



## Colorimetric and Fluorescent Sensors: Current Status and Future Development

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### Message from the Guest Editors

The detection of important and harmful metal ions and anions has become essential to maintaining clean and safe ecosystems. Compared to other methods, the colorimetric and fluorometric approaches are exceptional due to their unique applications, such as paper strips, in vitro/in vivo bioimaging, and real-time water analysis. Moreover, advanced and easily synthesizable organic colorimetric probes and fluorophores with specific ion binding sites have been demonstrated by researchers. More recently, reports on easily operable nanomaterial-based colorimetric and fluorometric sensors under sustainable environments have also attracted much attention. For example, silver and gold nanoparticle (Ag NP and Au NP)-driven colorimetric sensors and carbon dots (CDs), graphene quantum dots (GQDs), MOFs, metal halide perovskites (HPs), and composite-based fluorescent sensors are becoming the focus of environmental research with real-time applications. The aim of this Special Issue is to collect and publish these innovative colorimetric and fluorometric sensors, analytical techniques, and studies that could drive future developments in related research fields.





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