



Magneto-Optical Ceramics

Guest Editor:

Dr. Dmitry Permin

Devyatykh Institute of Chemistry
of High-Purity Substances of the
Russian Academy of Sciences, 49
Tropinina Str., 603950 Nizhny
Novgorod, Russia

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Message from the Guest Editor

This Special Issue of *Magnetochemistry* aims to publish a collection of research contributions illustrating the recent achievements in all aspects of the fabrication and investigation of highly transparent magneto-optical transparent ceramics used in high power Faraday isolators.

The development of ceramic technology has led to significant progress in the fabrication and improvement of the characteristics of magneto-optical polycrystalline materials through a base component of Faraday isolators (FIs) and Faraday rotators (FRs), which are widely used in advanced optical communication systems and high-power lasers for polarization control, optical isolation, and depolarization compensation. In this regard, many works have appeared that describe the preparation and properties of various classes of paramagnetic optical materials (such as garnets, sesquioxides, pyrochlores, etc.) owning superior properties compared to commercially available TGG single crystals.

