

Supplementary Table 1

List of 64 studies used in the meta-analysis. Abbreviations of the studies used in figures are listed on the left-hand column. All the studies here are included in the main bibliography.

Study	Reference
Bechemin99	Béchemin et al. (1999)
Berges02	Berges et al. (2002)
Bi17	Bi et al. (2017)
Bi18	Bi et al. (2018)
Bittar13	Bittar et al. (2013)
BlancoAmeijeiras18	Blanco-Ameijeiras et al. (2018)
Brauer13	Brauer et al. (2013)
Bucciarelli10	Bucciarelli et al. (2010)
Claquin02	Claquin et al. (2002)
Fabregas95	Fábregas et al. (1995)
Feng18	Feng et al. (2018)
Finkel06	Finkel et al. (2006)
Fu05	Fu et al. (2005)
Fu06	Fu et al. (2006)
Fu14	Fu et al. (2014)
Garcia11	Garcia et al. (2011)
Giovagnetti12	Giovagnetti et al. (2012)
Goldman76	Goldman and Ryther (1976)
Goldman79	Goldman (1979)
Heiden16	Heiden et al. (2016)
Jacq14	Jacq et al. (2014)
Jiang18	Jiang et al. (2018)
Johansson99	Johansson and Granéli (1999)
Kudo97	Kudo and Harrison (1997)
Leonardos04	Leonardos and Geider (2004)
Leonardos05	Leonardos and Geider (2005)
Leong04	Leong and Taguchi (2004)
Leong10	Leong et al. (2010)
Li13	Li and Campbell (2013)
Li17	Li and Campbell (2017)
Li18	Li et al. (2018)
Li80	Li (1980)
Lu18	Lu et al. (2018)
Mari99	Mari (1999)
Martiny16	Martiny et al. (2016)
Meyerink17	Meyerink et al. (2017)
Mortensen88	Mortensen et al. (1988)
Mou17	Mou et al. (2017)
Mouginot15	Mouginot et al. (2015)

Nielsen91	Nielsen and Tønseth (1991)
Nielsen92	Nielsen (1992)
Nielsen96	Nielsen (1996)
Otero98	Otero et al. (1998)
Passow15	Passow and Laws (2015)
Qu18	Qu et al. (2018)
Rabouille17	Rabouille et al. (2017)
Rasdi15	Rasdi and Qin (2015)
Saito03	Saito and Tsuda (2003)
Sakshaug83	Sakshaug et al. (1983)
Sakshaug86	Sakshaug and Andresen (1986)
Schaum18	Schaum et al. (2018)
Shoman15	Shoman (2015)
Six04	Six et al. (2004)
Spilling15	Spilling et al. (2015)
Staeher02	Staeher et al. (2002)
Sugie13	Sugie and Yoshimura (2013)
Terry83	Terry et al. (1983)
Thompson89	Thompson et al. (1989)
Thompson92	Thompson et al. (1992)
Thompson99	Thompson (1999)
Uronen05	Uronen et al. (2005)
Wood95	Wood and Flynn (1995)
Yoder79	Yoder (1979)
Zhu17	Zhu et al. (2017)

References

- Béchemin, C., Grzebyk, D., Hachame, F., Hummert, C., and Maestrini, S.: Effect of different nitrogen/phosphorus nutrient ratios on the toxin content in *Alexandrium minutum*, *Aquatic Microbial Ecology*, 20, 157–165, doi: 10.3354/ame020157, URL <http://www.int-res.com/abstracts/ame/v20/n2/p157-165/>, 1999.
- Berges, J., Varela, D., and Harrison, P.: Effects of temperature on growth rate, cell composition and nitrogen metabolism in the marine diatom *Thalassiosira pseudonana* (Bacillariophyceae), *Marine Ecology Progress Series*, 225, 139–146, doi: 10.3354/meps225139, URL <http://www.int-res.com/abstracts/meps/v225/p139-146/>, 2002.
- Bi, R., Ismar, S., Sommer, U., and Zhao, M.: Environmental dependence of the correlations between stoichiometric and fatty acid-based indicators of phytoplankton nutritional quality, *Limnology and Oceanography*, 62, 334–347, doi: 10.1002/lno.10429, URL <http://doi.wiley.com/10.1002/lno.10429>, 2017.
- Bi, R., Ismar, S. M., Sommer, U., and Zhao, M.: Simultaneous shifts in elemental stoichiometry and fatty acids of *Emiliania huxleyi* in response to environmental changes, *Biogeosciences*, 15, 1029–1045, doi: 10.5194/bg-15-1029-2018, URL <https://www.biogeosciences.net/15/1029/2018/>, 2018.

