

Selected publications:

- Zhang C, Yang S, Flossmann T, Gao S, Witte OW, Nagel G, Holthoff K, Kirmse K (2019) Optimized photo-stimulation of halorhodopsin for long-term neuronal inhibition. *BMC Biol.* in press
- Tian Y, Gao S, von der Heyde EL, Hallmann A, Nagel G (2018). Two-component cyclase opsins of green algae are ATP-dependent and light-inhibited guanylyl cyclases. *BMC Biol.* 2018 Dec 6;16(1):144. doi: 10.1186/s12915-018-0613-5.
- Beck Sebastian, Jing Yu-Strzelczyk, Dennis Pauls, Oana M. Constantin, Christine E. Gee, Nadine Ehmann, Robert J. Kittel, Georg Nagel, Shiqiang Gao Synthetic Light-Activated Ion Channels for Optogenetic Activation and Inhibition (2018) *Front Neurosci.* 12: 643. Published online 2018 Oct 2. doi: 10.3389/fnins.2018.00643
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- Scheib U, Broser M, Constantin O M, Yang S, Gao S, Mukherjee S, Stehfest K, Nagel G, Gee C E, Hegemann P (2018) Rhodopsin-cyclases for photocontrol of cGMP/cAMP and 2.3 Å structure of the adenylyl cyclase domain. *Nature Communications* 9(1):2046. doi: 10.1038/s41467-018-04428-w.
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- Dawydow A., Gueta R., Ljaschenko D., Ullrich S., Hermann M., Fiala A., Langenhan T., Nagel G., Kittel R.J., (2014) Channelrhodopsin-2-XXL, a powerful optogenetic tool for low-light applications. *Proc Natl Acad Sci USA.* 111(38):13972-7
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List of recent and most important publications:

Zhang C, Yang S, Flossmann T, Gao S, Witte OW, Nagel G, Holthoff K, Kirmse K (2019) Optimized photo-stimulation of halorhodopsin for long-term neuronal inhibition. *BMC Biol.* in press

Xiaodong Duan, Georg Nagel, Shiqiang Gao (2019) Mutated Channelrhodopsins with Increased Sodium and Calcium Permeability. *Appl. Sci.* 2019, 9, 664; doi:10.3390/app9040664

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