Zhongyu Yang

List of Publications by Year
in descending order

67 papers	3,133 citations	186265 28 h-index	161849 54 g-index
70 all docs	70 docs citations	70 times ranked	3712 citing authors

#	Article	IF	Citations
1	Design, synthesis and characterization of lysozymeâ€“gentisic acid dual-functional conjugates with antibacterial/antioxidant activities. Food Chemistry, 2022, 370, 131032.	8.2	15
2	Structure characteristics and functionality of water-soluble fraction from high-intensity ultrasound treated pea protein isolate. Food Hydrocolloids, 2022, 125, 107409.	10.7	46
3	Oriented Twoâ€Dimensional Covalent Organic Framework Membranes with High Ion Flux and Smart Gating Nanofluidic Transport. Angewandte Chemie, 2022, 134, .	2.0	10
4	Oriented Twoâ€Dimensional Covalent Organic Framework Membranes with High Ion Flux and Smart Gating Nanofluidic Transport. Angewandte Chemie - International Edition, 2022, 61, .	13.8	50
5	Modification of Î²-lactoglobulin by phenolic conjugations: Protein structural changes and physicochemical stabilities of stripped hemp oil-in-water emulsions stabilized by the conjugates. Food Hydrocolloids, 2022, 128, 107578.	10.7	10
6	Maximizing the applicability of continuous wave (CW) Electron Paramagnetic Resonance (EPR): what more can we do after a century?. Journal of Magnetic Resonance Open, 2022, 10-11, 100060.	1.1	3
7	Lipid bilayer induces contraction of the denatured state ensemble of a helical-bundle membrane protein. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	9
8	Singleâ€Pore versus Dualâ€Pore Bipyridineâ€Based Covalentâ€“Organic Frameworks: An Insight into the Heterogeneous Catalytic Activity for Selective Cï£¿H Functionalization. Small, 2021, 17, e2003970.	10.0	25
9	One-pot synthesis of enzyme@metalâ€“organic material (MOM) biocomposites for enzyme biocatalysis. Green Chemistry, 2021, 23, 4466-4476.	9.0	25
10	Emerging applications of site-directed spin labeling electron paramagnetic resonance (SDSL-EPR) to study food protein structure, dynamics, and interaction. Trends in Food Science and Technology, 2021, 109, 37-50.	15.1	8
11	Different Single-Enzyme Conformational Dynamics upon Binding Hydrolyzable or Nonhydrolyzable Ligands. Journal of Physical Chemistry B, 2021, 125, 5750-5756.	2.6	5
12	Covalentâ€“Organic Frameworks: Singleâ€Pore versus Dualâ€Pore Bipyridineâ€Based Covalentâ€“Organic Frameworks: An Insight into the Heterogeneous Catalytic Activity for Selective Cï£¿H Functionalization (Small 22/2021). Small, 2021, 17, 2170109.	10.0	2
13	A general Ca-MOM platform with enhanced acid-base stability for enzyme biocatalysis. Chem Catalysis, 2021, 1, 146-161.	6.1	26
14	Site-directed spin labeling-electron paramagnetic resonance spectroscopy in biocatalysis: Enzyme orientation and dynamics in nanoscale confinement. Chem Catalysis, 2021, 1, 207-231.	6.1	17
15	Mono-/Bimetallic Neutral Iridium(III) Complexes Bearing Diketopyrrolopyrrole-Substituted N-Heterocyclic Carbene Ligands: Synthesis and Photophysics. Inorganic Chemistry, 2021, 60, 15278-15290.	4.0	9
16	Protocol for resolving enzyme orientation and dynamics in advanced porous materials via SDSL-EPR. STAR Protocols, 2021, 2, 100676.	1.2	15
17	In situ monitoring of protein transfer into nanoscale channels. Cell Reports Physical Science, 2021, 2, 100576.	5.6	12
18	Cascade/Parallel Biocatalysis via Multi-enzyme Encapsulation on Metalâ€“Organic Materials for Rapid and Sustainable Biomass Degradation. ACS Applied Materials & Interfaces, 2021, 13, 43085-43093.	8.0	9

