



Hyperpolarized Molecules for Applications in Chemistry and Biomedicine

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Message from the Guest Editor

Dear Colleagues,

Nuclear magnetic resonance spectroscopy (NMR) and imaging (MRI) are among the most powerful analytical tools used to study chemical and biochemical transformations. However, one of the main drawbacks of NMR and MRI is their low sensitivity. Hyperpolarization techniques allow enhancing the NMR signals of various molecules by several orders of magnitude, making possible applications that were previously inaccessible, i.e., monitoring metabolism of small molecules *in vivo*.

Researchers working in the field of hyperpolarized NMR/MRI are invited to contribute original research papers or reviews to this Special Issue of *Molecules*, which will report on the chemistry and physics of hyperpolarization formation, improvements in the detection of hyperpolarized molecules, and applications of hyperpolarized NMR/MRI approaches in chemistry and biomedicine.

Dr. Danila Barskiy
Guest Editor





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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 30th 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 all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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