Richard D Ludescher

List of Publications by Year
in descending order

75 papers	1,609 citations	361413 20 h-index	330143 37 g-index
75 all docs	75 docs citations	75 times ranked	1532 citing authors

#	Article	IF	Citations
1	Fluorescence quenching study of resveratrol binding to zein and gliadin: Towards a more rational approach to resveratrol encapsulation using water-insoluble proteins. Food Chemistry, 2015, 185, 261-267.	8.2	262
2	Theory and applications of fluorescence spectroscopy in food research. Trends in Food Science and Technology, 1995, 6, 69-75.	15.1	89
3	Temperature- and Surfactant-Induced Membrane Modifications That Alter Listeria monocytogenes Nisin Sensitivity by Different Mechanisms. Applied and Environmental Microbiology, 2002, 68, 5904-5910.	3.1	71
4	Mean DNA Bend Angle and Distribution of DNA Bend Angles in the CAP-DNA Complex in Solution. Journal of Molecular Biology, 2001, 312, 453-468.	4.2	55
5	Complex photophysics of the single tryptophan of porcine pancreatic phospholipase A2, its zymogen, and an enzyme/micelle complex. Biochemistry, 1985, 24, 7240-7249.	2.5	52
6	Erythrosin B Phosphorescence Monitors Molecular Mobility and Dynamic Site Heterogeneity in Amorphous Sucrose. Biophysical Journal, 2005, 88, 3551-3561.	0.5	50
7	Microsecond rotational dynamics of phosphorescent-labeled muscle cross-bridges. Biochemistry, 1988, 27, 3343-3351.	2.5	47
8	Influence of glycerol on the molecular mobility, oxygen permeability and microstructure of amorphous zein films. Food Hydrocolloids, 2015, 44, 94-100.	10.7	47
9	Erythrosin B phosphorescence as a probe of oxygen diffusion in amorphous gelatin films. Food Hydrocolloids, 2004, 18, 621-630.	10.7	46
10	Molecular mobility in water and glycerol plasticized cold- and hot-cast gelatin films. Food Hydrocolloids, 2006, 20, 96-105.	10.7	43
11	Time-resolved rotational dynamics of phosphorescent-labeled myosin heads in contracting muscle fibers. Biochemistry, 1990, 29, 10023-10031.	2.5	40
12	Processing Stability of Squalene in Amaranth and Antioxidant Potential of Amaranth Extract. Journal of Agricultural and Food Chemistry, 2008, 56, 10675-10678.	5.2	39
13	Rotational dynamics of the single tryptophan of porcine pancreatic phospholipase A2, its zymogen, and an enzyme/micelle complex. A steady-state and time-resolved anisotropy study. Biochemistry, 1988, 27, 6618-6628.	2.5	34
14	Molecular mobility and the glass transition in amorphous glucose, maltose, and maltotriose. Carbohydrate Research, 2005, 340, 2654-2660.	2.3	31
15	Preparation and characterization of zein thermo-modified starch films. Carbohydrate Polymers, 2017, 157, 1254-1260.	10.2	31
16	Effects of glycerol on the molecular mobility and hydrogen bond network in starch matrix. Carbohydrate Polymers, 2015, 115, 401-407.	10.2	30
17	Effect of plasticizer on dynamic site heterogeneity in cold-cast gelatin films. Food Hydrocolloids, 2006, 20, 88-95.	10.7	29
18	INFLUENCE OF HYDRATION ON THE INTERNAL DYNAMICS OF HEN EGG WHITE LYSOZYME IN THE DRY STATE. Photochemistry and Photobiology, 1993, 58, 169-174.	2.5	26

