

## Peer-reviewed publications 2019 within C4F

- Berndtsson E, Nynäs AL, **Newson W, Langton M, Andersson R, Johansson E, Olsson ME**. The underutilised side streams of broccoli and kale—valorisation via proteins and phenols. Sustainable governance and management of food systems: Ethical perspectives 2019 Sep 19 (pp. 74-81). Wageningen Academic Publishers.
- Capezza AJ, Glad D, Özeren HD, Newson WR, Olsson RT, Johansson E, Hedenqvist MS** (2019) Novel sustainable super absorbents: a one-pot method for functionalization of side-stream potato proteins. ACS Sust Chem Eng. <https://doi.org/10.1021/acssuschemeng.9b04352>
- Capezza AJ, Wu Q, Newson WR, Olsson RT, Espuche E, Johansson E, Hedenqvist MS** (2019) Superabsorbent and fully biobased protein foams with a natural cross-linker and cellulose nanofibers. ACS Omega 4:18257-18267.
- Ceresino EB, Kuktaite R, Sato HH, Hedenqvist MS, Johansson E** (2019) Impact of gluten separation process and transglutaminase source on gluten based dough properties. Food Hydrocolloids 87:661-669. Popular scientific publications (reports etc)
- Capezza AJ, Newson W, Olsson R, Hedenqvist M, Johansson E** (2019) Advances in the use of protein-based materials: towards sustainable naturally sourced absorbent materials. ACS Sust Chem Eng 7: 4532-4547.
- Chen E, Xu Y, Ma B, Cui H, **Sun C\***, Zhang M\* (2019) Carboxyl-Functionalized Europium Nanoparticles-Based Fluorescent Immunochromatographic Assay for Sensitive Detection of Citrinin in Monascus Fermented Food. Toxins 11, 605.
- Das O, Rasheed F, Kim NK, **Johansson E, Capezza AJ**, Kalamkarov AL, Hedenqvist MS (2019) The development of fire and microbe resistant sustainable gluten plastics. J Clean Prod 222:163-173.
- Das O, Hedenqvist MS, **Johansson E, Olsson RT, Lohota, Capezza AJ**, Raman RKS, Holder S (2019) An all-gluten biocomposite: Comparisons with carbon black and pine char composites. Comp Part A: Appl Sci Manufact 120:42-48.
- Dauphinee AN, Cardoso C, Dalman K, Ohlsson JA, Berglund Fick S, Robert S, Hicks GR, Bozhkov PV, Minina EA** (2019) Chemical screening pipeline for identification of specific plant autophagy modulators (Breakthrough technologies). Plant Physiol 181, 855–866 (Recommended by F1000Prime).
- Gargiuloa L, **Grimberg Å, Repo-Carrasco-Valenciac, R, Carlsson, AS, Melea, G** 2019 Morphodensitometric traits for quinoa (*Chenopodium quinoa* Willd.) seed phenotyping by two X-ray micro-CT scanning approaches; Journal of Cereal Science 90.
- Jeppson S, Demski K, Carlsson AS, Zhu L-H, Banas A, Stymne S and Lager I** 2019. *Crambe hispanica* Subsp. *abyssinica* Diacylglycerol Acyltransferase Specificities Towards Diacylglycerols and Acyl-CoA Reveal Combinatorial Effects That Greatly Affect Enzymatic Activity and Specificity. Front. Plant Sci. 10:1442. doi: 10.3389/fpls.2019.01442
- Li J, Pylypchuk I, Johansson D, Kessler VG, Seisenbaeva GA & Langton M**, Self-assembly of plant protein fibrils interacting with superparamagnetic iron oxide nanoparticles., Scientific Reports (2019) 9:8939 <https://doi.org/10.1038/s41598-019-45437-z>.
- Li X, Guan R, Fan J and Zhu L-H.** 2019. Development of Industrial Oil Crop *Crambe abyssinica* for Wax Ester Production through Metabolic Engineering and Cross Breeding. Plant and Cell Physiology. 60 (6): 1274-1283.

- Kushwaha SK, **Grimberg Å, Carlsson AS, Hofvander P**. 2019. Charting oat (*Avena sativa*) embryo and endosperm transcription factor expression reveals differential expression of potential importance for seed development; *Molecular Genetics and Genomics*, 1-15
- Ma B, Yu H, Fang J, **Sun C**, Zhang M (2019) Employing DNA binding dye to improve detection of *Enterocytozoon hepatopenaei* in real-time LAMP. *Scientific Reports*, 9, 15860. doi: 10.1038/s41598-019-52459-0.
- Mendoza A, **Moriana Torro R**, Hillborg H, Strömberg E. (2019). Super-hydrophobic zinc oxide/silicone rubber nanocomposite surfaces Surfaces and interfaces, 14 ss.146- 157. DOI:10.1016/j.surfin.2018.12.008.
- Muneer F, Johansson E**, Hedenqvist MS, Plivelic TS, **Kuktaite R** (2019) Impact of pH modification on protein polymerization and structure-function relationships in potato protein and wheat gluten composites. *Int J Mol Sci* 20:58.
- Snell P, Grimberg Å, Carlsson AS, Hofvander P**. 2019. WRINKLED1 is subject to evolutionary conserved negative autoregulation; *Frontiers in Plant Science* 10, 387.
- Requena R, Jiménez-Quero A, Vargas M, **Moriana R**, Chiralt A, Vilaplana F, (2019). Integral Fractionation of Rice Husks into Bioactive Arabinoxylans, Cellulose Nanocrystals, and Silica Particles *ACS Sustainable Chemistry and Engineering*, 7 (6), ss.6275-6286. DOI:10.1021/acssuschemeng.8b06692.
- Rodriguez Furlan C, **Minina EA**, Hicks GR (2019) Remove, recycle, degrade - Regulating plasma membrane protein accumulation. *Plant Cell* doi: 10.1105/tpc.19.00433.
- Tagami A, Gioia C, Laubert M, Budnyak T, **Moriana R**, Lindström M, Sevastanova O, (2019). Solvent fractionation of softwood and hardwood kraft lignins for more efficient uses: Compositional, structural, thermal, antioxidant and adsorption properties *Industrial Crops and Products*, 129 ss.123-134. DOI:10.1016/j.indcrop.2018.11.067.
- Vazquez D, Berger A, Prieto-Linde ML, **Johansson E** (2019) Can nitrogen fertilization be used to modulate yield, protein content and bread-making quality in Uruguayan wheat? *J Cereal Sci.* 85:153-161
- Ye X, Lendel C, **Langton M**, Olsson RT, Hedenqvist MS (2019) Protein nanofibrils: Preparation, properties, and possible applications in industrial nanomaterials Chapter 2 in *Industrial Applications of Nanomaterials*. <https://doi.org/10.1016/B978-0-12-815749-7.00002-5>.
- Åhman I, **Kim S-Y** and **Zhu L-H** (2019) Plant Genes Benefitting Aphids—Potential for Exploitation in Resistance Breeding. *Front. Plant Sci.* 10:1452. doi: 10.3389/fpls.2019.01452