

# Erich J Windhab

## List of PR Articles by Year in descending order

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95

PR articles

3,487

PR citations

103993

32

PR h-index

114138

57

g-index

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documents

3856

doc citations

114578

33

h-index

3828

citing authors

#	ARTICLE	IF	PR CITATIONS
1	Valorization of cocoa pod side streams improves nutritional and sustainability aspects of chocolate. <i>Nature Food</i> , 2024, 5, 423-432.	17.1	9
2	Impact of microplastic pollution on breaking waves. <i>Physics of Fluids</i> , 2024, 36, .	3.8	6
3	The rheology and foamability of crystal-melt suspensions composed of triacylglycerols. <i>Soft Matter</i> , 2022, 18, 1183-1193.	2.7	5
4	Crust treatments to reduce bread staling. <i>Current Research in Food Science</i> , 2021, 4, 182-190.	6.5	27
5	Influence of local convective heat flux on solidification, contraction and wall detachment behavior of molded chocolate during air cooling. <i>Innovative Food Science and Emerging Technologies</i> , 2021, 68, 102629.	6.8	6
6	Fabrication of a Novel Protein Sponge with Dual-Scale Porosity and Mixed Wettability Using a Clean and Versatile Microwave-Based Process. <i>Materials</i> , 2021, 14, 2298.	2.9	4
7	Influence of Amylase Addition on Bread Quality and Bread Staling. <i>ACS Food Science &amp; Technology</i> , 2021, 1, 1143-1150.	2.9	40
8	Physiological fluid interfaces: Functional microenvironments, drug delivery targets, and first line of defense. <i>Acta Biomaterialia</i> , 2021, 130, 32-53.	9.4	33
9	Rheology of cocoa butter. <i>Journal of Food Engineering</i> , 2021, 305, 110598.	6.1	12
10	Entrance flow of unfoamed and foamed Herschelâ€“Bulkley fluids. <i>Journal of Rheology</i> , 2021, 65, 1155-1168.	2.9	16
11	Filter-less separation technique for micronized anthropogenic polymers from artificial seawater. <i>Environmental Science: Water Research and Technology</i> , 2021, 7, 2372-2380.	1.8	4
12	Extruded meat analogues based on yellow, heterotrophically cultivated <i>Auxenochlorella protothecoides</i> microalgae. <i>Innovative Food Science and Emerging Technologies</i> , 2020, 59, 102275.	6.8	186
13	The Effect of Wet Milling and Cryogenic Milling on the Structure and Physicochemical Properties of Wheat Bran. <i>Foods</i> , 2020, 9, 1755.	4.7	27
14	Crystallization-Induced Network Formation of Tri- and Monopalmitin at the Middle-Chain Triglyceride Oil/Air Interface. <i>Langmuir</i> , 2020, 36, 7566-7572.	3.8	34
15	Enzymatic cross-linking of pectin in a high-pressure foaming process. <i>Food and Function</i> , 2020, 11, 2040-2047.	5.4	12
16	Yield Stress Dependent Foaming of Edible Crystal-Melt Suspensions. <i>Crystal Growth and Design</i> , 2020, 20, 1292-1301.	3.4	35
17	Chia seed mucilage â€“ a vegan thickener: isolation, tailoring viscoelasticity and rehydration. <i>Food and Function</i> , 2019, 10, 4854-4860.	5.4	65
18	Impact of airflow on the heat transfer conditions inside an oven cavity, characterized using particle imaging velocimetry. <i>Physics of Fluids</i> , 2019, 31, 107109.	3.8	3

