





Arthur Grossman

- Visiting Professor (By courtesy), Biology
- Professor (By Courtesy), Biology
-  NIH Biosketch available Online
-  Curriculum Vitae available Online

Bio

BIO

Arthur Robert Grossman (born 1950): Arthur Grossman has been a Staff Scientist at The Carnegie Institution for Science, Department of Plant Biology since 1982, and holds a courtesy appointment as Professor in the Department of Biology at Stanford University. He has performed research across fields ranging from plant biology, microbiology, marine biology, ecology, genomics, engineering and photosynthesis and initiated large scale algal genomics by leading the *Chlamydomonas* genome project (sequencing of the genome coupled to transcriptomics). During his tenure at Carnegie, he mentored more than fifteen PhD students and approximately 40 post-doctoral fellows (many of whom have become very successful independent scientists at both major universities and in industry). In 2002 he received the Darbaker Prize (Botanical Society of America) for work on microalgae and in 2009 received the Gilbert Morgan Smith Medal (National Academy of Sciences) for the quality of his publications on marine and freshwater algae. In 2015 he was Vice Chair of the Gordon Research Conference on Photosynthesis and in 2017 was Chair of that same conference (Photosynthetic plasticity: From the environment to synthetic systems). He also gave the Arnon endowed lecture on photosynthesis in Berkeley in March of 2017, has given numerous plenary lectures and received a number of fellowships throughout his career, including the Visiting Scientist Fellowship - Department of Life and Environmental Sciences (DiSVA), Università Politecnica delle Marche (UNIVPM) (Italy, 2014), the Lady Davis Fellowship (Israel, 2011) and most recently the Chaire Edmond de Rothschild (to work IBPC in Paris in 2017-2018). He has been Co-Editor in Chief of Journal of Phycology and has served on the editorial boards of many well-respected biological journals including the Annual Review of Genetics, Plant Physiology, Eukaryotic Cell, Journal of Biological Chemistry, Molecular Plant, and Current Genetics. He has also reviewed innumerable papers and grants, served on many scientific panels that has evaluated various programs for granting agencies [NSF, CNRS, Marden program (New Zealand)] and private companies. He has also served in a scientific advisory capacity for both nonprofit and for profit companies including Phoenix Bioinformatics, Excelixis, Martex, Solazyme/TerraVia, Checkerspot, Phycoil and CarbonDrop. Recently he has worked with Francis-Andre Wollman, Susan Dutcher and Ursula Goodenough to complete a highly expanded third edition of the *Chlamydomonas* Sourcebook (Elsevier, 2023).

ACADEMIC APPOINTMENTS

- Visiting Professor (By courtesy), Biology

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

How photosynthetic organisms perceive and respond to their environment

Teaching

STANFORD ADVISEES

Postdoctoral Research Mentor

Lev Tsybin

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biology (School of Humanities and Sciences) (Phd Program)

