

Selected Publications - Gerd Patrick Bienert

Verwaaijen B, Alcock TD, Spitzer C, Liu Z, Fiebig A, Bienert MD, Bräutigam A, Bienert GP. (2023) The Brassica napus boron deficient inflorescence transcriptome resembles a wounding and infection response. *Physiol Plant*. 175(6):e14088. doi: 10.1111/ppl.14088.

Bienert MD, Werner LM, Wimmer MA, Bienert GP. (2021) Root hairs: the villi of plants. *Biochem Soc Trans*. 49(3):1133-1146. doi: 10.1042/BST20200716.

Jia Z, Bienert MD, von Wirén N, Bienert GP. (2021) Genome-wide association mapping identifies HvNIP2;2/HvLsi6 accounting for efficient boron transport in barley. *Physiol Plant*. 171(4):809-822. doi: 10.1111/ppl.13340.

Pommerrenig B, Diehn TA, Bernhardt N, Bienert MD, Mitani-Ueno N, Fuge J, Bieber A, Spitzer C, Bräutigam A, Ma JF, Chaumont F, Bienert GP. (2020) Functional evolution of nodulin 26-like intrinsic proteins: from bacterial arsenic detoxification to plant nutrient transport. *New Phytol*. 225(3):1383-1396. doi: 10.1111/nph.16217.

Bienert MD, Muries B, Crappe D, Chaumont F, Bienert GP. (2019) Overexpression of X Intrinsic Protein 1;1 in *Nicotiana tabacum* and *Arabidopsis* reduces boron allocation to shoot sink tissues. *Plant Direct*. 3(6):e00143. doi:

Diehn TA, Bienert MD, Pommerrenig B, Liu Z, Spitzer C, Bernhardt N, Fuge J, Bieber A, Richet N, Chaumont F, Bienert GP. (2019) Boron demanding tissues of *Brassica napus* express specific sets of functional Nodulin26-like Intrinsic Proteins and BOR1 transporters. *Plant J*. 100(1):68-82. doi: 10.1111/tpj.14428.

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Bestetti S, Medraño-Fernandez I, Galli M, Ghitti M, Bienert GP, Musco G, Orsi A, Rubartelli A, Sitia R. (2018) A persulfidation-based mechanism controls aquaporin-8 conductance. *Sci Adv*. 4(5):eaar5770. doi: 10.1126/sciadv.aar5770.

Bienert GP, Thorsen M, Schüssler MD, Nilsson HR, Wagner A, Tamás MJ, Jahn TP. (2008) A subgroup of plant aquaporins facilitate the bi-directional diffusion of As(OH)₃ and Sb(OH)₃ across membranes. *BMC Biol*. 6:26. doi: 10.1186/1741-7007-6-26.

Bienert GP, Møller AL, Kristiansen KA, Schulz A, Møller IM, Schjoerring JK, Jahn TP. (2007) Specific aquaporins facilitate the diffusion of hydrogen peroxide across membranes. *J Biol Chem*. 282(2):1183-92. doi: 10.1074/jbc.M603761200.