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19	Effect of foaming on mechanical properties of microfibrillated cellulose-based porous solids. <i>Cellulose</i> , 2019, 26, 2487-2497.	4.5	7
20	Development of Smart Optical Gels with Highly Magnetically Responsive Bicelles. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 8926-8936.	8.0	14
21	Fabrication Procedures and Birefringence Measurements for Designing Magnetically Responsive Lanthanide Ion Chelating Phospholipid Assemblies. <i>Journal of Visualized Experiments</i> , 2018, , .	0.3	1
22	Tailoring Emulsions for Controlled Lipid Release: Establishing in vitro“in Vivo Correlation for Digestion of Lipids. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 17571-17581.	8.0	73
23	Targeted Inhibition of Enzymatic Browning in Wheat Pastry Dough. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 12353-12360.	6.0	39
24	The rheology of batch and continuously prepared gluten-free bread dough in oscillatory and capillary shear flow. <i>Journal of Food Science and Technology</i> , 2018, 55, 3077-3084.	2.7	8
25	Nonlinear shear and dilatational rheology of viscoelastic interfacial layers of cellulose nanocrystals. <i>Physics of Fluids</i> , 2018, 30, .	3.8	52
26	Modifying the Contact Angle of Anisotropic Cellulose Nanocrystals: Effect on Interfacial Rheology and Structure. <i>Langmuir</i> , 2018, 34, 10932-10942.	3.8	28
27	Mastering the magnetic susceptibility of magnetically responsive bicelles with 3 <sup>+</sup> -amino-5-cholestene and complexed lanthanide ions. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 10820-10824.	2.8	6
28	Methods for Generating Highly Magnetically Responsive Lanthanide-Chelating Phospholipid Polymolecular Assemblies. <i>Langmuir</i> , 2017, 33, 6363-6371.	3.8	4
29	Molecular engineering of lanthanide ion chelating phospholipids generating assemblies with a switched magnetic susceptibility. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 20991-21002.	2.8	8
30	Cohesiveness and flowability of particulated solid and semi-solid food systems. <i>Food and Function</i> , 2017, 8, 3647-3653.	5.4	37
31	Microfluidic Technique for the Simultaneous Quantification of Emulsion Instabilities and Lipid Digestion Kinetics. <i>Analytical Chemistry</i> , 2017, 89, 9116-9123.	6.6	39
32	Understanding the Enhanced Magnetic Response of Aminocholesterol Doped Lanthanide-Ion-Chelating Phospholipid Bicelles. <i>Langmuir</i> , 2017, 33, 8533-8544.	3.8	5
33	Gelation of Soy Milk with Hagfish Exudate Creates a Flocculated and Fibrous Emulsion- and Particle Gel. <i>PLoS ONE</i> , 2016, 11, e0147022.	2.4	17
34	Quantification of Spontaneous W/O Emulsification and its Impact on the Swelling Kinetics of Multiple W/O/W Emulsions. <i>Langmuir</i> , 2016, 32, 5787-5795.	3.8	55
35	Stroboscopic two-dimensional ultrasonic velocity profiling for measuring flow transition in Taylor Couette systems. <i>Flow Measurement and Instrumentation</i> , 2016, 52, 137-143.	2.5	2
36	Tailoring Bicelle Morphology and Thermal Stability with Lanthanide-Chelating Cholesterol Conjugates. <i>Langmuir</i> , 2016, 32, 9005-9014.	3.8	11

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37	Experimental and computational study of a high speed pin mixer via PEPT, visualization and CFD. <i>Chemical Engineering Science</i> , 2016, 155, 221-232.	4.0	4
38	Trajectory analysis of a liquid filament under Rayleigh breakup conditions created from laminar rotary spraying of oil-in-water emulsions. <i>Chemical Engineering Science</i> , 2016, 156, 229-238.	4.0	1
39	Modeling and simulation of air-assist atomizers with applications to food sprays. <i>Applied Mathematical Modelling</i> , 2016, 40, 6121-6133.	4.7	5
40	Flow Properties of Spices Measured with Powder Flow Tester and Ring Shear Tester-XS. <i>International Journal of Food Properties</i> , 2016, 19, 1475-1482.	3.7	20
41	Decoupling of Mass Transport Mechanisms in the Stagemwise Swelling of Multiple Emulsions. <i>Langmuir</i> , 2015, 31, 5265-5273.	3.8	35
42	Mixing quality of powder-liquid mixtures studied by near infrared spectroscopy and colorimetry. <i>Powder Technology</i> , 2015, 278, 130-137.	4.5	7
43	Food Engineering at Multiple Scales: Case Studies, Challenges and the Future – A European Perspective. <i>Food Engineering Reviews</i> , 2015, 8, 91-115.	6.6	57
44	Magnetically Enhanced Bicelles Delivering Switchable Anisotropy in Optical Gels. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 1100-1105.	8.0	20
45	Effect of flow type, channel height, and viscosity on drop production from micro-pores. <i>Chemical Engineering Science</i> , 2014, 116, 372-382.	4.0	18
46	Shear and dilatational linear and nonlinear subphase controlled interfacial rheology of $\hat{I}^2$ -lactoglobulin fibrils and their derivatives. <i>Journal of Rheology</i> , 2013, 57, 1003-1022.	2.9	117
47	Cholesterol-Diethylenetriaminepentaacetate Complexed with Thulium Ions Integrated into Bicelles To Increase Their Magnetic Alignability. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14743-14748.	2.8	10
48	Foams Stabilized by Multilamellar Polyglycerol Ester Self-Assemblies. <i>Langmuir</i> , 2013, 29, 38-49.	3.8	33
49	Alignment of Bicelles Studied with High-Field Magnetic Birefringence and Small-Angle Neutron Scattering Measurements. <i>Langmuir</i> , 2013, 29, 3467-3473.	3.8	20
50	Iron encapsulated microstructured emulsion-particle formation by prilling process and its release kinetics. <i>Journal of Food Engineering</i> , 2013, 115, 198-206.	6.1	23
51	Simultaneous visualization of the flow inside and around droplets generated in microchannels. <i>Microfluidics and Nanofluidics</i> , 2013, 16, 743-755.	2.2	12
52	Cholesterol Increases the Magnetic Aligning of Bicellar Disks from an Aqueous Mixture of DMPC and DMPE – DTPA with Complexed Thulium Ions. <i>Langmuir</i> , 2012, 28, 10905-10915.	3.8	22
53	Simultaneous Control of pH and Ionic Strength during Interfacial Rheology of $\hat{I}^2$ -Lactoglobulin Fibrils Adsorbed at Liquid/Liquid Interfaces. <i>Langmuir</i> , 2012, 28, 12536-12543.	3.8	100
54	Interfacial aspects of the stability of polyglycerol ester covered bubbles against coalescence. <i>Soft Matter</i> , 2012, 8, 11620.	2.7	22

