

Special Issue

Application of EPR Spectroscopy in Biophysics and Biochemistry

Message from the Guest Editors

Electron paramagnetic resonance (EPR) spectroscopy is a powerful tool for studying the structure and dynamics of a wide variety of biological systems. EPR combined with site-directed spin labeling applies to biopolymers of any size, including multicomponent complexes of ribosomes, large proteins, and their complexes with RNA and DNA. Moreover, EPR is suitable for studying systems with a broad conformational ensemble and following structural changes in different environments, including cells. The focus of this Special Issue is the application of EPR spectroscopy in biochemistry and biophysics. Papers can cover the application of EPR methods in different areas of research, such as structural biology (protein, peptide, RNA, DNA, ribosome, etc.), interactions between macromolecules and their ligands, structural bases of folded and unfolded proteins; biomolecular recognition, and features of biomolecules in cells, etc. Studies related to the methodology's development of biomolecular EPR and works conducted by integrating EPR data with those from other experimental techniques along with computational tools are highly welcome.

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As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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