

Peer-reviewed articles

Algem PRO (current to June 2025, 53 articles)

- Song, S., Aljedaani, F., Liew, K. X., Mi, J., Salem, M., Bougouffa, S., Overmans, S., Lauersen, K. J., Zheng, X., & Al-Babili, S. Sustainable and secretory production of saffron pigments in *Synechocystis* sp. PCC 6803 and *E. coli*. *Plant Communications* (2025), 101388.
- Masson, M.L.P., Bastos de Freitas, B., Zybinskii, A., Althagafi, G., Amad, M., Fox, M.D., Peter J. Lammers, P.J., and Lauersen, K.J. Elevated carbon dioxide stimulates highly efficient organic-carbon consumption and confectionary-waste valorization under mixotrophy in the unicellular alga *Galdieria*. *bioRxiv* 2025.05.22.655468.
- Yahya, R.Z., Overmans, S., Wellman, G.B. and Lauersen, K.J. Engineered isoprene production from *Chlamydomonas reinhardtii* using herbicide selection markers and CO₂-fed cultivation optimization through multi-parallel photobioreactor headspace gas analysis. *bioRxiv* (2025) 04.22.649625.
- Wu, J., Cagney, N., Meeten, G.H., Jones, T.G.J. and Boek, E.S. Compressibility and permeability of flocculated microalgal sediment in filtration-permeation. *J Water Process Eng*, Volume 74 (2025) 107795.
- Wu, J., Meeten, G.H., Jones, T.G.J., Cagney, N and Boek, E.S. Membrane fouling during the harvesting of microalgae using static microfiltration. *Separation and Purification Tech*, Volume 353 (2025), Part A, 127737.

- Elghazy, E., Davies, M.M.J., Farr, N.T.H., Rodenburg, C., Willmott, J.R. and Pandhal, J. Capturing microalgae within aerosols provides carbon capture bio-functionality. *J CO2 Utilization*. Volume 92, (2025) 103024.
- Overmans, S., Gallo Jr, A., Mishra, H. and Lauersen, K.J. Sustainable in situ extraction of microalgae-derived terpenoids using functionalized silica microparticles. *Separation and Purification Tech*. Volume 362 (2025), Part 2, 131837.
- Freyria, N.J., de Oliveira, T.C., Chovatia, M. *et al*. Stress responses in an Arctic microalga (Pelagophyceae) following sudden salinity change revealed by gene expression analysis. *Commun Biol* **7** (2024), 1084.
- Elghazy, E., Syed, M.D., Wianglor, K., Tetali, S., Raut, M., Roy, I. and Pandhal, J. Large-scale cultivation of *Synechocystis* sp. PCC6803 for the production of Poly(3-hydroxybutyrate) and its potential applications in the manufacturing of bulk and medical prototypes. *New Biotechnology*, Volume 83 (2024), 133-141.
- Villegas-Valencia, M., Stark, M. R., Seger, M., Wellman, G. B., Overmans, S., Lammers, P. J., Rader, S. D., & Lauersen, K. J. A rapid CAT transformation protocol and nuclear transgene expression tools for metabolic engineering in *Cyanidioschyzon merolae* 10D. *bioRxiv* (2024) .07.30.605877.
- Faustino, M.; Machado, D.; Rodrigues, D.; Andrade, J.C.; Freitas, A.C.; Gomes, A.M. Design and characterization of a cheese spread incorporating *Osmundea pinnatifida* extract. *Foods* (2023), 12, 611.
- Cruz, J.D., Delattre, C., Felpeto, A.B. *et al*. Bioprospecting for industrially relevant exopolysaccharide-producing cyanobacteria under Portuguese simulated climate. *Sci Rep* (2023) 13, 13561.
- Celente, Gleison, de Cassia de Souza Schneider, Rosana, Julich, Jennifer, Medianeira Rizzetti, Tiele, Alcayaga Lobo, Eduardo and Sui, Yixing. Life cycle assessment of microalgal cultivation medium: biomass, glycerol, and beta-carotene

production by *Dunaliella salina* and *Dunaliella tertiolecta*. The International Journal of Life Cycle Assessment. (2023) ISSN 0948-3349 (Print), 1614-7502.

