Francesco Bonomi

List of Publications by Year in descending order

129 papers	4,387 citations	101496 36 h-index	133188 59 g-index
130 all docs	130 docs citations	130 times ranked	4689 citing authors

#	Article	IF	Citations
1	Beta-Lactoglobulin as a Model Food Protein: How to Promote, Prevent, and Exploit Its Unfolding Processes. Molecules, 2022, 27, 1131.	1.7	7
2	Protein interactions in the biological assembly of ironâ€“sulfur clusters in <scp>Escherichia coli</scp>: Molecular and mechanistic aspects of the earliest assembly steps. IUBMB Life, 2022, 74, 723-732.	1.5	2
3	Redox Titration of Flavoproteins: An Overview. Methods in Molecular Biology, 2021, 2280, 119-133.	0.4	2
4	Circular Dichroism to Probe the Synthesis, Transfer, and Stability of Fe-S Clusters. Methods in Molecular Biology, 2021, 2353, 209-229.	0.4	1
5	Monitoring the carryover of egg proteins in pasta making to support allergen risk management. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2021, 38, 1087-1095.	1.1	4
6	Bio-Functional and Structural Properties of Pasta Enriched with a Debranning Fraction from Purple Wheat. Foods, 2020, 9, 163.	1.9	14
7	Topological features of the intermolecular contacts in gluten-forming proteins: Exploring a novel methodological approach based on gold nanoparticles. Food Research International, 2019, 119, 492-498.	2.9	2
8	Effects of starch addition on the activity and specificity of foodâ€grade lipases. Biotechnology and Applied Biochemistry, 2019, 66, 607-616.	1.4	6
9	Greetings from foodland: Teaching biochemistry to BS students in foodâ€related courses in Italy. Biochemistry and Molecular Biology Education, 2019, 47, 394-403.	0.5	1
10	Surface Layer of Lactobacillus helveticus MIMLh5 Promotes Endocytosis by Dendritic Cells. Applied and Environmental Microbiology, 2019, 85, .	1.4	4
11	Affinity and selectivity of plant proteins for red wine components relevant to color and aroma traits. Food Chemistry, 2018, 256, 235-243.	4.2	24
12	Structural consequences of the interaction of puroindolines with gluten proteins. Food Chemistry, 2018, 253, 255-261.	4.2	19
13	Enriching gluten-free rice pasta with soybean and sweet potato flours. Journal of Food Science and Technology, 2018, 55, 2641-2648.	1.4	21
14	Bacterial Production, Characterization and Protein Modeling of a Novel Monofuctional Isoform of FAD Synthase in Humans: An Emergency Protein?. Molecules, 2018, 23, 116.	1.7	26
15	Interplay between starch and proteins in waxy wheat. Journal of Cereal Science, 2017, 75, 198-204.	1.8	21
16	Stabilization of beta-lactoglobulin by polyols and sugars against temperature-induced denaturation involves diverse and specific structural regions of the protein. Food Chemistry, 2017, 234, 155-162.	4.2	27
17	Iron Binding Properties of Recombinant Class A Protein Disulfide Isomerase from Arabidopsis thaliana. Biochemistry, 2017, 56, 2116-2125.	1.2	7
18	Blood trace metals in a sporadic amyotrophic lateral sclerosis geographical cluster. BioMetals, 2017, 30, 355-365.	1.8	24

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19	Molecular features of fermented teff flour relate to its suitability for the production of enriched gluten-free bread. LWT - Food Science and Technology, 2017, 78, 296-302.	2.5	25
20	Serum Proteome in a Sporadic Amyotrophic Lateral Sclerosis Geographical Cluster. Proteomics - Clinical Applications, 2017, 11, 1700043.	0.8	8
21	Macromolecular and Micronutrient Profiles of Sprouted Chickpeas to Be Used for Integrating Cerealâ€Based Food. Cereal Chemistry, 2017, 94, 82-88.	1.1	17
