Yuji Goto

List of Publications by Citations

129 papers	9,022 citations	48 h-index	94 g-index
134 ext. papers	10,139 ext. citations	5.7 avg, IF	5.93 L-index

#	Paper	IF	Citations
129	Accurate secondary structure prediction and fold recognition for circular dichroism spectroscopy. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E3095-103	11.5	825
128	Mechanism of acid-induced folding of proteins. *Biochemistry*, **1990**, 29, 3480-8	3.2	562
127	Trifluoroethanol-induced stabilization of the alpha-helical structure of beta-lactoglobulin: implication for non-hierarchical protein folding. *Journal of Molecular Biology*, **1995**, 245, 180-94	6.5	418
126	Conformational states of beta-lactamase: molten-globule states at acidic and alkaline pH with high salt. *Biochemistry*, **1989**, 28, 945-52	3.2	414
125	BeStSel: a web server for accurate protein secondary structure prediction and fold recognition from the circular dichroism spectra. *Nucleic Acids Research*, **2018**, 46, W315-W322	20.1	412
124	Classification of acid denaturation of proteins: intermediates and unfolded states. *Biochemistry*, **1994**, 33, 12504-11	3.2	385
123	Clustering of Fluorine-Substituted Alcohols as a Factor Responsible for Their Marked Effects on Proteins and Peptides. *Journal of the American Chemical Society*, **1999**, 121, 8427-8433	16.4	329
122	Mapping the core of the beta(2)-microglobulin amyloid fibril by H/D exchange. *Nature Structural Biology*, **2002**, 9, 332-6		290
121	Group additive contributions to the alcohol-induced alpha-helix formation of melittin: implication for the mechanism of the alcohol effects on proteins. *Journal of Molecular Biology*, **1998**, 275, 365-78	6.5	228
120	3D structure of amyloid protofilaments of beta2-microglobulin fragment probed by solid-state NMR. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 18119-24	11.5	205
119	Direct observation of Abeta amyloid fibril growth and inhibition. *Journal of Molecular Biology*, **2004**, 344, 757-67	6.5	202
118	Distinguishing crystal-like amyloid fibrils and glass-like amorphous aggregates from their kinetics of formation. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 14446-51	11.5	200
117	Low concentrations of sodium dodecyl sulfate induce the extension of beta 2-microglobulin-related amyloid fibrils at a neutral pH. *Biochemistry*, **2004**, 43, 11075-82	3.2	172
116	Phase diagram for acidic conformational states of apomyoglobin. *Journal of Molecular Biology*, **1990**, 214, 803-5	6.5	150
115	Critical balance of electrostatic and hydrophobic interactions is required for beta 2-microglobulin amyloid fibril growth and stability. *Biochemistry*, **2005**, 44, 1288-99	3.2	144
114	Formation of Ni3C Nanocrystals by Thermolysis of Nickel Acetylacetonate in Oleylamine: Characterization Using Hard X-ray Photoelectron Spectroscopy. *Chemistry of Materials*, **2008**, 20, 4156-4160	9.6	138
113	Ultrasonication-induced amyloid fibril formation of beta2-microglobulin. *Journal of Biological Chemistry*, **2005**, 280, 32843-8	5.4	138

112	Glycosaminoglycans enhance the trifluoroethanol-induced extension of beta 2-microglobulin-related amyloid fibrils at a neutral pH. *Journal of the American Society of Nephrology: JASN*, **2004**, 15, 126-33	12.7	136
111	Guanidine hydrochloride-induced folding of proteins. *Journal of Molecular Biology*, **1993**, 231, 180-4	6.5	127
110	Thermodynamic stability of the molten globule states of apomyoglobin. *Journal of Molecular Biology*, **1995**, 250, 223-38	6.5	117
109	Direct observation of amyloid fibril growth, propagation, and adaptation. *Accounts of Chemical Research*, **2006**, 39, 663-70	24.3	116
