	0.4	12
43	Mass spectrometric identification of posttranslational modifications in transthyretin from human blood. Molecular Biology, 2013, 47, 885-893.	0.4	12
44	Physico-chemical methods for studying amyloid-Î² aggregation. Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry, 2015, 9, 258-274.	0.2	12
45	Zinc-Mediated Binding of Nucleic Acids to Amyloid-Î² Aggregates: Role of Histidine Residues. Journal of Alzheimer's Disease, 2016, 54, 809-819.	1.2	12
46	Direct molecular fishing in molecular partners investigation in proteinâ€“protein and proteinâ€“peptide interactions. Russian Journal of Bioorganic Chemistry, 2016, 42, 14-21.	0.3	12
47	Electrochemical detection of Zn(II)- and Cu(II)-induced amyloid-Î² aggregation: Quantitative aspects and application to amyloid-Î² isoforms. Journal of Electroanalytical Chemistry, 2017, 791, 152-158.	1.9	12
48	N-domain of angiotensin-converting enzyme hydrolyzes human and rat amyloid-Î²(1-16) peptides as arginine specific endopeptidase potentially enhancing risk of Alzheimerâ€™s disease. Scientific Reports, 2018, 8, 298.	1.6	12
49	Evaluation of MALDI-TOF/TOF Mass Spectrometry Approach for Quantitative Determination of Aspartate Residue Isomerization in the Amyloid-Î² Peptide. Journal of the American Society for Mass Spectrometry, 2019, 30, 1325-1329.	1.2	12
50	Chemical modifications of amyloid-Î²(1-42) have a significant impact on the repertoire of brain amyloid-Î²(1-42) binding proteins. Biochimie, 2016, 128-129, 55-58.	1.3	11
51	Electrochemical detection of protein post-translational modifications: Phosphorylation and nitration of amyloid-beta (1â€“16). Electrochimica Acta, 2017, 258, 1182-1190.	2.6	11
52	Application of MALDI-TOF/TOF-MS for relative quantitation of Î±- and Î²-Asp7 isoforms of amyloid-Î² peptide. European Journal of Mass Spectrometry, 2018, 24, 141-144.	0.5	11
53	Epitope Mapping of Cytochrome P450cam (CYP101). Archives of Biochemistry and Biophysics, 1997, 341, 229-237.	1.4	10
54	Heparin Modulates the Kinetics of Zinc-Induced Aggregation of Amyloid-Î² Peptides. Journal of Alzheimer's Disease, 2018, 63, 539-550.	1.2	10

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55	Electrochemical detection of Zn(II)-induced amyloid-Î² aggregation: Insights into aggregation mechanisms. Journal of Electroanalytical Chemistry, 2018, 830-831, 34-42.	1.9	10
56	Steroids, histamine, and serotonin in the medicinal leech salivary gland secretion. Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry, 2008, 2, 215-225.	0.2	9
57	Enalaprilat Inhibits Zinc-Dependent Oligomerization of Metal-Binding Domain of Amyloid-beta Isoforms and Protects Human Neuroblastoma Cells from Toxic Action of these Isoforms. Molecular Biology, 2018, 52, 590-597.	0.4	9
58	Tetrapeptide Ac-HAEE-NH2 Protects Î±4Î²2 nAChR from Inhibition by AÎ². International Journal of Molecular Sciences, 2020, 21, 6272.	1.8	9
59	Estimation of phosphorylation level of amyloid-beta isolated from human blood plasma: Ultrahigh-resolution mass spectrometry. Molecular Biology, 2014, 48, 607-614.	0.4	8
60	Effect of mutations and modifications of amino acid residues on zinc-induced interaction of the metal-binding domain of Î²-amyloid with DNA. Molecular Biology, 2015, 49, 450-456.	0.4	8
61	Application of electrochemical method to a comparative study of spontaneous aggregation of amyloid-Î² isoforms. Journal of Electroanalytical Chemistry, 2020, 861, 113938.	1.9	7
62	Mass spectrometric studies of the variety of betaâ€amyloid proteoforms in Alzheimer's disease. Mass Spectrometry Reviews, 2022, , e21775.	2.8	7