- Ozawa-Uyeda, Takehiro A., Sebastian J. Overmans, Barbara Bastos de Freitas, Edmundo Lozoya-Gloria, and Kyle J. Lauersen. "Comparison of alternative solvents for in situ extraction of hydrocarbons from the colonial green alga *Botryococcus braunii* race B (Showa)." *bioRxiv* (2023): 2023-10.
- Yang, Cong, Joyce Cavalcante, Bárbara Bastos de Freitas, Kyle J. Lauersen, and Gyorgy Szekely. "Crude algal biomass for the generation of thin-film composite solvent-resistant nanofiltration membranes." *Chemical Engineering Journal* 470 (2023): 144153.
- Villegas-Valencia, Melany, Ricardo E. González-Portela, Bárbara Bastos de Freitas, Abdulaziz Al Jahdali, Gabriel I. Romero-Villegas, Raghdah Malibari, Rahul Vijay Kapoore, Claudio Fuentes-Grünwald, and Kyle J. Lauersen. "Cultivation of the polyextremophile *Cyanidioschyzon merolae* 10D during summer conditions on the coast of the Red Sea and its adaptation to hypersaline sea water." *Frontiers in Microbiology* 14 (2023): 1157151.
- Taunt, H.N., Jackson, H.O., Gunnarsson, Í.N., Pervaiz, R. and Purton, S. Accelerating chloroplast engineering: A new system for rapid generation of marker-free transplastomic lines of *Chlamydomonas reinhardtii*. *Microorganisms*, (2023) 11(8), p.1967.
- Bastos de Freitas, B., Overmans, S., Sanchez Medina, J., Hong, P-Y. and Lauersen, K.J. Biomass generation and heterologous isoprenoid milking from engineered microalgae grown in anaerobic membrane bioreactor effluent. *Water Research*, 229 (2023) 119486.
- Yahya, Razan Z., Gordon B. Wellman, Sebastian Overmans, and Kyle J. Lauersen. "Engineered production of isoprene from the model green microalga *Chlamydomonas reinhardtii*." *bioRxiv* (2023): 2023-01.

- Boisset, Nicolas D., Giusi Favoino, Maria Meloni, Lucile Jomat, Corinne Cassier-Chauvat, Mirko Zaffagnini, Stephane D. Lemaire, and Pierre Crozet. "Phosphoribulokinase abundance is not limiting the Calvin-Benson-Bassham cycle in *Chlamydomonas reinhardtii*." *bioRxiv* (2023): 2023-05.
- Villegas-Valencia M, González-Portela RE, de Freitas BB, Al Jahdali A, Romero-Villegas GI, Malibari R, Kapoore RV, Fuentes-Grünewald C, Lauersen KJ. Cultivation of the polyextremophile *Cyanidioschyzon merolae* 10D during summer conditions on the coast of the Red Sea and its adaptation to hypersaline sea water. *Front Microbiol.* 2023 Apr 20;14:1157151.
- Seger, Mark, Fakhriyya Mammadova, Melany Villegas-Valencia, Bárbara Bastos de Freitas, Clarissa Chang, Iona Isachsen, Haley Hemstreet et al. "Engineered ketocarotenoid biosynthesis in the polyextremophilic red microalga *Cyanidioschyzon merolae* 10D." *bioRxiv* (2023): 2023-02.
- Booth, Matthew, Andrew Spicer, and Alexandros Kiparissides. "Shedding light on phototrophic biomass production of *Chlorella variabilis*: The importance of dissolved CO₂, light intensity and duty cycle." *Biochemical Engineering Journal* 179 (2022): 108315.
- Kube, Matthew, Linhua Fan, Felicity Roddick, Rachel Whitton, Marc Pidou, and Bruce Jefferson. "High rate algal systems for treating wastewater: A comparison." *Algal Research* 65 (2022): 102754.
- Biancacci, C., McDougall, G.J., Day, J.G. et al. Cultivation of *Osmundea pinnatifida* (Hudson) Stackhouse in the Algem® photobioreactor system. *J Appl Phycol* 34, 3095–3105 (2022).
- Celente, G, T. M. Rizzetti, RdCdS Schneider, P. J. Harvey, and Y. Sui. "Organic Carbon Is Ineffective in Enhancing the Growth of *Dunaliella*. *Fermentation* 2022, 8, 261." (2022).

