

# Alberto Giuseppe Barbiroli

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

1,636  
citations

331538

21  
h-index

345118

36  
g-index

80  
all docs

80  
docs citations

80  
times ranked

2495  
citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular features and cooking behavior of pasta from pulses. <i>Cereal Chemistry</i> , 2022, 99, 270-274.	1.1	7
2	Emulsifying and foaming properties of a hydrophobin-based food ingredient from <i>Trichoderma reesei</i> : A phenomenological comparative study. <i>LWT - Food Science and Technology</i> , 2022, 157, 113060.	2.5	3
3	Cu(II) Binding Increases the Soluble Toxicity of Amyloidogenic Light Chains. <i>International Journal of Molecular Sciences</i> , 2022, 23, 950.	1.8	1
4	Beta-Lactoglobulin as a Model Food Protein: How to Promote, Prevent, and Exploit Its Unfolding Processes. <i>Molecules</i> , 2022, 27, 1131.	1.7	7
5	Impact of Thermal Treatment on the Starch-Protein Interplay in Red Lentils: Connecting Molecular Features and Rheological Properties. <i>Molecules</i> , 2022, 27, 1266.	1.7	10
6	<sc>l</sc>- to <sc>d</sc>-Amino Acid Substitution in the Immunodominant LCMV-Derived Epitope gp33 Highlights the Sensitivity of the TCR Recognition Mechanism for the MHC/Peptide Structure and Dynamics. <i>ACS Omega</i> , 2022, 7, 9622-9635.	1.6	1
7	Distribution of Charged Residues Affects the Average Size and Shape of Intrinsically Disordered Proteins. <i>Biomolecules</i> , 2022, 12, 561.	1.8	11
8	Protein interactions in the biological assembly of iron-sulfur clusters in <i>Escherichia coli</i> : Molecular and mechanistic aspects of the earliest assembly steps. <i>IUBMB Life</i> , 2022, 74, 723-732.	1.5	2
9	<i>Apis mellifera</i> Rida, a novel member of the canonical YigF/YER057c/UK114 imine deiminase superfamily of enzymes pre-empting metabolic damage. <i>Biochemical and Biophysical Research Communications</i> , 2022, 616, 70-75.	1.0	0
10	The coexistence of cold activity and thermal stability in an Antarctic GH42 $\beta$ -galactosidase relies on its hexameric quaternary arrangement. <i>FEBS Journal</i> , 2021, 288, 546-565.	2.2	31
11	Circular Dichroism to Probe the Synthesis, Transfer, and Stability of Fe-S Clusters. <i>Methods in Molecular Biology</i> , 2021, 2353, 209-229.	0.4	1
12	Morpholino-based peptide oligomers: Synthesis and DNA binding properties. <i>Biochemical and Biophysical Research Communications</i> , 2021, 549, 8-13.	1.0	3
13	Monitoring the carryover of egg proteins in pasta making to support allergen risk management. <i>Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment</i> , 2021, 38, 1087-1095.	1.1	4
14	The activity and stability of a cold-active acylaminoacyl peptidase rely on its dimerization by domain swapping. <i>International Journal of Biological Macromolecules</i> , 2021, 181, 263-274.	3.6	5
15	A novel hotspot of gelsolin instability triggers an alternative mechanism of amyloid aggregation. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 6355-6365.	1.9	2
16	Biochemical and biophysical comparison of human and mouse $\beta$ 2-microglobulin reveals the molecular determinants of low amyloid propensity. <i>FEBS Journal</i> , 2020, 287, 546-560.	2.2	11
17	Inherent Biophysical Properties Modulate the Toxicity of Soluble Amyloidogenic Light Chains. <i>Journal of Molecular Biology</i> , 2020, 432, 845-860.	2.0	26
18	The structure of N184K amyloidogenic variant of gelsolin highlights the role of the H-bond network for protein stability and aggregation properties. <i>European Biophysics Journal</i> , 2020, 49, 11-19.	1.2	4