- Bittar, T. B., Lin, Y., Sassano, L. R., Wheeler, B. J., Brown, S. L., Cochlan, W. P., and Johnson, Z. I.: Carbon allocation under light and nitrogen resource gradients in two model marine phytoplankton 1, *Journal of Phycology*, 49, 523–535, doi: 10.1111/jpy.12060, URL <http://doi.wiley.com/10.1111/jpy.12060>, 2013.
- Blanco-Ameijeiras, S., Moisset, S. A. M., Trimborn, S., Campbell, D. A., Heiden, J. P., and Hassler, C. S.: Elemental Stoichiometry and Photophysiology Regulation of *Synechococcus* sp. PCC7002 Under Increasing Severity of Chronic Iron Limitation, *Plant and Cell Physiology*, 59, 1803–1816, doi: 10.1093/pcp/pcy097, URL <https://academic.oup.com/pcp/article/59/9/1803/5025672>, 2018.
- Brauer, V. S., Stomp, M., Rosso, C., van Beusekom, S. A., Emmerich, B., Stal, L. J., and Huisman, J.: Low temperature delays timing and enhances the cost of nitrogen fixation in the unicellular cyanobacterium *Cyanothece*, *The ISME Journal*, 7, 2105–2115, doi: 10.1038/ismej.2013.103, URL <http://www.nature.com/articles/ismej2013103>, 2013.
- Bucciarelli, E., Pondaven, P., and Sarthou, G.: Effects of an iron-light co-limitation on the elemental composition (Si, C, N) of the marine diatoms *Thalassiosira oceanica* and *Ditylum brightwellii*, *Biogeosciences*, 7, 657–669, doi: 10.5194/bg-7-657-2010, URL <http://www.biogeosciences.net/7/657/2010/>, 2010.
- Claquin, P., Martin-Jezequel, V., Kromkamp, J. C., Veldhuis, M. J. W., and Kraay, G. W.: UNCOUPLING OF SILICON COMPARED WITH CARBON AND NITROGEN METABOLISMS AND THE ROLE OF THE CELL CYCLE IN CONTINUOUS CULTURES OF *THALASSIOSIRA PSEUDONANA* (BACILLARIOPHYCEAE) UNDER LIGHT, NITROGEN, AND PHOSPHORUS CONTROL1, *Journal of Phycology*, 38, 922–930, doi: 10.1046/j.1529-8817.2002.t01-1-01220.x, URL <http://doi.wiley.com/10.1046/j.1529-8817.2002.t01-1-01220.xhttps://linkinghub.elsevier.com/retrieve/pii/0198014983900316>, 2002.
- Fábregas, J., Patiño, M., Vecino, E., Cházaro, F., and Otero, A.: Productivity and biochemical composition of cyclostat cultures of the marine microalga *Tetraselmis suecica*, *Applied Microbiology and Biotechnology*, 43, 617–621, doi: 10.1007/BF00164763, URL <http://link.springer.com/10.1007/BF00164763>, 1995.
- Feng, Y., Roleda, M. Y., Armstrong, E., Law, C. S., Boyd, P. W., and Hurd, C. L.: Environmental controls on the elemental composition of a Southern Hemisphere strain of the coccolithophore *Emiliania huxleyi*, *Biogeosciences*, 15, 581–595, doi: 10.5194/bg-15-581-2018, URL <https://www.biogeosciences.net/15/581/2018/>, 2018.

