Special Issue

Advances in Structural Biology Methods: Protein Footprinting with Radical Probe Mass Spectrometry and Complementary Techniques

Message from the Guest Editor

Protein Footprinting coupled with mass spectrometry is a pioneering method in structural biology that enables the study of three-dimensional protein structures, folding, and macromolecular interaction dynamics on fast timescales (down to sub-milliseconds). The methodology is based on hydroxyl radicals (•OH) generated directly from water within aqueous solutions, which react with solvent accessible amino acid side chains, inducing covalent modifications that are analyzed by mass spectrometry techniques. A recent 2019 review article highlights the significant growth of "Protein Footprinting" over 20 years, and its applications resulting in over 200 publications to date.

This Special Issue initiative invites articles with an overview of this fast-growing technology, covering advances of hydroxyl radical production, updates in capabilities of synchrotron facilities, and a range of biological and pharmaceutical applications of protein footprinting.

http://www.siminmaleknia.com/About/

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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