

[発表論文(英文の総説を含む)] (2006年度以降)

※最初の番号(64.~82.)は研究室創設時からの通し番号

64. Oyama, Y., Izumo, A., Fujiwara, S., Shimonaga, T., Nakamura, Y., and Tsuzuki, M., Granule-bound starch synthase cDNA in *Chlorella kessleri* 11h: Cloning and regulation of expression by CO<sub>2</sub> concentration. *Planta* 224 , 646-654 (2006).

65. Kumata, H., Uchida, M., Sakuma, E., Uchida, T., Fujiwara, K., Tsuzuki, M., Yoneda, M., and Shibata, Y., Compound class specific 14 C analysis of polycyclic aromatic hydrocarbons associated with PM<sub>10</sub> and PM<sub>1.1</sub> aerosols from residential area of suburban Tokyo. *Environmental Science Technol.* 40 , 3474-3480 (2006).

66. Okazaki , K., Sato, N., Tsuji, N., Tsuzuki, M., and Nishida, I. , The significance of C<sub>16</sub> -fatty acids in the sn-2 positions of glycerolipids in the photosynthetic growth of *Synechocystis* sp. PCC6803. *Plant Physiol.* 141 , 546-556 (2006).

67. Dorsey, T.F. Jr., Lafleur, A.L., Kumata, H., Takada, H., Herrero-Jimenez, P., Thilly, W.G., Correlations of asthma mortality with traffic-related factors: Use of catalytic converters and radial tires. *JOEM* 48 , 1321-1327 (2006).

68. Takayanagi, T., Hirokawa, Y., Yamamoto, M., Ohki, T., Fujiwara, S., and Tsuzuki, M., Protoplast formation of the coccolithophorid *Pleurochrysis haptanemofera* in hypoosmotic K<sup>+</sup> solution: shedding of the coccosphere and regrowth of the protoplast in normal medium. *Marine Biotechnol.* 9 , 56-65 (2007).

69. Suzuki, E., Umeda, K., Nihei, S., Moriya, K., Ohkawa, H., Fujiwara, S., Tsuzuki, M., and Nakamura, Y., Role of the GlgX protein in glycogen metabolism of the cyanobacterium, *Synechococcus elongatus* PCC7942 . *Biochim. Biophys. Acta* 1770 , 763-773 (2007).

67. Tabei, Y., Okada, K., and Tsuzuki, M., Sll1330 controls the expression of glycolytic genes in *Synechocystis* sp. PCC6803. *Biochem. Biophys. Res. Comm.*, 355 , 1045-1050 (2007).

