Special Issue

Recent Advances in Chemosensory-Based Behaviorally, Physiologically, and Molecularly Manipulated Technology of Pest Insects

Message from the Guest Editors

Chemosensory reception stands as an ancient and pivotal sensory mode in insects, where environmental volatile cues and taste components are intricately processed through sophisticated neural circuits. These interactions yield discernible behavioral and physiological responses, necessitating cross-trophic chemical communication and precise chemosensory protein function. This framework offers avenues for targeted manipulation of insect species, potentially augmenting environmentally friendly strategies within conventional integrated pest management approaches. This Special Issue invites research papers investigating key chemical signals, their reception mechanisms, molecular underpinnings, and relevant technological applications for insect pest management. In this Special Issue, we welcome original research articles and review papers.

Guest Editors

Dr. Rui Tang

Centre for Resource Insects and Biotechnology, Institute of Zoology, Guangdong Academy of Sciences, Guangzhou, China

Dr. Nanji Jiang

Department of Evolutionary Neuroethology, Max Planck Institute for Chemical Ecology, Jena, Germany

Deadline for manuscript submissions

31 March 2025



Life

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 4.3 Indexed in PubMed



mdpi.com/si/182921

Life

MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 life@mdpi.com

mdpi.com/journal/ life





Life

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 4.3 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)

