Guanghua Zhao

List of Publications by Year
in descending order

130 papers	4,498 citations	94381 37 h-index	128225 60 g-index
131 all docs	131 docs citations	131 times ranked	4375 citing authors

#	Article	IF	Citations
1	Iron and Hydrogen Peroxide Detoxification Properties of DNA-binding Protein from Starved Cells. Journal of Biological Chemistry, 2002, 277, 27689-27696.	1.6	357
2	Antioxidant capacities of the selenium nanoparticles stabilized by chitosan. Journal of Nanobiotechnology, 2017, 15, 4.	4.2	197
3	Multiple Pathways for Mineral Core Formation in Mammalian Apoferritin. The Role of Hydrogen Peroxideâ€. Biochemistry, 2003, 42, 3142-3150.	1.2	151
4	Synthesis, characterization, and controlled release of selenium nanoparticles stabilized by chitosan of different molecular weights. Carbohydrate Polymers, 2015, 134, 158-166.	5.1	143
5	Encapsulation of Î²-carotene within ferritin nanocages greatly increases its water-solubility and thermal stability. Food Chemistry, 2014, 149, 307-312.	4.2	133
6	Phytoferritin and its implications for human health and nutrition. Biochimica Et Biophysica Acta - General Subjects, 2010, 1800, 815-823.	1.1	120
7	Encapsulation of curcumin in recombinant human H-chain ferritin increases its water-solubility and stability. Food Research International, 2014, 62, 1147-1153.	2.9	109
8	Facilitated Diffusion of Iron(II) and Dioxygen Substrates into Human H-Chain Ferritin. A Fluorescence and Absorbance Study Employing the Ferroxidase Center Substitution Y34W. Journal of the American Chemical Society, 2008, 130, 17801-17811.	6.6	107
9	Encapsulation of anthocyanin molecules within a ferritin nanocage increases their stability and cell uptake efficiency. Food Research International, 2014, 62, 183-192.	2.9	107
10	Gold nanoparticles: From synthesis, properties to their potential application as colorimetric sensors in food safety screening. Trends in Food Science and Technology, 2018, 78, 83-94.	7.8	103
11	Nanomolar Hg²⁺ Detection Using Î²-Lactoglobulin-Stabilized Fluorescent Gold Nanoclusters in Beverage and Biological Media. Analytical Chemistry, 2016, 88, 10275-10283.	3.2	89
12	Iron(II) and Hydrogen Peroxide Detoxification by Human H-Chain Ferritin. An EPR Spin-Trapping Study. Biochemistry, 2006, 45, 3429-3436.	1.2	87
13	Origin of the Unusual Kinetics of Iron Deposition in Human H-Chain Ferritin. Journal of the American Chemical Society, 2005, 127, 3885-3893.	6.6	81
14	Effect of molecular weight of chitosan and its oligosaccharides on antitumor activities of chitosan-selenium nanoparticles. Carbohydrate Polymers, 2020, 231, 115689.	5.1	79
15	Fermentation Kinetics of Different Sugars by Apple Wine Yeast<i>Saccharomyces cerevisiae</i>. Journal of the Institute of Brewing, 2004, 110, 340-346.	0.8	69
16	Engineering protein interfaces yields ferritin disassembly and reassembly under benign experimental conditions. Chemical Communications, 2016, 52, 7402-7405.	2.2	69
17	Is Hydrogen Peroxide Produced during Iron(II) Oxidation in Mammalian Apoferritins?. Biochemistry, 2001, 40, 10832-10838.	1.2	68
18	Ferritin cage for encapsulation and delivery of bioactive nutrients: From structure, property to applications. Critical Reviews in Food Science and Nutrition, 2017, 57, 3673-3683.	5.4	64

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19	Identification of carotenoids in foxtail millet (Setaria italica) and the effects of cooking methods on carotenoid content. Journal of Cereal Science, 2015, 61, 86-93.	1.8	63
20	Ferritin Nanocage: A Versatile Nanocarrier Utilized in the Field of Food, Nutrition, and Medicine. Nanomaterials, 2020, 10, 1894.	1.9	57
