



## Recent Advances and Perspectives of Fluorescent Biosensors

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### Message from the Guest Editors

Dear Colleagues,

Tools to elucidate biological phenomena have been regularly developed, especially in the last few decades. Fluorescent biosensors, as alternative approaches to omics studies, have been continuously developed alongside devices for quantitative detection of biomolecule dynamics. While various fluorescence measurement methods exist, such as intensity, polarization, lifetime, and correlation, most fluorescent biosensors are designed for target-specific applications in living cells. These biosensors provide amplifiable signals applicable in biological, medicinal, and clinical fields. They comprise fluorescent organic compounds, proteins, nanoparticles, and their combinations. Ongoing improvements aim to expand dynamic ranges, enhance selectivity, and improve sensitivity for monitoring. These advancements enable high-content imaging of cellular signaling and high-throughput screening for agonists or antagonists. This Special Issue seeks high-quality original research articles and comprehensive reviews in the field of fluorescent biosensors, particularly those focusing on new ideas and directions.





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## Message from the Editor-in-Chief

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