Publications

PUBLICATIONS

- **One step further toward a crop CO₂-concentrating mechanism.** *Journal of experimental botany*
Findinier, J., Grossman, A. R.
2023; 74 (12): 3402-3405
- **Light-independent regulation of algal photoprotection by CO₂ availability.** *Nature communications*
Aguila Ruiz-Sola, M., Flori, S., Yuan, Y., Villain, G., Sanz-Luque, E., Redekop, P., Tokutsu, R., Kuken, A., Tschla, A., Kepesidis, G., Alloreant, G., Arend, M., Iacono, et al
2023; 14 (1): 1977
- **Chlamydomonas mutants lacking chloroplast TRIOSE PHOSPHATE TRANSPORTER3 are metabolically compromised and light-sensitive.** *The Plant cell*
Huang, W., Krishnan, A., Plett, A., Meagher, M., Linka, N., Wang, Y., Ren, B., Findinier, J., Redekop, P., Fakhimi, N., Kim, R. G., Karns, D. A., Boyle, et al
2023
- **Restricting electron flow at cytochrome b6f when downstream electron acceptors are severely limited.** *Plant physiology*
Saroussi, S., Redekop, P., Karns, D. A., Thomas, D. C., Wittkopp, T. M., Posewitz, M. C., Grossman, A. R.
2023
- **The Influence of Symbiosis on the Proteome of the Exaistasia Endosymbiont Breviolum minutum.** *Microorganisms*
Mashini, A. G., Oakley, C. A., Beepat, S. S., Peng, L., Grossman, A. R., Weis, V. M., Davy, S. K.
2023; 11 (2)
- **Symbiosis induces unique volatile profiles in the model cnidarian Aiptasia.** *The Journal of experimental biology*
Wuerz, M., Lawson, C. A., Ueland, M., Oakley, C. A., Grossman, A. R., Weis, V. M., Suggett, D. J., Davy, S. K.
2022
- **Lifestyle differences and carbon acquisition in Paragymnodinium dinoflagellates.** *Journal of phycology*
Grossman, A. R.
2022; 58 (4): 487-489
- **Immunolocalization of Metabolite Transporter Proteins in a Model Cnidarian-Dinoflagellate Symbiosis.** *Applied and environmental microbiology*
Mashini, A. G., Oakley, C. A., Grossman, A. R., Weis, V. M., Davy, S. K.
2022: e0041222
- **Retrotransposition facilitated the establishment of a primary plastid in the thecate amoeba Paulinella.** *Proceedings of the National Academy of Sciences of the United States of America*
Calatrava, V., Stephens, T. G., Gabr, A., Bhaya, D., Bhattacharya, D., Grossman, A. R.
2022; 119 (23): e2121241119
- **Transcriptional regulation of photoprotection in dark-to-light transition-More than just a matter of excess light energy.** *Science advances*
Redekop, P., Sanz-Luque, E., Yuan, Y., Villain, G., Petroustos, D., Grossman, A. R.
2022; 8 (22): eabn1832
- **Intelligent image-activated sorting of Chlamydomonas reinhardtii by mitochondrial localization.** *Cytometry. Part A : the journal of the International Society for Analytical Cytology*
Harmon, J., Findinier, J., Ishii, N. T., Herbig, M., Isozaki, A., Grossman, A., Goda, K.
2022
- **Symbiosis with Dinoflagellates Alters Cnidarian Cell-Cycle Gene Expression** *CELLULAR MICROBIOLOGY*
Gorman, L. M., Konciute, M. K., Cui, G., Oakley, C. A., Grossman, A. R., Weis, V. M., Aranda, M., Davy, S. K.
2022; 2022