21	Protein Association and Dissociation Regulated by Ferric Ion. Journal of Biological Chemistry, 2009, 284, 16743-16751.	1.6	56
22	Self-assembly of ferritin nanocages into linear chains induced by poly(Î±,l-lysine). Chemical Communications, 2014, 50, 481-483.	2.2	51
23	Oxidation of Goodâ€™s buffers by hydrogen peroxide. Analytical Biochemistry, 2006, 349, 262-267.	1.1	50
24	On-Axis Alignment of Protein Nanocage Assemblies from 2D to 3D through the Aromatic Stacking Interactions of Amino Acid Residues. ACS Nano, 2018, 12, 11323-11332.	7.3	49
25	Optimization of Microwave-Assisted Extraction of Astaxanthin from Haematococcus Pluvialis by Response Surface Methodology and Antioxidant Activities of the Extracts. Separation Science and Technology, 2009, 44, 243-262.	1.3	48
26	Proanthocyanidins Inhibit Iron Absorption from Soybean (Glycine max) Seed Ferritin in Rats with Iron Deficiency Anemia. Plant Foods for Human Nutrition, 2011, 66, 212-217.	1.4	47
27	Structure, Function, and Nutrition of Phytoferritin: A Newly Functional Factor for Iron Supplement. Critical Reviews in Food Science and Nutrition, 2014, 54, 1342-1352.	5.4	47
28	Redesign of protein nanocages: the way from 0D, 1D, 2D to 3D assembly. Chemical Society Reviews, 2021, 50, 3957-3989.	18.7	47
29	A novel EP-involved pathway for iron release from soya bean seed ferritin. Biochemical Journal, 2010, 427, 313-321.	1.7	45
30	Antidepressant-like effects of the hydroalcoholic extracts of Hemerocallis Citrina and its potential active components. BMC Complementary and Alternative Medicine, 2014, 14, 326.	3.7	45
31	Purification and characterization of a novel fungi Se-containing protein from Se-enriched Ganoderma Lucidum mushroom and its Se-dependent radical scavenging activity. European Food Research and Technology, 2007, 224, 659-665.	1.6	44
32	Effect of selenium on increasing free radical scavenging activities of polysaccharide extracts from a Se-enriched mushroom species of the genus Ganoderma. European Food Research and Technology, 2008, 226, 499-505.	1.6	44
33	Binding of proanthocyanidins to soybean (Glycine max) seed ferritin inhibiting protein degradation by protease in vitro. Food Research International, 2011, 44, 33-38.	2.9	40
34	Effect of the structure of gallic acid and its derivatives on their interaction with plant ferritin. Food Chemistry, 2016, 213, 260-267.	4.2	40
35	Role of H-1 and H-2 Subunits of Soybean Seed Ferritin in Oxidative Deposition of Iron in Protein. Journal of Biological Chemistry, 2010, 285, 32075-32086.	1.6	38
36	Effect of tannic acid on properties of soybean (Glycine max) seed ferritin: A model for interaction between naturally-occurring components in foodstuffs. Food Chemistry, 2012, 133, 410-415.	4.2	38

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37	Food-derived antithrombotic peptides: Preparation, identification, and interactions with thrombin. Critical Reviews in Food Science and Nutrition, 2019, 59, S81-S95.	5.4	38
38	His-Mediated Reversible Self-Assembly of Ferritin Nanocages through Two Different Switches for Encapsulation of Cargo Molecules. ACS Nano, 2020, 14, 17080-17090.	7.3	38
39	Bioavailability of iron from plant and animal ferritins. Journal of Nutritional Biochemistry, 2015, 26, 532-540.	1.9	37
40	The Size Flexibility of Ferritin Nanocage Opens a New Way to Prepare Nanomaterials. Small, 2017, 13, 1701045.	5.2	37
41	Two different H-type subunits from pea seed (Pisum sativum) ferritin that are responsible for fast Fe(II) oxidation. Biochimie, 2009, 91, 230-239.	1.3	36
42	Effect of high hydrostatic pressure (HHP) on structure and activity of phytoferritin. Food Chemistry, 2012, 130, 273-278.	4.2	36
