

# Weichun Pan

## List of Publications by Year in descending order

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Version: 2024-02-01

41  
papers

1,442  
citations

471371

17  
h-index

315616

38  
g-index

42  
all docs

42  
docs citations

42  
times ranked

1419  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | A Metastable Prerequisite for the Growth of Lumazine Synthase Crystals. <i>Journal of the American Chemical Society</i> , 2005, 127, 3433-3438.                                       | 6.6 | 136       |
| 2  | Nucleation of ordered solid phases of proteins via a disordered high-density state: Phenomenological approach. <i>Journal of Chemical Physics</i> , 2005, 122, 174905.                | 1.2 | 118       |
| 3  | Metastable Liquid Clusters in Super- and Undersaturated Protein Solutions. <i>Journal of Physical Chemistry B</i> , 2007, 111, 3106-3114.   | 1.2 | 112       |
| 4  | Metastable Mesoscopic Clusters in Solutions of Sickle-Cell Hemoglobin. <i>Biophysical Journal</i> , 2007, 92, 267-277.  | 0.2 | 110       |
| 5  | Two-Step Mechanism of Homogeneous Nucleation of Sickle Cell Hemoglobin Polymers. <i>Biophysical Journal</i> , 2007, 93, 902-913.  | 0.2 | 109       |
| 6  | Viscoelasticity in Homogeneous Protein Solutions. <i>Physical Review Letters</i> , 2009, 102, 058101.   | 2.9 | 97        |
| 7  | Origin of Anomalous Mesoscopic Phases in Protein Solutions. <i>Journal of Physical Chemistry B</i> , 2010, 114, 7620-7630.  | 1.2 | 95        |
| 8  | The characteristic and dispersion stability of nanocellulose produced by mixed acid hydrolysis and ultrasonic assistance. <i>Carbohydrate Polymers</i> , 2017, 165, 197-204.          | 5.1 | 91        |
| 9  | Structural characteristics and rheological properties of ovalbumin-gum arabic complex coacervates. <i>Food Chemistry</i> , 2018, 260, 1-6.  | 4.2 | 69        |
| 10 | Nucleation of Protein Crystals under the Influence of Solution Shear Flow. <i>Annals of the New York Academy of Sciences</i> , 2006, 1077, 214-231.                                   | 1.8 | 55        |
| 11 | Free Heme and the Polymerization of Sickle Cell Hemoglobin. <i>Biophysical Journal</i> , 2010, 99, 1976-1985.   | 0.2 | 40        |
| 12 | Physical and antimicrobial properties of thyme oil emulsions stabilized by ovalbumin and gum arabic. <i>Food Chemistry</i> , 2016, 212, 138-145.                                      | 4.2 | 36        |
| 13 | Characterization of structure and stability of emulsions stabilized with cellulose macro/nano particles. <i>Carbohydrate Polymers</i> , 2018, 199, 314-319.                           | 5.1 | 35        |
| 14 | Influence of the preparation method on the structure formed by ovalbumin/gum arabic to observe the stability of oil-in-water emulsion. <i>Food Hydrocolloids</i> , 2017, 63, 602-610. | 5.6 | 34        |
| 15 | Preparation, characterization and antibacterial activity of new ionized chitosan. <i>Carbohydrate Polymers</i> , 2022, 290, 119490.   | 5.1 | 30        |
| 16 | Preparation of ultra-long stable ovalbumin/sodium carboxymethylcellulose nanoparticle and loading properties of curcumin. <i>Carbohydrate Polymers</i> , 2021, 271, 118451.           | 5.1 | 29        |
| 17 | Salting-in effect on muscle protein extracted from giant squid ( <i>Dosidicus gigas</i> ). <i>Food Chemistry</i> , 2017, 215, 256-262.  | 4.2 | 25        |
| 18 | A predictive model for astringency based on in vitro interactions between salivary proteins and (âˆ’)-Epigallocatechin gallate. <i>Food Chemistry</i> , 2021, 340, 127845.            | 4.2 | 18        |