- **Systematic characterization of gene function in the photosynthetic alga *Chlamydomonas reinhardtii*.** *Nature genetics*
Fausser, F., Vilarrasa-Blasi, J., Onishi, M., Ramundo, S., Patena, W., Millican, M., Osaki, J., Philp, C., Nemeth, M., Salome, P. A., Li, X., Wakao, S., Kim, et al
2022
- **Differential Phototactic Behavior of Closely Related Cyanobacterial Isolates from Yellowstone Hot Spring Biofilms.** *Applied and environmental microbiology*
Bunbury, F., Rivas, C., Calatrava, V., Shelton, A. N., Grossman, A., Bhaya, D.
2022: e0019622
- **Cnidarian-Symbiodiniaceae symbiosis establishment is independent of photosynthesis.** *Current biology : CB*
Jinkerson, R. E., Russo, J. A., Newkirk, C. R., Kirk, A. L., Chi, R. J., Martindale, M. Q., Grossman, A. R., Hatta, M., Xiang, T.
2022
- **The chromatin organization of a chlorarachniophyte nucleomorph genome.** *Genome biology*
Marinov, G. K., Chen, X., Wu, T., He, C., Grossman, A. R., Kundaje, A., Greenleaf, W. J.
2022; 23 (1): 65
- **Deep imaging flow cytometry.** *Lab on a chip*
Huang, K., Matsumura, H., Zhao, Y., Herbig, M., Yuan, D., Mineharu, Y., Harmon, J., Findinier, J., Yamagishi, M., Ohnuki, S., Nitta, N., Grossman, A. R., Ohya, et al
2022
- **Genomic conservation and putative downstream functionality of the phosphatidylinositol signalling pathway in the cnidarian-dinoflagellate symbiosis.** *Frontiers in microbiology*
Ashley, I. A., Kitchen, S. A., Gorman, L. M., Grossman, A. R., Oakley, C. A., Suggett, D. J., Weis, V. M., Rosset, S. L., Davy, S. K.
2022; 13: 1094255
- **INSIGHTS INTO THE EVOLUTION OF A PRIMARY ENDOSYMBIOSIS THROUGH ANALYSIS OF THE PAULINELLA GENOME**
Stephens, T. G., Calatrava, V., Gabr, A., Grossman, A., Bhattacharya, D.
TAYLOR & FRANCIS LTD.2021: 54
- **WHY IS PRIMARY ENDOSYMBIOSIS SO RARE?**
Bhattacharya, D., Stephens, T. G., Gabr, A., Calatrava, V., Grossman, A. R.
TAYLOR & FRANCIS LTD.2021: 41-42
- **Why is primary endosymbiosis so rare?** *The New phytologist*
Stephens, T. G., Gabr, A., Calatrava, V., Grossman, A. R., Bhattacharya, D.
2021
- **Transcription-dependent domain-scale three-dimensional genome organization in the dinoflagellate *Breviolum minutum*.** *Nature genetics*
Marinov, G. K., Trevino, A. E., Xiang, T., Kundaje, A., Grossman, A. R., Greenleaf, W. J.
2021
- **Responses of *Chlamydomonas reinhardtii* during the transition from P-deficient to P-sufficient growth (the P-overplus response): The roles of the vacuolar transport chaperones and polyphosphate synthesis.** *Journal of phycology*
Plouviez, M., Fernandez, E., Grossman, A. R., Sanz-Luque, E., Sells, M., Wheeler, D., Guieysse, B.
2021
- **Interplay of four auxiliary factors is required for the assembly of photosystem I reaction center subcomplex.** *The Plant journal : for cell and molecular biology*
Nellaepalli, S., Kim, R. G., Grossman, A. R., Takahashi, Y.
2021
- **moving toward more model algae.** *Journal of phycology*
Grossman, A.
2021; 57 (1): 51-53
- **A phytophotonic approach to enhanced photosynthesis** *ENERGY & ENVIRONMENTAL SCIENCE*
Kunz, L. Y., Redekop, P., Ort, D. R., Grossman, A. R., Cargnello, M., Majumdar, A.
2020; 13 (12): 4794-4807

