Tamotsu Zako

List of Publications by Year
in descending order

82	1,991	304743 22	265206 42
papers	citations	h-index	g-index

83	83	83	2961
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Amyloid oligomers: formation and toxicity of AÎ² oligomers. FEBS Journal, 2010, 277, 1348-1358.	4.7	508
2	Bovine Insulin Filaments Induced by Reducing Disulfide Bonds Show a Different Morphology, Secondary Structure, and Cell Toxicity from Intact Insulin Amyloid Fibrils. Biophysical Journal, 2009, 96, 3331-3340.	0.5	111
3	Cyclic RGD peptide-labeled upconversion nanophosphors for tumor cell-targeted imaging. Biochemical and Biophysical Research Communications, 2009, 381, 54-58.	2.1	104
4	Formation of highly toxic soluble amyloid beta oligomers by the molecular chaperone prefoldin. FEBS Journal, 2008, 275, 5982-5993.	4.7	55
5	Kinetics and Binding Sites for Interaction of the Prefoldin with a Group II Chaperonin. Journal of Biological Chemistry, 2004, 279, 31788-31795.	3.4	53
6	Prefoldin Protects Neuronal Cells from Polyglutamine Toxicity by Preventing Aggregation Formation. Journal of Biological Chemistry, 2013, 288, 19958-19972.	3.4	49
7	Improvement of dispersion stability and characterization of upconversion nanophosphors covalently modified with PEG as a fluorescence bioimaging probe. Journal of Materials Science, 2008, 43, 5325-5330.	3.7	47
8	Cancer-targeted near infrared imaging using rare earth ion-doped ceramic nanoparticles. Biomaterials Science, 2015, 3, 59-64.	5.4	46
9	Facilitated release of substrate protein from prefoldin by chaperonin. FEBS Letters, 2005, 579, 3718-3724.	2.8	44
10	Human Prefoldin Inhibits Amyloid-Î² (AÎ²) Fibrillation and Contributes to Formation of Nontoxic AÎ² Aggregates. Biochemistry, 2013, 52, 3532-3542.	2.5	43
11	Localization of Prefoldin Interaction Sites in the Hyperthermophilic Group II Chaperonin and Correlations between Binding Rate and Protein Transfer Rate. Journal of Molecular Biology, 2006, 364, 110-120.	4.2	42
12	Role of the Helical Protrusion in the Conformational Change and Molecular Chaperone Activity of the Archaeal Group II Chaperonin. Journal of Biological Chemistry, 2004, 279, 18834-18839.	3.4	41
13	A Structure-Toxicity Study of AÃŸ42 Reveals a New Anti-Parallel Aggregation Pathway. PLoS ONE, 2013, 8, e80262.	2.5	41
14	Toxicity of insulin-derived amyloidosis: a case report. BMC Endocrine Disorders, 2019, 19, 61.	2.2	40
15	Detection of DNA induced gold nanoparticle aggregation with dark field imaging. Chemical Communications, 2013, 49, 7531.	4.1	35
16	Effect of the C-terminal Truncation on the Functional Cycle of Chaperonin GroEL. Journal of Biological Chemistry, 2008, 283, 23931-23939.	3.4	30
17	The immobilization of DNA on microstructured patterns fabricated by maskless lithography. Sensors and Actuators B: Chemical, 2004, 97, 243-248.	7.8	29
18	Characterization of Archaeal Group II Chaperonin-ADP-Metal Fluoride Complexes. Journal of Biological Chemistry, 2005, 280, 40375-40383.	3.4	29