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19	Two novel fish paralogs provide insights into the Rid family of imine deaminases active in pre-empting enamine/imine metabolic damage. <i>Scientific Reports</i> , 2020, 10, 10135.	1.6	4
20	From cheese whey permeate to Sakacin-A/bacterial cellulose nanocrystal conjugates for antimicrobial food packaging applications: a circular economy case study. <i>Scientific Reports</i> , 2020, 10, 21358.	1.6	28
21	Modulation of Guanylate Cyclase Activating Protein 1 (GCAP1) Dimeric Assembly by Ca <sup>2+</sup> or Mg <sup>2+</sup> : Hints to Understand Protein Activity. <i>Biomolecules</i> , 2020, 10, 1408.	1.8	11
22	Glycosylation Tunes Neuroserpin Physiological and Pathological Properties. <i>International Journal of Molecular Sciences</i> , 2020, 21, 3235.	1.8	11
23	Influence of Free Fatty Acids on Lipid Membrane-Nisin Interaction. <i>Langmuir</i> , 2020, 36, 13535-13544.	1.6	12
24	Antilisterial Bacteriocins for Food Security: The Case of Sakacin A. , 2019, , 385-392.		2
25	Modulating the cardiotoxic behaviour of immunoglobulin light chain dimers through point mutations. <i>Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis</i> , 2019, 26, 105-106.	1.4	4
26	The concurrency of several biophysical traits links immunoglobulin light chains with toxicity in AL amyloidosis. <i>Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis</i> , 2019, 26, 107-108.	1.4	2
27	The hidden side of the human FAD synthase 2. <i>International Journal of Biological Macromolecules</i> , 2019, 138, 986-995.	3.6	16
28	Effects on the Caco-2 Cells of a Hypoglycemic Protein from Lupin Seeds in a Solution and Adsorbed on Polystyrene Nanoparticles to Mimic a Complex Food Matrix. <i>Biomolecules</i> , 2019, 9, 606.	1.8	4
29	Greetings from foodland: Teaching biochemistry to BS students in food-related courses in Italy. <i>Biochemistry and Molecular Biology Education</i> , 2019, 47, 394-403.	0.5	1
30	Cellulose nanofiber (CNF)-sakacin-A active material: production, characterization and application in storage trials of smoked salmon. <i>Journal of the Science of Food and Agriculture</i> , 2019, 99, 4731-4738.	1.7	17
31	Insights into the effects of N-glycosylation on the characteristics of the VC1 domain of the human receptor for advanced glycation end products (RAGE) secreted by <i>Pichia pastoris</i> . <i>Glycoconjugate Journal</i> , 2019, 36, 27-38.	1.4	5
32	Nanobody interaction unveils structure, dynamics and proteotoxicity of the Finnish-type amyloidogenic gelsolin variant. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2019, 1865, 648-660.	1.8	21
33	Gelsolin pathogenic Gly167Arg mutation promotes domain-swap dimerization of the protein. <i>Human Molecular Genetics</i> , 2018, 27, 53-65.	1.4	16
34	A stereospecific carboxyl esterase from <i>Bacillus coagulans</i> hosting nonlipase activity within a lipase-like fold. <i>FEBS Journal</i> , 2018, 285, 903-914.	2.2	10
35	Conformational dynamics in crystals reveal the molecular bases for D76N beta-2 microglobulin aggregation propensity. <i>Nature Communications</i> , 2018, 9, 1658.	5.8	53
36	Imine Deaminase Activity and Conformational Stability of UK114, the Mammalian Member of the Rid Protein Family Active in Amino Acid Metabolism. <i>International Journal of Molecular Sciences</i> , 2018, 19, 945.	1.8	16