- **Phylogenetic analysis of cell-cycle regulatory proteins within the Symbiodiniaceae.** *Scientific reports*
Gorman, L. M., Wilkinson, S. P., Kitchen, S. A., Oakley, C. A., Grossman, A. R., Weis, V. M., Davy, S. K.
2020; 10 (1): 20473
- **Transcriptome Reprogramming of Symbiodiniaceae *Breviolum minutum* in Response to Casein Amino Acids Supplementation** *FRONTIERS IN PHYSIOLOGY*
Kirk, A. L., Clowez, S., Lin, F., Grossman, A. R., Xiang, T.
2020; 11
- **Impact of menthol on growth and photosynthetic function of *Breviolum minutum* (Dinoflagellata, Dinophyceae, Symbiodiniaceae) and interactions with its *Aiptasia* host.** *Journal of phycology*
Clowez, S., Renicke, C., Pringle, J. R., Grossman, A. R.
2020
- **Metabolite pools of the reef building coral *Montipora capitata* are unaffected by Symbiodiniaceae community composition** *CORAL REEFS*
Matthews, J. L., Cuning, R., Ritson-Williams, R., Oakley, C. A., Lutz, A., Roessner, U., Grossman, A. R., Weis, V. M., Gates, R. D., Davy, S. K.
2020
- **Sub-cellular imaging shows reduced photosynthetic carbon and increased nitrogen assimilation by the non-native endosymbiont *Durusdinium trenchii* in the model cnidarian *Aiptasia*.** *Environmental microbiology*
Sproles, A. E., Oakley, C. A., Krueger, T., Grossman, A. R., Weis, V. M., Meibom, A., Davy, S. K.
2020
- **Paulinella, a model for understanding plastid primary endosymbiosis.** *Journal of phycology*
Gabr, A., Grossman, A. R., Bhattacharya, D.
2020
- **Symbiont population control by host-symbiont metabolic interaction in Symbiodiniaceae-cnidarian associations.** *Nature communications*
Xiang, T. n., Lehnert, E. n., Jinkerson, R. E., Clowez, S. n., Kim, R. G., DeNofrio, J. C., Pringle, J. R., Grossman, A. R.
2020; 11 (1): 108
- **Polyphosphate: A Multifunctional Metabolite in Cyanobacteria and Algae.** *Frontiers in plant science*
Sanz-Luque, E., Bhaya, D., Grossman, A. R.
2020; 11: 938
- **Photo-movement in the sea anemone *Aiptasia* influenced by light quality and symbiotic association** *CORAL REEFS*
Foo, S. A., Liddell, L., Grossman, A., Caldeira, K.
2019
- **Towards sustainable microalgal biomass processing: anaerobic induction of autolytic cell-wall self-ingestion in lipid-rich *Nannochloropsis* slurries** *GREEN CHEMISTRY*
Halim, R., Hill, D. A., Hanssen, E., Webley, P. A., Blackburn, S., Grossman, A. R., Posten, C., Martin, G. O.
2019; 21 (11): 2967–82
- **Proteomics quantifies protein expression changes in a model cnidarian colonised by a thermally tolerant but suboptimal symbiont.** *The ISME journal*
Sproles, A. E., Oakley, C. A., Matthews, J. L., Peng, L., Owen, J. G., Grossman, A. R., Weis, V. M., Davy, S. K.
2019
- **Alternative outlets for sustaining photosynthetic electron transport during dark-to-light transitions.** *Proceedings of the National Academy of Sciences of the United States of America*
Saroussi, S., Karns, D. A., Thomas, D. C., Bloszies, C., Fiehn, O., Posewitz, M. C., Grossman, A. R.
2019
- **Building the GreenCut2 suite of proteins to unmask photosynthetic function and regulation.** *Microbiology (Reading, England)*
Grossman, A., Sanz-Luque, E., Yi, H., Yang, W.
2019
- **A genome-wide algal mutant library and functional screen identifies genes required for eukaryotic photosynthesis** *NATURE GENETICS*
Li, X., Patena, W., Fauser, F., Jinkerson, R. E., Saroussi, S., Meyer, M. T., Ivanova, N., Robertson, J. M., Yue, R., Zhang, R., Vilarasa-Blasi, J., Wittkopp, T. M., Ramundo, et al