43	Comparative Study on Iron Release from Soybean (<i>Glycine max</i>) Seed Ferritin Induced by Anthocyanins and Ascorbate. Journal of Agricultural and Food Chemistry, 2010, 58, 635-641.	2.4	35
44	â€œSilentâ€•Amino Acid Residues at Key Subunit Interfaces Regulate the Geometry of Protein Nanocages. ACS Nano, 2016, 10, 10382-10388.	7.3	35
45	Protein Association and Dissociation Regulated by Extension Peptide: A Mode for Iron Control by Phytoferritin in Seeds. Plant Physiology, 2010, 154, 1481-1491.	2.3	34
46	NADH induces iron release from pea seed ferritin: A model for interaction between coenzyme and protein components in foodstuffs. Food Chemistry, 2013, 141, 3851-3858.	4.2	33
47	2D square arrays of protein nanocages through channel-directed electrostatic interactions with poly(Î±, l-lysine). Chemical Communications, 2014, 50, 2879.	2.2	33
48	Conversion of the Native 24â€mer Ferritin Nanocage into Its Nonâ€Native 16â€mer Analogue by Insertion of Extra Amino Acid Residues. Angewandte Chemie - International Edition, 2016, 55, 16064-16070.	7.2	33
49	Disulfide-mediated conversion of 8-mer bowl-like protein architecture into three different nanocages. Nature Communications, 2019, 10, 778.	5.8	32
50	Designed Two- and Three-Dimensional Protein Nanocage Networks Driven by Hydrophobic Interactions Contributed by Amyloidogenic Motifs. Nano Letters, 2019, 19, 4023-4028.	4.5	31
51	ENERGY REQUIREMENT AND QUALITY ASPECTS OF CHINESE JUJUBE (<i>ZIZYPHUS JUJUBA MILLER</i>) IN HOT AIR DRYING FOLLOWED BY MICROWAVE DRYING. Journal of Food Process Engineering, 2011, 34, 491-510.	1.5	30
52	Identification and inhibitory activity against Î±-thrombin of a novel anticoagulant peptide derived from oyster (<i>Crassostrea gigas</i>) protein. Food and Function, 2018, 9, 6391-6400.	2.1	30
53	Chitinase III in pomegranate seeds (<i>Punica granatum</i> Linn.): a highâ€capacity calciumâ€binding protein in amyloplasts. Plant Journal, 2011, 68, 765-776.	2.8	29
54	The development of natural and designed protein nanocages for encapsulation and delivery of active compounds. Food Hydrocolloids, 2021, 121, 107004.	5.6	29

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55	Highly fluorescent gold nanoclusters stabilized by food proteins: From preparation to application in detection of food contaminants and bioactive nutrients. Critical Reviews in Food Science and Nutrition, 2018, 58, 689-699.	5.4	28
56	The first crystal structure of crustacean ferritin that is a hybrid type of H and L ferritin. Protein Science, 2018, 27, 1955-1960.	3.1	28
57	Î¼-1,2-Peroxo Diferric Complex Formation in Horse Spleen Ferritin. A Mixed H/L-Subunit Heteropolymer. Journal of Molecular Biology, 2005, 352, 467-477.	2.0	27
58	Selective Elimination of the Key Subunit Interfaces Facilitates Conversion of Native 24-mer Protein Nanocage into 8-mer Nanorings. Journal of the American Chemical Society, 2018, 140, 14078-14081.	6.6	27
59	Gibberellin-induced mesocotyl elongation in deep-sowing tolerant maize inbred line 3681-4. Plant Breeding, 2010, 129, 87-91.	1.0	26
60	Physicochemical characteristics and functional properties of grape (<i>Vitis vinifera L.</i>) seeds protein. International Journal of Food Science and Technology, 2011, 46, 635-641.	1.3	26
61	A novel calcium supplement prepared by phytoferritin nanocages protects against absorption inhibitors through a unique pathway. Bone, 2014, 64, 115-123.	1.4	26
62	Four-Fold Channels Are Involved in Iron Diffusion into the Inner Cavity of Plant Ferritin. Biochemistry, 2014, 53, 2232-2241.	1.2	26
63	Bionanomaterials based on protein self-assembly: Design and applications in biotechnology. Biotechnology Advances, 2021, 52, 107835.	6.0	26
64	Correlation of methylglyoxal with acrylamide formation in fructose/asparagine Maillard reaction model system. Food Chemistry, 2008, 108, 885-890.	4.2	23