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19	Molecular Mobility in Amorphous Maltose and Maltitol from Phosphorescence of Erythrosin B. Journal of Physical Chemistry B, 2005, 109, 16119-16126.	2.6	22
20	Assessment of Oral Bioavailability and Biotransformation of Emulsified Nobiletin Using <i>In Vitro</i> and <i>In Vivo</i> Models. Journal of Agricultural and Food Chemistry, 2020, 68, 11412-11420.	5.2	22
21	Influence of Tightly Bound Mg2+and Ca2+, Nucleotides, and Phalloidin on the Microsecond Torsional Flexibility of F-Actinâ€. Biochemistry, 1998, 37, 14529-14538.	2.5	21
22	Differential Mobility of Skeletal and Cardiac Tropomyosin on the Surface of F-Actinâ€. Biochemistry, 1999, 38, 9286-9294.	2.5	21
23	Phosphorescence Probes of the Glassy State in Amorphous Sucrose. Biotechnology Progress, 1995, 11, 540-544.	2.6	20
24	Syntheses of optically efficient (La1âˆ’xâˆ’yCexTby)F3 nanocrystals via a hydrothermal method. Journal of Luminescence, 2010, 130, 1076-1084.	3.1	20
25	Monitoring Molecular Oxygen Depletion in Wheat Flour Dough Using Erythrosin B Phosphorescence: A Biophysical Approach. Food Biophysics, 2012, 7, 138-144.	3.0	20
26	Fluorescence Spectroscopy as a Tool to Unravel the Dynamics of Protein Nanoparticle Formation by Liquid Antisolvent Precipitation. Food Biophysics, 2017, 12, 211-221.	3.0	20
27	Room Temperature Phosphorescence from Tryptophan and Halogenated Tryptophan Analogs in Amorphous Sucrose. Photochemistry and Photobiology, 1999, 70, 166-171.	2.5	18
28	Native Fluorescence from Juvenile Stages of Common Food Storage Insects. Journal of Agricultural and Food Chemistry, 2003, 51, 544-549.	5.2	18
29	Dynamic site heterogeneity in amorphous maltose and maltitol from spectral heterogeneity in erythrosin B phosphorescence. Carbohydrate Research, 2005, 340, 2661-2669.	2.3	17
30	The effect of sodium chloride on molecular mobility in amorphous sucrose detected by phosphorescence from the triplet probe erythrosin B. Carbohydrate Research, 2008, 343, 350-363.	2.3	17
31	Microsecond Rotational Dynamics of F-Actin in ActoS1 Filaments during ATP Hydrolysis. Biochemistry, 1994, 33, 9098-9104.	2.5	16
32	Molecular mobility and oxygen permeability in amorphous Î²-lactoglobulin films. Food Hydrocolloids, 2008, 22, 403-413.	10.7	16
33	Antioxidants Modulate Molecular Mobility, Oxygen Permeability, and Microstructure in Zein Films. Journal of Agricultural and Food Chemistry, 2011, 59, 13173-13180.	5.2	16
34	Molecular Mobility and Oxygen Permeability in Amorphous Bovine Serum Albumin Films. Food Biophysics, 2006, 1, 151-162.	3.0	15
35	The Effect of Molecular Size on Molecular Mobility in Amorphous Oligosaccharides. Food Biophysics, 2010, 5, 82-93.	3.0	15
36	Effect of additives on physicochemical properties in amorphous starch matrices. Food Chemistry, 2015, 171, 298-305.	8.2	14

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37	Effect of bolus viscosity on carbohydrate digestion and glucose absorption processes: An <i>in vitro</i> study. Physics of Fluids, 2019, 31, .	4.0	14
38	Effect of Encapsulation Process on Technological Functionality and Stability of Spirulina Platensis Extract. Food Biophysics, 2020, 15, 50-63.	3.0	14
39	Phosphorescence of Erythrosin B as a Robust Probe of Molecular Mobility in Amorphous Solid Sucrose. Applied Spectroscopy, 2006, 60, 813-819.	2.2	13
40	CHARACTERIZATION OF SKELETAL MUSCLE ACTIN LABELED WITH THE TRIPLET PROBE ERYTHROSIN-5-IODOACETAMIDE. Photochemistry and Photobiology, 1993, 58, 858-866.	2.5	12
41	Molecular mobility and dynamic site heterogeneity in amorphous lactose and lactitol from erythrosin B phosphorescence. Biophysical Chemistry, 2006, 123, 122-133.	2.8	12
42	The effect of salts on molecular mobility in amorphous sucrose monitored by erythrosin B phosphorescence. Carbohydrate Research, 2008, 343, 2641-2649.	2.3	11
43	Total Phenolics and Antioxidant Capacity of Cocoa Pulp: Processing and Storage Study. Journal of Food Processing and Preservation, 2017, 41, e13029.	2.0	11
44	Potential applications of luminescent molecular rotors in food science and engineering. Critical Reviews in Food Science and Nutrition, 2018, 58, 1902-1916.	10.3	11
45	The Effect of Glycerol on Molecular Mobility in Amorphous Sucrose Detected by Phosphorescence of Erythrosin B. Food Biophysics, 2007, 2, 133-145.	3.0	10
46	Effect of gelatin on molecular mobility in amorphous sucrose detected by erythrosin B phosphorescence. Carbohydrate Research, 2008, 343, 2657-2666.	2.3	10
47	Identifying and selecting edible luminescent probes as sensors of food quality. AIMS Biophysics, 2016, 3, 319-339.	0.6	10
48	Tryptophan fluorescence quenching in rabbit skeletal myosin rod. Biophysical Chemistry, 1993, 48, 49-59.	2.8	9
49	Differential Dynamic Behavior of Actin Filaments Containing Tightly-Bound Ca2+or Mg2+in the Presence of Myosin Heads Actively Hydrolyzing ATPâ€. Biochemistry, 1999, 38, 13288-13295.	2.5	9
50	Effect of Xanthan on the Molecular Mobility of Amorphous Sucrose Detected by Erythrosin B Phosphorescence. Journal of Agricultural and Food Chemistry, 2009, 57, 709-716.	5.2	9
51	Photophysical Probes of the Amorphous Solid State of Proteins. Food Biophysics, 2010, 5, 337-345.	3.0	9
52	Degradation kinetics of C-Phycocyanin under isothermal and dynamic thermal treatments. Food Chemistry, 2022, 382, 132266.	8.2	9
53	Tryptophan photophysics in rabbit skeletal myosin rod. Biophysical Chemistry, 1994, 49, 113-126.	2.8	8
54	STEADY-STATE OPTICAL POLARIZATION ANISOTROPY OF RODLIKE MOLECULES UNDERGOING TORSIONAL TWISTING MOTIONS. Photochemistry and Photobiology, 1993, 58, 881-883.	2.5	7

