



Publikationen

Swelling of food powders: Kinetics measurement and quantification using NMR relaxometry. Food Hydrocolloids https://doi.org/10.1016/j.foodhyd.2024.110169	2024	Teichmann, H., Anzmann, T., Haas, K., Kohlus, R.
Thermal damages in spray drying: Particle size-dependent protein denaturation using phycocyanin as model substrate. Drying Technology https://doi.org/10.1080/07373937.2023.2243495	2023	Ruprecht, N.A., Kohlus, R.
Development of In-Line Measurement Techniques for Monitoring Powder Characteristics in a Multi-Stage Spray Drying Process. Processes https://doi.org/10.3390/pr11071931	2023	Frank, J., Raiber, T.V., Grotenhoff, L., Kohlus, R.
Fluidized bed drying of dairy gel granules supported by the in-line monitoring of water content. Drying Technology https://doi.org/10.1080/07373937.2023.2216774	2023	Frank, J., Schlitter, M., Hinrichs, J., Kohlus, R.
Nozzle zone agglomeration in spray dryers: Determination of agglomeration efficiency in the fines return by means of agglomerate properties and residence time distribution. Drying Technology https://doi.org/10.1080/07373937.2023.2203224	2023	Fröhlich, J.A., Ruprecht, N.A., Kohlus, R.
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A particle shape-based segmentation method to characterize spray dried materials by X-Ray microtomography. Particuology https://doi.org/10.1016/j.partic.2022.12.017	2023	Ruprecht, N. A., Teichmann, H., Kohlus, R.

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Photometric extinction measurements to study dissolution kinetic of skim milk powder. International Dairy Journal https://doi.org/10.1016/j.idairyj.2021.105210	2022	Schulnies, F., Teichmann, H., Kohlus, R., Kleinschmidt, S., Kleinschmidt, T.
Influence of Levan on the Thermally Induced Gel Formation of β -Lactoglobulin. Gels https://doi.org/10.3390/gels8040228	2022	Hundscheil, C.S., Brühan, J., Anzmann, T., Kohlus, R., Wagemans, A.M.
Simulation of the oxidation of microencapsulated oil based on oxygen distribution – Impact of powder and matrix properties. Powder Technology https://doi.org/10.1016/j.powtec.2022.117289	2022	Linke, A., Teichmann, H., Kohlus, R.
Macroscopic rheology of non-Brownian suspensions at high shear rates: the influence of solid volume fraction and non-Newtonian behaviour of the liquid phase. Rheologica Acta https://doi.org/10.1007/s00397-021-01320-1	2022	Wilms, P., Hinrichs, J., Kohlus, R.
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<p>On the difficulty of determining the apparent wall slip of highly concentrated suspensions in pressure driven flows: the accuracy of indirect methods and best practice. <i>Journal of non-Newtonian fluid mechanics</i>.</p> <p>https://doi.org/10.1016/j.jnnfm.2021.104694</p>	2022	Wilms, P., Wieringa, J., Blijdenstein, T., van Malssen, K., Hinrichs, J., Kohlus, R.
<p>A new method for continuous measurement of residence time distribution in spray drying. <i>Drying technology</i>.</p> <p>https://doi.org/10.1080/07373937.2021.1951287</p>	2022	Ruprecht, N. A; Köhler, A., Kohlus, R.
<p>Implementation of an acoustic levitator experimental setup for the investigation into drying kinetics of single droplets. <i>Drying technology</i>.</p> <p>https://doi.org/10.1080/07373937.2021.1872609</p>	2022	Hülsmann, R., Mast, M., Schnorr, C., Esper, G.J., Kohlus, R.
<p>Laboratory-scale superheated steam spray drying of food and dairy products. <i>Drying technology</i>.</p> <p>https://doi.org/10.1080/07373937.2020.1870127</p>	2022	Linke, T., Happe, J., Kohlus, R.
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<p>Quantification of shear viscosity and wall slip velocity of highly concentrated suspensions with non-Newtonian matrices in pressure driven flows. <i>Rheologica Acta</i></p> <p>https://doi.org/10.1007/s00397-021-01281-5</p>	2021	Wilms, P., Wieringa, J., Blijdenstein, T., van Malssen, K., Kohlus, R.
<p>Simulation of the oxidation of microencapsulated oil based on oxygen distribution – Model setup and validation. <i>Journal of Food Engineering</i></p> <p>https://doi.org/10.1016/j.jfoodeng.2021.110486</p>	2021	Linke, A., Teichmann, H., Kohlus, R.