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55	Characterization of wet powder flowability by shear cell measurements and compaction curves. Powder Technology, 2012, 215-216, 59-65.	4.5	32
56	Effect of pendular liquid bridges on the flow behavior of wet powders. Powder Technology, 2012, 217, 599-606.	4.5	17
57	Rheology of food materials. Current Opinion in Colloid and Interface Science, 2011, 16, 36-40.	6.7	210
58	Emulsion Drops with Complex Interfaces: Globular Versus Flexible Proteins. Macromolecular Materials and Engineering, 2011, 296, 249-262.	4.1	70
59	Self-aligned mask renewal for anisotropically etched circular micro- and nanostructures. Journal of Micromechanics and Microengineering, 2011, 21, 115003.	1.9	2
60	Novel Type of Bicellar Disks from a Mixture of DMPC and DMPE-DTPA with Complexed Lanthanides. Langmuir, 2010, 26, 5382-5387.	3.8	28
61	Interfacial rheology of soy proteins " High methoxyl pectin films. Food Hydrocolloids, 2009, 23, 2125-2131.	12.4	44
62	Binary coalescence of gas bubbles in the presence of a non-ionic surfactant. Journal of Colloid and Interface Science, 2009, 333, 579-584.	9.9	32
63	Continuous flow structuring of anisotropic biopolymer particles. Advances in Colloid and Interface Science, 2009, 150, 16-26.	17.7	43
64	Shear-Induced Crystal Formation and Transformation in Cocoa Butter. Crystal Growth and Design, 2009, 9, 4023-4031.	3.4	30
65	Single bubble deformation and breakup in simple shear flow. Experiments in Fluids, 2008, 45, 917-926.	2.1	58
66	Complex Interfaces and their Role in Protein-Stabilized Soft Materials. ChemPhysChem, 2008, 9, 1833-1837.	2.0	24
67	Monitoring of fat crystallization process using LVP-PD technique. Flow Measurement and Instrumentation, 2008, 19, 163-169.	2.5	39
68	Investigation of molecular weight distribution of LBG galactomannan for flours prepared from individual seeds, mixtures, and commercial samples. Food Hydrocolloids, 2008, 22, 1596-1606.	12.4	37
69	Structure and Mechanical Properties of a Polyglycerol Ester at the Air-Water Surface. Langmuir, 2008, 24, 12282-12289.	3.8	23
70	Extensional Properties of Hydroxypropyl Ether Guar Gum Solutions. Biomacromolecules, 2008, 9, 2989-2996.	5.3	59
71	Alternating Vorticity Bands in a Solution of Wormlike Micelles. Physical Review Letters, 2007, 99, .	8.3	36
72	Interfacial Rheology of Surface-Active Biopolymers: Acacia senegal Gum versus Hydrophobically Modified Starch. Biomacromolecules, 2007, 8, 3458-3466.	5.3	119