68. Shimonaga, T., Fujiwara, S., Kaneko, M., Izumo, A., Nihei, S., Francisco, P.B.Jr., Satoh, A., Fujita, N., Nakamura, Y., and Tsuzuki, M., Variation in storage a -polyglucans of red algae: amylose and semi-amylopectin types in Porphyridium and glycogen type in Cyanidium . *Marine Biotechnol.* , 9 , 192-202 (2007).
69. Fujiwara, S., Hirokawa, Y., Takatsuka, Y., Suda, K., Asamizu, E., Takayanagi, T., Shibata, D., Tabata, S., and Tsuzuki, M., Gene expression profiling of coccolith-bearing cells and naked cells in haptophyte *Pleurochrysis haptanemofera* with a cDNA macroarray system. *Marine Biotechnol.* , 9 , 550-560 (2007). [ 論文賞受賞 ]
70. Izumo, A., Fujiwara, S., Oyama, Y., Sato, A., Fujita, N., Nakamura, Y., and Tsuzuki, M., Physicochemical properties of starch in *Chlorella* change depending on the CO<sub>2</sub> concentration during growth: comparison of structure and properties of pyrenoid and stroma starch. *Plant Science*, 172 , 1138 - 1147 (2007).
71. Sugimoto, K., Sato, N., and Tsuzuki, M., Utilization of a chloroplast membrane sulfolipid as a major internal sulfur source for protein synthesis in the early phase of sulfur starvation in *Chlamydomonas reinhardtii* . *FEBS Letters* , 581 , 4519-4522 (2007).
72. Hirokawa, Y., Fujiwara, S., Suzuki, M., Akiyama, T., Sakamoto, M., Kobayashi, S., and Tsuzuki, M., Structural and physiological studies on the storage b -polyglucan of haptophyte *Pleurochrysis haptanemofera* . *Planta* 227 , 539-599 (2008).
73. Shimonaga, T., Konishi, M., Oyama, Y., Fujiwara, S., Satoh, A., Fujita, N., Colleoni, C., Bleon, A., Putaux, J.-L., Ball, S., Yokoyama, A., Hara, Y., Nakamura, Y., and Tsuzuki, M., Variatiin storage a -polyglucans of the Porphyridiales (Rhodophyta). *Plant Cell Physiol.* 49 , 102-116 (2008).
74. Sugimoto, K., Midorikawa, T., Tsuzuki, M., and Sato, N., Upregulation of PG synthesis on sulfur-starvation for PSII in *Chlamydomonas* . *Biochem. Biophys. Res. Comm.* 369 , 660-665 (2008).
75. Fujiwara, K., Matsumoto, Y., Kawakami, H., Aoki, M., Tsuzuki, M., Evaluation of metal toxicity in *Chlorella kessleri* from the perspective of the periodic table. *Bull. Chem. Soc. Jpn.* 81 , 478-488 (2008).

76. Tabei, Y., Okada, K., Makita, N., and Tsuzuki, M., Light-induced gene expression of fructose-1,6-bisphosphate aldolase during heterotrophic growth in a cyanobacterium, *Synechocystis* sp. PCC 6803. *FEBS J.* **276**, 187-196 (2009).
77. Miyashita, S., Shimoya, M., Kamidate, Y., Kuroiwa, T., Shikino, O., Fujiwara, S., Francesconi K. A., and Kaise, T., Rapid determination of arsenic species in freshwater organisms from the arsenic-rich Hayakawa River in Japan using HPLC-ICP-MS. *Chemosphere* **75**, 1065-1073 (2009).
78. Fujiwara, S., Tsuzuki, M., Coccolith formation in the Haptophyta, In *Marine Phytoplankton*, edited by Kersey, W. T., & Munger, S. P., ISBN: 978-1-60741-087-4, Nova Science Publishers, Inc., (2009).
79. Katagiri, F., Takatsuka, Y., Fujiwara, S., and Tsuzuki, M., Effects of Ca and Mg on growth and calcification of the coccolithophorid *Pleurochrysis haptoneoformis*: Ca-requirement for cell division in coccolith-bearing cells and for normal coccolith-formation with acidic polysaccharides. *Mar. Biotechnol.* **12**, 42-51 (2010).
80. Sato, N., Wada, H., Lipid biosynthesis and its regulation in cyanobacteria, In *Lipids in Photosynthesis: Essential and Regulatory Functions*, edited by Wada, H. and Murata, N., Springer, pp. 157-177 (2009).
81. Suzuki, E., Ohkawa, H., Moriya, K., Matsubara, T., Nagaike, Y., Iwasaki, I., Fujiwara, S., Tsuzuki, M., and Nakamura, Y., Carbohydrate metabolism in the mutants of the cyanobacterium *Synechococcus elongatus* PCC 7942 defective in glycogen synthesis. *Appl. Environ. Microbiol.* **76**, 3153-3159 (2010).
82. Hirabaru, C., Izumo, A., Fujiwara, S., Tadokoro, Y., Shimonaga, T., Konishi, M., Yoshida, M., Fujita, N., Nakamura, Y., Yoshida, M., Kuroiwa T., and Tsuzuki, M., The primitive rhodophyte *Cyanidioschyzon merolae* contains a semiamylopectin-type, but not an amylose-type  $\alpha$ -glucan. *Plant Cell Physiol.* **51**, 682-693 (2010).