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PhD 1977, Purdue University
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Recent Papers

ACF Dos Santos, A Ahmadzadegan, E Ximenes, P Vlachos, A Ardekani, S Kapur, V Corvari, MR Ladisch. 2022. In vitro measurement of concentration of unlabeled protein within a hyaluronic acid matrix. *Biotechnology and Bioengineering* 119 (12), 3647-3656.

LA Serra, RG da Silva Cruz, DMR Gutierrez, AJG Cruz, CAT Canizares, X Chen, N Mosier, D Thompson, J Aston, J Dooley, P Sharma, JL DeMarco, JRM de Almeida, K Erk, E Ximenes, MR Ladisch. 2022. Screening method for Enzyme-based liquefaction of corn stover pellets at high solids. *Bioresource Technology* 363, 127999.

A Patil, PT Benavides, D Monceaux, M Ladisch, A Engelberth. 2022. Biomass Liquefaction: A techno-economic assessment of three potential pathways. 44th Symposium on Biomaterials, Fuels and Chemicals.

LA Serra, RG da Silva Cruz, DMR Gutierrez, AJG da Cruz, CAT Canizares, X Chen, N Mosier, D Thompson, J Aston, J Dooley, P Sharma, JL DeMarco, JRM Almeida, K Erk, E Ximenes, M Ladisch. Screening Method for Liquefaction of Corn Stover Pellets at High Solids. 44th Symposium on Biomaterials, Fuels and Chemicals.

AJG da Cruz, DMR Gutierrez, LA Serra, RG da Silva Cruz, CAT Canizares, X Chen, N Mosier, D Thompson, J Aston, J Dooley, P Sharma, JL DeMarco, JRM Almeida, CS Farinas, AC Badino, K Erk, E Ximenes, M Ladisch. 2022. Liquefaction of pelleted corn cobs. 44th Symposium on Biomaterials, Fuels and Chemicals.

SE Bordignon, E Ximenes, OM Perrone, KD Carreira Nunes CdC, M Boscolo, E Gomes Filho da Silva R EXF, MR Ladisch. 2022. Combined Sugarcane Pretreatment for the Generation of Ethanol and Value-Added Products. *Energy Res* 10, 834966.

HA Ruiz, M Galbe, G Garrote, DM Ramirez-Gutierrez, E Ximenes, SN Sun, D Lachos-Perez, RM Rodriguez-Jasso,

RC Sun, B Yang, MR Ladisch. 2021. Severity factor kinetic model as a strategic parameter of hydrothermal processing (steam explosion and liquid hot water) for biomass fractionation under biorefinery concept. *Bioresource Technology* 342, 125961.

ACF Dos Santos, JC Overton, R Szeto, MH Patel, DMR Gutierrez, C Eby, AMM Moreno, KA Erk, JE Aston, DN Thompson, JH Dooley, P Sharma, NS Mosier, E Ximenes, MR Ladisch. 2021. New strategy for liquefying corn stover pellets. *Bioresource Technology* 341, 125773.

F Rossi, J Zuponic, E Ximenes, S Geng, Y Tao, V Corvari, M Ladisch, GV Reklaitis. 2021. Dynamic Optimization of an Ultrafiltration System for the Concentration of Monoclonal Antibody Solutions Under Uncertainty. 2021 AIChE Annual Meeting.

J Zuponic, F Rossi, E Ximenes, N Bruns, S Geng, Y Tao, V Corvari, GV Reklaitis, M Ladisch. 2021. Confocal Imaging of Protein Gel Layer Formation during Tangential Flow Filtration to Inform Process Conditions Reducing Protein Losses and Increasing Protein Concentration. 2021 AIChE Annual Meeting.

R Szeto, JC Overton, ACF Dos Santos, C Eby, NS Mosier, E Ximenes, MR Ladisch, KA Erk. 2021. Rheology of enzyme liquefied corn stover slurries: The effect of solids concentration on yielding and flow behavior. *Biotechnology Progress* 37 (6), e3216.

MM Buffo, ALZ Ferreira, RMRG Almeida, CS Farinas, AC Badino, EA Ximenes, MR Ladisch. 2021. Cellulolytic enzymes production guided by morphology engineering. *Enzyme and Microbial Technology* 149, 109833.

Recent Patents

MR Ladisch, YM Kim. 2022. Methods for mitigating the inhibitory effects of lignin and soluble phenolics for enzymatic conversion of cellulose. US Patent 11,371,069.