

## Special Issue

# Antibodies and Aptamers Used as Molecular Recognition Components in Sensing Platforms

### Message from the Guest Editor

The interfacial molecular recognition phenomenon is a key aspect taken into account in the developed sensor systems. The type of the probe molecule and its spatial arrangement determine the properties of the bio interface. There has been ongoing competition between antibodies and aptamers used as molecular recognition components in sensing platforms. Indeed, the number of available aptamer molecules is still insufficient to directly compare them with existing antibodies. Aptamers are characterized by a high efficiency toward specific analytes, less immunogenicity as compared with antibodies, ease of synthesis and minimum cost. On the other hand, comparative experimental studies, based on aptamers and antibodies used as molecular probes under equivalent conditions, are limited, and the results are ambiguous regarding the advantages and disadvantages of each bioreceptor type.

The main goal of this Special Issue is to collect original research articles or reviews, including electrochemical, optical and other existing methodologies. This SI aims to underline the efficiency of antibodies vs. aptamers used as molecular recognition components in sensing platforms.

### Guest Editor

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## International Journal of Molecular Sciences

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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.

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