108	Investigation of a peptide responsible for amyloid fibril formation of beta 2-microglobulin by achromobacter protease I. *Journal of Biological Chemistry*, **2002**, 277, 1310-5	5.4	109
107	Amyloid fibril formation in the context of full-length protein: effects of proline mutations on the amyloid fibril formation of beta2-microglobulin. *Journal of Biological Chemistry*, **2003**, 278, 47016-24	5.4	104
106	Ultrasonication-dependent production and breakdown lead to minimum-sized amyloid fibrils. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 11119-24	11.5	103
105	Direct measurement of the thermodynamic parameters of amyloid formation by isothermal titration calorimetry. *Journal of Biological Chemistry*, **2004**, 279, 55308-14	5.4	101
104	Mechanism by which the amyloid-like fibrils of a beta 2-microglobulin fragment are induced by fluorine-substituted alcohols. *Journal of Molecular Biology*, **2006**, 363, 279-88	6.5	98
103	Heat-induced conversion of beta(2)-microglobulin and hen egg-white lysozyme into amyloid fibrils. *Journal of Molecular Biology*, **2007**, 372, 981-991	6.5	91
102	Dissolution of beta2-microglobulin amyloid fibrils by dimethylsulfoxide. *Journal of Biochemistry*, **2003**, 134, 159-64	3.1	89
101	The role of disulfide bond in the amyloidogenic state of beta(2)-microglobulin studied by heteronuclear NMR. *Protein Science*, **2002**, 11, 2218-29	6.3	80
100	Principal component analysis of the pH-dependent conformational transitions of bovine beta-lactoglobulin monitored by heteronuclear NMR. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 15346-51	11.5	76
99	The intrachain disulfide bond of beta(2)-microglobulin is not essential for the immunoglobulin fold at neutral pH, but is essential for amyloid fibril formation at acidic pH. *Journal of Biochemistry*, **2002** , 131, 45-52	3.1	72
98	Heat of supersaturation-limited amyloid burst directly monitored by isothermal titration calorimetry. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 6654-9	11.5	69
97	Mechanism of the conformational transition of melittin. *Biochemistry*, **1992**, 31, 732-8	3.2	69
96	Structure, folding dynamics, and amyloidogenesis of D76N β-microglobulin: roles of shear flow, hydrophobic surfaces, and αcrystallin. *Journal of Biological Chemistry*, **2013**, 288, 30917-30	5.4	63
95	Anion and pH-dependent conformational transition of an amphiphilic polypeptide. *Journal of Molecular Biology*, **1991**, 218, 387-96	6.5	63

94	Seeding-dependent maturation of beta2-microglobulin amyloid fibrils at neutral pH. *Journal of Biological Chemistry*, **2005**, 280, 12012-8	5.4	60
93	Critical role of interfaces and agitation on the nucleation of Abeta amyloid fibrils at low concentrations of Abeta monomers. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2010**, 1804, 986-95	4	59
92	Small liposomes accelerate the fibrillation of amyloid □(1-40). *Journal of Biological Chemistry*, **2015**, 290, 815-26	5.4	58
91	Amyloid nucleation triggered by agitation of beta2-microglobulin under acidic and neutral pH conditions. *Biochemistry*, **2008**, 47, 2650-60	3.2	57
90	Parkinson□s disease is a type of amyloidosis featuring accumulation of amyloid fibrils of □synuclein. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 17963-17969	11.5	56
89	Cold denaturation of □synuclein amyloid fibrils. *Angewandte Chemie - International Edition*, **2014**, 53, 7799-804	16.4	56
88	Ultrasonication-dependent acceleration of amyloid fibril formation. *Journal of Molecular Biology*, **2011**, 412, 568-77	6.5	54