- Finkel, Z. V., Quigg, A., Raven, J. A., Reinfelder, J. R., Schofield, O. E., and Falkowski, P. G.: Irradiance and the elemental stoichiometry of marine phytoplankton, *Limnology and Oceanography*, 51, 2690–2701, doi: 10.4319/lo.2006.51.6.2690, URL <http://doi.wiley.com/10.4319/lo.2006.51.6.2690>, 2006.
- Fu, F., Yu, E., Garcia, N., Gale, J., Luo, Y., Webb, E., and Hutchins, D.: Differing responses of marine N₂ fixers to warming and consequences for future diazotroph community structure, *Aquatic Microbial Ecology*, 72, 33–46, doi: 10.3354/ame01683, URL <http://www.int-res.com/abstracts/ame/v72/n1/p33-46/>, 2014.
- Fu, F.-X., Zhang, Y., Bell, P. R. F., and Hutchins, D. A.: PHOSPHATE UPTAKE AND GROWTH KINETICS OF TRICHODESMIUM (CYANOBACTERIA) ISOLATES FROM THE NORTH ATLANTIC OCEAN AND THE GREAT BARRIER REEF, AUSTRALIA, *Journal of Phycology*, 41, 62–73, doi: 10.1111/j.1529-8817.2005.04063.x, URL <http://doi.wiley.com/10.1111/j.1529-8817.2005.04063.x>, 2005.
- Fu, F.-X., Zhang, Y., Feng, Y., and Hutchins, D. A.: Phosphate and ATP uptake and growth kinetics in axenic cultures of the cyanobacterium *Synechococcus* CCMP 1334, *European Journal of Phycology*, 41, 15–28, doi: 10.1080/09670260500505037, URL <http://www.tandfonline.com/doi/abs/10.1080/09670260500505037>, 2006.
- Garcia, N. S., Fu, F.-X., Breene, C. L., Bernhardt, P. W., Mulholland, M. R., Sohm, J. A., and Hutchins, D. A.: INTERACTIVE EFFECTS OF IRRADIANCE AND CO₂ ON CO₂ FIXATION AND N₂ FIXATION IN THE DIAZOTROPH TRICHODESMIUM ERYTHRAEUM (CYANOBACTERIA)1, *Journal of Phycology*, 47, 1292–1303, doi: 10.1111/j.1529-8817.2011.01078.x, URL <http://doi.wiley.com/10.1111/j.1529-8817.2011.01078.x>, 2011.
- Giovagnetti, V., Cataldo, M. L., Conversano, F., and Brunet, C.: Growth and photophysiological responses of two picoplanktonic *Minutocellus* species, strains RCC967 and RCC703 (Bacillariophyceae), *European Journal of Phycology*, 47, 408–420, doi: 10.1080/09670262.2012.733030, URL <http://www.tandfonline.com/doi/abs/10.1080/09670262.2012.733030>, 2012.
- Goldman, J. C.: Temperature effects on steady-state growth, phosphorus uptake, and the chemical composition of a marine phytoplankter, *Microbial Ecology*, 5, 153–166, doi: 10.1007/BF02013523, URL <http://link.springer.com/10.1007/BF02013523>, 1979.
- Goldman, J. C. and Ryther, J. H.: Temperature-influenced species competition in mass cultures of marine phytoplankton, *Biotechnology and Bioengineering*, 18, 1125–1144, doi: 10.1002/bit.260180809, URL <http://doi.wiley.com/10.1002/bit.260180809>, 1976.

