

Publications of Prof. Boon Leong Lim (2018-2024)

1. W.C. Sin, J. Liu, J. Y. Zhong, H. M. Lam*, **B. L. Lim*** (2024) Comparative proteomics analysis of root and nodule mitochondria of soybean. [Plant, Cell & Environment DOI: 10.1111/pce.15026](#)
2. S.L. Lim, J. Liu, G. Dupouy, G. Singh, S. Baudrey, L. Yang, J. Y. Zhong, M. Chabouté, **B. L. Lim*** (2024) *In planta* imaging of pyridine nucleotides using second-generation fluorescent protein biosensors. [The Plant Journal. DOI: 10.1111/tpj.16796](#)
3. M. Yang, S. Chen, S. L. Lim, L. Yang, J. Y. Zhong, K. C. Chan, K.B. Wong, J. Wang, and **B. L. Lim*** (2024) A converged ubiquitin-proteasome pathway for degradation of tail-anchored receptors of TOC and TOM in Arabidopsis. [Journal of Integrative Plant Biology](#) 66 (5):1007-1023.
4. L. Yang, J. Liu, C.K. Wong and **B. L. Lim*** (2023) Movement of lipid droplets in the Arabidopsis pollen tube is dependent on the actomyosin system. [Plants](#) 12:2489.
5. J. Liu, S.L. Lim, J. Y. Zhong, **B. L. Lim*** (2022) Bioenergetics of pollen tube growth in *Arabidopsis thaliana* revealed by ratiometric genetically encoded biosensors. [Nature Communications](#) 13: 7822.
6. S.L. Lim, S. Flütsch, J. Liu, L. Distefano, D. Santelia*, **B. L. Lim*** (2022) Arabidopsis guard cell chloroplasts import cytosolic ATP for starch turnover and stomatal opening. [Nature Communications](#) 13: 652.
7. R. Zhang, X. Guan, M. Yang, Y. Law, C. P. Voon, J. Yan, F. Sun, **B. L. Lim*** (2021) Overlapping functions of the paralogous proteins AtPAP2 and AtPAP9 in *Arabidopsis thaliana*. [Int J Mol Sci.](#) 22(14):7243.
8. Z. Xu, R. Zhang, M. Yang, Y. Law, F. Sun, N. L. Hon, S. M. Ngai, **B. L. Lim*** (2021) A balance between the activities of chloroplasts and mitochondria is crucial for optimal plant growth. [Antioxidants](#) 10(6):935.
9. C. P. Voon, Y. Law, X. Guan, S. L. Lim, Z. Xu, W.T. Chu, R. Zhang, F. Sun, M. Labs, M. Pribil, D. Leister, M. Hronková, J. Kubásek, Y. Cui, L. Jiang, M. Tsuyama, P. Gardeström, M. Tikkannen, **B. L. Lim*** (2021) Modulating the activities of chloroplasts and mitochondria promotes ATP production and plant growth. [Quantitative Plant Biology](#) 2:e7.
10. Y. Sun, M. Xie, Z. Xu, K. C. Chan, J. Y. Zhong, K. Fan, J. Wong-Bajracharya, H. M. Lam*, and **B. L. Lim*** (2020) Differential RNA editing and intron splicing in soybean mitochondria during nodulation. [Int J Mol Sci.](#) 21:E9378.
11. S. L. Lim, C. P. Voon, X. Guan, Y. Yang, P. Gardeström, **B. L. Lim*** (2020) *In planta* study of photosynthesis and photorespiration using NADPH and NADH/NAD⁺ fluorescent protein sensors. [Nature Communications](#) 11(1):3238.
12. C. P. Voon & **B. L. Lim*** (2019) ATP translocation and chloroplast biology. [National Science Review](#) 6:1073-1076.
13. C. P. Voon, X. Guan, Y. Sun, A. Sahu, M. N. Chan, P. Gardeström, S. Wagner, P. Fuchs, T. Nietzel, W. K. Versaw, M. Schwarzländer, **B. L. Lim*** (2018) ATP compartmentation in plastids and cytosol of *Arabidopsis thaliana* revealed by fluorescent protein sensing. [Proc Natl Acad Sci USA](#) 115(45):10778-E10787.
14. Y. Law, L. Ngan, J. Yan, L. Y. Kwok, Y. Sun, S. Cheng, S. Schwenkert and **B. L. Lim*** (2018) Multiple kinases can phosphorylate the N-terminal sequences of mitochondrial proteins in *Arabidopsis thaliana*. [Frontiers in Plant Science](#) 9: 982.
15. X. Guan, S. Chen, C. P. Voon, K. B. Wong, M. Tikkannen, **B. L. Lim*** (2018) FdC1 and leaf-type ferredoxins channel electrons from photosystem I to different downstream electron acceptors. [Frontiers in Plant Science](#) 9:410.
16. W. Zhang, I. M. C. Lo, L. Hu, C. P. Voon, **B. L. Lim**, W. K. Versaw (2018) Environmental risks of nano zero-valent iron for arsenate remediation: Impacts on cytosolic levels of inorganic phosphate and MgATP²⁻ in *Arabidopsis thaliana*. [Environmental Science & Technology](#) 52(7):4385-4392.