87	Effects of ammonium sulfate on the unfolding and refolding of the variable and constant fragments of an immunoglobulin light chain. *Biochemistry*, **1988**, 27, 1670-7	3.2	54
86	Conformational stability of amyloid fibrils of beta2-microglobulin probed by guanidine-hydrochloride-induced unfolding. *FEBS Letters*, **2004**, 576, 313-9	3.8	53
85	Synchrotron FTIR micro-spectroscopy for structural analysis of Lewy bodies in the brain of Parkinson□s disease patients. *Scientific Reports*, **2015**, 5, 17625	4.9	52
84	Main-chain dominated amyloid structures demonstrated by the effect of high pressure. *Journal of Molecular Biology*, **2005**, 352, 941-51	6.5	52
83	Reversible heat-induced dissociation of □-microglobulin amyloid fibrils. *Biochemistry*, **2011**, 50, 3211-20	3.2	49
82	A comprehensive model for packing and hydration for amyloid fibrils of beta2-microglobulin. *Journal of Biological Chemistry*, **2009**, 284, 2169-75	5.4	49
81	Kinetically controlled thermal response of beta2-microglobulin amyloid fibrils. *Journal of Molecular Biology*, **2005**, 352, 700-11	6.5	47
80	Supersaturation-limited and Unlimited Phase Transitions Compete to Produce the Pathway Complexity in Amyloid Fibrillation. *Journal of Biological Chemistry*, **2015**, 290, 18134-18145	5.4	45
79	Revisiting supersaturation as a factor determining amyloid fibrillation. *Current Opinion in Structural Biology*, **2016**, 36, 32-9	8.1	43
78	Dimethylsulfoxide-quenched hydrogen/deuterium exchange method to study amyloid fibril structure. *Biochimica Et Biophysica Acta - Biomembranes*, **2007**, 1768, 1886-99	3.8	42
77	Charge repulsion in the conformational stability of melittin. *Biochemistry*, **1992**, 31, 11908-14	3.2	42

76	Lysophospholipids induce the nucleation and extension of beta2-microglobulin-related amyloid fibrils at a neutral pH. *Nephrology Dialysis Transplantation*, **2008**, 23, 3247-55	4.3	38
75	Measurement of amyloid formation by turbidity assay-seeing through the cloud. *Biophysical Reviews*, **2016**, 8, 445-471	3.7	38
74	Supersaturation-limited amyloid fibrillation of insulin revealed by ultrasonication. *Journal of Biological Chemistry*, **2014**, 289, 18228-38	5.4	37
73	Polymorphism of 2-microglobulin amyloid fibrils manifested by ultrasonication-enhanced fibril formation in trifluoroethanol. *Journal of Biological Chemistry*, **2012**, 287, 22827-37	5.4	36
72	Growth of beta(2)-microglobulin-related amyloid fibrils by non-esterified fatty acids at a neutral pH. *Biochemical Journal*, **2008**, 416, 307-15	3.8	33
71	Molecular interactions in the formation and deposition of beta2-microglobulin-related amyloid fibrils. *Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis*, **2005**, 12, 15-25	2.7	33
70	Nucleus factory on cavitation bubble for amyloid fibril. *Scientific Reports*, **2016**, 6, 22015	4.9	32
69	Acceleration of the depolymerization of amyloid fibrils by ultrasonication. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2013**, 1834, 2480-5	4	30
68	High-throughput analysis of ultrasonication-forced amyloid fibrillation reveals the mechanism underlying the large fluctuation in the lag time. *Journal of Biological Chemistry*, **2014**, 289, 27290-27299	5.4	30
67	The monomer-seed interaction mechanism in the formation of the 2-microglobulin amyloid fibril clarified by solution NMR techniques. *Journal of Molecular Biology*, **2012**, 422, 390-402	6.5	30
66	Structural stability of amyloid fibrils of beta(2)-microglobulin in comparison with its native fold. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2005**, 1753, 64-75	4	30