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73	Simulation and experiments of droplet deformation and orientation in simple shear flow with surfactants. <i>Chemical Engineering Science</i> , 2007, 62, 3242-3258.	4.0	78
74	Dynamically enhanced membrane foaming. <i>Chemical Engineering Science</i> , 2007, 62, 4409-4419.	4.0	26
75	Impact of static pressure and volumetric energy input on the microstructure of food foam whipped in a rotor-stator device. <i>Journal of Food Engineering</i> , 2007, 80, 306-316.	6.1	34
76	Development, Stability, and Sensory Testing of Microcapsules Containing Iron, Iodine, and Vitamin A for Use in Food Fortification. <i>Journal of Food Science</i> , 2006, 71, .	3.1	72
77	Determination of the interfacial tension of low density difference liquid-liquid systems containing surfactants by droplet deformation methods. <i>Chemical Engineering Science</i> , 2006, 61, 1386-1394.	4.0	26
78	Rheology of concentrated suspensions containing mixtures of spheres and fibres. <i>Rheologica Acta</i> , 2005, 44, 502-512.	2.6	62
79	Deformation of single emulsion drops covered with a viscoelastic adsorbed protein layer in simple shear flow. <i>Applied Physics Letters</i> , 2005, 87, 244104.	3.1	60
80	Drop deformation dynamics and gel kinetics in a co-flowing water-in-oil system. <i>Journal of Colloid and Interface Science</i> , 2005, 286, 378-386.	9.9	22
81	Stress Driven Shear Bands and the Effect of Confinement on Their StructuresA Rheological, Flow Visualization, and Rheo-SALS Study. <i>Langmuir</i> , 2005, 21, 9051-9057.	3.8	61
82	Computer-Controlled Flow Cell for the Study of Particle and Drop Dynamics in Shear Flow Fields. <i>Industrial &amp; Engineering Chemistry Research</i> , 2005, 44, 6999-7009.	3.9	15
83	Sorbitan Tristearate Layers at the Air/Water Interface Studied by Shear and Dilatational Interfacial Rheology. <i>Langmuir</i> , 2005, 21, 10555-10563.	3.8	72
84	Drop formation in a co-flowing ambient fluid. <i>Chemical Engineering Science</i> , 2004, 59, 3045-3058.	4.0	488
85	Triple fortification of salt with microcapsules of iodine, iron, and vitamin A. <i>American Journal of Clinical Nutrition</i> , 2004, 80, 1283-1290.	5.0	95
86	Stress- and strain-controlled measurements of interfacial shear viscosity and viscoelasticity at liquid/liquid and gas/liquid interfaces. <i>Review of Scientific Instruments</i> , 2003, 74, 4916-4924.	1.5	251
87	A numerical procedure for calculating droplet deformation in dispersing flows and experimental verification. <i>Chemical Engineering Science</i> , 2003, 58, 2351-2363.	4.0	46
88	Industrial application of ultrasound based in-line rheometry: Visualization of steady shear pipe flow of chocolate suspension in pre-crystallization process. <i>Review of Scientific Instruments</i> , 2003, 74, 5255-5259.	1.5	19
89	Viscosity of Cocoa and Chocolate Products. <i>Applied Rheology</i> , 2002, 12, 32-34.	1.7	14
90	Flow processing and gel formation—a promising combination for the design of the shape of gelatin drops. <i>Food Hydrocolloids</i> , 2002, 16, 633-643.	12.4	24

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91	Measurement of the Surface and Interfacial Tension from Maximum Volume of a Pendant Drop. Journal of Colloid and Interface Science, 2001, 244, 113-122.	9.9	40
92	Investigation on the Drop Break-up under Controlled Mixed Shear and Elongational Flow Conditions in Combination with the Morphology and Rheology of Emulsifiers at the Drop's Interface. Chemie-Ingenieur-Technik, 2001, 73, 740-741.	0.9	1
93	Fluid Immobilization – A Structure-Related Key Mechanism for the Viscous Flow Behavior of Concentrated Suspension Systems. Applied Rheology, 2000, 10, 134-144.	1.7	60
94	In-line measurement of tempered cocoa butter and chocolate by means of near-infrared spectroscopy. JAOCS, Journal of the American Oil Chemists' Society, 1999, 76, 659-667.	2.5	39
95	Direct measurement of thermal fat crystal properties for milk-fat fractionation. JAOCS, Journal of the American Oil Chemists' Society, 1996, 73, 1603-1610.	2.5	36