

**Special issue of `Current Physical Chemistry`
Recent developments in Lanthanide doped materials and their applications**

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Aim and Scope

Lanthanide doped optical materials deserve very wide attention in today's high technology photonics applications ranging from security authentication to cancer therapy. Lanthanides trivalent ions are considered as the most stable and intrinsically highly efficient light emitters in the vacuum ultraviolet to mid infrared region. These ions can be easily incorporated into several crystalline as well as amorphous materials that enable their applications in several diverse field such as lasers, fiber amplifiers, solar cells, displays, catalysis, scintillators, security markers as well as in biomedical areas such as cancer therapy, bioimaging and other detection and identification purposes. In this context, this special journal volume attempt to explore some of the recent developments the photonics and technological applications of rare earth doped materials.

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