

GAS MIXING SYSTEM GMS 150

LIST OF REFERENCES

CLARK, A.J., TORRES-ROMERO, I., JAGGI, M., BERNASCONI, S.M., & STOLL, H.M. (2024). A clumped isotope calibration of coccoliths at well-constrained culture temperatures for marine temperature reconstructions. *Clim. Past*, 20, 2081–2101.

DOI: 10.5194/cp-20-2081-2024

TORRES-ROMERO, I., CLARK, A.J., WIJKER, R.S., ET AL. (2024). Temperature-dependent carbon isotope fractionation in coccolithophores. *Front Earth Sci*, 12:1331179.

DOI: 10.3389/feart.2024.1331179

LLOP, A., LABELLA, J.I. BORISOVA, M., ET AL. (2023). Pleiotropic effects of PipX, PipY, or RelQ overexpression on growth, cell size, photosynthesis, and polyphosphate accumulation in the cyanobacterium *Synechococcus elongatus* PCC7942. *Front Microbiol*, 14:1141775.

DOI: 10.3389/fmicb.2023.1141775

MIAO, R., JAHN, M., SHABESTARY, K., PELTIER, G., & HUDSON, E.P. (2023). CRISPR interference screens reveal growth–robustness tradeoffs in *Synechocystis* sp. PCC 6803 across growth conditions. *Plant Cell*, 35(11), 3937–3956.

DOI: 10.1093/plcell/koad208

NAŘ M., BRUMMER V., LOŠÁK P., MÁŠA V., ET AL. (2023). Waste-to-energy plants flue gas CO₂ mitigation using a novel tubular photobioreactor while producing *Chlorella* algae. *Journal of Cleaner Production*, 385, 135721.

DOI: 10.1016/j.jclepro.2022.135721

SCHUBERT, M.G., TANG, T-C., GOODCHILD-MICHELMAN, I.M., RYON, K.A., HENRIKSEN, J.R., ET AL. (2023). Cyanobacteria newly isolated from marine volcanic seeps display rapid sinking and robust, high density growth. *bioRxiv*, 2023.10.30.564770.

DOI: 10.1101/2023.10.30.564770

SUKAČOVÁ K., SZOTKOWSKI M., PAŘIL, P., ET AL. (2023). Simultaneous production of γ -linolenic acid and carotenoids by a novel microalgal strain isolated from the underexplored habitat of intermittent streams. *Algal Research*, 103055.

DOI: 10.1016/j.algal.2023.103055

SUZUKI, H., DÉTAIN, A., PARK, Y., VISWANATH, K., WIJFFELS, R.H., ET AL. (2023). Phylogeny and lipid profiles of snow algae isolated from Norwegian red-snow microbiomes. *FEMS Microbiol Ecol*, 99(6), fiad057.

DOI: 10.1093/femsec/fiad057

YEE, D.P., SAMO, T.J., ABBRIANO, R.M., SHIMASAKI, B., VERNET, M., ET AL. (2023). *The V-type ATPase enhances photosynthesis in marine phytoplankton and further links phagocytosis to symbiogenesis. Current Biology, 33(12), 2541 - 2547.e5.*

DOI: 10.1016/j.cub.2023.05.020

MATTILA, H., VALEV, D., MISHRA, K.B. ET AL. (2022) *Differences in susceptibility to photoinhibition do not determine growth rate under moderate light in batch or turbidostat – a study with five green algae. Photosynthetica, 60, 8 – 18.*

DOI: 10.32615/ps.2021.054

PUZORJOV, A., UNAL, S. M., WEAR, M. A. & MCCORMICK, A. J. (2022). *Pilot scale production, extraction and purification of a thermostable phycocyanin from Synechocystis sp. PCC 6803. Bioresource Technology, 345, 126459.*

DOI:10.1016/j.biortech.2021.126459

Zhang H., Torres-Romero I., Anjewierden P., Jaggi M. and Stoll H.M. (2022) *The DIC carbon isotope evolutions during CO₂ bubbling: Implications for ocean acidification laboratory culture. Front. Mar. Sci. 9:1045634.*

DOI: 10.3389/fmars.2022.1045634

BILLEY, E., MAGNESCHI, L., LETERME, S. ET AL. (2021). *Characterization of the Bubblegum acyl-CoA synthetase of Microchloropsis gaditana. Plant Physiology, 185, 815 – 835.*

DOI:10.1093/plphys/kiab110

DOELLO, S., BURKHARDT, M. & FORCHHAMMER, K. (2021) *The essential role of sodium bioenergetics and ATP homeostasis in the developmental transitions of a cyanobacterium. Current Biology, 31(8), 1606-1615.e2.*