22	Defining the Overall Quality of Cowpeaâ€Enriched Riceâ€Based Breakfast Cereals. Cereal Chemistry, 2017, 94, 151-157.	1.1	8
23	Macromolecular Traits in the African Rice Oryza glaberrima and in Glaberrima/Sativa Crosses, and Their Relevance to Processing. Journal of Food Science, 2017, 82, 2298-2305.	1.5	6
24	Stabilization of the â€œopenâ€•conformer of apoIscU on the surface of polystyrene nanobeads accelerates assembly of a 2Fe2S structure. Peptidomics, 2016, 2, .	0.3	1
25	Soybean-Enriched Snacks Based on African Rice. Foods, 2016, 5, 38.	1.9	5
26	Serum metal evaluation in a small cohort of Amyotrophic Lateral Sclerosis patients reveals high levels of thiophylic species. Peptidomics, 2016, 2, .	0.3	3
27	Structural changes in emulsion-bound bovine beta-lactoglobulin affect its proteolysis and immunoreactivity. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 805-813.	1.1	8
28	Structural Modification of Gluten Proteins in Strong and Weak Wheat Dough as Affected by Mixing Temperature. Cereal Chemistry, 2016, 93, 189-195.	1.1	27
29	Remaining challenges in cellular flavin cofactor homeostasis and flavoprotein biogenesis. Frontiers in Chemistry, 2015, 3, 30.	1.8	36
30	Future of Grain Science Series: Italy. Cereal Foods World, 2015, 60, 27-31.	0.7	0
31	Esterases as stereoselective biocatalysts. Biotechnology Advances, 2015, 33, 547-565.	6.0	65
32	Gluten Structural Evolution During Pasta Processing of Refined and Whole Wheat Pasta from Hard White Winter Wheat: The Influence of Mixing, Drying, and Cooking. Cereal Chemistry, 2015, 92, 460-465.	1.1	30
33	Molecular features of fermented and sprouted sorghum flours relate to their suitability as components of enriched gluten-free pasta. LWT - Food Science and Technology, 2015, 63, 511-518.	2.5	45
34	Structural Modifications of Gluten Proteins in Strong and Weak Wheat Dough During Mixing. Cereal Chemistry, 2015, 92, 105-113.	1.1	66
35	Functional implications of the interaction between HscB and IscU in the biosynthesis of FeS clusters. Journal of Biological Inorganic Chemistry, 2015, 20, 1039-1048.	1.1	14
36	New insights on the features of the vinyl phenol reductase from the wine-spoilage yeast Dekkera/Brettanomyces bruxellensis. Annals of Microbiology, 2015, 65, 321-329.	1.1	26

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37	Significance of redox-active cysteines in human FAD synthase isoform 2. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2014, 1844, 2086-2095.	1.1	15
38	Rubredoxin refolding on nanostructured hydrophobic surfaces: Evidence for a new type of biomimetic chaperones. Proteins: Structure, Function and Bioinformatics, 2014, 82, 3154-3162.	1.5	5
39	Effect of Highâ€Pressure Processing on the Features of Wheat Milling Byâ€products. Cereal Chemistry, 2014, 91, 318-320.	1.1	6
40	Fining white wine with plant proteins: effects of fining on proanthocyanidins and aroma components. European Food Research and Technology, 2014, 238, 265-274.	1.6	29
41	TgaA, a VirB1-Like Component Belonging to a Putative Type IV Secretion System of Bifidobacterium bifidum MIMBb75. Applied and Environmental Microbiology, 2014, 80, 5161-5169.	1.4	13
42	Murein Lytic Enzyme TgaA of Bifidobacterium bifidum MIMBb75 Modulates Dendritic Cell Maturation through Its Cysteine- and Histidine-Dependent Amidohydrolase/Peptidase (CHAP) Amidase Domain. Applied and Environmental Microbiology, 2014, 80, 5170-5177.	1.4	27