#	Article	IF	Citations
19	Prefoldin, a jellyfish-like molecular chaperone: functional cooperation with a group II chaperonin and beyond. Biophysical Reviews, 2018, 10, 339-345.	3.2	25
20	Preferential immobilization of biomolecules on silicon microstructure array by means of electron beam lithography on organosilane self-assembled monolayer resist. Applied Surface Science, 2004, 234, 102-106.	6.1	24
21	A facile method towards cyclic assembly of gold nanoparticles using DNA template alone. Chemical Communications, 2010, 46, 6132.	4.1	24
22	IAPP/amylin deposition, which is correlated with expressions of ASC and IL-1Î² in Î²-cells of Langerhansâ€™ islets, directly initiates NLRP3 inflammasome activation. International Journal of Immunopathology and Pharmacology, 2018, 32, 205873841878874.	2.1	23
23	The role of firefly luciferase C-terminal domain in efficient coupling of adenylation and oxidative steps. FEBS Letters, 2005, 579, 4389-4394.	2.8	22
24	Bio-supramolecular photochirogenesis with molecular chaperone: enantiodifferentiating photocyclodimerization of 2-anthracenecarboxylate mediated by prefoldin. Photochemical and Photobiological Sciences, 2010, 9, 655-660.	2.9	21
25	DNA-Templating Mass Production of Gold Trimer Rings for Optical Metamaterials. Journal of Physical Chemistry C, 2012, 116, 15028-15033.	3.1	21
26	Contribution of the C-terminal region to the thermostability of the archaeal group II chaperonin from Thermococcus sp. strain KS-1. Extremophiles, 2006, 10, 451-459.	2.3	20
27	Interaction of a Small Heat Shock Protein of the Fission Yeast, Schizosaccharomyces pombe, with a Denatured Protein at Elevated Temperature. Journal of Biological Chemistry, 2005, 280, 32586-32593.	3.4	19
28	Measuring Adsorption of a Hydrophobic Probe with a Surface Plasmon Resonance Sensor to Monitor Conformational Changes in Immobilized Proteins. Biotechnology Progress, 2008, 19, 1348-1354.	2.6	19
29	Nuclear Exportin Receptor CAS Regulates the NPI-1â€“Mediated Nuclear Import of HIV-1 Vpr. PLoS ONE, 2011, 6, e27815.	2.5	19
30	Naked-eye Detection of Amyloid Aggregates Using Gold Nanoparticles Modified with Amyloid Beta Antibody. Analytical Sciences, 2012, 28, 73-76.	1.6	18
31	Degeneration of amyloid-ÃŸ fibrils caused by exposure to low-temperature atmospheric-pressure plasma in aqueous solution. Applied Physics Letters, 2014, 104, .	3.3	18
32	Insulinâ€derived amyloidosis without a palpable mass at the insulin injection site: A report of two cases. Journal of Diabetes Investigation, 2020, 11, 1002-1005.	2.4	18
33	Cysteine inhibits amyloid fibrillation of lysozyme and directs the formation of small wormâ€like aggregates through nonâ€covalent interactions. Biotechnology Progress, 2014, 30, 470-478.	2.6	17
34	Selectivity improvement in protein nanopatterning with a hydroxy-terminated self-assembled monolayer template. Nanotechnology, 2007, 18, 305304.	2.6	16
35	Thermodynamic Characterization of the Interaction between Prefoldin and Group II Chaperonin. Journal of Molecular Biology, 2010, 399, 628-636.	4.2	16
36	1,5â€Diazacyclooctanes, as Exclusive Oxidative Polyamine Metabolites, Inhibit Amyloidâ€Î²(1â€40) Fibrillization. Advanced Science, 2016, 3, 1600082.	11.2	16