2019; 51 (4): 627-+

- **A genome-wide algal mutant library and functional screen identifies genes required for eukaryotic photosynthesis.** *Nature genetics*
Li, X., Patena, W., Fauser, F., Jinkerson, R. E., Saroussi, S., Meyer, M. T., Ivanova, N., Robertson, J. M., Yue, R., Zhang, R., Vilarraza-Blasi, J., Wittkopp, T. M., Ramundo, et al
2019
- **The mitochondrial alternative oxidase from *Chlamydomonas reinhardtii* enables survival in high light** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Kaye, Y., Huang, W., Clowez, S., Saroussi, S., Idoine, A., Sanz-Luque, E., Grossman, A. R.
2019; 294 (4): 1380–95
- **Partner switching and metabolic flux in a model cnidarian-dinoflagellate symbiosis.** *Proceedings. Biological sciences*
Matthews, J. L., Oakley, C. A., Lutz, A., Hillyer, K. E., Roessner, U., Grossman, A. R., Weis, V. M., Davy, S. K.
2018; 285 (1892)
- **From molecular manipulation of domesticated *Chlamydomonas reinhardtii* to survival in nature.** *eLife*
Sasso, S., Stibor, H., Mittag, M., Grossman, A. R.
2018; 7
- **A giant type I polyketide synthase participates in zygospore maturation in *Chlamydomonas reinhardtii*** *PLANT JOURNAL*
Heimerl, N., Hommel, E., Westermann, M., Meichsner, D., Lohr, M., Hertweck, C., Grossman, A. R., Mittag, M., Sasso, S.
2018; 95 (2): 268–81
- **Phylogenetic characterization of transporter proteins in the cnidarian-dinoflagellate symbiosis** *MOLECULAR PHYLOGENETICS AND EVOLUTION*
Sproles, A. E., Kirk, N. L., Kitchen, S. A., Oakley, C. A., Grossman, A. R., Weis, V. M., Davy, S. K.
2018; 120: 307–20
- **Glucose-Induced Trophic Shift in an Endosymbiont Dinoflagellate with Physiological and Molecular Consequences** *PLANT PHYSIOLOGY*
Xiang, T., Jinkerson, R. E., Clowez, S., Tran, C., Krediet, C. J., Onishi, M., Cleves, P. A., Pringle, J. R., Grossman, A. R.
2018; 176 (2): 1793–1807
- **GreenCut protein CPLD49 of *Chlamydomonas reinhardtii* associates with thylakoid membranes and is required for cytochrome b6f complex accumulation.** *The Plant journal : for cell and molecular biology*
Wittkopp, T. M., Saroussi, S. n., Yang, W. n., Johnson, X. n., Kim, R. G., Heinnickel, M. L., Russell, J. J., Phuthong, W. n., Dent, R. M., Broeckling, C. D., Peers, G. n., Lohr, M. n., Wollman, et al
2018
- **Prolonged and highly efficient intracellular extraction of photosynthetic electrons from single algal cells by optimized nanoelectrode insertion** *NANO RESEARCH*
Hong, H., Kim, Y., Han, M., Yoo, G., Song, H., Chae, Y., Pyun, J., Grossman, A. R., Ryu, W.
2018; 11 (1): 397–409
- **Optimal nutrient exchange and immune responses operate in partner specificity in the cnidarian-dinoflagellate symbiosis (vol 114, pg 13194, 2017)** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Matthews, J. L., Crowder, C., Oakley, C. A., Lutz, A., Roessner, U., Meyer, E., Grossman, A. R., Weis, V. M., Davy, S. K.
2017; 114 (51): E11058
- **Optimal nutrient exchange and immune responses operate in partner specificity in the cnidarian-dinoflagellate symbiosis** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Matthews, J. L., Crowder, C. M., Oakley, C. A., Lutz, A., Roessner, U., Meyer, E., Grossman, A. R., Weis, V. M., Davy, S. K.
2017; 114 (50): 13194–99
- **Flocculation of *Chlamydomonas reinhardtii* with Different Phenotypic Traits by Metal Cations and High pH** *FRONTIERS IN PLANT SCIENCE*
Fan, J., Zheng, L., Bai, Y., Saroussi, S., Grossman, A. R.
2017; 8
- **Biotic interactions as drivers of algal origin and evolution** *NEW PHYTOLOGIST*
Brodie, J., Ball, S. G., Bouget, F., Chan, C., De Clerck, O., Cock, J., Gachon, C., Grossman, A. R., Mock, T., Raven, J. A., Saha, M., Smith, A. G., Vardi, et al
2017; 216 (3): 670–81
- **Bilin-Dependent Photoacclimation in *Chlamydomonas reinhardtii*** *PLANT CELL*