DOI:10.1016/j.cub.2021.01.065

KUBASEK, J., HAJEK, T., DUCKETT2, J. ET AL. (2021) *Moss stomata do not respond to light and CO₂ concentration but facilitate carbon uptake by sporophytes: a gas exchange, stomatal aperture, and ¹³C-labelling study. New Phytologist, 230, 1815–1828.*

DOI:10.1111/nph.17208

SUKAČOVÁ, K., LOŠÁK, P., BRUMMER, V. ET AL. (2021). *Perspective Design of Algae Photobioreactor for Greenhouses—A Comparative Study. Energies, 14, 1338.*

DOI:10.3390/en14051338

TONOYAN, L., GUIHÉNEUF, F., FRIEL, R. & O'FLAHERTY, V. (2021). *Construction and Validation of A Low-cost, Small-scale, Multiplex Continuous Culturing System for Microorganisms. Bio-protocol, 10, e3813.*

DOI:10.21769/BioProtoc.3813

VASILE, N. S., CORDARA, A., USAI, G. & RE, A. (2021) *Computational Analysis of Dynamic Light Exposure of Unicellular Algal Cells in a Flat-Panel Photobioreactor to Support Light-Induced CO₂ Bioprocess Development. Frontiers in Microbiology, 12:639482.*

DOI:10.3389/fmicb.2021.639482

WU, S., GU, W., JIA, S. ET AL. (2021). Proteomic and biochemical responses to different concentrations of CO₂ suggest the existence of multiple carbon metabolism strategies in *Phaeodactylum tricornutum*. *Biotechnology for Biofuels*, 14:235.

DOI:10.1186/s13068-021-02088-5

LU, H., CHENG, J., WANG, Z. ET AL. (2020). Improved photosynthetic characteristics of *Chlorella* mutant MS700 induced by nuclear radiation. *Process Biochemistry*, 99, 154 – 159.

DOI:10.1016/j.procbio.2020.08.022

MORALES-SÁNCHEZA, D., SCHULZEA, P.S.C., KIRONA, V. & WIJFFELS, R.H. (2020). Production of carbohydrates, lipids and polyunsaturated fatty acids (PUFA) by the polar marine microalga *Chlamydomonas malina* RCC2488. *Algal Research*, 50, 102016.

DOI:10.1016/j.algal.2020.102016

DU, W., JONGBLOETS, J. A., GUILLAUME, M. ET AL. (2019). Exploiting Day- and Night-Time Metabolism of *Synechocystis* sp. PCC 6803 for Fitness-Coupled Fumarate Production around the Clock. *Synthetic Biology*, 8, 2263 – 2269.

DOI: 10.1021/acssynbio.9b00289

SCHULZE, P. S. C., HULATT, C. J., MORALES-SÁNCHEZ, D., WIJFFELS, R. H., & KIRON, V. (2019). Fatty acids and proteins from marine cold adapted microalgae for biotechnology. *Algal Research*, 42, 101604.

DOI:10.1016/j.algal.2019.101604

SUKAČOVÁ, K., BÚZOVÁ, D., TRÁVNÍČEK, P. ET AL. (2019). Optimization of microalgal growth and cultivation parameters for increasing bioenergy potential: Case study using the oleaginous microalga *Chlorella pyrenoidosa* Chick (IPPAS C2). *Algal Research*, 40, 101519.

DOI: 10.1016/j.algal.2019.101519

ZAVŘEL, T., FAIZI, M., LOUREIRO, C. ET AL. (2019). Quantitative insight into the cyanobacterial cell economy. *eLife* 2019; 8:e42508

DOI:10.7554/eLife.42508

CORDARA A, RE A, PAGLIANO C, VAN ALPHEN P, PIRONE R, SARACCO G, BRANCO DOS SANTOS F. ET AL. (2018). Analysis of the light intensity dependence of the growth of *Synechocystis* and of the light distribution in a photobioreactor energized by 635 nm light. *PeerJ*.

DOI: 10.7717/peerj.5256

JAHN, M., VIALAS, V., KARLSEN, J., MADDALO, G., EDFORS, F., ET AL. (2018). Growth of *Cyanobacteria* Is Constrained by the Abundance of Light and Carbon Assimilation Proteins. *Cell Reports*, 25(2), 478–486.e8.

DOI:10.1016/j.celrep.2018.09.040

SARAYLOO, E., SIMSEK, S., UNLU, Y. S., CEVAHIR, G., ERKEY, C., & KAVAKLI, I. H. (2018). Enhancement of the lipid productivity and fatty acid methyl ester profile of *Chlorella vulgaris* by two rounds of mutagenesis. *Bioresource Technology*, 250, 764–769.

