



## Luminescent Properties of Lanthanoid Doped Crystals

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Deadline for manuscript  
submissions:

**closed (31 July 2017)**

### Message from the Guest Editor

In times of major changes for mankind, with respect of generating and using energy, the quest for efficient processes is more important than ever. This is especially true for luminophores regarding lighting strategies and display technologies, but also for detection methods, security issues and many other fields of applications. Solid, crystalline compounds bearing lanthanoid cations as activators represent a very vital research area in the realm of luminescent materials. The host materials are usually inert to environmental influences and the synthesis is facile in most cases. The role of the dopants is a very diverse one, with influences of the crystal field (e.g.,  $\text{Eu}^{2+}$ ), parity forbidden f–f transitions (e.g.,  $\text{Eu}^{3+}$ ,  $\text{Tb}^{3+}$ ) that can be rather intense nonetheless, or the effect of co-dopants (e.g.,  $\text{Gd}^{3+}$ ), just to name a few. These are more than enough reasons for producing the current special issue.





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