- Corcoran, Alina A., Juliette Ohan, Erik R. Hanschen, Anthony Granite, Heather Martinez, F. O. Holguin, Blake T. Hovde, and Shawn R. Starkenburg. "Scale-dependent enhancement of productivity and stability in xenic *Nannochloropsis* cultures." *Algal Research* 68 (2022): 102892.
- Lydia J. Mapstone, Henry N. Taunt, Jing Cui, Saul Purton & Tom G. R. Brooks (2022) ADA: an open-source software platform for plotting and analysis of data from laboratory photobioreactors, *Applied Phycology*, 3:1, 16-26.
- Umaima Al Hoqani, Rosa León, Saul Purton. Over-expression of a cyanobacterial gene for 1-deoxy-d-xylulose-5-phosphate synthase in the chloroplast of *Chlamydomonas reinhardtii* perturbs chlorophyll: carotenoid ratios. *Journal of King Saud University - Science*, Volume 34, Issue 6, 2022, 102141.
- Schiano di Visconte G, Allen MJ, Spicer A. New Insights from the High-Resolution Monitoring of Microalgae–Virus Infection Dynamics. *Viruses*. 2022; 14(3):466.
- Umaima Al Hoqani, Rosa León, Saul Purton. Over-expression of a cyanobacterial gene for 1-deoxy-d-xylulose-5-phosphate synthase in the chloroplast of *Chlamydomonas reinhardtii* perturbs chlorophyll: carotenoid ratios. *Journal of King Saud University - Science*, Volume 34, Issue 6, 2022, 102141.
- Sui, Yixing, Laura Mazzucchi, Parag Acharya, Yanan Xu, Geraint Morgan, and Patricia J. Harvey. "A Comparison of β -Carotene, Phytoene and Amino Acids Production in *Dunaliella salina* DF 15 (CCAP 19/41) and *Dunaliella salina* CCAP 19/30 Using Different Light Wavelengths." *Foods* 10, no. 11 (2021): 2824.
- Sui, Yixing, and Patricia J. Harvey. "Effect of light intensity and wavelength on biomass growth and protein and amino acid composition of *Dunaliella salina*." *Foods* 10, no. 5 (2021): 1018.

- Murujew, Olga, Rachel Whitton, Matthew Kube, Linhua Fan, Felicity Roddick, Bruce Jefferson, and Marc Pidou. "Recovery and reuse of alginate in an immobilized algae reactor." *Environmental Technology* 42, no. 10 (2021): 1521-1530.
- Schiano di Visconte, Gino, Michael J. Allen, and Andrew Spicer. "Novel Capsular Polysaccharide from *Lobochlamys segnis*." *Polysaccharides* 2, no. 1 (2021): 121-137.
- Xu, Yanan, and Patricia J. Harvey. "Mitosis inhibitors induce massive accumulation of phytoene in the microalga *Dunaliella salina*." *Marine Drugs* 19, no. 11 (2021): 595.
- Sanchez-Tarre, Victor, and Alexandros Kiparissides. "The effects of illumination and trophic strategy on gene expression in *Chlamydomonas reinhardtii*." *Algal Research* 54 (2021): 102186.
- Mazzucchi, Laura, Yanan Xu, and Patricia Harvey. "Stereoisomers of colourless carotenoids from the marine microalga *Dunaliella salina*." *Molecules* 25, no. 8 (2020): 1880.
- Changko, S., Rajakumar, P.D., Young, R.E.B. et al. The phosphite oxidoreductase gene, ptxD as a bio-contained chloroplast marker and crop-protection tool for algal biotechnology using *Chlamydomonas*. *Appl Microbiol Biotechnol* 104, 675–686 (2020).
- Xu, Yanan, and Patricia J. Harvey. "Phytoene and phytofluene overproduction by *Dunaliella salina* using the mitosis inhibitor chlorpropham." *Algal Research* 52 (2020): 102126.
- De Carpentier, Félix, Jeanne Le Peillet, Nicolas D. Boisset, Pierre Crozet, Stéphane D. Lemaire, and Antoine Danon. "Blasticidin S deaminase: a new efficient selectable marker for *Chlamydomonas reinhardtii*." *Frontiers in Plant Science* 11 (2020): 242.