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37	Bacterial Production, Characterization and Protein Modeling of a Novel Monofunctional Isoform of FAD Synthase in Humans: An Emergency Protein?. <i>Molecules</i> , 2018, 23, 116.	1.7	26
38	Interplay between starch and proteins in waxy wheat. <i>Journal of Cereal Science</i> , 2017, 75, 198-204.	1.8	21
39	An Asp to Asn mutation is a toxic trigger in beta-2 microglobulin: structure and biophysics. <i>Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis</i> , 2017, 24, 15-16.	1.4	2
40	Stabilization of beta-lactoglobulin by polyols and sugars against temperature-induced denaturation involves diverse and specific structural regions of the protein. <i>Food Chemistry</i> , 2017, 234, 155-162.	4.2	27
41	Sakacinâ€A antimicrobial packaging for decreasing <i>Listeria</i> contamination in thinâ€cut meat: preliminary assessment. <i>Journal of the Science of Food and Agriculture</i> , 2017, 97, 1042-1047.	1.7	17
42	Defining the Overall Quality of Cowpeaâ€Enriched Riceâ€Based Breakfast Cereals. <i>Cereal Chemistry</i> , 2017, 94, 151-157.	1.1	8
43	Concurrent structural and biophysical traits link with immunoglobulin light chains amyloid propensity. <i>Scientific Reports</i> , 2017, 7, 16809.	1.6	50
44	Macromolecular Traits in the African Rice <i>Oryza glaberrima</i> and in <i>Glaberrima/Sativa</i> Crosses, and Their Relevance to Processing. <i>Journal of Food Science</i> , 2017, 82, 2298-2305.	1.5	6
45	Soybean-Enriched Snacks Based on African Rice. <i>Foods</i> , 2016, 5, 38.	1.9	5
46	Embelin binds to human neuroserpin and impairs its polymerisation. <i>Scientific Reports</i> , 2016, 6, 18769.	1.6	13
47	Rational design of mutations that change the aggregation rate of a protein while maintaining its native structure and stability. <i>Scientific Reports</i> , 2016, 6, 25559.	1.6	47
48	Structural changes in emulsion-bound bovine beta-lactoglobulin affect its proteolysis and immunoreactivity. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2016, 1864, 805-813.	1.1	8
49	A bacterial acyl aminoacyl peptidase couples flexibility and stability as a result of cold adaptation. <i>FEBS Journal</i> , 2016, 283, 4310-4324.	2.2	19
50	Molecular basis of a novel renal amyloidosis due to N184K gelsolin variant. <i>Scientific Reports</i> , 2016, 6, 33463.	1.6	12
51	Î±-Synuclein is a Novel Microtubule Dynamase. <i>Scientific Reports</i> , 2016, 6, 33289.	1.6	79
52	A covalent homodimer probing early oligomers along amyloid aggregation. <i>Scientific Reports</i> , 2015, 5, 14651.	1.6	13
53	Decoding the Structural Bases of D76N ÅŸ2-Microglobulin High Amyloidogenicity through Crystallography and Asn-Scan Mutagenesis. <i>PLoS ONE</i> , 2015, 10, e0144061.	1.1	22
54	Crystal structure of LptH, the periplasmic component of the lipopolysaccharide transport machinery from <i>Pseudomonas</i> . <i>FEBS Journal</i> , 2015, 282, 1980-1997.	2.2	31

