photonics

an Open Access Journal by MDPI

IMPACT FACTOR 2.1

CITESCORE 2.6

Optical Properties of Sol-Gel Derived Materials and Thin Film Structures

Guest Editors:

Prof. Dr. Nikolai Gaponenko
Department of Micro and Nanoelectronics, Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus

Prof. Dr. Raghavan Subasri
Centre for Sol-Gel Coatings, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Balapur, Hyderabad 500005, Telangana State, India

Prof. Dr. Wiesław Stręk
Institute of Low Temperatures and Structure Research, Polish Academy of Sciences, Wroclaw, Poland

Deadline for manuscript submissions:
closed (30 November 2023)

Message from the Guest Editors

Low-cost sol-gel technology receives significant attention for photonics applications. This special issue invites manuscripts that introduce the recent advances in sol-gel-derived optical materials and microstructures. Topics include, but are not limited to the following:

- Luminescence of lanthanides and transition metals from sol-gel-derived powders and thin films
- Materials and coatings with upconversion luminescence for solar cells
- Enhanced luminescence of lanthanides from microcavities: Stokes and anti-Stokes (upconversion luminescence)
- X-ray convertors and scintillators
- Photonic band gap materials and sol-gel derived materials in porous matrices.
- Optical filters
- Optical properties of conductive transparent coatings
- Sol-gel-derived planar waveguides
- Optical properties of sol-gel-derived glasses
- Porous materials for photocatalysis
- Optical sensors