43	Unfolding of betaâ€lactoglobulin on the surface of polystyrene nanoparticles: Experimental and computational approaches. Proteins: Structure, Function and Bioinformatics, 2014, 82, 1272-1282.	1.5	16
44	Integrating the information from proteomic approaches: A â€œthiolomicsâ€•approach to assess the role of thiols in protein-based networks. Food Research International, 2013, 54, 980-987.	2.9	21
45	Process conditions affect starch structure and its interactions with proteins in rice pasta. Carbohydrate Polymers, 2013, 92, 1865-1872.	5.1	63
46	Shelf life of case-ready beef steaks (Semitendinosus muscle) stored in oxygen-depleted master bag system with oxygen scavengers and CO2/N2 modified atmosphere packaging. Meat Science, 2013, 93, 477-484.	2.7	20
47	The Performing Protein: Beyond Wheat Proteomics?. Cereal Chemistry, 2013, 90, 358-366.	1.1	34
48	Binding of curcumin to milk proteins increases after static high pressure treatment of skim milk. Journal of Dairy Research, 2013, 80, 152-158.	0.7	24
49	Purified sakacin A shows a dual mechanism of action against Listeria spp: proton motive force dissipation and cell wall breakdown. FEMS Microbiology Letters, 2012, 334, 143-149.	0.7	19
50	Molecular rearrangements in extrusion processes for the production of amaranth-enriched, gluten-free rice pasta. LWT - Food Science and Technology, 2012, 47, 421-426.	2.5	85
51	Structureâ€“quality relationship in commercial pasta: A molecular glimpse. Food Chemistry, 2012, 135, 348-355.	4.2	88
52	Antimicrobial activity of lysozyme and lactoferrin incorporated in cellulose-based food packaging. Food Control, 2012, 26, 387-392.	2.8	147
53	Wards in the keyway: amino acids with anomalous pK as in calycins. Amino Acids, 2012, 43, 2457-2468.	1.2	1
54	Analysis of Pseudomonas aeruginosa Cell Envelope Proteome by Capture of Surface-Exposed Proteins on Activated Magnetic Nanoparticles. PLoS ONE, 2012, 7, e51062.	1.1	14

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55	Maize Prolamins Resistant to Peptic-tryptic Digestion Maintain Immune-recognition by IgA from Some Celiac Disease Patients. Plant Foods for Human Nutrition, 2012, 67, 24-30.	1.4	18
56	Electrostatics of folded and unfolded bovine Î²-lactoglobulin. Amino Acids, 2012, 42, 2019-2030.	1.2	8
57	Transglutaminase treatment of brown rice flour: A chromatographic, electrophoretic and spectroscopic study of protein modifications. Food Chemistry, 2012, 131, 1076-1085.	4.2	40
58	Comparison of lipid effects on structural features of hard and soft wheat flour proteins assessed by front-face fluorescence. Food Chemistry, 2012, 133, 1011-1016.	4.2	17
59	Structural changes of soy proteins at the oilâ€“water interface studied by fluorescence spectroscopy. Colloids and Surfaces B: Biointerfaces, 2012, 93, 41-48.	2.5	115
60	Facilitated Transfer of IscUâ€“[2Fe2S] Clusters by Chaperone-Mediated Ligand Exchange. Biochemistry, 2011, 50, 9641-9650.	1.2	83
61	Bound Fatty Acids Modulate the Sensitivity of Bovine Î²-Lactoglobulin to Chemical and Physical Denaturation. Journal of Agricultural and Food Chemistry, 2011, 59, 5729-5737.	2.4	38
62	Effect of the Hofmeister series on gluten aggregation measured using a high shear-based technique. Food Research International, 2011, 44, 893-896.	2.9	40
63	Structural determinants of the immunomodulatory properties of the C-terminal region of bovine Î²-casein. International Dairy Journal, 2011, 21, 770-776.	1.5	23
64	Dâ€strand perturbation and amyloid propensity in betaâ€2 microglobulin. FEBS Journal, 2011, 278, 2349-2358.	2.2	13