65	A multi-pathway perspective on protein aggregation: implications for control of the rate and extent of amyloid formation. *FEBS Letters*, **2015**, 589, 672-9	3.8	29
64	Protein aggregate turbidity: Simulation of turbidity profiles for mixed-aggregation reactions. *Analytical Biochemistry*, **2016**, 498, 78-94	3.1	29
63	A common mechanism underlying amyloid fibrillation and protein crystallization revealed by the effects of ultrasonication. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2013**, 1834, 2640-6	4	29
62	Solubility and supersaturation-dependent protein misfolding revealed by ultrasonication. *Langmuir*, **2014**, 30, 1845-54	4	28
61	Mechanism of lysophosphatidic acid-induced amyloid fibril formation of beta(2)-microglobulin in vitro under physiological conditions. *Biochemistry*, **2009**, 48, 5689-99	3.2	27
60	Heat-triggered conversion of protofibrils into mature amyloid fibrils of beta2-microglobulin. *Biochemistry*, **2007**, 46, 3286-93	3.2	26
59	Model membrane size-dependent amyloidogenesis of Alzheimer's amyloid- peptides. *Physical Chemistry Chemical Physics*, **2017**, 19, 16257-16266	3.6	25

58	Ultrafast propagation of -amyloid fibrils in oligomeric cloud. *Scientific Reports*, **2014**, 4, 6960	4.9	25
57	Ultrasonication: An Efficient Agitation for Accelerating the Supersaturation-Limited Amyloid Fibrillation of Proteins. *Japanese Journal of Applied Physics*, **2013**, 52, 07HA01	1.4	25
56	Salt-induced formations of partially folded intermediates and amyloid fibrils suggests a common underlying mechanism. *Biophysical Reviews*, **2018**, 10, 493-502	3.7	23
55	Membrane-induced initial structure of -synuclein control its amyloidogenesis on model membranes. *Biochimica Et Biophysica Acta - Biomembranes*, **2018**, 1860, 757-766	3.8	23
54	Heparin-dependent aggregation of hen egg white lysozyme reveals two distinct mechanisms of amyloid fibrillation. *Journal of Biological Chemistry*, **2017**, 292, 21219-21230	5.4	23
53	Aggregation-phase diagrams of -microglobulin reveal temperature and salt effects on competitive formation of amyloids amorphous aggregates. *Journal of Biological Chemistry*, **2018**, 293, 14775-14785	5.4	21
52	Exothermic effects observed upon heating of beta2-microglobulin monomers in the presence of amyloid seeds. *Biochemistry*, **2006**, 45, 8760-9	3.2	21
51	Possible mechanisms of polyphosphate-induced amyloid fibril formation of -microglobulin. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 12833-12838	11.5	20
50	The molten globule of (2)-microglobulin accumulated at pH 4 and its role in protein folding. *Journal of Molecular Biology*, **2013**, 425, 273-91	6.5	20
49	Nanocrystals of zirconia- and ceria-based solid electrolytes: Syntheses and properties. *Science and Technology of Advanced Materials*, **2007**, 8, 524-530	7.1	20
48	Ultrasonication-based rapid amplification of -synuclein aggregates in cerebrospinal fluid. *Scientific Reports*, **2019**, 9, 6001	4.9	19
47	Seed-dependent deposition behavior of A peptides studied with wireless quartz-crystal-microbalance biosensor. *Analytical Chemistry*, **2011**, 83, 4982-8	7.8	19
46	The Antibody Light-Chain Linker Is Important for Domain Stability and Amyloid Formation. *Journal of Molecular Biology*, **2015**, 427, 3572-3586	6.5	18
45	Drastic acceleration of fibrillation of insulin by transient cavitation bubble. *Ultrasonics Sonochemistry*, **2017**, 36, 206-211	8.9	18
44	Direct observation of minimum-sized amyloid fibrils using solution NMR spectroscopy. *Protein Science*, **2010**, 19, 2347-55	6.3	18
