



- Evans, E., and Ludwig, F. (2000). Dynamic strengths of molecular anchoring and material cohesion in fluid biomembranes. *J. Phys. Condens. Matter* 12:A315. doi: 10.1088/0953-8984/12/8A/341
- Franks, P. J., Buckley, T. N., Shope, J. C., and Mott, K. A. (2001). Guard cell volume and pressure measured concurrently by confocal microscopy and the cell pressure probe. *Plant Physiol.* 125, 1577–1584. doi: 10.1104/pp.125.4.1577
- Gustin, M. C., Zhou, X. L., Martinac, B., and Kung, C. (1988). A mechanosensitive ion channel in the yeast plasma membrane. *Science* 242, 762–765. doi: 10.1126/science.2460920
- Haswell, E. S., Peyronnet, R., Barbier-Brygoo, H., Meyerowitz, E. M., and Frachisse, J. M. (2008). Two MscS homologs provide mechanosensitive channel activities in the *Arabidopsis* root. *Curr. Biol.* 18, 730–734. doi: 10.1016/j.cub.2008.04.039
- Kwok, R., and Evans, E. (1981). Thermoelasticity of large lecithin bilayer vesicles. *Biophys. J.* 35, 637–652. doi: 10.1016/S0006-3495(81)84817-5
- Meckel, T., Hurst, A. C., Thiel, G., and Homann, U. (2004). Endocytosis against high turgor: intact guard cells of *Vicia faba* constitutively endocytose fluorescently labelled plasma membrane and GFP-tagged K-channel KAT1. *Plant J.* 39, 182–193. doi: 10.1111/j.1365-313X.2004.02119.x
- Morris, C. E., and Homann, U. (2001). Cell surface area regulation and membrane tension. *J. Membr. Biol.* 179, 79–102. doi: 10.1007/s002320010040
- Nichol, J. A., and Hutter, O. F. (1996). Tensile strength and dilatational elasticity of giant sarcolemmal vesicles shed from rabbit muscle. *J. Physiol.* 493(Pt 1), 187–198.
- Petrov, E., Palanivelu, D., Constantine, M., Rohde, P. R., Cox, C. D., Nomura, T., et al. (2013). Patch-clamp characterization of the MscS-like mechanosensitive channel from *Silicibacter pomeroyi*. *Biophys. J.* 104, 1426–1434. doi: 10.1016/j.bpj.2013.01.055
- Pritchard, J., Barlow, P. W., Adam, J. S., and Tomos, A. D. (1990). Biophysics of the inhibition of the growth of maize roots by lowered temperature. *Plant Physiol.* 93, 222–230. doi: 10.1104/pp.93.1.222
- Sachs, F., and Morris, C. E. (1998). Mechanosensitive ion channels in nonspecialized cells. *Rev. Physiol. Biochem. Pharmacol.* 132, 1–77. doi: 10.1007/BFb0004985
- Shabala, S. N., and Lew, R. R. (2002). Turgor regulation in osmotically stressed *Arabidopsis* epidermal root cells. Direct support for the role of inorganic ion uptake as revealed by concurrent flux and cell turgor measurements. *Plant Physiol.* 129, 290–299. doi: 10.1104/pp.020005
- Solsona, C., Innocenti, B., and Fernandez, J. M. (1998). Regulation of exocytotic fusion by cell inflation. *Biophys. J.* 74, 1061–1073. doi: 10.1016/S0006-3495(98)74030-5
- Sukharev, S., and Sachs, F. (2012). Molecular force transduction by ion channels: diversity and unifying principles. *J. Cell Sci.* 125, 3075–3083. doi: 10.1242/jcs.092353
- Wolfe, J., Dowgert, M. F., and Steponkus, P. L. (1985). Dynamics of membrane exchange of the plasma membrane and the lysis of isolated protoplasts during rapid expansion in area. *J. Membr. Biol.* 86, 127–138. doi: 10.1007/BF01870779
- Wood, J. M. (1999). Osmosensing by bacteria: signals and membrane-based sensors. *Microbiol. Mol. Biol. Rev.* 63, 230–262.