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## ***PUBLICATIONS: WOLFGANG RÖSSLER***

### ***PUBLICATIONS IN PEER-REVIEWED JOURNALS***

1. **Rössler W**, Bailey WJ, Schröder J, Kalmring K (1990) Resolution of time and frequency patterns in the tympanal organs of tettigoniids. I. Synchronization and oscillation in the activity of receptor populations. *Zool Jb Physiol* 94:83-99
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10. Lin Y, Kalmring K, Jatho M, Sickmann T, **Rössler W** (1993) The auditory receptor organs in the forelegs of *Gampsocleis gratiosa* (Tettigoniidae); morphology and function of the organs in comparison to the frequency parameters of the conspecific song. *J Exp Zool* 267:377-388
11. **Rössler W**, Hübschen A, Schul J, Kalmring K (1994) Functional morphology of bushcricket ears: comparison between two species belonging to the Phaneropterinae and Decticinae (Insecta, Ensifera). *Zoomorphology* 114:39-46

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13. Bickmeyer U, **Rössler W**, Wiegand H (1994) Calcium channel currents in cultured pars intercerebralis neurosecretory cells of adult *Locusta migratoria*. *J Exp Biol* 197:393-398
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51. Brandstaetter AS, **Rössler W**, Kleineidam CJ (2010) Dummies versus Air Puffs: efficient stimulus delivery for low-volatile odors. *Chem Senses*, in press
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53. Galizia CG, **Rössler W** (2010) Parallel olfactory systems in insects: anatomy and function. *Annual Rev Entomol* 55: 399-420
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2. (R) Kalmring K, **Rössler W**, Schröder J, Stiedl O, Bickmeyer U, Bailey WJ (1990) Importance of tooth impact rate in acoustic communication in bushcrickets. In: Sensory systems and communication in arthropods. GRIBAKIN, F.G., WIESE, K. and POPOV, A.V. (Eds.), Birkhäuser Verlag Basel, Boston, Berlin, pp. 248-253
3. (R) Kalmring K, Ebendt R, Ahi J, Hellweg J, Young D, Halex H, Lakes R, **Rössler W**, Schröder J (1990) Comparative investigation on the morphology and physiology of the auditory receptor organs of seven species of bushcrickets. In: Sensory systems and communication in arthropods. GRIBAKIN, F.G., WIESE, K. and POPOV, A.V. (Eds.), Birkhäuser Verlag Basel, Boston, Berlin, pp. 241-247
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6. (N) Hildebrand JG, Christensen TA, Heinbockel T, Roche-King J, Mechaber W, **Rössler W**, Selchow K, Shields VDC (1999) The olfactory neurobiology of host- and mate-attraction in moths. In: Proceedings of the 27th Göttingen Neurobiology Conference. ELSNER, N. and EYSEL, U. (Hrsg.). Georg Thieme Verlag, Stuttgart, New York:pp56-67.
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10. (R) Kleineidam CJ, **Rössler W** (2009) Adaptations of the olfactory system of social Hymenoptera. In: Organization of Insect Societies (Gadau J, Fewell J, eds): Harvard University Press, Cambridge, MA. pp. 195-219

## **THESES**

**Diploma thesis (1987)** Vergleichende Untersuchungen zur synaptischen Übertragung im akustischen Neuropilem des Prothorakalganglions verschiedener Laubheuschrecken; Stromquellendichte-Analysen bei Reizung mit Kunstlauten und Vibration. (*Comparative investigations on the synaptic transmission in the auditory neuropil of the prothoracic ganglion of different species of bush cricket: Current-Source-Density analyses and stimulation with airborne sound and vibration.*) University of Marburg.

**Doktoral thesis (1990):** Vergleichende Untersuchungen zur neuronalen Kodierung komplexer artspezifischer Signalparameter in der Hör- und Vibrationsbahn von Laubheuschrecken; Mehrkanalelektroden-Ableitungen und Stromquellendichte-Analysen. (*Comparative investigations on neuronal coding of complex species-specific sound parameters in the auditory-vibratory pathway of bush crickets; multi-channel recordings and current-source-density analyses.*) University of Marburg.

**Habilitation (1994):** Untersuchungen zur akustischen Kommunikation und zur Funktion neurosekretorischer Zellen bei Heuschrecken. (*Investigations on auditory communication and the function of neurosecretory cells in bush crickets and locusts.*) University of Marburg.