65	Human FAD synthase (isoform 2): a component of the machinery that delivers FAD to apoâ€flavoproteins. FEBS Journal, 2011, 278, 4434-4449.	2.2	44
66	Denaturation of soy proteins in solution and at the oilâ€“water interface: A fluorescence study. Food Hydrocolloids, 2011, 25, 620-626.	5.6	66
67	Recognition and uptake of free and nanoparticleâ€bound betalactoglobulin â€“ a food allergen â€“ by human monocytes. Molecular Nutrition and Food Research, 2011, 55, 1708-1716.	1.5	10
68	Proteomic and peptidomic characterisation of beer: Immunological and technological implications. Food Chemistry, 2011, 124, 1718-1726.	4.2	75
69	The effects of an ideal Î²-turn on Î²-2 microglobulin fold stability. Journal of Biochemistry, 2011, 150, 39-47.	0.9	9
70	Solubility of proteins from non-gluten cereals: A comparative study on combinations of solubilising agents. Food Chemistry, 2010, 121, 1225-1230.	4.2	33
71	DEâ€loop mutations affect Î²2 microglobulin stability, oligomerization, and the lowâ€pH unfolded form. Protein Science, 2010, 19, 1386-1394.	3.1	43
72	Modification of celluloseâ€based packaging materials for enzyme immobilization. Packaging Technology and Science, 2010, 23, 47-57.	1.3	16

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73	Bovine Î²-lactoglobulin acts as an acid-resistant drug carrier by exploiting its diverse binding regions. Biological Chemistry, 2010, 391, 21-32.	1.2	30
74	Two Latent and Two Hyperstable Polymeric Forms of Human Neuroserpin. Biophysical Journal, 2010, 99, 3402-3411.	0.2	20
75	Iron-Nucleated Folding of a Metalloprotein in High Urea: Resolution of Metal Binding and Protein Folding Events. Biochemistry, 2010, 49, 6627-6634.	1.2	21
76	Structure and function of the apoA-IV T347S and Q360H common variants. Biochemical and Biophysical Research Communications, 2010, 393, 126-130.	1.0	12
77	Molecular Basis of the Interaction between Proteins of Plant Origin and Proanthocyanidins in a Model Wine System. Journal of Agricultural and Food Chemistry, 2010, 58, 11969-11976.	2.4	20
78	Bacterial frataxin CyaY is the gatekeeper of iron-sulfur cluster formation catalyzed by IscS. Nature Structural and Molecular Biology, 2009, 16, 390-396.	3.6	228
79	â€œIron primingâ€•guides folding of denatured aporubredoxins. Journal of Biological Inorganic Chemistry, 2008, 13, 981-991.	1.1	11
80	Relevance of the flavin binding to the stability and folding of engineered cholesterol oxidase containing noncovalently bound FAD. Protein Science, 2008, 17, 409-419.	3.1	22
81	Prion protein structure is affected by pHâ€dependent interaction with membranes: A study in a model system. FEBS Letters, 2008, 582, 215-220.	1.3	25
82	Structural perturbation of Î±B-crystallin by zinc and temperature related to its chaperone-like activity. International Journal of Biological Macromolecules, 2008, 42, 229-234.	3.6	26
83	Studies on the Mechanism of Catalysis of Ironâ^'Sulfur Cluster Transfer from IscU[2Fe2S] by HscA/HscB Chaperones. Biochemistry, 2008, 47, 12795-12801.	1.2	96
84	Properties of the Protein and Carbohydrate Fractions in Immature Wheat Kernels. Journal of Agricultural and Food Chemistry, 2006, 54, 10239-10244.	2.4	57
85	Structural Features of Transiently Modified Beta-Lactoglobulin Relevant to the Stable Binding of Large Hydrophobic Molecules. Protein Journal, 2006, 25, 1-15.	0.7	21
86	Fermentation modifies protein/protein and protein/starch interactions in sorghum dough. European Food Research and Technology, 2006, 222, 559-564.	1.6	39