65	The interaction of phenolic acids with Fe(III) in the presence of citrate as studied by isothermal titration calorimetry. Food Chemistry, 2014, 157, 302-309.	4.2	23
66	Study of the physicochemical properties of the BSA: flavonoid nanoparticle. European Food Research and Technology, 2011, 233, 275-283.	1.6	21
67	Thermostability of protein nanocages: the effect of natural extra peptide on the exterior surface. RSC Advances, 2019, 9, 24777-24782.	1.7	21
68	Zinc nutrition and dietary zinc supplements. Critical Reviews in Food Science and Nutrition, 2023, 63, 1277-1292.	5.4	20
69	Deuterium Structural Effects in Inorganic and Bioinorganic Aggregates. Journal of the American Chemical Society, 2002, 124, 3042-3049.	6.6	19
70	Interactions between plant proteins/enzymes and other food components, and their effects on food quality. Critical Reviews in Food Science and Nutrition, 2017, 57, 1718-1728.	5.4	19
71	Preparation of hypocrellin B nanocages in self-assembled apoferritin for enhanced intracellular uptake and photodynamic activity. Journal of Materials Chemistry B, 2017, 5, 1980-1987.	2.9	19
72	Structural Insight into Binary Protein Metalâ€“Organic Frameworks with Ferritin Nanocages as Linkers and Nickel Clusters as Nodes. Chemistry - A European Journal, 2020, 26, 3016-3021.	1.7	19

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73	16-Mer ferritin-like protein templated gold nanoclusters for bioimaging detection of methylmercury in the brain of living mice. Analytica Chimica Acta, 2020, 1127, 149-155.	2.6	19
74	Construction of three-dimensional interleaved protein hetero-superlattices in solution by cooperative electrostatic and aromatic stacking interactions. Journal of Colloid and Interface Science, 2021, 582, 1-11.	5.0	19
75	Optimization of Extraction Process of Crude Protein from Grape Seeds by RSM. Food Science and Technology Research, 2011, 17, 437-445.	0.3	18
76	A novel strategy of natural plant ferritin to protect DNA from oxidative damage during iron oxidation. Free Radical Biology and Medicine, 2012, 53, 375-382.	1.3	18
77	Disulfide-mediated reversible two-dimensional self-assembly of protein nanocages. Chemical Communications, 2019, 55, 7510-7513.	2.2	18
78	Phosphate facilitates Fe(II) oxidative deposition in pea seed (PisumÂsativum) ferritin. Biochimie, 2009, 91, 1475-1481.	1.3	17
79	Effects of microwave and ultrasonic wave treatment on inactivation of <i>Alicyclobacillus</i>. International Journal of Food Science and Technology, 2010, 45, 459-465.	1.3	16
80	Phytoferritin Association Induced by EGCG Inhibits Protein Degradation by Proteases. Plant Foods for Human Nutrition, 2014, 69, 386-391.	1.4	16
81	Design and site-directed compartmentalization of gold nanoclusters within the intrasubunit interfaces of ferritin nanocage. Journal of Nanobiotechnology, 2019, 17, 79.	4.2	16
82	AB loop engineered ferritin nanocages for drug loading under benign experimental conditions. Chemical Communications, 2019, 55, 12344-12347.	2.2	15
83	Zinc homeostasis and regulation: Zinc transmembrane transport through transporters. Critical Reviews in Food Science and Nutrition, 2023, 63, 7627-7637.	5.4	14
84	Purification and characterization of a new 11S globulin-like protein from grape (Vitis vinifera L.) seeds. European Food Research and Technology, 2010, 230, 693-699.	1.6	13
85	Thermal Treatment Greatly Improves Storage Stability and Monodispersity of Pea Seed Ferritin. Journal of Food Science, 2019, 84, 1188-1193.	1.5	13
86	Protein interface redesign facilitates the transformation of nanocage building blocks to 1D and 2D nanomaterials. Nature Communications, 2021, 12, 4849.	5.8	13