- Wittkopp, T. M., Schmollinger, S., Saroussi, S., Hu, W., Zhang, W., Fan, Q., Gallaher, S. D., Leonard, M. T., Soubeyrand, E., Basset, G. J., Merchant, S. S., Grossman, A. R., Duanmu, et al
2017; 29 (11): 2711–26
- **Nutrient scavenging and energy management: acclimation responses in nitrogen and sulfur deprived *Chlamydomonas*.** *Current opinion in plant biology*
Saroussi, S., Sanz-Luque, E., Kim, R. G., Grossman, A. R.
2017; 39: 114-122
 - **Insights into the red algae and eukaryotic evolution from the genome of *Porphyra umbilicalis* (Bangiophyceae, Rhodophyta)** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Brawley, S. H., Blouin, N. A., Ficko-Blean, E., Wheeler, G. L., Lohr, M., Goodson, H. V., Jenkins, J. W., Blaby-Haas, C. E., Helliwell, K. E., Chan, C., Marriage, T. N., Bhattacharya, D., Klein, et al
2017; 114 (31): E6361–E6370
 - **Thermal Shock Induces Host Proteostasis Disruption and Endoplasmic Reticulum Stress in the Model Symbiotic Cnidarian *Aiptasia*** *JOURNAL OF PROTEOME RESEARCH*
Oakley, C. A., Durand, E., Wilkinson, S. P., Peng, L., Weis, V. M., Grossman, A. R., Davy, S. K.
2017; 16 (6): 2121–34
 - **Pyrenoid loss in *Chlamydomonas reinhardtii* causes limitations in CO₂ supply, but not thylakoid operating efficiency.** *Journal of experimental botany*
Caspari, O. D., Meyer, M. T., Tolleter, D., Wittkopp, T. M., Cunniffe, N. J., Lawson, T., Grossman, A. R., Griffiths, H.
2017; 68 (14): 3903-3913
 - **A robust protocol for efficient generation, and genomic characterization of insertional mutants of *Chlamydomonas reinhardtii*** *PLANT METHODS*
Pollock, S. V., Mukherjee, B., Bajsa-Hirschel, J., Machingura, M. C., Mukherjee, A., Grossman, A. R., Moroney, J. V.
2017; 13
 - **Impact of light intensity and quality on chromatophore and nuclear gene expression in *Paulinella chromatophora*, an amoeba with nascent photosynthetic organelles** *PLANT JOURNAL*
Zhang, R., Nowack, E. C., Price, D. C., Bhattacharya, D., Grossman, A. R.
2017; 90 (2): 221-234
 - **Development of a toolbox to dissect host-endosymbiont interactions and protein trafficking in the trypanosomatid *Angomonas deanei*** *BMC EVOLUTIONARY BIOLOGY*
Morales, J., Kokkori, S., Weidauer, D., Chapman, J., Goltsman, E., Rokhsar, D., Grossman, A. R., Nowack, E. C.
2016; 16
 - **Patterned Nanowire Electrode Array for Direct Extraction of Photosynthetic Electrons from Multiple Living Algal Cells** *ADVANCED FUNCTIONAL MATERIALS*
Kim, L. H., Kim, Y. J., Hong, H., Yang, D., Han, M., Yoo, G., Song, H. W., Chae, Y., Pyun, J., Grossman, A. R., Ryu, W.
2016; 26 (42): 7679-7689
 - **Gene transfers from diverse bacteria compensate for reductive genome evolution in the chromatophore of *Paulinella chromatophora*** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Nowack, E. C., Price, D. C., Bhattacharya, D., Singer, A., Melkonian, M., Grossman, A. R.
2016; 113 (43): 12214-12219
 - **Relative Contributions of Various Cellular Mechanisms to Loss of Algae during Cnidarian Bleaching** *PLOS ONE*
Bieri, T., Onishi, M., Xiang, T., Grossman, A. R., Pringle, J. R.
2016; 11 (4)
 - **The Type II NADPH Dehydrogenase Facilitates Cyclic Electron Flow, Energy-Dependent Quenching, and Chlororespiratory Metabolism during Acclimation of *Chlamydomonas reinhardtii* to Nitrogen Deprivation** *PLANT PHYSIOLOGY*
Saroussi, S. I., Wittkopp, T. M., Grossman, A. R.
2016; 170 (4): 1975-1988
 - **Genome Analysis of Planctomycetes Inhabiting Blades of the Red Alga *Porphyra umbilicalis*** *PLOS ONE*
Kim, J. W., Brawley, S. H., Prochnik, S., Chovatia, M., Grimwood, J., Jenkins, J., LaButti, K., Mavromatis, K., Nolan, M., Zane, M., Schmutz, J., Stiller, J. W., Grossman, et al
2016; 11 (3)