87	Multiple Turnover Transfer of [2Fe2S] Clusters by the Iron-Sulfur Cluster Assembly Scaffold Proteins IscU and IscA. Journal of Biological Chemistry, 2005, 280, 29513-29518.	1.6	61
88	Dissecting the Structural Determinants of the Stability of Cholesterol Oxidase Containing Covalently Bound Flavin. Journal of Biological Chemistry, 2005, 280, 22572-22581.	1.6	60
89	Unfolding Intermediate in the Peroxisomal Flavoprotein d-Amino Acid Oxidase. Journal of Biological Chemistry, 2004, 279, 28426-28434.	1.6	26
90	Contribution of the [FeII(SCys)4] site to the thermostability of rubredoxins. Journal of Biological Inorganic Chemistry, 2004, 9, 297-306.	1.1	13

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91	Probing structural features of water-insoluble proteins by front-face fluorescence. Analytical Biochemistry, 2004, 329, 104-111.	1.1	63
92	Improved Protocols for ELISA Determination of Gliadin in Glucose Syrups. Cereal Chemistry, 2004, 81, 15-18.	1.1	5
93	Contribution of the dimeric state to the thermal stability of the flavoprotein D-amino acid oxidase. Protein Science, 2003, 12, 1018-1029.	3.1	43
94	Molecular Recognition between Azotobacter vinelandii Rhodanese and a Sulfur Acceptor Protein. Biological Chemistry, 2003, 384, 1473-1481.	1.2	9
95	Reduction of immunoreactivity of bovine Î²-lactoglobulin upon combined physical and proteolytic treatment. Journal of Dairy Research, 2003, 70, 51-59.	0.7	99
96	Thermal stability of the [Fe(SCys)4] site in Clostridium pasteurianum rubredoxin: contributions of the local environment and Cys ligand protonation. Journal of Biological Inorganic Chemistry, 2002, 7, 427-436.	1.1	14
97	Proteolysis of bovine Î²-lactoglobulin during thermal treatment in subdenaturing conditions highlights some structural features of the temperature-modified protein and yields fragments with low immunoreactivity. FEBS Journal, 2002, 269, 1362-1372.	0.2	47
98	Primary structure of Î¹-casein isolated from mares' milk. Journal of Dairy Research, 2001, 68, 53-61.	0.7	40
99	GroEL-assisted refolding of adrenodoxin during chemical cluster insertion. FEBS Journal, 2001, 268, 2421-2429.	0.2	14
100	Thermal unfolding of monomeric and dimeric Î²-lactoglobulins. FEBS Journal, 2001, 268, 5439-5448.	0.2	96
101	Dissociation of human alphaB-crystallin aggregates by thiocyanate is structurally and functionally reversible. The Protein Journal, 2000, 19, 311-318.	1.1	4
102	Thermal stability of Clostridium pasteurianum rubredoxin: Deconvoluting the contributions of the metal site and the protein. Protein Science, 2000, 9, 2413-2426.	3.1	33
103	Characterization of High-Pressure-Treated Egg Albumen. Journal of Agricultural and Food Chemistry, 1999, 47, 3611-3616.	2.4	55
104	Cluster-iron substitution is related to structural and functional features of adrenodoxin mutants and to their redox states. FEBS Journal, 1998, 251, 673-681.	0.2	8
105	Direct metal ion substitution at the [M(SCys)4]2â€“ site of rubredoxin. Journal of Biological Inorganic Chemistry, 1998, 3, 595-605.	1.1	23
106	Macroscopic and Structural Consequences of High-Pressure Treatment of Ovalbumin Solutions. Journal of Agricultural and Food Chemistry, 1998, 46, 3521-3527.	2.4	64
107	Aggregation of Proteins in Whey from Raw and Heat-Processed Milk: Formation of Soluble Macroaggregates and Nutritional Consequences. LWT - Food Science and Technology, 1998, 31, 522-529.	2.5	16