87	Characterization of a new yellow pigment from model reaction system related to garlic greening. European Food Research and Technology, 2010, 230, 973-979.	1.6	12
88	Purification and characterization of new phytoferritin from black bean (Phaseolus vulgaris L.) seed. Journal of Biochemistry, 2010, 147, 679-688.	0.9	12
89	Hyperthermostability of prawn ferritin nanocage facilitates its application as a robust nanovehicle for nutraceuticals. International Journal of Biological Macromolecules, 2021, 191, 152-160.	3.6	12
90	Isolation and characterization of a new phytoferritin from broad bean (Vicia faba) seed with higher stability compared to pea seed ferritin. Food Research International, 2012, 48, 271-276.	2.9	11

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91	The interaction of DNA with phytoferritin during iron oxidation. Food Chemistry, 2014, 153, 292-297.	4.2	11
92	Zn2+ rather than Ca2+ or Mg2+ used as a cofactor in non-muscular actin from the oyster to control protein polymerization. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 4179-4188.	1.1	10
93	Synthesis and DNA-binding properties of binuclear platinum complexes with two trans-[Pt(NH3)2Cl]+ units bridged by 4,4?-dipyridyl sulfide or selenide. Transition Metal Chemistry, 2004, 29, 607-612.	0.7	9
94	Self-assembly of the sodium salts of fatty acids into limpid hydrogels through non-covalent interactions with peptides. RSC Advances, 2015, 5, 61719-61724.	1.7	9
95	Re-designing ferritin nanocages for mercuric ion detection. Analyst, The, 2019, 144, 5890-5897.	1.7	9
96	Self-assembly of engineered protein nanocages into reversible ordered 3D superlattices mediated by zinc ions. Chemical Communications, 2019, 55, 11299-11302.	2.2	9
97	Ferritin with Atypical Ferroxidase Centers Takes B-Channels as the Pathway for Fe²⁺ Uptake from <i>Mycoplasma</i>. Inorganic Chemistry, 2021, 60, 7207-7216.	1.9	9
98	Weak Binding of Epigallocatechin to Î±-Lactalbumin Greatly Improves Its Stability and Uptake by Caco-2 Cells. Journal of Agricultural and Food Chemistry, 2021, 69, 8482-8491.	2.4	9
99	Structural Insights for the Stronger Ability of Shrimp Ferritin to Coordinate with Heavy Metal Ions as Compared to Human H-Chain Ferritin. International Journal of Molecular Sciences, 2021, 22, 7859.	1.8	9
100	Shrimp ferritin greatly improves the physical and chemical stability of astaxanthin. Journal of Food Science, 2021, 86, 5295-5306.	1.5	9
101	PM1-loaded recombinant human H-ferritin nanocages: A novel pH-responsive sensing platform for the identification of cancer cells. International Journal of Biological Macromolecules, 2022, 199, 223-233.	3.6	9
102	Effects of Inhibitory Environmental Factors on Growth of<i>Oenococcus oeni</i>CCSYU2068 for Malolactic Fermentation of Cider Production. Journal of the Institute of Brewing, 2005, 111, 223-228.	0.8	8
103	Converting histidine-induced 3D protein arrays in crystals into their 3D analogues in solution by metal coordination cross-linking. Communications Chemistry, 2020, 3, .	2.0	8
104	Chicoric acid encapsulated within ferritin inhibits tau phosphorylation by regulating AMPK and GluT1 signaling cascade. Journal of Functional Foods, 2021, 86, 104681.	1.6	8
105	Iron Release from Soybean Seed Ferritin Induced by Cinnamic Acid Derivatives. Pharmaceuticals, 2018, 11, 39.	1.7	7
106	Ways to enhance the bioavailability of polyphenols in the brain: A journey through the blood-brain barrier. Food Reviews International, 2022, 38, 812-828.	4.3	7
107	Construction of thermally robust and porous shrimp ferritin crystalline for molecular encapsulation through intermolecular arginine-arginine attractions. Food Chemistry, 2021, 349, 129089.	4.2	7