DOI:10.1016/j.biortech.2017.11.105

SUZUKI, H., HULATT, C.J., WIJFFELS, R.H. ET AL. (2018). Growth and LC-PUFA production of the cold-adapted microalga *Koliella antarctica* in photobioreactors. *J Appl Phycol* (2018).

DOI: 10.1007/s10811-018-1606-z

VAN ALPHEN, P., ABEDINI NAJAFABADI, H., BRANCO DOS SANTOS, F., & HELLINGWERF, K. J. (2018). Increasing the Photoautotrophic Growth Rate of *Synechocystis* sp. PCC 6803 by Identifying the Limitations of Its Cultivation. *Biotechnology Journal*, 13(8), 1700764.

DOI:10.1002/biot.201700764

STOLÁRIK, T., HEDTKE, B., ŠANTRŮČEK, J., ILÍK, P., GRIMM, B., & PAVLOVIČ, A. (2017). Transcriptional and post-translational control of chlorophyll biosynthesis by dark-operative protochlorophyllide oxidoreductase in Norway spruce. *Photosynthesis Research*, 132(2), 165–179.

DOI:10.1007/s11120-017-0354-2

HULATT, C. J., BEREZ, O., EGELAND, E. S., WIJFFELS, R. H., & KIRON, V. (2017). Polar snow algae as a valuable source of lipids? *Bioresource Technology*, 235, 338–347.

DOI:10.1016/j.biortech.2017.03.130

MITCHELL, M. C., METODIEVA, G., METODIEV, M. V., GRIFFITHS, H., & MEYER, M. T. (2017). Pyrenoid loss impairs carbon-concentrating mechanism induction and alters primary metabolism in *Chlamydomonas reinhardtii*. *Journal of Experimental Botany*, 68(14), 3891–3902.

DOI:10.1093/jxb/erx121

JOUHET, J., LUPETTE, J., CLERC, O., MAGNESCHI, L., BEDHOMME, M., COLLIN, S., ET AL. (2017). LC-MS/MS versus TLC plus GC methods: Consistency of glycerolipid and fatty acid profiles in microalgae and higher plant cells and effect of a nitrogen starvation. *PLOS ONE*, 12(8), e0182423.

DOI:10.1371/journal.pone.0182423

ACUÑA A. M., KAÑA R., GWIZDALA, M., ET AL. (2016). A method to decompose spectral changes in *Synechocystis* PCC 6803 during light-induced state transitions. *Photosynthesis Research*. Volume 130. Pages 237–249.

DOI: 10.1007/s11120-016-0248-8

ANGERMAYR S. A., VAN ALPHEN P., HASDEMIR D., ET AL. (2016). Culturing *Synechocystis* sp. Strain PCC 6803 with N₂ and CO₂ in a Diel Regime Reveals Multiphase Glycogen Dynamics with Low Maintenance Costs. *Appl. Environ. Microbiol.* Volume 82. Pages 4180-4189

DOI:10.1128/AEM.00256-16

VAN ALPHEN P., HELLINGWERF K. J. (2015). Sustained Circadian Rhythms in Continuous Light in *Synechocystis* sp. PCC6803 Growing in a Well-Controlled Photobioreactor. *PLoS ONE*. Volume 10.

DOI:10.1371/journal.pone.0127715

MÖLLERS K. B., CANNELLA D., JØRGENSEN H., ET AL. (2014). Cyanobacterial biomass as carbohydrate and nutrient feedstock for bioethanol production by yeast fermentation. *Biotechnology for Biofuels*. Volume 7.

DOI: 10.1186/1754-6834-7-64

*SINETOVA M. A., ČERVENÝ J., ZAVŘEL T., ET AL. (2012). On the dynamics and constraints of batch culture growth of the cyanobacterium *Cyanothece* sp. ATCC 51142, Journal of Biotechnology, Volume 162, Pages 148-155.*

DOI: 10.1016/j.jbiotec.2012.04.009

NEDBAL L., ČERVENÝ J., NIR K., ET AL. (2010). Experimental validation of a nonequilibrium model of CO₂ fluxes between gas, liquid medium, and algae in a flat-panel photobioreactor. Journal of Industrial Microbiology & Biotechnology. Volume 37, Pages 1319-1326.

DOI: 10.1007/s10295-010-0876-5



PSI (Photon Systems Instruments), spol. s r.o.

Drasov 470, 664 24, Czech Republic

+420 511 440 012

info@psi.cz

VAT: CZ60646594

Version: 2024/09

© PSI (Photon Systems Instruments), spol. s r.o.