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37	Detection of Gold Nanoparticles Aggregation Using Light Scattering for Molecular Sensing. Analytical Sciences, 2019, 35, 685-690.	1.6	16
38	Amorphous protein aggregation monitored using fluorescence selfâ€quenching. FEBS Letters, 2016, 590, 3501-3509.	2.8	15
39	Construction of Quenchbodies to detect and image amyloid Î² oligomers. Analytical Biochemistry, 2018, 550, 61-67.	2.4	15
40	Cell Interaction Study of Amyloid by Using Luminescent Conjugated Polythiophene: Implication that Amyloid Cytotoxicity Is Correlated with Prolonged Cellular Binding. ChemBioChem, 2012, 13, 358-363.	2.6	12
41	Application of biomaterials for the detection of amyloid aggregates. Biomaterials Science, 2014, 2, 951-955.	5.4	12
42	Dark Field Microscopic Sensitive Detection of Amyloid Fibrils Using Gold Nanoparticles Modified with Antibody. Analytical Sciences, 2016, 32, 307-311.	1.6	12
43	Insulin amyloid polymorphs: implications for iatrogenic cytotoxicity. RSC Advances, 2020, 10, 37721-37727.	3.6	12
44	Extra-luminal detection of assumed colonic tumor site by near-infrared laparoscopy. Surgical Endoscopy and Other Interventional Techniques, 2016, 30, 4153-4159.	2.4	11
45	Nanoscopic and Photonic Ultrastructural Characterization of Two Distinct Insulin Amyloid States. International Journal of Molecular Sciences, 2012, 13, 1461-1480.	4.1	10
46	Cysteine inhibits the fibrillisation and cytotoxicity of amyloid-Î² 40 and 42: implications for the contribution of the thiophilic interaction. Physical Chemistry Chemical Physics, 2014, 16, 3566.	2.8	10
47	Molecular detection using aptamer-modified gold nanoparticles with an immobilized DNA brush for the prevention of non-specific aggregation. RSC Advances, 2021, 11, 11984-11991.	3.6	10
48	Contribution of the C-Terminal Region of a Group II Chaperonin to its Interaction with Prefoldin and Substrate Transfer. Journal of Molecular Biology, 2016, 428, 2405-2417.	4.2	9
49	Degradation of insulin amyloid by antibiotic minocycline and formation of toxic intermediates. Scientific Reports, 2021, 11, 6857.	3.3	9
50	Transcription-Based Amplified Colorimetric Thrombin Sensor Using Non-Crosslinking Aggregation of DNA-Modified Gold Nanoparticles. Sensors, 2021, 21, 4318.	3.8	9
51	Micropatterning Oligonucleotides on Single-Crystal Diamond Surface by Photolithography. Japanese Journal of Applied Physics, 2005, 44, L295-L298.	1.5	8
52	Dynamics of group II chaperonin and prefoldin probed by ¹³C NMR spectroscopy. Proteins: Structure, Function and Bioinformatics, 2008, 70, 1257-1263.	2.6	8
53	Size-selective recognition of gold nanoparticles by a molecular chaperone. Chemical Physics Letters, 2010, 501, 108-112.	2.6	8
54	Protein-Functionalized Gold Nanoparticles for Antibody Detection Using the Darkfield Microscopic Observation of Nanoparticle Aggregation. Analytical Sciences, 2021, 37, 507-511.	1.6	8

