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Recent Papers

GP Desam, NL Dehghani, G Narsimhan, V Narsimhan. 2021. Characterization of storage modulus of starch suspensions during the initial stages of pasting using Stokesian dynamics simulations. *Food Hydrocolloids* 121, 107010.

S Sang, X Xu, X Zhu, G Narsimhan. 2021. Complexation of 26-Mer Amylose with Egg Yolk Lipids with Different Numbers of Tails Using a Molecular Dynamics Simulation. *Foods* 10 (10), 2355.

GP Desam, OG Jones, G Narsimhan. 2021. Prediction of the effect of sucrose on equilibrium swelling of starch suspensions. *Journal of Food Engineering* 294, 110397.

J Li, GP Desam, V Narsimhan, G Narsimhan. 2021. Methodology to predict the time-dependent storage modulus of starch suspensions during heating. *Food Hydrocolloids* 113, 106463.

V Narsimhan, GP Desam, J Li, G Narsimhan. 2020. Prediction of Storage Modulus of Starch Suspensions during Granule Swelling. 2020 Virtual AIChE Annual Meeting.

A Ponrajan, T Tonner, M Okos, O Campanella, G Narsimhan. 2020. Comparing inline extrusion viscosity for different operating conditions to offline capillary viscosity measurements. *Journal of Food Process Engineering* 43 (5), e13199.

GP Desam, J Li, G Chen, O Campanella, G Narsimhan. 2020. Swelling kinetics of rice and potato starch suspensions. *Journal of Food Process Engineering* 43 (4), e13353.

MJ Malm, G Narsimhan, JL Kokini. 2020. Effect of contact surface, plasticized and crosslinked zein films are cast on, on the distribution of dispersive and polar surface energy using the Van Oss method of deconvolution. *Journal of Food Engineering* 263, 262-271.

GP Desam, J Li, NL Dehghani, V Narsimhan, G Narsimhan. 2019. Prediction of Swelling and Linear Viscoelasticity of Starch Suspensions. 2019 AIChE Annual Meeting.

G Narsimhan. 2019. *Aerated Foods: Principles, Formation and Stability*. John Wiley & Sons, Hoboken, NJ.

S Sang, Y Chen, X Zhu, G Narsimhan, Q Hu, Z Jin, X Xu. 2019. Effect of egg yolk lipids on structure and properties of wheat starch in steamed bread. *Journal of Cereal Science* 86, 77-85.

Y Lyu, M Fitriyanti, G Narsimhan. 2019. Nucleation and growth of pores in 1, 2-Dimyristoyl-sn-glycero-3-phosphocholine (DMPC)/cholesterol bilayer by antimicrobial peptides melittin, its mutants and cecropin P1. *Colloids and Surfaces B: Biointerfaces* 173, 121-127.

G Narsimhan, Z Wang, N Xiang. 2019. Guidelines for processing emulsion-based foods. *Food emulsifiers and their applications*, 435-501.

M Zhang, J Wang, Y Lyu, M Fitriyanti, H Hou, Z Jin, X Zhu, G Narsimhan. 2018. Understanding the antimicrobial activity of water soluble γ -cyclodextrin/alamethicin complex. *Colloids and Surfaces B: Biointerfaces* 172, 451-458.

GP Desam, J Li, G Chen, O Campanella, G Narsimhan. 2018. Prediction of swelling behavior of crosslinked maize starch suspensions. *Carbohydrate polymers* 199, 331-340.

M Fitriyanti, G Narsimhan. 2018. Synergistic effect of low power ultrasonication on antimicrobial activity of cecropin P1 against *E. coli* in food systems. *LWT* 96, 175-181.

Recent Patents

G Narsimhan, GP Desam, J Li, V Narsimhan. 2020. Swelling of starch suspensions. US Patent App. 16/795,205.