- Heiden, J. P., Bischof, K., and Trimborn, S.: Light Intensity Modulates the Response of Two Antarctic Diatom Species to Ocean Acidification, *Frontiers in Marine Science*, 3, 260, doi: 10.3389/fmars.2016.00260, URL <http://journal.frontiersin.org/article/10.3389/fmars.2016.00260/full>, 2016.
- Jacq, V., Ridame, C., L'Helguen, S., Kaczmar, F., and Saliot, A.: Response of the Unicellular Diazotrophic Cyanobacterium *Crocospaera watsonii* to Iron Limitation, *PLoS ONE*, 9, e86749, doi: 10.1371/journal.pone.0086749, URL <https://dx.plos.org/10.1371/journal.pone.0086749>, 2014.
- Jiang, H.-B., Fu, F.-X., Rivero-Calle, S., Levine, N. M., Sañudo-Wilhelmy, S. A., Qu, P.-P., Wang, X.-W., Pinedo-Gonzalez, P., Zhu, Z., and Hutchins, D. A.: Ocean warming alleviates iron limitation of marine nitrogen fixation, *Nature Climate Change*, 8, 709–712, doi: 10.1038/s41558-018-0216-8, URL <http://www.nature.com/articles/s41558-018-0216-8>, 2018.
- Johansson, N. and Granéli, E.: Cell density, chemical composition and toxicity of *Chrysochromulina polylepis* (Haptophyta) in relation to different N:P supply ratios, *Marine Biology*, 135, 209–217, doi: 10.1007/s002270050618, URL <http://link.springer.com/10.1007/s002270050618>, 1999.
- Kudo, I. and Harrison, P. J.: EFFECT OF IRON NUTRITION ON THE MARINE CYANOBACTERIUM *SYNECHOCOCCUS* GROWN ON DIFFERENT N SOURCES AND IRRADIANCES¹, *Journal of Phycology*, 33, 232–240, doi: 10.1111/j.0022-3646.1997.00232.x, URL <http://doi.wiley.com/10.1111/j.0022-3646.1997.00232.x>, 1997.
- Leonardos, N. and Geider, R. J.: Responses of elemental and biochemical composition of *Chaetoceros muelleri* to growth under varying light and nitrate : phosphate supply ratios and their influence on critical N: P, *Limnology and Oceanography*, 49, 2105–2114, doi: 10.4319/lo.2004.49.6.2105, URL <http://doi.wiley.com/10.4319/lo.2004.49.6.2105>, 2004.
- Leonardos, N. and Geider, R. J.: ELEMENTAL AND BIOCHEMICAL COMPOSITION OF *RHINOMONAS RETICULATA* (CRYPTOPHYTA) IN RELATION TO LIGHT AND NITRATE-TO-PHOSPHATE SUPPLY RATIOS¹, *Journal of Phycology*, 41, 567–576, doi: 10.1111/j.1529-8817.2005.00082.x, URL <http://doi.wiley.com/10.1111/j.1529-8817.2005.00082.x>, 2005.
- Leong, S. C. Y. and Taguchi, S.: Response of the dinoflagellate *Alexandrium tamarense* to a range of nitrogen sources and concentrations: Growth rate, chemical carbon and nitrogen, and pigments, *Hydrobiologia*, 515, 215–224, doi: 10.1023/B:HYDR.0000027331.49819.a4, URL <http://link.springer.com/10.1023/B:HYDR.0000027331.49819.a4>, 2004.
- Leong, S. C. Y., Maekawa, M., and Taguchi, S.: Carbon and nitrogen acquisition by the toxic dinoflagellate *Alexandrium tamarense* in response to

- different nitrogen sources and supply modes, *Harmful Algae*, 9, 48–58, doi: 10.1016/j.hal.2009.07.003, URL <https://linkinghub.elsevier.com/retrieve/pii/S156898830900081X>, 2010.
- Li, G. and Campbell, D. A.: Rising CO₂ Interacts with Growth Light and Growth Rate to Alter Photosystem II Photoinactivation of the Coastal Diatom *Thalassiosira pseudonana*, *PLoS ONE*, 8, e55562, doi: 10.1371/journal.pone.0055562, URL <https://dx.plos.org/10.1371/journal.pone.0055562>, 2013.
- Li, G. and Campbell, D. A.: Interactive effects of nitrogen and light on growth rates and RUBISCO content of small and large centric diatoms, *Photosynthesis Research*, 131, 93–103, doi: 10.1007/s11120-016-0301-7, URL <http://link.springer.com/10.1007/s11120-016-0301-7>, 2017.
- Li, W. K. W.: Temperature Adaptation in Phytoplankton: Cellular and Photosynthetic Characteristics, in: *Primary Productivity in the Sea*, pp. 259–279, Springer US, Boston, MA, doi: 10.1007/978-1-4684-3890-1_15, URL http://link.springer.com/10.1007/978-1-4684-3890-1_15, 1980.
- Li, Z., Wu, Y., and Beardall, J.: Physiological and biochemical responses of *Thalassiosira punctigera* to nitrate limitation, *Diatom Research*, 33, 135–143, doi: 10.1080/0269249X.2018.1489897, URL <https://www.tandfonline.com/doi/full/10.1080/0269249X.2018.1489897>, 2018.
- Lu, Y., Wen, Z., Shi, D., Chen, M., Zhang, Y., Bonnet, S., Li, Y., Tian, J., and Kao, S.-J.: Effect of light on N₂ fixation and net nitrogen release of *Trichodesmium* in a field study, *Biogeosciences*, 15, 1–12, doi: 10.5194/bg-15-1-2018, URL <https://www.biogeosciences.net/15/1/2018/>, 2018.
- Mari, X.: Carbon content and C:N ratio of transparent exopolymeric particles (TEP) produced by bubbling exudates of diatoms, *Marine Ecology Progress Series*, 183, 59–71, doi: 10.3354/meps183059, URL <http://www.int-res.com/abstracts/meps/v183/p59-71/>, 1999.
- Martiny, A. C., Ma, L., Mouginit, C., Chandler, J. W., and Zinser, E. R.: Interactions between Thermal Acclimation, Growth Rate, and Phylogeny Influence *Prochlorococcus* Elemental Stoichiometry, *PLOS ONE*, 11, e0168291, doi: 10.1371/journal.pone.0168291, URL <http://dx.plos.org/10.1371/journal.pone.0168291>, 2016.
- Meyerink, S. W., Ellwood, M. J., Maher, W. A., Dean Price, G., and Strzepek, R. F.: Effects of iron limitation on silicon uptake kinetics and elemental stoichiometry in two Southern Ocean diatoms, *Eucampia antarctica* and *Proboscia inermis*, and the temperate diatom *Thalassiosira pseudonana*, *Limnology and Oceanography*, 62, 2445–2462, doi: 10.1002/lno.10578, URL <http://doi.wiley.com/10.1002/lno.10578>, 2017.