A barometric approach for high temperature water desorption isotherm determination. LWT - food science and technology. https://doi.org/10.1016/j.lwt.2020.110750	2021	Linke, T., Kirsch, R., Kohlus, R.
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Wall slip of highly concentrated non-Brownian suspensions in pressure driven flows: a geometrical dependency put into a non-Newtonian perspective. Journal of non-Newtonian fluid mechanics. https://doi.org/10.1016/j.jnnfm.2020.104336	2020	Wilms, P., Wieringa, J., Blijdenstein, T., van Malssen, K., Hinrichs, J., Kohlus, R.,

Contribution of the internal and external oxygen to the oxidation of microencapsulated fish oil. European Journal of Lipid Science and Technology. https://doi.org/10.1002/ejlt.201900381	2020	Linke, A., Linke, T., Kohlus, R.
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<p>Concentration of skim milk by means of dynamic filtration using overlapping rotating ceramic membrane disks. International Dairy Journal</p> <p>https://doi.org/10.1016/j.idairyj.2017.10.004</p>	2018	Schäfer, J., Bast, R., Atamer, Z., Nöbel, S., Kohlus, R., Hinrichs, J.
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Investigation to Increase the Drying Rate of the Freeze-Drying Untersuchungen zur Steigerung der Trocknungsgeschwindigkeit der Gefriertrocknung. <i>Chemie Ingenieur Technik</i> https://doi.org/10.1002/cite.201400062	2015	Pliske, R., Müller, U., Kohlus, R.
Modulation of the rheological properties and microstructure of collagen by addition of co-gelling proteins. <i>Food Hydrocolloids</i> https://doi.org/10.1016/j.foodhyd.2015.03.013	2015	Oechsle, A.M., Häupler, M., Gibis, M., Kohlus, R., Weiss, J.
Optimal design of experiments and measurements of the water sorption process of wheat grains using a modified Peleg model. <i>Journal of Food Engineering</i> https://doi.org/10.1016/j.jfoodeng.2015.06.025	2015	Paquet-Durand, O., Zettel, V., Kohlus, R., Hitzmann, B.
Characterization of cell wall polysaccharides of purple pitaya (<i>Hylocereus</i> sp.) pericarp. <i>Food Hydrocolloids</i> https://doi.org/10.1016/j.foodhyd.2013.07.010	2014	Montoya-Arroyo, A., Schweiggert, R.M., Pineda-Castro, M.-L., Sramek, M., Kohlus, R., Carle, R., Esquivel, P.
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<p>Enhancement in yeast separation and recycling in continuous bio-ethanol fermentation process in Blenke cascade. Journal of Chemical Technology and Biotechnology</p> <p>https://doi.org/10.1002/jctb.4045</p>	2013	Ntihuga, J.N., Senn, T., Gschwind, P., Kohlus, R
<p>Influence of filling conditions on product quality and machine parameters in fermented coarse meat emulsions produced by high shear grinding and vacuum filling. Journal of Food Engineering</p> <p>https://doi.org/10.1016/j.jfoodeng.2013.03.015</p>	2013	Irmscher, S., Böhje, Z., Hermann, K., Gibis, M., Kohlus, R., Weiss, J.
<p>Presence of electrostatically adsorbed polysaccharides improves spray drying of liposomes, Journal of Food Science</p> <p>https://doi.org/10.1111/1750-3841.12023</p>	2013	Karadag, A., Özçelik, B., Sramek, M., Gibis, M., Kohlus, R., Weiss, J.
<p>Impact of carboxymethyl cellulose (CMC) and microcrystalline cellulose (MCC) on functional characteristics of emulsified sausages. Meat Science</p> <p>https://doi.org/10.1016/j.meatsci.2012.08.025</p>	2013	Schuh, V., Allard, K., Herrmann, K., Gibis, M., Kohlus, R., Weiss, J.
<p>Estimating energy- and eco-balances for continuous bio-ethanol production using a blenke cascade system. Energies</p> <p>https://doi.org/10.3390/en6042065</p>	2013	Ntihuga, J.N., Senn, T., Gschwind, P., Kohlus, R.
<p>An evaluation of different bioreactor configurations for continuous bio-ethanol production. Applied Energy</p> <p>https://doi.org/10.1016/j.apenergy.2013.03.017</p>	2013	Ntihuga, J.N., Senn, T., Gschwind, P., Kohlus, R.
<p>Efficiency of Blenke cascade system for continuous bio-ethanol fermentation. Bioresource Technology.</p> <p>https://doi.org/10.1016/j.biortech.2012.07.032</p>	2012	Ntihuga, J.N., Senn, T., Gschwind, P., Kohlus, R.
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