

(a) Peer-reviewed publications in the primary literature, exclusive of abstracts:

- Segui-Simarro JM, **Austin JR**, White EA, Staehelin LA. Electron tomographic analysis of somatic cell plate formation in meristematic cells of *Arabidopsis* preserved by high-pressure freezing. *Plant Cell*. 2004, 16:836-56. DOI: <https://doi.org/10.1105/tpc.017749>
- Austin JR**, Webber AN. Photosynthesis in *Arabidopsis* mutants with reduced chloroplast number. *Photosynthesis Research*. 2004, 85:373-384. DOI: <https://doi.org/10.1007/s11120-005-7708-x>
- Austin JR**, Segui-Simarro JM, Staehelin LA. Quantitative analysis of changes in spatial distribution and plus-end geometry of microtubules involved in plant-cell cytokinesis. *J Cell Sci*. 2005, 118:3895-903. DOI: <https://doi.org/10.1242/jcs.02512>
- Vidi P-A, Kanwischer M, Baginsky S, **Austin JR**, Csucs G, Dormann P, Kessler F, Brehelin C. Tocopherol Cyclase (VTE1) localization and major vitamin E accumulation in chloroplast plastoglobule lipoprotein particles. *J Biol Chem*. 2006, 281:11225-11234. DOI: <https://doi.org/10.1074/jbc.M511939200>
- Austin JR**, Frost E, Vidi P-A, Kessler F, Staehelin LA. Plastoglobules are lipoprotein subcompartments of the chloroplast that are permanently coupled to thylakoid membranes and contain biosynthetic enzymes. *Plant Cell*. 2006, 7:1693-1703. DOI: <https://doi.org/10.1105/tpc.105.039859>
- Marchiando AM, Shen L, Graham WV, Weber CR, Schwarz BT, **Austin JR**, Guan Y, Watson AJM, Montrose MH, Turner JR. Caveolin-1-dependent occluding endocytosis is required for TNF-induced tight junction regulation in vivo. *J. Cell Biol*. 2010, 189: 111-126. DOI: <http://dx.doi.org/10.1083/jcb.200902153>
- Daum B, Nicastro D, **Austin JR**, McIntosh JR, Kuhlbrandt W. Arrangement of photosystem-II and ATP synthase in chloroplast membranes. *Plant Cell*. 2010, 22: 1299-1312. DOI: <https://doi.org/10.1105/tpc.109.071431>
- Levi KS, Bhattacharya D, Strack RL, **Austin JR**, Glick BS. The yeast GRASP Grh1 colocalizes with COPII and is dispensable for organizing the early secretory pathway. *Traffic*. 2010, 11:1168-1179. DOI: <https://doi.org/10.1111/j.1600-0854.2010.01089.x>
- Liberton M, **Austin JR**, Berg RH, Pakrasi HB. Unique thylakoid membrane and cellular architecture of *Cyanothece SP ATCC 51142* revealed by electron tomography. *Plant Phys*. 2011, 155: 1656-1666. DOI: <https://doi.org/10.1104/pp.110.165332>
- Austin JR**, Staehelin LA. Three-dimensional architecture of grana and stroma thylakoids of higher plants as determined by electron tomography. *Plant Phys*. 2011, 155: 1601-1611. DOI: <https://doi.org/10.1104/pp.110.170647>
- Liberton M, **Austin JR**, Berg RH, Pakrasi HB. Insights into the complex 3-D architecture of the thylakoid membrane in the unicellular cyanobacterium *Cyanothece SP ATCC 51142*. *Plant Signal Behav*. 2011, 566-569. DOI: <https://doi.org/10.4161/psb.6.4.14946>
- Bhave M, Papanikou E, Iyer P, Pandya K, Jain BK, Ganguly A, Sharma C, Pawar K, **Austin JR**, Day KJ, Rossanese OW, Glick B, and Bhattacharyya D. Golgi enlargement in Arf-depleted yeast cells is due to altered dynamics of cisternal maturation. *J. Cell Biol.*, 2013, 127: 250-257. DOI: <https://doi.org/10.1242/jcs.140996>
- Omairi-Nasser A, Haselkorn R, **Austin JR**. Visualization of channels connecting cells in filamentous nitrogen-fixing cyanobacteria. *FASEB J*. 2014, 28: 3016-22. DOI: <https://doi.org/10.1096/fj.14-252007>
- Szuchet S, Nielsen LL, Domowicz MS, **Austin JR**, Arvanitis DL. CNS myelin sheath is stochastically built by homotypic fusion of myelin membranes within the bounds of an oligodendrocyte process. *J Struct Biol*. 2015, 190: 56-72. DOI: <https://doi.org/10.1016/j.jsb.2015.01.015>