63	Antigenic mapping of bacterial and animal cytochromes P-450. Biochimie, 1996, 78, 752-762.	1.3	6
64	Epitope mapping of the domains of human angiotensin converting enzyme. Biochimica Et Biophysica Acta - General Subjects, 2006, 1760, 959-965.	1.1	6
65	The English (H6R) Mutation of the Alzheimerâ€™s Disease Amyloid-Î² Peptide Modulates Its Zinc-Induced Aggregation. Biomolecules, 2020, 10, 961.	1.8	6
66	A Binuclear Zinc Interaction Fold Discovered in the Homodimer of Alzheimer's Amyloidâ€Î² Fragment with Taiwanese Mutation D7H. Angewandte Chemie, 2017, 129, 11896-11901.	1.6	5
67	Optimization of the methods for small peptide solution structure determination by NMR spectroscopy. Molecular Biology, 2010, 44, 958-967.	0.4	4
68	Pharmacokinetics and Molecular Modeling Indicate nAChRÎ±4-Derived Peptide HAEE Goes through the Bloodâ€“Brain Barrier. Biomolecules, 2021, 11, 909.	1.8	4
69	Application of Prussian Blue modified carbon electrodes for amperometric detection of amyloid-Î² peptides by flow injection analysis. Electrochimica Acta, 2022, 406, 139829.	2.6	4
70	Development of Peptide Biopharmaceuticals in Russia. Pharmaceutics, 2022, 14, 716.	2.0	4
71	Zinc-induced interactions of the metal-binding domain of beta-amyloid with nucleic acids and glycosaminoglycans. Molecular Biology, 2016, 50, 927-929.	0.4	3
72	Localization of zinc binding sites of Ab1-16 with English mutation during formation of monomers and dimers with zinc. International Journal of Mass Spectrometry, 2016, 409, 67-72.	0.7	3

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73	Neurotoxic Effects of Aî²6-42 Peptides Mimicking Putative Products Formed by the Angiotensin Converting Enzyme. Journal of Alzheimer's Disease, 2018, 66, 263-270.	1.2	2
74	Aberrant interactions between amyloid-beta and alpha5 laminins as possible driver of neuronal disfunction in Alzheimerâ€™s disease. Biochimie, 2020, 174, 44-48.	1.3	2
75	Solution structure of the sheep prion PrPâ€š142-166â€›: a possible site for the conformational conversion of prion protein. Comptes Rendus De L'Academie Des Sciences - Series IIc: Chemistry, 2001, 4, 739-743.	0.1	1
76	P4-028: ZINC-INDUCED DIMERS OF CHEMICALLY MODIFIED A î²- ARE POSSIBLE AGGREGATION SEEDS. , 2014, 10, P793-P793.		1
77	Effects of the H6R and D7H Mutations on the Heparin-Dependent Modulation of Zinc-Induced Aggregation of Amyloid î². Molecular Biology, 2019, 53, 922-928.	0.4	1
78	Identification of î±4î²2 nAChR interaction site with Aî²₄₂ and development of tetrapeptide capable of breaking this interaction. Alzheimer's and Dementia, 2020, 16, e040936.	0.4	1
79	Direct Molecular Fishing of Zinc-Dependent Protein Partners of Amyloid-beta 1â€“16 with the Taiwan (D7H) Mutation and Phosphorylated Ser8 Residue. Molecular Biology, 2020, 54, 904-910.	0.4	1
80	Secondary structure of Aî²(1â€“16) complexes with zinc: A study in the gas phase using deuterium/hydrogen exchange and ultra-high-resolution mass spectrometry. Molecular Biology, 2017, 51, 627-632.	0.4	0
81	Frontispiece: A Binuclear Zinc Interaction Fold Discovered in the Homodimer of Alzheimer's Amyloidâ€Î² Fragment with Taiwanese Mutation D7H. Angewandte Chemie - International Edition, 2017, 56, .	7.2	0
82	Frontispiz: A Binuclear Zinc Interaction Fold Discovered in the Homodimer of Alzheimer's Amyloidâ€Î² Fragment with Taiwanese Mutation D7H. Angewandte Chemie, 2017, 129, .	1.6	0
83	Extracellular complex of betaâ€amyloid with glyceraldehydeâ€3â€phosphate dehydrogenase contributes to neurodegeneration in Alzheimerâ€™s disease. Alzheimer's and Dementia, 2020, 16, e043347.	0.4	0