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19	Optimization and validation of in-situ derivatization and headspace solid-phase microextraction for gas chromatographyâ€“mass spectrometry analysis of 3-MCPD esters, 2-MCPD esters and glycidyl esters in edible oils via central composite design. Food Chemistry, 2020, 307, 125542.	8.2	20
20	A Mixedâ€Metal Porphyrinic Framework Promoting Gasâ€Phase CO₂ Photoreduction without Organic Sacrificial Agents. ChemSusChem, 2020, 13, 6273-6277.	6.8	26
21	Size-Tunable Metalâ€“Organic Framework-Coated Magnetic Nanoparticles for Enzyme Encapsulation and Large-Substrate Biocatalysis. ACS Applied Materials & Interfaces, 2020, 12, 41794-41801.	8.0	47
22	Conjugation of Pea Protein Isolate via Maillard-Driven Chemistry with Saccharide of Diverse Molecular Mass: Molecular Interactions Leading to Aggregation or Glycation. Journal of Agricultural and Food Chemistry, 2020, 68, 10157-10166.	5.2	20
23	Protein Detection Using Quadratic Fit Analysis near the Dirac Point of Graphene Field-Effect Biosensors. ACS Applied Electronic Materials, 2020, 2, 913-919.	4.3	10
24	Spatial Distribution and Solvent Polarity-Triggered Release of a Polypeptide Incorporated into Invertible Micellar Assemblies. ACS Applied Materials & Interfaces, 2020, 12, 12075-12082.	8.0	4
25	Enzyme Immobilization on Graphite Oxide (GO) Surface via One-Pot Synthesis of GO/Metalâ€“Organic Framework Composites for Large-Substrate Biocatalysis. ACS Applied Materials & Interfaces, 2020, 12, 23119-23126.	8.0	45
26	A sulfonated mesoporous silica nanoparticle for enzyme protection against denaturants and controlled release under reducing conditions. Journal of Colloid and Interface Science, 2019, 556, 292-300.	9.4	12
27	Iridium complex immobilization on covalent organic framework for effective Câ€"H borylation. APL Materials, 2019, 7, .	5.1	24
28	Gum Arabic-Mediated Synthesis of Glyco-pea Protein Hydrolysate via Maillard Reaction Improves Solubility, Flavor Profile, and Functionality of Plant Protein. Journal of Agricultural and Food Chemistry, 2019, 67, 10195-10206.	5.2	46
29	Improving Antioxidant Activity of Î²-Lactoglobulin by Nature-Inspired Conjugation with Gentisic Acid. Journal of Agricultural and Food Chemistry, 2019, 67, 11741-11751.	5.2	25
30	Enhancing Enzyme Immobilization on Carbon Nanotubes via Metalâ€“Organic Frameworks for Large-Substrate Biocatalysis. ACS Applied Materials & Interfaces, 2019, 11, 12133-12141.	8.0	82
31	From Fragile Plastic to Room-Temperature Self-Healing Elastomer: Tuning Quadruple Hydrogen Bonding Interaction through One-Pot Synthesis. ACS Applied Polymer Materials, 2019, 1, 425-436.	4.4	38
32	Vanadium Docked Covalent-Organic Frameworks: An Effective Heterogeneous Catalyst for Modified Mannich-Type Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 4878-4888.	6.7	46
33	Mapping out the Degree of Freedom of Hosted Enzymes in Confined Spatial Environments. CheM, 2019, 5, 3184-3195.	11.7	62
34	Covalent Organic Framework Decorated with Vanadium as a New Platform for Prins Reaction and Sulfide Oxidation. ACS Applied Materials & Interfaces, 2019, 11, 3070-3079.	8.0	66
35	Insights on the Structure, Molecular Weight and Activity of an Antibacterial Proteinâ€“Polymer Hybrid. ChemPhysChem, 2018, 19, 651-658.	2.1	8
36	How Do Enzymes Orient When Trapped on Metalâ€“Organic Framework (MOF) Surfaces?. Journal of the American Chemical Society, 2018, 140, 16032-16036.	13.7	138