- D'Adamo, S., Schiano di Visconte, G., Lowe, G., Szaub-Newton, J., Beacham, T., Landels, A., Allen, M.J., Spicer, A. and Matthijs, M. (2019), Engineering the unicellular alga *Phaeodactylum tricornutum* for high-value plant triterpenoid production. *Plant Biotechnol J*, 17: 75-87.
- Rachel Whitton, Francesco Ometto, Raffaella Villa, Marc Pidou, Bruce Jefferson. Influence of light regime on the performance of an immobilised microalgae reactor for wastewater nutrient removal, *Algal Research*, 2019, Volume 44, 101648.
- Xu, Yanan, and Patricia J. Harvey. "Carotenoid production by *Dunaliella salina* under red light." *Antioxidants* 8, no. 5 (2019): 123.
- Xu, Yanan, and Patricia J. Harvey. "Red light control of β -carotene isomerisation to 9-cis β -carotene and carotenoid accumulation in *Dunaliella salina*." *Antioxidants* 8, no. 5 (2019): 148.
- Whitton, Rachel, Martina Santinelli, Marc Pidou, Francesco Ometto, Rita Henderson, Felicity Roddick, Peter Jarvis, Raffaella Villa, and Bruce Jefferson. "Tertiary nutrient removal from wastewater by immobilised microalgae: impact of wastewater nutrient characteristics and hydraulic retention time (HRT)." *H2Open Journal* 1, no. 1 (2018): 12-25.
- Pereira, H., Páramo, J., Silva, J. et al. Scale-up and large-scale production of *Tetraselmis* sp. CTP4 (Chlorophyta) for CO₂ mitigation: from an agar plate to 100-m³ industrial photobioreactors. *Sci Rep* 8, 5112 (2018).
- Young, Rosanna, and Saul Purton. "CITRIC: Cold-inducible translational readthrough in the chloroplast of *Chlamydomonas reinhardtii* using a novel temperature-sensitive transfer RNA." *Microbial Cell Factories* 17, no. 1 (2018): 1-12.
- Xu, Yanan, Iskander M. Ibrahim, Chiziezi I. Wosu, Ami Ben-Amotz, and Patricia J. Harvey. "Potential of new isolates of *Dunaliella salina* for natural β -carotene production." *Biology* 7, no. 1 (2018): 14.

- Matthijs, Michiel, Michele Fabris, Toshihiro Obata, Imogen Foubert, José Manuel Franco-Zorrilla, Roberto Solano, Alisdair R. Fernie, Wim Vyverman, and Alain Goossens. "The transcription factor bZIP14 regulates the TCA cycle in the diatom *Phaeodactylum tricornutum*." The EMBO journal 36, no. 11 (2017): 1559-1576.
- Stoffels, L., Taunt, H. N., Charalambous, B., & Purton, S. (2017). Synthesis of bacteriophage lytic proteins against *Streptococcus pneumoniae* in the chloroplast of *Chlamydomonas reinhardtii*. Plant biotechnology journal, 15(9), 1130-1140.
- Yanan Xu, Iskander M. Ibrahim, Patricia J. Harvey. The influence of photoperiod and light intensity on the growth and photosynthesis of *Dunaliella salina* (chlorophyta) CCAP 19/30. Plant Physiology and Biochemistry, 2016. Volume 106, 305-315.
- Lea-Smith, David J., Nic Ross, Maria Zori, Derek S. Bendall, John S. Dennis, Stuart A. Scott, Alison G. Smith, and Christopher J. Howe. "Thylakoid terminal oxidases are essential for the cyanobacterium *Synechocystis* sp. PCC 6803 to survive rapidly changing light intensities." Plant Physiology 162, no. 1 (2013): 484-495.