- Lingaraju A, Long TM, **Austin JR**, Turner JR. Conceptual barriers to understanding physical barriers. *Seminars in Cell and Developmental Biology*. 2015, Volume 42. DOI: <https://doi.org/10.1016/j.semcd.2015.04.008>
- Zimmerman JF, Murray GF, Wang Y, Jumper JM, **Austin JR**, Tian B. Free-Standing Kinked Silicon Nanowires for Probing Inter- and Intracellular Force Dynamics. *Nano Letters*. 2015, 15 (8), 5492-5498. DOI: <https://doi.org/10.1021/acs.nanolett.5b01963>
- Omairi-Nasser A, Marical V, **Austin JR**, Haselkorn R. Requirement of Fra proteins for communication channels between cells in the filamentous nitrogen-fixing cyanobacterium Anabaena sp. PCC 7120. *PNAS*. 2015, Aug 11;112 (32). DOI: <https://doi.org/10.1073/pnas.1512232112>
- Papanikou E, Day KJ, **Austin JR**, Glick BS. COPI selectively drives maturation of the early Golgi. *eLife*. 2015 Dec 10.7554/eLife.13232. DOI: <https://doi.org/10.7554/eLife.13232>
- Alarcon C, Boland BB, Uchizono Y, Moore PC, Peterson B, Rajan Suryalekha R, Rhodes OS, Noske AB, Haataja L, Arvan P, Marsh BJ, **Austin JR**, Rhodes CJ. β -Cell adaptive plasticity in obesity increases insulin production but affects secretory function. *Diabetes*. 2016, 65 (2). DOI: <https://doi.org/10.1021/acs.jproteome.9b00160>
- Liu X, Mao Kai, YU AYH, Omairi-Nasser A, **Austin JR**, Glick BS, Yip CK, Klionsky DJ. The Atg17-Atg31-Atg29 complex coordinates with Atg11 to recruit the Vam7 SNARE and mediate autophagosome-vacuole fusion. *Current Biol*. 2016, 26(2):150-60. DOI: <https://doi.org/10.1016/j.cub.2015.11.054>
- Kashiv Y, **Austin JR**, Lai B, Rose V, Vogt S, El-Muayed M. Imaging trace element distributions in single organelles and subcellular features. *Scientific Reports*. 2016, 6:21437. DOI: <https://doi.org/10.1038/srep21437>
- Hickey WJ, Shetty AR, Massey RJ, Toso DB, **Austin JR**. Three-dimensional bright-field scanning transmission electron microscopy elucidate novel nanostructure in microbial biofilms. *J Microscopy*. 2017, 265(1):3-10. DOI: <https://doi.org/10.1111/jmi.12455>
<http://onlinelibrary.wiley.com/doi/10.1111/jmi.12455/epdf>
- McIntosh JR, O'Toole E, Morgan G, **Austin J**, Ulyanov E, Ataullakhanov F, Gudimchuk N. Microtubules grow by the addition of bent GTP tubulin to the tips of curved protofilaments. *J Cell Biology*. 2018, 217(5):2691-2708. DOI: <https://doi.org/10.1083/jcb.201802138>
- Jang S, Gornicki P, Marjanovic J, Bass E, Lurcotta T, Rodriguez P, **Austin J**, Haselkorn R. Activity and structure of human acetyl-CoA carboxylase targeted by a specific inhibitor. *FEBS Letters*. 2018, 592(12): 2048-2058. DOI: <https://doi.org/10.1002/1873-3468.13097>
- Ivanov S, **Austin J**, Berg R, Harrison M. Extensive membrane systems at the host-arbuscular mycorrhizal fungus interface. *Nature Plants*. 2019, 5, 194-203. DOI: <https://doi.org/10.1038/s41477-019-0364-5>
- Grayson JL, Xiao-Min L, **Austin J**, Jianguo W, Jaeger HM. Ultrathin porous hydrocarbon membranes templated by nanoparticle assemblies. *Nano Letters*. 2021, 21 (1), 166-174. DOI: <https://doi.org/10.1021/acs.nanolett.0c03450>
- Boland BB, Laker RC, O'Brien S, Sitaula S, Sermadiras I, Nielsen JC, Barkholt P, Roostalu U, Hecksher-Sørensen J, Sejthen SR, Thorbek DD, Suckow A, Burmeister N, Oldham S, Will S, Howard VG, Gill BM, Newton P, Naylor J, Hornigold DC, **Austin J**, Lantier L, McGuinness OP, Trevaskis JL, Grimsby JS, Rhodes CJ. Peptide-YY3-36/glucagon-like peptide-1 combination treatment of obese diabetic mice improves insulin sensitivity associated with recovered pancreatic β -cell

function and synergistic activation of discrete hypothalamic and brainstem neuronal circuitries. Molecular Metabolism. 2021, Article 101392. DOI: <https://doi.org/10.1016/j.molmet.2021.101392>

(b) Non-peer-reviewed original articles

Graham B, **Austin JR**, Kaech A, Heuser JE. Freezing techniques: History, Comparisons, and Applications. Microscopy Today. 2008, 16:12-17. DOI: <https://doi.org/10.1017/S1551929500061708>

(c) Books:

As author:

Austin, II J. 2021. Will You Still Love Me If I Become Someone Else? 405 pp., Rhetoric Askew Publishing, Coweta, OK. ISBN: [9781949398496](https://doi.org/10.1017/S1551929500061708)

(d) Book chapters:

Otegui MS and **Austin JR**. Visualization Of Membrane-Cytoskeletal Interactions During Plant Cytokinesis. In: Cellular Electron Microscopy, Volume 79 (Methods in Cell Biology). Ed: McIntosh JR. Academic Press. 2007, Pg: 221-240. DOI: [https://doi.org/10.1016/S0091-679X\(06\)79009-4](https://doi.org/10.1016/S0091-679X(06)79009-4)

Segui-Simarro JM, Otegui MS, **Austin JR**, Staehelin LA. Plant Cytokinesis-Insights Gained from Electron Tomography Studies. In: Cell Division Control in Plants. (Plant Cell Monographs). Eds: Verma DPS, Hong Zonglie. Springer, Berlin, Heidelberg. 2008, Pg: 251-287. DOI: https://doi.org/10.1007/7089_2007_131

Austin JR. High-Pressure Freezing and Freeze Substitution of *Arabidopsis* for Electron Microscopy. In: *Arabidopsis* Protocols, Methods in Molecular Biology (Methods and Protocols), vol 1062. Eds: Sanchez-Serrano JJ, Salinas J. Humana Press, Totowa, NJ. 2014, Pg: 473-486. DOI: https://doi.org/10.1007/978-1-62703-580-4_25