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37	Inversion of Polymeric Micelles Probed by Spin Labeled Peptide Incorporation and Electron Paramagnetic Resonance. Journal of Physical Chemistry C, 2018, 122, 25692-25699.	3.1	13
38	Superfast and Reversible Thermoresponse of Poly(<i>N</i>-isopropylacrylamide) Hydrogels Grafted on Macroporous Poly(vinyl alcohol) Formaldehyde Sponges. ACS Applied Materials & Interfaces, 2018, 10, 32747-32759.	8.0	17
39	Real-time tracking of single-molecule collagenase on native collagen and partially structured collagen-mimic substrates. Chemical Communications, 2018, 54, 10248-10251.	4.1	1
40	Engineering Proteinâ€“Gold Nanoparticle/Nanorod Complexation via Surface Modification for Protein Immobilization and Potential Therapeutic Applications. ACS Applied Nano Materials, 2018, 1, 4053-4063.	5.0	16
41	Probing the structural basis and adsorption mechanism of an enzyme on nano-sized protein carriers. Nanoscale, 2017, 9, 3512-3523.	5.6	34
42	Probing the Aggregation Mechanism of Gold Nanoparticles Triggered by a Globular Protein. Journal of Physical Chemistry C, 2017, 121, 1377-1386.	3.1	43
43	Analysis of Saturation Recovery Amplitudes to Characterize Conformational Exchange in Spin-Labeled Proteins. Applied Magnetic Resonance, 2017, 48, 1315-1340.	1.2	3
44	Spinâ€labeling of polymeric micelles and application in probing micelle swelling using EPR spectroscopy. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 1770-1782.	2.1	14
45	The structure and dynamics of secretory component and its interactions with polymeric immunoglobulins. ELife, 2016, 5, .	6.0	86
46	A triarylmethyl spin label for long-range distance measurement at physiological temperatures using T 1 relaxation enhancement. Journal of Magnetic Resonance, 2016, 269, 50-54.	2.1	50
47	Conformational Mobility in Cytochrome P450 3A4 Explored by Pressure-Perturbation EPR Spectroscopy. Biophysical Journal, 2016, 110, 1485-1498.	0.5	25
48	Knockdown of delta-5-desaturase promotes the anti-cancer activity of dihomo-Î³-linolenic acid and enhances the efficacy of chemotherapy in colon cancer cells expressing COX-2. Free Radical Biology and Medicine, 2016, 96, 67-77.	2.9	26
49	Biophysical and Biochemical Characterization of Avian Secretory Component Provides Structural Insights into the Evolution of the Polymeric Ig Receptor. Journal of Immunology, 2016, 197, 1408-1414.	0.8	17
50	Steric trapping reveals a cooperativity network in the intramembrane protease GlpG. Nature Chemical Biology, 2016, 12, 353-360.	8.0	45
51	Conformational Flexibility Enables the Function of a BECN1 Region Essential for Starvation-Mediated Autophagy. Biochemistry, 2016, 55, 1945-1958.	2.5	28
52	Conformational Flexibility Enables Function of a BECN1 Region Essential for Starvationâ€Mediated Autophagy. FASEB Journal, 2016, 30, 1062.6.	0.5	0
53	Saturation Recovery EPR and Nitroxide Spin Labeling for Exploring Structure and Dynamics in Proteins. Methods in Enzymology, 2015, 564, 3-27.	1.0	15
54	High-Pressure EPR and Site-Directed Spin Labeling for Mapping Molecular Flexibility in Proteins. Methods in Enzymology, 2015, 564, 29-57.	1.0	11

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55	Cu2+ as an ESR Probe of Protein Structure and Function. Methods in Enzymology, 2015, 563, 459-481.	1.0	19
56	Structural basis for nucleotide exchange in heterotrimeric G proteins. Science, 2015, 348, 1361-1365.	12.6	250
57	Structure-relaxation mechanism for the response of T4 lysozyme cavity mutants to hydrostatic pressure. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2437-46.	7.1	36
58	Structural Insights into the Dynamic Process of Î² 2 -Adrenergic Receptor Signaling. Cell, 2015, 161, 1101-1111.	28.9	562
59	Long-Range Distance Measurements in Proteins at Physiological Temperatures Using Saturation Recovery EPR Spectroscopy. Journal of the American Chemical Society, 2014, 136, 15356-15365.	13.7	43
60	Mapping protein conformational heterogeneity under pressure with site-directed spin labeling and double electronâ€“electron resonance. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1201-10.	7.1	40
61	Technological advances in site-directed spin labeling of proteins. Current Opinion in Structural Biology, 2013, 23, 725-733.	5.7	262
62	Conformational selection and adaptation to ligand binding in T4 lysozyme cavity mutants. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E4306-15.	7.1	46
63	ESR spectroscopy identifies inhibitory Cu ²⁺ sites in a DNA-modifying enzyme to reveal determinants of catalytic specificity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E993-1000.	7.1	70
64	Pulsed ESR Dipolar Spectroscopy for Distance Measurements in Immobilized Spin Labeled Proteins in Liquid Solution. Journal of the American Chemical Society, 2012, 134, 9950-9952.	13.7	179
65	Practical Aspects of Copper Ion-Based Double Electron Electron Resonance Distance Measurements. Applied Magnetic Resonance, 2010, 39, 487-500.	1.2	33
66	An Approach towards the Measurement of Nanometer Range Distances Based on Cu²⁺ Ions and ESR. Journal of Physical Chemistry B, 2010, 114, 6165-6174.	2.6	79
67	On Cu(II)â€“Cu(II) distance measurements using pulsed electron electron double resonance. Journal of Magnetic Resonance, 2007, 188, 337-343.	2.1	54