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研究專長：生物化學、分子遺傳學、分子細胞生物學、植物生理學、應用藻類學

研究領域：珊瑚共生微藻的耐熱性、生物多樣性以及熱帶和耐熱微藻的應用、調節微藻中脂質和類胡蘿蔔素的生物合成、海草生理與生態

Selected recent publications :

1. Yi-Chen Chang, Tian-Huei Chu, Po-Chien Yu, E-Ming Wang, Chao-Cheng Huang, Tsung-Hui Hu, Zhi-Hong Wen, Chou-Yuan Ko, **Ching-Nen Nathan Chen**, and **Ming-Hong Tai** (co-corresponding) (2021). Microalgal extract from thermotolerant *Coelastrrella* sp. F50 retards the liver tumor progression by targeting hepatic cancer stem cells. *Phytotherapy Research* 2021; 1-14, <https://doi.org/10.1002/ptr.7111>
2. Chia-Sheng Chiu, Pai-Ho Chiu, Tze Ching Yong, Hsin-Pei Tsai, Keryea Soong, Hsiang-En Huang, and **Ching-Nen Nathan Chen** (corresponding) (2020). Mechanisms protect airborne green microalgae during long distance dispersal. *Scientific Reports* 10:13984 <https://doi.org/10.1038/s41598-020-71004-y>
3. Tze Ching Yong, Pai-Ho Chiu, Chi-Hui Chen, Chun-Hung Hung and **Ching-Nen Nathan Chen** (corresponding) (2020). Disruption of thin- and thick-wall microalgae using high pressure gases: Effects of gas species, pressure and treatment duration on the extraction of proteins and carotenoids. *Journal of Bioscience and Bioengineering* 129: 502-507.
4. Tze Ching Yong, Chia-Shen Chiu and **Ching-Nen Nathan Chen** (corresponding) (2019). Optimization of a simple, accurate and low cost method for starch quantification in green microalgae. *Botanical Studies* 60:25-30
5. Pai-Ho Chiu, Keryea Soong, **Ching-Nen Nathan Chen** (corresponding) (2016). Cultivation of two thermotolerant microalgae under tropical conditions: Influences of carbon sources and light duration on biomass and lutein productivity in four seasons. *Bioresource Technology* 212:190-198.
6. Wen-Chi Chang, Han-Qin Zheng, **Ching-Nen Nathan Chen** (corresponding) (2016). Comparative transcriptome analysis reveals a potential photosynthate partitioning between lipid and starch biosynthesis pathways in green microalgae. *Algal Research* 16: 54-62.