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55	Molecular mobility in a homologous series of amorphous solid glucose oligomers. Food Chemistry, 2012, 132, 1814-1821.	8.2	7
56	Making sense of luminescence from GRAS optical probes. Current Opinion in Food Science, 2015, 4, 25-31.	8.0	7
57	Standard reference for instrument response function in fluorescence lifetime measurements in visible and near infrared. Measurement Science and Technology, 2016, 27, 027001.	2.6	7
58	Vanillin Phosphorescence as a Probe of Molecular Mobility in Amorphous Sucrose. Journal of Fluorescence, 2010, 20, 125-133.	2.5	6
59	Effect of Starch on the Molecular Mobility of Amorphous Sucrose. Journal of Agricultural and Food Chemistry, 2011, 59, 3340-3347.	5.2	6
60	Tryptophan Fluorescence Yields and Lifetimes as a Probe of Conformational Changes in Human Glucokinase. Journal of Fluorescence, 2017, 27, 1621-1631.	2.5	6
61	Influence of glycerol on molecular mobility and hydrogen bond network in amorphous glucose matrix. Carbohydrate Research, 2012, 361, 120-126.	2.3	5
62	Revisiting Time-Resolved Protein Phosphorescence. Applied Spectroscopy, 2015, 69, 1074-1081.	2.2	4
63	Potential Use of Food Synthetic Colors as Intrinsic Luminescent Probes of the Physical State of Foods. ACS Symposium Series, 2015, , 253-267.	0.5	4
64	Molecular dynamics of food proteins: experimental techniques and observations. Trends in Food Science and Technology, 1990, 1, 145-149.	15.1	3
65	Effect of temperature on molecular mobility, oxygen permeability, and dynamic site heterogeneity in amorphous Î±-lactalbumin films. Food Hydrocolloids, 2013, 31, 357-364.	10.7	3
66	Influence of antioxidant structure on local molecular mobility in amorphous sucrose. Carbohydrate Research, 2014, 383, 14-20.	2.3	3
67	<title>Quenching of tryptophan fluorescence in skeletal myosin rod</title>. , 1992, , .		2
68	Phosphorescence from tryptophan and tryptophan analogs in the solid state. , 1998, , .		2
69	Solvent-Slaved Dynamic Processes Observed by Tryptophan Phosphorescence of Human Serum Albumin. Biophysical Journal, 2017, 112, 881-891.	0.5	2
70	Luminescence Spectroscopy â€“ a Useful Tool in Real-Time Monitoring of Viscosity during In-Vitro Digestion. Food Biophysics, 2021, 16, 181-190.	3.0	2
71	Analysis of the Conformational Stability of the Active Domain of Recombinant Mouse TIMP-1 by Intrinsic Fluorescence. Biochemical and Biophysical Research Communications, 1998, 242, 303-309.	2.1	1
72	Molecular Mobility in Amorphous Sucrose Films Monitored by Riboflavin Phosphorescence - Potential Applications in Edible/Biodegradable Films. Biophysical Journal, 2015, 108, 621a.	0.5	1

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73	<title>Temperature dependence of tryptophan photophysics in rabbit skeletal myosin rod</title>. , 1994, , .		0
74	Phosphorescence Spectroscopy as a Probe of the Glassy State in Amorphous Solids. , 2003, , .		0
75	Temperature-dependence of riboflavin phosphorescence in cryosolvents. Food Chemistry, 2022, 376, 131928.	8.2	0