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|----|---|-----|-----------|
| 19 | Ovalbumin/carboxymethylcellulose colloids: Particle compactness and interfacial stability. <i>Food Chemistry</i> , 2022, 372, 131223.   | 4.2 | 16        |
| 20 | Control of the nucleation of sickle cell hemoglobin polymers by free hematin. <i>Faraday Discussions</i> , 2012, 159, 87.   | 1.6 | 15        |
| 21 | The application of diffusing wave spectroscopy (DWS) in soft foods. <i>Food Hydrocolloids</i> , 2019, 96, 671-680.  | 5.6 | 14        |
| 22 | Does Solution Viscosity Scale the Rate of Aggregation of Folded Proteins?. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1258-1263.   | 2.1 | 13        |
| 23 | Interactions between mucin and okra gum during pH cycling. <i>Food Hydrocolloids</i> , 2019, 95, 1-9.   | 5.6 | 13        |
| 24 | Properties of nano protein particle in solutions of myofibrillar protein extracted from giant squid ( <i>Dosidicus gigas</i> ). <i>Food Chemistry</i> , 2020, 330, 127254.                                      | 4.2 | 13        |
| 25 | Formation of $\beta$ -Lactoglobulin Self-Assemblies via Liquid-Liquid Phase Separation for Applications beyond the Biological Functions. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 46391-46405. | 4.0 | 12        |
| 26 | The influence of low frequency of external electric field on nucleation enhancement of hen egg-white lysozyme (HEWL). <i>Journal of Crystal Growth</i> , 2015, 428, 35-39.                                      | 0.7 | 11        |
| 27 | Molecular interactions between gelatin and mucin: Phase behaviour, thermodynamics and rheological studies. <i>Food Hydrocolloids</i> , 2020, 102, 105585.   | 5.6 | 11        |
| 28 | Free heme in micromolar amounts enhances the attraction between sickle cell hemoglobin molecules. <i>Biopolymers</i> , 2009, 91, 1108-1116.   | 1.2 | 10        |
| 29 | Crystal Growth of Hen Egg-White Lysozyme (HEWL) under Various Gravity Conditions. <i>Journal of Crystal Growth</i> , 2013, 377, 43-50.  | 0.7 | 10        |
| 30 | The role of glycerol on the thermal gelation of myofibrillar protein from giant squid ( <i>Dosidicus gigas</i> ). <i>Journal of Food Science</i> , 2021, 92, 1000-1005.   | 4.2 | 10        |
| 31 | Biologically-relevant interactions, phase separations and thermodynamics of chitosan-mucin binary systems. <i>Process Biochemistry</i> , 2020, 94, 152-163.   | 1.8 | 10        |
| 32 | Chemical physics of whey protein isolate in the presence of mucin: From macromolecular interactions to functionality. <i>International Journal of Biological Macromolecules</i> , 2020, 143, 573-581.           | 3.6 | 9         |
| 33 | Interfacial adsorption behavior of ovalbumin/ sodium carboxymethyl cellulose colloidal particles: The effects of preparation methods. <i>Food Hydrocolloids</i> , 2021, 120, 106969.                            | 5.6 | 9         |
| 34 | Structural characteristics and digestibility of bovine skin protein and corn starch extruded blend complexes. <i>Journal of Food Science and Technology</i> , 2020, 57, 1041-1048.                              | 1.4 | 7         |
| 35 | Thermodynamic mechanism of free heme action on sickle cell hemoglobin polymerization. <i>AIChE Journal</i> , 2015, 61, 2861-2870.   | 1.8 | 6         |
| 36 | Physicochemical properties of protein from pearling fractions of wheat kernels. <i>Cereal Chemistry</i> , 2020, 97, 1084-1092.  | 1.1 | 5         |

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|----|---|-----|-----------|
| 37 | The mesoscopic structure in wheat flour dough development. Journal of Cereal Science, 2020, 95, 103087.   | 1.8 | 3         |
| 38 | Changes in properties of nano protein particles (NPP) of fish muscle stored at 4°C and its application in food quality assessment. LWT - Food Science and Technology, 2022, 155, 112968.          | 2.5 | 3         |
| 39 | Microgravity influence on the instability of phase separation in protein solution. Applied Physics Letters, 2015, 107, 123701.  | 1.5 | 2         |
| 40 | Physical and chemical properties of soy protein isolates treated with sodium sulphite under low temperature extrusion. International Journal of Food Science and Technology, 2021, 56, 4559-4567. | 1.3 | 1         |
| 41 | Effect of microcrystalline cellulose under different hydrolysis durations on the stability of thyme oil emulsion. Journal of Food Science, 2022, , .  | 1.5 | 0         |