Algem HT24 (sold first unit 2021, 8 articles)

- Abdelkarim, O.H., Wijffels, R.H. & Barbosa, M.J. Microalgal lipid production: A comparative analysis of *Nannochloropsis* and *Microchloropsis* strains. *J Appl Phycol* **37** (2025), 15–34.
- Südfeld, Christian, Aamna Kiyani, Katrin Wefelmeier, René H. Wijffels, Maria J. Barbosa, and Sarah D'Adamo. "Expression of glycerol-3-phosphate acyltransferase increases non-polar lipid accumulation in *Nannochloropsis oceanica*." *Microbial Cell Factories* 22, no. 1 (2023): 1-14.
- Südfeld, Christian, Aamna Kiyani, Hortense Buckens, Michal Hubáček, René H. Wijffels, Maria J. Barbosa, and Sarah D'Adamo. "Accumulation of medium chain fatty acids in *Nannochloropsis oceanica* by heterologous expression of *Cuphea palustris* thioesterase FatB1." *Algal Research* 64 (2022): 102665.
- Südfeld, Christian, Ana Pozo-Rodríguez, Sara A. Manjavacas Díez, René H. Wijffels, Maria J. Barbosa, and Sarah D'Adamo. "The nucleolus as a genomic safe harbor for strong gene expression in *Nannochloropsis oceanica*." *Molecular Plant* 15, no. 2 (2022): 340-353.
- Celente, Gleison de Souza, Tiele Medianeira Rizzetti, Rosana de Cassia de Souza Schneider, Patricia J. Harvey, and Yixing Sui. "Organic carbon is ineffective in enhancing the growth of *Dunaliella*." *Fermentation* 8, no. 6 (2022): 261.
- Schiano di Visconte G, Allen MJ, Spicer A. New Insights from the High-Resolution Monitoring of Microalgae–Virus Infection Dynamics. *Viruses*. 2022; 14(3):466.
- Südfeld, Christian, Michal Hubáček, Daniel Figueiredo, Mihris IS Naduthodi, John Van Der Oost, René H. Wijffels, Maria J. Barbosa, and Sarah D'Adamo. "High-throughput insertional mutagenesis reveals novel targets for enhancing lipid accumulation in *Nannochloropsis oceanica*." *Metabolic Engineering* 66 (2021): 239-258.

- Sui, Yixing, and Patricia J. Harvey. "Effect of light intensity and wavelength on biomass growth and protein and amino acid composition of *Dunaliella salina*." Foods 10, no. 5 (2021): 1018.

