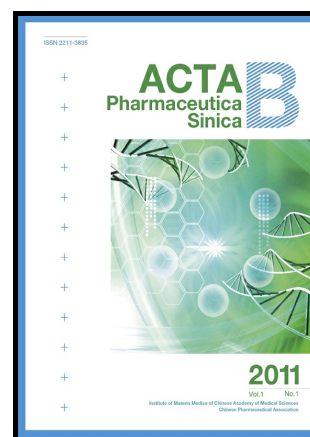


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## REVIEW

## Recent developments in multimodality fluorescence imaging probes

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**Abstract** Multimodality optical imaging probes have emerged as powerful tools that improve detection sensitivity and accuracy, important in disease diagnosis and treatment. In this review, we focus on recent developments of optical fluorescence imaging (OFI) probe integration with other imaging modalities such as X-ray computed tomography (CT), magnetic resonance imaging (MRI), positron emission tomography (PET), single-photon emission computed tomography (SPECT), and photoacoustic imaging (PAI). The imaging technologies are briefly described in order to introduce the strengths and limitations of each techniques and the need for further multimodality optical imaging probe development. The emphasis of this account is placed on how design strategies are currently implemented to afford physicochemically and biologically compatible multimodality optical fluorescence imaging probes. We also present studies that overcame intrinsic disadvantages of each imaging technique by multimodality approach with improved detection sensitivity and accuracy.

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