- Mortensen, S. H., Børsheim, K. Y., Rainuzzo, J., and Knutsen, G.: Fatty acid and elemental composition of the marine diatom *Chaetoceros gracilis* Schütt. Effects of silicate deprivation, temperature and light intensity, *Journal of Experimental Marine Biology and Ecology*, 122, 173–185, doi: 10.1016/0022-0981(88)90183-9, URL <https://linkinghub.elsevier.com/retrieve/pii/0022098188901839>, 1988.
- Mou, S., Zhang, Y., Li, G., Li, H., Liang, Y., Tang, L., Tao, J., Xu, J., Li, J., Zhang, C., and Jiao, N.: Effects of elevated CO₂ and nitrogen supply on the growth and photosynthetic physiology of a marine cyanobacterium, *Synechococcus* sp. PCC7002, *Journal of Applied Phycology*, 29, 1755–1763, doi: 10.1007/s10811-017-1089-3, URL <http://link.springer.com/10.1007/s10811-017-1089-3>, 2017.
- Mouginot, C., Zimmerman, A. E., Bonachela, J. A., Fredricks, H., Allison, S. D., Van Mooy, B. A. S., and Martiny, A. C.: Resource allocation by the marine cyanobacterium *Synechococcus* WH8102 in response to different nutrient supply ratios, *Limnology and Oceanography*, 60, 1634–1641, doi: 10.1002/lno.10123, URL <http://doi.wiley.com/10.1002/lno.10123>, 2015.
- Nielsen, M.: Growth and chemical composition of the toxic dinoflagellate *Gymnodinium galatheanum* in relation to irradiance, temperature and salinity, *Marine Ecology Progress Series*, 136, 205–211, doi: 10.3354/meps136205, URL <http://www.int-res.com/abstracts/meps/v136/p205-211/>, 1996.
- Nielsen, M. V.: Irradiance and daylength effects on growth and chemical composition of *Gyrodinium aureolum* Hulbert in culture, *Journal of Plankton Research*, 14, 811–820, doi: 10.1093/plankt/14.6.811, URL <https://academic.oup.com/plankt/article-lookup/doi/10.1093/plankt/14.6.811>, 1992.
- Nielsen, M. V. and Tønseth, C. P.: Temperature and salinity effect on growth and chemical composition of *Gyrodinium aureolum* Hulbert in culture, *Journal of Plankton Research*, 13, 389–398, doi: 10.1093/plankt/13.2.389, URL <https://academic.oup.com/plankt/article-lookup/doi/10.1093/plankt/13.2.389>, 1991.
- Otero, A., Dominguez, A., Lamela, T., Garcia, D., and Fábregas, J.: Steady-states of semicontinuous cultures of a marine diatom: Effect of saturating nutrient concentrations, *Journal of Experimental Marine Biology and Ecology*, 227, 23–33, doi: 10.1016/S0022-0981(97)00259-1, URL <https://linkinghub.elsevier.com/retrieve/pii/S0022098197002591>, 1998.
- Passow, U. and Laws, E.: Ocean acidification as one of multiple stressors: growth response of *Thalassiosira weissflogii* (diatom) under temperature and light stress, *Marine Ecology Progress Series*, 541, 75–90, doi: 10.3354/