Book Chapters, Review Papers and Conference Proceedings

- Overmans, S., & Lauersen, K. J. (2023). Novel approaches for in situ extraction of heterologous metabolites from living microalgae cultures. *Algal BBB*, (2023).
- Udayan, Aswathy, Ashutosh Kumar Pandey, Ranjna Sirohi, Nidhin Sreekumar, Byoung-In Sang, Sung Jun Sim, Sang Hyoun Kim, and Ashok Pandey. "Production of microalgae with high lipid content and their potential as sources of nutraceuticals." *Phytochemistry Reviews* (2022): 1-28.
- Corcoran, Alina, and Shawn Starkenburg. Success Through Synergy (STS): Increasing Cultivation Yield and Stability with Rationally Designed Consortia. No. DOE-New Mexico Consortium-0008122-1. New Mexico Consortium, 2022.
- Butler, Thomas, Rahul Vijay Kapoore, and Seetharaman Vaidyanathan. "*Phaeodactylum tricornutum*: a diatom cell factory." *Trends in biotechnology* 38, no. 6 (2020): 606-622.
- Diogo Cruz, Cédric Delattre, Vitor Vasconcelos. Cyano-EPS: An environmental based screening on the Blue Biotechnology and Ecotoxicology Culture Collection (LEGE-CC). Blue Think Conference, Portugal Sept 2020.
- Barros, Ana Cláudia, A. L. Gonçalves, and Manuel Simões. "Microalgal and cyanobacterial biofilms." In *Recent Trends in Biofilm Science and Technology*, pp. 127-156. Academic Press, 2020.
- Lei Qin, Md. Asraful Alam, Zhongming Wang. Open Pond Culture Systems and Photobioreactors for Microalgal Biofuel Production. In, *Microalgae Biotechnology for Development of Biofuel and Wastewater Treatment*, 2019, ISBN : 978-981-13-2263-1

- Rejzek, Martin, Lionel Hill, Edward S. Hems, Sakonwan Kuhaudomlarp, Ben A. Wagstaff, and Robert A. Field. "Profiling of sugar nucleotides." In *Methods in enzymology*, vol. 597, pp. 209-238. Academic Press, 2017.
- Pickett, M., O. Ozcan, H. Jean, A. Quinones, K. Moore, J. Love, and D. Yeh. Cultivation of microalgae with membrane-filtered wastewater: implications for energy and nutrient recovery from wastewater. Water Efficiency Conference 2015, Paper 31, page 284.

Masters and PhD Theses (to date) (Algem PRO and Algem HT24, 31 😊)

- Yahya, R.Z. "Engineered volatile isoprene production from the eukaryotic green model microalga *Chlamydomonas reinhardtii*" (2024) King Abdullah University of Science and Technology, Doctoral Thesis.
- Booth, Matthew "Development of a turbidostat photo-bioreactor to investigate the effects of process parameters on the physiology and growth of micro-algae". (2023) Doctoral thesis (Eng.D), UCL (University College London).
- Grisenthwaite, Robert. "Establishing land tank cultivation of *Asparagopsis taxiformis* in Scotland". (2023) University of the Highlands and Islands (UHI), Master's Thesis.
- Grabarczyk, Natalia. "Food from the air: Selection and characterization of hydrogen oxidizing bacteria for sustainable anaerobic production of single-cell protein." (2023), Wageningen University, Master's Thesis.
- Schiano Di Visconte, G. "Exploration of scalable industrial platforms for the commercial production of active molecules from microalgae cell walls." (2023). University of Exeter, Doctoral thesis.
- Boisset, Nicolas. « Biologie synthétique de la fixation du carbone chez *Chlamydomonas reinhardtii* ». Biotechnologies. Université Paris-Saclay, (2023). Français.
- Olorunyomi, G. "Comparative toxicity of perfluoroalkyl carboxylic acids (pfcas) exposure using aquatic organisms". (2023) Texas Tech University, Doctoral Thesis.
- bin Wan Razali, Wan Aizuddin. "Maximising long chain polyunsaturated fatty acids eicosapentaenoic acid biosynthesis of marine microalgae species *Nannochloropsis oculata*." (2022) The University of Sheffield, Doctoral thesis.

