International Journal of
Molecular Sciences

IMPACT FACTOR 5.6 | Indexed in: PubMed | CITESCORE 8.1

an Open Access Journal by MDPI

Structure and Formation Mechanism of Amyloid Fibrils

Guest Editors:

Dr. Takayasu Kawasaki
Accelerator Laboratory, High Energy Accelerator Research Organization, 1-1 Oho, Tsukuba, Ibaraki 305-0801, Japan

Dr. Phuong H. Nguyen
CNRS, UPR 9080, Laboratoire de Biochimie Théorique, Institut de Biologie Physico-Chimique, Fondation Edmond de Rothschild, Université Paris Cité, 13 Rue Pierre et Marie Curie, 75005 Paris, France

Deadline for manuscript submissions:
closed (30 April 2024)

Message from the Guest Editors

Amyloid fibrils are known to cause serious diseases such as neurodegenerative diseases and amyloidosis. Recently, it has been reported that lower-molecular-sized oligomers are found to be more toxic in cells than mature fibrils. The technology for the degradation of those amyloid assemblies has the potential for leading to amyloidosis therapy. However, the formation mechanism of amyloid fibrils is not completely understood, and it is usually difficult to degrade the rigid fibrous conformation under mild conditions unless using denaturants.

This special issue welcomes structural studies focusing on the fibrils, proto-fibrils, and oligomers of various types of amyloid peptides and proteins. Especially uses of not only experimental techniques but also computer simulation methods for approaching the formation mechanisms of amyloid assemblies are acceptable. In addition, application studies of physical engineering techniques such as lasers and high-power radiations to develop novel therapeutic ways for amyloidosis should also be welcome.

International Journal of
Molecular Sciences

IMPACT FACTOR 5.6 | Indexed in: PubMed | CITESCORE 8.1

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino
Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (Inorganic Chemistry)

Contact Us

International Journal of Molecular Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
𝕏@IJMS_MDPI