43	Amorphous Aggregation of Cytochrome c with Inherently Low Amyloidogenicity Is Characterized by the Metastability of Supersaturation and the Phase Diagram. *Langmuir*, **2016**, 32, 2010-22	4	17
42	A Stable Mutant Predisposes Antibody Domains to Amyloid Formation through Specific Non-Native Interactions. *Journal of Molecular Biology*, **2016**, 428, 1315-1332	6.5	17
41	Kinetic intermediates of (2)-microglobulin fibril elongation probed by pulse-labeling H/D exchange combined with NMR analysis. *Journal of Molecular Biology*, **2011**, 405, 851-62	6.5	17

40	The amyloid fibrils of the constant domain of immunoglobulin light chain. *FEBS Letters*, **2010**, 584, 3348-53	3.6	16
39	Heparin-induced amyloid fibrillation of β-microglobulin explained by solubility and a supersaturation-dependent conformational phase diagram. *Protein Science*, **2017**, 26, 1024-1036	6.3	15
38	Heating during agitation of β-microglobulin reveals that supersaturation breakdown is required for amyloid fibril formation at neutral pH. *Journal of Biological Chemistry*, **2019**, 294, 15826-15835	5.4	15
37	Breakdown of supersaturation barrier links protein folding to amyloid formation. *Communications Biology*, **2021**, 4, 120	6.7	15
36	Ultrasonication-dependent formation and degradation of α-synuclein amyloid fibrils. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2015**, 1854, 209-17	4	14
35	A residue-specific shift in stability and amyloidogenicity of antibody variable domains. *Journal of Biological Chemistry*, **2014**, 289, 26829-26846	5.4	14
34	Supersaturation-Limited and Unlimited Phase Spaces Compete to Produce Maximal Amyloid Fibrillation near the Critical Micelle Concentration of Sodium Dodecyl Sulfate. *Langmuir*, **2015**, 31, 9973-82	4	12
33	Thermal response with exothermic effects of beta2-microglobulin amyloid fibrils and fibrillation. *Journal of Molecular Biology*, **2009**, 389, 584-94	6.5	12
32	Isolation of short peptide fragments from alpha-synuclein fibril core identifies a residue important for fibril nucleation: a possible implication for diagnostic applications. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2010**, 1804, 2077-87	4	12
31	Heat-Induced Aggregation of Hen Ovalbumin Suggests a Key Factor Responsible for Serpin Polymerization. *Biochemistry*, **2018**, 57, 5415-5426	3.2	11
30	Elongation of amyloid fibrils through lateral binding of monomers revealed by total internal reflection fluorescence microscopy. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2014**, 1844, 1881-8	4	10
29	Mechanisms of Ultrasonically Induced Fibrillation of Amyloid β40Peptides. *Japanese Journal of Applied Physics*, **2013**, 52, 07HE10	1.4	10
28	A two-step refolding of acid-denatured microbial transglutaminase escaping from the aggregation-prone intermediate. *Biochemistry*, **2011**, 50, 10390-8	3.2	10
27	Synthesis of CeO2, ZrO2 Nanocrystals, and Core-Shell-Type Nanocomposites. *Journal of the Electrochemical Society*, **2006**, 153, A2269	3.9	10
26	Isoelectric point-amyloid formation of α-synuclein extends the generality of the solubility and supersaturation-limited mechanism. *Current Research in Structural Biology*, **2020**, 2, 35-44	2.8	9
25	Current Understanding of the Structure, Stability and Dynamic Properties of Amyloid Fibrils. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	9
24	Acceleration of deposition of Aβ(1-40) peptide on ultrasonically formed Aβ(1-42) nucleus studied by wireless quartz-crystal-microbalance biosensor. *Biosensors and Bioelectronics*, **2013**, 40, 200-5	11.8	8