108	Structural Features and Reversible Association of Different Quaternary Structures of Î²-Lactoglobulin. Journal of Agricultural and Food Chemistry, 1998, 46, 2159-2166.	2.4	36

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109	Molecular Modifications of Î²-Lactoglobulin upon Exposure to High Pressure. Journal of Agricultural and Food Chemistry, 1997, 45, 23-29.	2.4	92
110	Surface properties of the fat globule in treated creams. International Dairy Journal, 1997, 7, 375-380.	1.5	15
111	Pro108 is Important for Folding and Stabilization of Adrenal Ferredoxin, but does not Influence the Functional Properties of the Protein. FEBS Journal, 1997, 248, 897-902.	0.2	26
112	Modifications Occur at Different Structural Levels During the Heat Denaturation of beta-Lactoglobulin. FEBS Journal, 1996, 237, 106-112.	0.2	235
113	Reversible, Non-Denaturing Metal Substitution in Bovine Adrenodoxin and Spinach Ferredoxin and the Different Reactivities of [2Fe-2S]-Cluster-Containing Proteins. FEBS Journal, 1996, 239, 818-826.	0.2	18
114	Modifications in Disulfide Reactivity of Milk Induced by Different Pasteurization Conditions. Journal of Food Science, 1996, 61, 495-500.	1.5	12
115	Modifications of High-Order Structures upon Heating of .beta.-Lactoglobulin: Dependence on the Protein Concentration. Journal of Agricultural and Food Chemistry, 1995, 43, 53-58.	2.4	106
116	Recombinant Desulfovibrio vulgaris rubrerythrin. Isolation and characterization of the diiron domain. Biochemistry, 1995, 34, 3310-3318.	1.2	61
117	Reversible and irreversible modifications ofÎ²-lactoglobulin upon exposure to heat. The Protein Journal, 1994, 13, 347-354.	1.1	129
118	Kinetic and immobilization studies on fungal glycosidases for aroma enhancement in wine. Enzyme and Microbial Technology, 1994, 16, 286-291.	1.6	79
119	Amino-acid sequences of the alpha- and beta-subunits of hemerythrin from Lingula reevii. BBA - Proteins and Proteomics, 1994, 1208, 277-285.	2.1	17
120	Reversible and non-denaturing replacement of iron by cadmium in Clostridium pasteurianum ferredoxin. FEBS Journal, 1994, 222, 639-644.	0.2	16
121	Thermal sensitivity of mares' milk proteins. Journal of Dairy Research, 1994, 61, 419-422.	0.7	25
122	Surface hydrophobicity changes and heat-induced modifications of .alpha.-lactalbumin. Journal of Agricultural and Food Chemistry, 1992, 40, 1731-1736.	2.4	35
123	Acceleration by Fe(II) of thiomolybdate formation from aqueous molybdate and sulfide. A simplified synthesis of [Fe(MoS4)2]3â^'. Inorganica Chimica Acta, 1992, 193, 125-128.	1.2	8
124	A new synthetic method for MS42â^' (M î—» Mo, W). Evidence for catalysis of aqueous MO42â^'/MS42â^' interconversion by thiols. Inorganica Chimica Acta, 1992, 191, 197-202.	1.2	7
125	Myohemerythrin from the sipunculid, Phascolopsis gouldii: purification, properties and amino acid sequence. BBA - Proteins and Proteomics, 1992, 1122, 136-142.	2.1	10
126	Interaction of Zn2+ with the bovine-heart mitochondrial bc1 complex. FEBS Journal, 1991, 197, 555-561.	0.2	63

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127	Uptake of iron by apoferritin from a ferric dihydrolipoate complex. FEBS Journal, 1991, 199, 181-186.	0.2	7
128	Molecular aspects of the removal of ferritin-bound iron bydl-dihydrolipoate. BBA - Proteins and Proteomics, 1989, 994, 180-186.	2.1	30
129	Purification and properties of a membrane-bound NADH-cytochrome-b5 reductase from erythrocytes of the sipunculid worm, Phascolopsis gouldii. BBA - Proteins and Proteomics, 1989, 999, 147-156.	2.1	14