108	Binding of Chloroquine to Whey Protein Relieves Its Cytotoxicity while Enhancing Its Uptake by Cells. Journal of Agricultural and Food Chemistry, 2021, 69, 10669-10677.	2.4	7

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109	The Change in the Structure and Functionality of Ferritin during the Production of Pea Seed Milk. Foods, 2022, 11, 557.	1.9	7
110	A novel homopolymeric phytoferritin from chickpea seeds with high stability. European Food Research and Technology, 2014, 239, 777-783.	1.6	6
111	Structural comparison between the DNA-protective ability of scallop and shrimp ferritin from iron-induced oxidative damage. Food Chemistry, 2022, 386, 132827.	4.2	6
112	Effect on garlic greening and thermal stability of 1-(2â€²-hydroxybenzene-1â€²-carboxy-ethyl) pyrrole. European Food Research and Technology, 2011, 232, 389-395.	1.6	4
113	Binding properties of apoferritin to nicotinamide and calcium. European Food Research and Technology, 2012, 235, 893-899.	1.6	4
114	Self-assembly of NH2-(Î±,l-lysine)5-COOH and SDS into nanodiscs or nanoribbons regulated by pH. Chemical Communications, 2014, 50, 9943-9946.	2.2	4
115	Construction of alginate beads for efficient conversion of CO2 into vaterite CaCO3 particles. Food Hydrocolloids, 2022, 130, 107693.	5.6	4
116	Deuterium isotope effects on iron core formation in ferritin. Hyperfine Interactions, 2007, 165, 333-338.	0.2	3
117	Conversion of the Native 24â€mer Ferritin Nanocage into Its Nonâ€Native 16â€mer Analogue by Insertion of Extra Amino Acid Residues. Angewandte Chemie, 2016, 128, 16298-16304.	1.6	3
118	Isolation and characterisation of tropomyosin from shrimp (Penaeus vannamei Boone) and its association property at high ionic strength. Natural Product Research, 2016, 30, 115-119.	1.0	3
119	A short helix regulates conversion of dimeric and 24-meric ferritin architectures. International Journal of Biological Macromolecules, 2022, 203, 535-542.	3.6	3
120	Synthesis and characterization of novel sulfur-containing 2-(1H-pyrrolyl) carboxylic acids and their effects on garlic greening. European Food Research and Technology, 2010, 231, 555-561.	1.6	2
121	Different effects of temperature on supramolecular protein and non-protein materials in hydrogen storage. International Journal of Hydrogen Energy, 2013, 38, 991-998.	3.8	2
122	Physicochemical and Functional Properties of Chinese Jujube (<i>ziziphus jujube</i> mill.) Seeds Protein Concentrate. Food Science and Technology Research, 2015, 21, 95-102.	0.3	2
123	Structure, Function, and Nutrition of Ferritin from Foodstuffs. , 2017, , 1-31.		2
124	Designing Stacked Assembly of Type III Rubisco for CO₂ Fixation with Higher Efficiency. Journal of Agricultural and Food Chemistry, 2022, 70, 7049-7057.	2.4	2
125	Nanomaterials: The Size Flexibility of Ferritin Nanocage Opens a New Way to Prepare Nanomaterials (Small 37/2017). Small, 2017, 13, .	5.2	1
126	Reversible structure transformation between protein nanocages and nanorods controlled by small molecules. Chemical Communications, 2021, 57, 12996-12999.	2.2	1

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127	Characterization and the Immune Regulation Activities in Vitro of Se-GL-P, an Antioxidant Selenium-Containing Protein from Se-Enriched Ganoderma Lucidum Mushroom. , 2008, , .		0
128	Purification and characterization of a new 11S globulin-like protein from Chinese jujube (Ziziphus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.6	0
129	Structure, Function, and Nutrition of Zinc-Containing Proteins in Foodstuffs. , 2017, , 63-88.		0
130	Roles of homopolymeric apoferritin in alleviating alcohol-induced liver injury. Food Bioscience, 2022, , 101794.	2.0	0