- Amaral, Hugo Ricardo Filipe. "OSMAC approach to identify novel metabolites from Spirulina with anti-obesity activity as future nutraceuticals." (2022). University of Porto, Master's thesis.
- Pardasani, Yash. "Survival potential of microalgae for long-term space missions." (2022). University of the Highlands & Islands (UHI), UK, Master's thesis.
- Gonçalves, A. P. R. (2022). Set-up and optimization of a pilot-scale photobioreactor for autotrophic microalgae growth (Doctoral dissertation). <https://hdl.handle.net/1822/80848>, University of Minho, Portugal
- Butler, Thomas. "The diatom *Phaeodactylum tricornutum* as a sustainable microalgal cell factory: towards a biorefinery approach." PhD diss., University of Sheffield, 2021.
- Moutinho, Mariana Miranda. "Manipulation of growth conditions of cyanobacteria to potentiate the production of high value compounds for obesity treatment." (2021). University of Portugal, Doctoral dissertation.
- Aldholmi, Mohammed. "Microbial Natural Product Discovery through Nutritional and Epigenetic Manipulation." PhD diss., University of East Anglia, 2020.
- Maia, Inês Beatriz Castro. "Optimization of *Emiliania huxleyi* Growth for Production of n-3 Polyunsaturated Fatty Acids and Novel Compounds with Osteogenic Activity." PhD diss., Universidade do Algarve (Portugal), 2019.
- Li, Fuyao. "Cloning and expression of virus-like particles (VLPs) in microalgal expression systems." PhD diss., UCL (University College London), 2019.
- Ravendran Vasudevan, Ravendran. "Characterization of low molecular weight c-type cytochromes in cyanobacteria and plants." PhD diss., University of Cambridge, 2019.

- Josenhans, S. (2019). Environmental and nutritional parameters influencing the growth of *Skeletonema* cultures and optimization of the large-scale production in photobioreactors (Doctoral dissertation, Universidade do Algarve (Portugal)).
- Salazar, J. M. R. (2019). Optimization of the production of fucoxanthin-rich fractions from the microalga *Isochrysis galbana* (Doctoral dissertation, Universidade do Algarve (Portugal)).
- Agbebi, TV; (2019) Design and characterization of a miniature photobioreactor for microalgae culture. Masters thesis (M.Phil), UCL (University College London).
- Pereira, Hugo Galvão Caiano. "Biotechnological applications of a promising marine chlorophyte (*Tetraselmis* sp. CTP4): a biorefinery approach." PhD diss., Universidade do Algarve (Portugal), 2019.
- Biancacci, Cecilia. "Towards a sustainable production of *Osmundea pinnatifida*: insight into the cultivation and biochemical composition of the species." PhD diss., University of Aberdeen, 2019.
- Da Costa Ramos, Juliana. "The algal chloroplast as a platform for synthesis of lytic enzymes targeting Gram-negative pathogens." PhD diss., UCL (University College London), 2019.
- Spencer-Milnes, Xenia. "Towards engineering the microalga *Chlorella sorokiniana* for the production of tailored high-value oils." PhD diss., UCL (University College London), 2019.
- Ross, Michael Eric. "Wastewater treatment by filamentous macroalgae." (2018). University of Edinburgh, PhD diss.
- Pickett, Melanie. "The ICARUS Floating Membrane Photobioreactor for Microalgae Cultivation in Wastewater: Advancing Technology from Lab to Field Prototype." PhD diss., University of South Florida, 2018.

- Blanshard, Maximilian Edward Alfred. "Synthesis of recombinant antibacterial proteins in the *Chlamydomonas reinhardtii* chloroplast." PhD diss., UCL (University College London), 2018.
- Al Hoqani, U. H. A. "Metabolic engineering of the algal chloroplast for terpenoid production." PhD diss., UCL (University College London), 2017.
- Whitton, Rachel Louise. "Algae reactors for wastewater treatment." (2016). Cranfield University, Ph.D. diss.
- Pearce, Matthew William. "An integrated approach to microalgae biomass generation and processing." (2016). Cranfield University, Ph.D. diss.
- Braun Galleani, S. C. "Exploring the potential for recombinant protein production in microalgae." PhD diss., UCL (University College London), 2014.
- Al-Haj, Lamya Adnan. "Development of genetic engineering tools for the cyanobacterium *Synechocystis* PCC 6803 for advanced biofuel production." PhD diss., UCL (University College London), 2014.