- meps11541, URL <http://www.int-res.com/abstracts/meps/v541/p75-90/>, 2015.
- Qu, P., Fu, F., and Hutchins, D. A.: Responses of the large centric diatom *Coccinodiscus* sp. to interactions between warming, elevated CO₂, and nitrate availability, *Limnology and Oceanography*, 63, 1407–1424, doi: 10.1002/lno.10781, URL <http://doi.wiley.com/10.1002/lno.10781>, 2018.
- Rabouille, S., Semedo Cabral, G., and Pedrotti, M.: Towards a carbon budget of the diazotrophic cyanobacterium *Crocospaera*: effect of irradiance, *Marine Ecology Progress Series*, 570, 29–40, doi: 10.3354/meps12087, URL <http://www.int-res.com/abstracts/meps/v570/p29-40/>, 2017.
- Rasdi, N. W. and Qin, J. G.: Effect of N:P ratio on growth and chemical composition of *Nannochloropsis oculata* and *Tisochrysis lutea*, *Journal of Applied Phycology*, 27, 2221–2230, doi: 10.1007/s10811-014-0495-z, URL <http://link.springer.com/10.1007/s10811-014-0495-z>, 2015.
- Saito, H. and Tsuda, A.: Influence of light intensity on diatom physiology and nutrient dynamics in the Oyashio region, *Progress in Oceanography*, 57, 251–263, doi: 10.1016/S0079-6611(03)00100-9, URL <https://linkinghub.elsevier.com/retrieve/pii/S0079661103001009>, 2003.
- Sakshaug, E. and Andresen, K.: Effect of light regime upon growth rate and chemical composition of a clone of *Skeletonema costatum* from the Trondheimsfjord, Norway, *Journal of Plankton Research*, 8, 619–637, doi: 10.1093/plankt/8.4.619, URL <https://academic.oup.com/plankt/article-lookup/doi/10.1093/plankt/8.4.619>, 1986.
- Sakshaug, E., Andresen, K., Mykkestad, S., and Olsen, Y.: Nutrient status of phytoplankton communities in Norwegian waters (marine, brackish, and fresh) as revealed by their chemical composition, *Journal of Plankton Research*, 5, 175–196, doi: 10.1093/plankt/5.2.175, URL <https://academic.oup.com/plankt/article-lookup/doi/10.1093/plankt/5.2.175>, 1983.
- Schaum, C.-E., Buckling, A., Smirnoff, N., Studholme, D. J., and Yvon-Durocher, G.: Environmental fluctuations accelerate molecular evolution of thermal tolerance in a marine diatom, *Nature Communications*, 9, 1719, doi: 10.1038/s41467-018-03906-5, URL <http://www.nature.com/articles/s41467-018-03906-5>, 2018.
- Shoman, N. Y.: The dynamics of the intracellular contents of carbon, nitrogen, and chlorophyll a under conditions of batch growth of the diatom *Phaeodactylum tricornutum* (Bohlin, 1897) at different light intensities, *Russian Journal of Marine Biology*, 41, 356–362, doi: 10.1134/S1063074015050132, URL <http://link.springer.com/10.1134/S1063074015050132>, 2015.

