



Submission Deadline—April 15, 2014

Optical Ceramics Science

Transparent ceramics offer unique fabrication advantages enabling bulk optical components to be formed with near-net shape, strain-free and homogenous doping. In the past decades, remarkable progress has been made to produce ceramics with high optical quality, controlled microstructures, engineered index and doping profiles for applications in lighting, high-power lasers, solar-energy harvesting, medical imaging and homeland security. Despite those achievements, several important challenges remain to improve on the quality and the functionalities of those materials. *JMR* is planning a Focus Issue on *Optical Ceramics Science* to be published in October 2014. We are soliciting original contributed papers on recent advances made in the area of optical ceramic science.

Contributed papers are solicited in the following areas:

- ◆ Optical ceramic materials for high-strength windows, scintillators, lasers, lighting, passive optics elements in the UV, visible and IR spectral regions
- ◆ New functionalities in transparent ceramic materials
- ◆ Defect studies in optical ceramics: grain-boundaries, stoichiometry issues, sintering additives, atomistic modeling
- ◆ Novel developments in powder synthesis, powder shaping and sintering methods for high performance optical ceramics
- ◆ Engineered optical ceramics: methods for microstructure, dopant and refractive index control
- ◆ Light-matter interaction in optical ceramics: theory, modeling and experimental studies

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MANUSCRIPT SUBMISSION

To be considered for this issue, new and previously unpublished results significant to the development of this field should be presented. The manuscripts must be submitted via the *JMR* electronic submission system by April 15, 2014. Manuscripts submitted after this deadline will not be considered for the issue due to time constraints on the review process. **Submission instructions may be found at www.mrs.org/jmr-instructions.** Please select "Focus Issue: *Optical Ceramic Science*" as the manuscript type. All manuscripts will be reviewed in a normal but expedited fashion. Papers submitted by the deadline and subsequently accepted will be published in the Focus Issue. Other manuscripts that are acceptable but cannot be included in the issue will be scheduled for publication in a subsequent issue of *JMR*.

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Please contact jmr@mrs.org with questions.

CALL FOR PAPERS

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The Society's interdisciplinary approach to the exchange of technical information is qualitatively different from that provided by single-discipline professional societies because it promotes technical exchange across the various fields of science affecting materials development. MRS sponsors three major international annual meetings encompassing many topical symposia, as well as numerous single-topic scientific meetings each year. It recognizes professional and technical excellence, conducts tutorials, and fosters technical exchange in various local geographical regions through Section activities and Student Chapters on university campuses.

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A publication of the
MRS MATERIALS RESEARCH SOCIETY
Advancing materials. Improving the quality of life.

Periodical Rate Postage Paid at New York, NY
and Additional Mailing Offices

Postmaster—Send change of address notice to:

ISSN: 0884-2914

Cambridge University Press
100 Brook Hill Drive
West Nyack, NY 10994-2113, USA