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55	Functional implications of the interaction between HscB and IscU in the biosynthesis of FeS clusters. <i>Journal of Biological Inorganic Chemistry</i> , 2015, 20, 1039-1048.	1.1	14
56	Class I Major Histocompatibility Complex, the Trojan Horse for Secretion of Amyloidogenic Î²2-Microglobulin. <i>Journal of Biological Chemistry</i> , 2014, 289, 3318-3327.	1.6	22
57	Effect of High-Pressure Processing on the Features of Wheat Milling By-products. <i>Cereal Chemistry</i> , 2014, 91, 318-320.	1.1	6
58	Structuring and texturing gluten-free pasta: egg albumen or whey proteins?. <i>European Food Research and Technology</i> , 2014, 238, 217-224.	1.6	66
59	Process conditions affect starch structure and its interactions with proteins in rice pasta. <i>Carbohydrate Polymers</i> , 2013, 92, 1865-1872.	5.1	63
60	Structures of the lamin A/C R335W and E347K mutants: Implications for dilated cardiomyopathies. <i>Biochemical and Biophysical Research Communications</i> , 2012, 418, 217-221.	1.0	21
61	Antimicrobial activity of lysozyme and lactoferrin incorporated in cellulose-based food packaging. <i>Food Control</i> , 2012, 26, 387-392.	2.8	147
62	Electrostatics of folded and unfolded bovine Î²-lactoglobulin. <i>Amino Acids</i> , 2012, 42, 2019-2030.	1.2	8
63	Transglutaminase treatment of brown rice flour: A chromatographic, electrophoretic and spectroscopic study of protein modifications. <i>Food Chemistry</i> , 2012, 131, 1076-1085.	4.2	40
64	Bound Fatty Acids Modulate the Sensitivity of Bovine Î²-Lactoglobulin to Chemical and Physical Denaturation. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 5729-5737.	2.4	38
65	Biochemical and Functional Characterization of an Albumin Protein Belonging to the Hemopexin Superfamily from <i>Lens culinaris</i> Seeds. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 9637-9644.	2.4	10
66	Dâ€šstrand perturbation and amyloid propensity in betaâ€š2 microglobulin. <i>FEBS Journal</i> , 2011, 278, 2349-2358.	2.2	13
67	The effects of an ideal Î²-turn on Î²-2 microglobulin fold stability. <i>Journal of Biochemistry</i> , 2011, 150, 39-47.	0.9	9
68	DEâ€šloop mutations affect Î²2 microglobulin stability, oligomerization, and the lowâ€špH unfolded form. <i>Protein Science</i> , 2010, 19, 1386-1394.	3.1	43
69	Bovine Î²-lactoglobulin acts as an acid-resistant drug carrier by exploiting its diverse binding regions. <i>Biological Chemistry</i> , 2010, 391, 21-32.	1.2	30
70	Two Latent and Two Hyperstable Polymeric Forms of Human Neuroserpin. <i>Biophysical Journal</i> , 2010, 99, 3402-3411.	0.2	20
71	Structure and function of the apoA-IV T347S and Q360H common variants. <i>Biochemical and Biophysical Research Communications</i> , 2010, 393, 126-130.	1.0	12
72	Relevance of the flavin binding to the stability and folding of engineered cholesterol oxidase containing noncovalently bound FAD. <i>Protein Science</i> , 2008, 17, 409-419.	3.1	22

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73	Prion protein structure is affected by pH-dependent interaction with membranes: A study in a model system. <i>FEBS Letters</i> , 2008, 582, 215-220.	1.3	25
74	Molecular adaptation strategies to high temperature and thermal denaturation mechanism of the D-trehalose/D-maltose-binding protein from the hyperthermophilic archaeon <i>Thermococcus litoralis</i> . <i>Proteins: Structure, Function and Bioinformatics</i> , 2007, 67, 1002-1009.	1.5	9
75	Structural Features of Transiently Modified Beta-Lactoglobulin Relevant to the Stable Binding of Large Hydrophobic Molecules. <i>Protein Journal</i> , 2006, 25, 1-15.	0.7	21
76	Dissecting the Structural Determinants of the Stability of Cholesterol Oxidase Containing Covalently Bound Flavin. <i>Journal of Biological Chemistry</i> , 2005, 280, 22572-22581.	1.6	60
77	Unfolding Intermediate in the Peroxisomal Flavoprotein d-Amino Acid Oxidase. <i>Journal of Biological Chemistry</i> , 2004, 279, 28426-28434.	1.6	26
78	Contribution of the dimeric state to the thermal stability of the flavoprotein D-amino acid oxidase. <i>Protein Science</i> , 2003, 12, 1018-1029.	3.1	43
79	One-step purification of Kunitz soybean trypsin inhibitor. <i>Protein Expression and Purification</i> , 2003, 30, 167-170.	0.6	21
80	Xanthan and Glucomannan Mixtures: Synergistic Interactions and Gelation. <i>Biomacromolecules</i> , 2002, 3, 498-504.	2.6	79