- **Tetratricopeptide repeat protein protects photosystem I from oxidative disruption during assembly** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Heinzel, M., Kim, R. G., Wittkopp, T. M., Yang, W., Walters, K. A., Herbert, S. K., Grossman, A. R.
2016; 113 (10): 2774-2779
- **Gordon research conference on the dynamics and regulation of photosynthesis: from the origin of bio-catalysis to innovative solar conversion.** *Photosynthesis research*
Govindjee, Grossman, A. R., Bhaya, D.
2016; 127 (3): 379-389
- **Critical role of *Chlamydomonas reinhardtii* ferredoxin-5 in maintaining membrane structure and dark metabolism.** *Proceedings of the National Academy of Sciences of the United States of America*
Yang, W., Wittkopp, T. M., Li, X., Warakanont, J., Dubini, A., Catalanotti, C., Kim, R. G., Nowack, E. C., Mackinder, L. C., Aksoy, M., Page, M. D., D'Adamo, S., Saroussi, et al
2015; 112 (48): 14978-14983
- **The Use of Contact Mode Atomic Force Microscopy in Aqueous Medium for Structural Analysis of Spinach Photosynthetic Complexes.** *Plant physiology*
Phuthong, W., Huang, Z., Wittkopp, T. M., Sznee, K., Heinzel, M. L., Dekker, J. P., Frese, R. N., Prinz, F. B., Grossman, A. R.
2015; 169 (2): 1318-1332
- **Algae after dark: mechanisms to cope with anoxic/hypoxic conditions** *PLANT JOURNAL*
Yang, W., Catalanotti, C., Wittkopp, T. M., Posewitz, M. C., Grossman, A. R.
2015; 82 (3): 481-503
- **Symbiodinium transcriptome and global responses of cells to immediate changes in light intensity when grown under autotrophic or mixotrophic conditions** *PLANT JOURNAL*
Xiang, T., Nelson, W., Rodriguez, J., Tolleter, D., Grossman, A. R.
2015; 82 (1): 67-80
- **Profiling *Chlamydomonas* Metabolism under Dark, Anoxic H₂-Producing Conditions Using a Combined Proteomic, Transcriptomic, and Metabolomic Approach** *JOURNAL OF PROTEOME RESEARCH*
Subramanian, V., Dubini, A., Astling, D. P., Laurens, L. M., Old, W. M., Grossman, A. R., Posewitz, M. C., Seibert, M.
2014; 13 (12): 5431-5451
- **Alternative Acetate Production Pathways in *Chlamydomonas reinhardtii* during Dark Anoxia and the Dominant Role of Chloroplasts in Fermentative Acetate Production.** *Plant cell*
Yang, W., Catalanotti, C., D'Adamo, S., Wittkopp, T. M., Ingram-Smith, C. J., Mackinder, L., Miller, T. E., Heuberger, A. L., Peers, G., Smith, K. S., Jonikas, M. C., Grossman, A. R., Posewitz, et al
2014; 26 (11): 4499-4518
- **Critical Function of a *Chlamydomonas reinhardtii* Putative Polyphosphate Polymerase Subunit during Nutrient Deprivation** *PLANT CELL*
Aksoy, M., Pootakham, W., Grossman, A. R.
2014; 26 (10): 4214-4229
- **The *Chlamydomonas* genome project: a decade on** *TRENDS IN PLANT SCIENCE*
Blaby, I. K., Blaby-Haas, C. E., Tourasse, N., Hom, E. F., Lopez, D., Aksoy, M., Grossman, A., Umen, J., Dutcher, S., Porter, M., King, S., Witman, G. B., Stanke, et al
2014; 19 (10): 672-680
- **16S AND 23S PLASTID RDNA PHYLOGENIES OF PROTOTHECA SPECIES AND THEIR AUXANOGRAPHIC PHENOTYPES** *JOURNAL OF PHYCOLOGY*
Ewing, A., Brubaker, S., Somanchi, A., Yu, E., Rudenko, G., Reyes, N., Espina, K., Grossman, A., Franklin, S.
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