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55	Refolding of Firefly Luciferase Immobilized on Agarose Beads. Journal of Biochemistry, 2000, 127, 351-354.	1.7	7
56	Hyperthermophilic archaeal prefoldin shows refolding activity at low temperature. Biochemical and Biophysical Research Communications, 2010, 391, 467-470.	2.1	7
57	Adsorption and separation of amyloid beta aggregates using ferromagnetic nanoparticles coated with charged polymer brushes. Journal of Materials Chemistry B, 2015, 3, 3351-3357.	5.8	7
58	Complex formation of CdSe/ZnS/TOPO nanocrystal vs. molecular chaperone in aqueous solution by hydrophobic interaction. Journal of Luminescence, 2007, 127, 192-197.	3.1	6
59	Amyloid oligomer detection by immobilized molecular chaperone. Biochemical Engineering Journal, 2012, 61, 28-33.	3.6	6
60	NADH oxidase and alkyl hydroperoxide reductase subunit C (peroxiredoxin) fromAmphibacillus xylanus form an oligomeric assembly. FEBS Open Bio, 2015, 5, 124-131.	2.3	6
61	Dark field microscopic analysis of discrete Au nanostructures: Understanding the correlation of scattering with stoichiometry. Chemical Physics Letters, 2017, 684, 310-315.	2.6	6
62	Recent advances in research on biointerfaces: From cell surfaces to artificial interfaces. Journal of Bioscience and Bioengineering, 2022, , .	2.2	6
63	Formation of non-toxic AÎ² fibrils by small heat shock protein under heat-stress conditions. Biochemical and Biophysical Research Communications, 2013, 430, 1259-1264.	2.1	5
64	Molecular chaperone prefoldin-assisted biosynthesis of gold nanoparticles with improved size distribution and dispersion. Biomaterials Science, 2019, 7, 1801-1804.	5.4	5
65	Colorimetric detection of thrombin based on signal amplification by transcription-reverse transcription concerted reaction using non-crosslinking aggregation of gold nanoparticles. Analytical Sciences, 2022, 38, 3-7.	1.6	5
66	Clinical and MRI characteristics and follow-up studies of insulin-derived amyloidosis. Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis, 2019, 26, 156-157.	3.0	4
67	Insulin amyloid fibrils interact directly with the NLRP3, resulting in inflammasome activation and pyroptotic cell death. International Journal of Immunopathology and Pharmacology, 2021, 35, 205873842110383.	2.1	4
68	Differences in interaction lead to the formation of different types of insulin amyloid. Scientific Reports, 2022, 12, .	3.3	4
69	Inhibition of Amyloid Î² Protein Fibrillation via Carboxypeptidase Y after Protein Trapping Using Immunoaffinity Membranes. Chemistry Letters, 2016, 45, 1241-1243.	1.3	3
70	Analysis of the degradation of amyloid beta fibrils after separation via the combination of nonâ€denaturing agarose electrophoresis and Congo red dye staining. Separation Science Plus, 2019, 2, 322-328.	0.6	3
71	Inhibition of amyloid formation of amyloid Î² (1â€“42), amylin and insulin by 1,5-diazacyclooctanes, a spermine-acrolein conjugate. Bioorganic and Medicinal Chemistry, 2021, 46, 116391.	3.0	3
72	Amyloid oligomers. FEBS Journal, 2010, 277, 1347-1347.	4.7	2

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73	Immobilized Insulin Amyloid Enhances Cell Adhesion and Proliferation Due to Interaction with Fibronectin. Chemistry Letters, 2011, 40, 315-317.	1.3	2
74	Rapid Surfaceâ€“Biostructure Interaction Analysis Using Strong Metal-Based Nanomagnets. Langmuir, 2013, 29, 14117-14123.	3.5	2
75	Signal-amplified Colorimetric Biosensors Using Gold Nanoparticles. Bunseki Kagaku, 2021, 70, 661-670.	0.2	1
76	2P103 Characterization of flexible insulin fibrils induced by reducing agent(31. Protein folding and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2006, 46, S321.	0.1	0
77	3P314 Single-molecule analysis of the complex formed between molecular chaperone prefoldin and amyloid beta(Bioimaging,Poster Presentations). Seibutsu Butsuri, 2007, 47, S281.	0.1	0
78	3P-033 Analysis of Ab oligomer formation by photon counting histogram (PCH) and fluorescence correlation spectroscopy (FCS)(The 46th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2008, 48, S132.	0.1	0
79	1P085 Amyloid beta oligomer studied by photon counting histogram(Protein:Function,The 48th Annual) Tj ETQq1 1 0.784314 rgBT /Ov	0.1	0
80	2C1524 Newly developed photon counting histogram method for amyloid beta oligomer formation(Protein: Function 1,The 48th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2011, 51, S79.	0.1	0
81	Oxidative Stress: 1,5-Diazacyclooctanes, as Exclusive Oxidative Polyamine Metabolites, Inhibit Amyloid-Î² (1-40) Fibrillization (Adv. Sci. 10/2016). Advanced Science, 2016, 3, .	11.2	0
82	Insulin-derived amyloidosis (insulin ball) and skin-related complications of insulin therapy. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2022, 95, 3-S34-3.	0.0	0