- Six, C., Thomas, J., Brahamsha, B., Lemoine, Y., and Partensky, F.: Photophysiology of the marine cyanobacterium *Synechococcus* sp. WH8102, a new model organism, *Aquatic Microbial Ecology*, 35, 17–29, doi: 10.3354/ame035017, URL <http://www.int-res.com/abstracts/ame/v35/n1/p17-29/>, 2004.
- Spilling, K., Ylöstalo, P., Simis, S., and Seppälä, J.: Interaction Effects of Light, Temperature and Nutrient Limitations (N, P and Si) on Growth, Stoichiometry and Photosynthetic Parameters of the Cold-Water Diatom *Chaetoceros wighamii*, *PLOS ONE*, 10, e0126308, doi: 10.1371/journal.pone.0126308, URL <https://dx.plos.org/10.1371/journal.pone.0126308>, 2015.
- Staehr, P., Henriksen, P., and Markager, S.: Photoacclimation of four marine phytoplankton species to irradiance and nutrient availability, *Marine Ecology Progress Series*, 238, 47–59, doi: 10.3354/meps238047, URL <http://www.int-res.com/abstracts/meps/v238/p47-59/>, 2002.
- Sugie, K. and Yoshimura, T.: Effects of p CO₂ and iron on the elemental composition and cell geometry of the marine diatom *Pseudo-nitzschia pseudodelicatissima* (Bacillariophyceae) 1, *Journal of Phycology*, 49, 475–488, doi: 10.1111/jpy.12054, URL <http://doi.wiley.com/10.1111/jpy.12054>, 2013.
- Terry, K. L., Hirata, J., and Laws, E. A.: Light-limited growth of two strains of the marine diatom *Phaeodactylum tricornutum* Bohlin: Chemical composition, carbon partitioning and the diel periodicity of physiological processes, *Journal of Experimental Marine Biology and Ecology*, 68, 209–227, doi: 10.1016/0022-0981(83)90054-0, URL <https://linkinghub.elsevier.com/retrieve/pii/0022098183900540>, 1983.
- Thompson, P.: THE RESPONSE OF GROWTH AND BIOCHEMICAL COMPOSITION TO VARIATIONS IN DAYLENGTH, TEMPERATURE, AND IRRADIANCE IN THE MARINE DIATOM *THALASSIOSIRA PSEUDONANA* (BACILLARIOPHYCEAE), *Journal of Phycology*, 35, 1215–1223, doi: 10.1046/j.1529-8817.1999.3561215.x, URL <http://doi.wiley.com/10.1046/j.1529-8817.1999.3561215.x>, 1999.
- Thompson, P. A., Levasseur, M. E., and Harrison, P. J.: Light-limited growth on ammonium vs. nitrate: What is the advantage for marine phytoplankton?, *Limnology and Oceanography*, 34, 1014–1024, doi: 10.4319/lo.1989.34.6.1014, URL <http://doi.wiley.com/10.4319/lo.1989.34.6.1014>, 1989.
- Thompson, P. A., Guo, M., Harrison, P. J., and Whyte, J. N. C.: EFFECTS OF VARIATION IN TEMPERATURE. II. ON THE FATTY ACID COMPOSITION OF EIGHT SPECIES OF MARINE PHYTOPLANKTON¹, *Journal of Phycology*, 28, 488–497, doi: 10.1111/j.0022-3646.1992.00488.x, URL <http://doi.wiley.com/10.1111/j.0022-3646.1992.00488.x>, 1992.

- Uronen, P., Lehtinen, S., Legrand, C., Kuuppo, P., and Tamminen, T.: Haemolytic activity and allelopathy of the haptophyte *Prymnesium parvum* in nutrient-limited and balanced growth conditions, *Marine Ecology Progress Series*, 299, 137–148, doi: 10.3354/meps299137, URL <http://www.int-res.com/abstracts/meps/v299/p137-148/>, 2005.
- Wood, G. J. and Flynn, K. J.: GROWTH OF HETEROSIGMA CARTERAE (RAPHIDOPHYCEAE) ON NITRATE AND AMMONIUM AT THREE PHOTON FLUX DENSITIES: EVIDENCE FOR N STRESS IN NITRATE-GROWING CELLS¹, *Journal of Phycology*, 31, 859–867, doi: 10.1111/j.0022-3646.1995.00859.x, URL <http://doi.wiley.com/10.1111/j.0022-3646.1995.00859.x>, 1995.
- Yoder, J. A.: EFFECT OF TEMPERATURE ON LIGHT-LIMITED GROWTH AND CHEMICAL COMPOSITION OF SKELETONEMA COSTATUM (BACILLARIOPHYCEAE), *Journal of Phycology*, 15, 362–370, doi: 10.1111/j.1529-8817.1979.tb00706.x, URL <http://doi.wiley.com/10.1111/j.1529-8817.1979.tb00706.x>, 1979.
- Zhu, Z., Qu, P., Gale, J., Fu, F., and Hutchins, D. A.: Individual and interactive effects of warming and CO₂ on *Pseudo-nitzschia subcurvata* and *Phaeocystis antarctica*, two dominant phytoplankton from the Ross Sea, Antarctica, *Biogeosciences*, 14, 5281–5295, doi: 10.5194/bg-14-5281-2017, URL <https://www.biogeosciences.net/14/5281/2017/>, 2017.