Special Issue

Advanced Magneto-Optical and Luminescence Materials

Message from the Guest Editor

Magneto-optical and luminescence properties have become important for the development of a new class of functional materials. This effect causes the rotation of polarization by a material as the result of the application of an external magnetic field. The Faraday effect has received significant attention with regard to applications of magneto-optical materials. The degree of Kerr rotation is used to determine the magnitude and orientation of the local magnetic domain. Dispersive MO effects in pure and substituted rare-earth ions garnets or sinters are the subject of numerous experimental and theoretical investigations. These effects are used for modulating the amplitude of light and form the basis of optical circulators and optical isolators and are integral to optical telecommunications networks and various laser applications. This Special Issue focuses mainly on the detection and characterization of magneto-optical, luminescence,

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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