23	Recognizing and analyzing variability in amyloid formation kinetics: Simulation and statistical methods. *Analytical Biochemistry*, **2016**, 510, 56-71	3.1	8

22	Amyloid Formation of α-Synuclein Based on the Solubility- and Supersaturation-Dependent Mechanism. *Langmuir*, **2020**, 36, 4671-4681	4	7
21	Thioflavin T-Silent Denaturation Intermediates Support the Main-Chain-Dominated Architecture of Amyloid Fibrils. *Biochemistry*, **2016**, 55, 3937-48	3.2	7
20	Optimized sonoreactor for accelerative amyloid-fibril assays through enhancement of primary nucleation and fragmentation. *Ultrasonics Sonochemistry*, **2021**, 73, 105508	8.9	6
19	Optimized Ultrasonic Irradiation Finds Out Ultrastable Aβ Oligomers. *Journal of Physical Chemistry B*, **2017**, 121, 2603-2613	3.4	5
18	Polyphosphates diminish solubility of a globular protein and thereby promote amyloid aggregation. *Journal of Biological Chemistry*, **2019**, 294, 15318-15329	5.4	5
17	Polyphenol-solubility alters amyloid fibril formation of α-synuclein. *Protein Science*, **2021**, 30, 1701-1713	6.3	5
16	Inorganic polyphosphate potentiates lipopolysaccharide-induced macrophage inflammatory response. *Journal of Biological Chemistry*, **2020**, 295, 4014-4023	5.4	4
15	A back hydrogen exchange procedure via the acid-unfolded state for a large protein. *Biochemistry*, **2012**, 51, 5564-70	3.2	4
14	Time-Resolved Observation of Evolution of Amyloid-β Oligomer with Temporary Salt Crystals. *Journal of Physical Chemistry Letters*, **2020**, 11, 6176-6184	6.4	3
13	Dialysis-related amyloidosis associated with a novel β-microglobulin variant. *Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis*, **2021**, 28, 42-49	2.7	3
12	Disaggregation Behavior of Amyloid β Fibrils by Anthocyanins Studied by Total-Internal-Reflection-Fluorescence Microscopy Coupled with a Wireless Quartz-Crystal Microbalance Biosensor. *Analytical Chemistry*, **2021**, 93, 11176-11183	7.8	3
11	Nucleation–fibrillation dynamics of Aβ1-40peptides on liquid–solid surface studied by total-internal-reflection fluorescence microscopy coupled with quartz-crystal microbalance biosensor. *Japanese Journal of Applied Physics*, **2015**, 54, 07HE01	1.4	2
10	Two-step screening method to identify α-synuclein aggregation inhibitors for Parkinson's disease.. *Scientific Reports*, **2022**, 12, 351	4.9	2
9	Half-Time Heat Map Reveals Ultrasonic Effects on Morphology and Kinetics of Amyloidogenic Aggregation Reaction. *ACS Chemical Neuroscience*, **2021**, 12, 3456-3466	5.7	2
8	Amyloid Formation under Complicated Conditions in Which β-Microglobulin Coexists with Its Proteolytic Fragments. *Biochemistry*, **2019**, 58, 4925-4934	3.2	1
7	Conformational change in the monomeric alpha-synuclein imparts fibril polymorphs		1
6	Strong acids induce amyloid fibril formation of β-microglobulin via an anion-binding mechanism. *Journal of Biological Chemistry*, **2021**, 297, 101286	5.4	1
5	Development of HANABI, an ultrasonication-forced amyloid fibril inducer.. *Neurochemistry International*, **2021**, 153, 105270	4.4	0

4	Multistep Changes in Amyloid Structure Induced by Cross-Seeding on a Rugged Energy Landscape. *Biophysical Journal*, **2021**, 120, 284-295	2.9	0
3	Polyphosphates induce amyloid fibril formation of □synuclein in concentration-dependent distinct manners. *Journal of Biological Chemistry*, **2021**, 296, 100510	5.4	0
2	Acceleration of amyloid fibril formation by multichannel sonochemical reactor. *Japanese Journal of Applied Physics*, **2022**, 61, SG1002	1.4	0
1	Linking Protein Folding to Amyloid Formation. *Seibutsu Butsuri*, **2021**, 61, 358-365	0	