Special Issue

Advances toward the Development of “Green” Pyrotechnics: Materials Selection and Design

Message from the Guest Editor

The development of "green" pyrotechnics, which are environmentally friendly alternatives to traditional pyrotechnic materials, has been a growing focus in the field of pyrotechnics. This advancement involves the careful selection and design of materials that are less harmful to the environment and human health. Researchers are exploring various options such as using non-toxic oxidizers and fuels, as well as reducing the heavy metal content in pyrotechnic formulations. Through incorporating these sustainable materials into pyrotechnic compositions, the goal is to create pyrotechnics that produce less toxic byproducts and emissions while still maintaining the desired visual and auditory effects. Although challenges remain in terms of the performance and cost, ongoing research and development efforts are making significant strides towards the realization of "green" pyrotechnics. Ultimately, the development of environmentally friendly pyrotechnics has the potential to not only reduce the environmental impact of pyrotechnic displays, but also to contribute to a cleaner and safer future for all.

Guest Editor

Dr. Magdalena Rusan
Department of Chemistry, Ludwig-Maximilians-Universität München, Butenandtstraße 5-13, 81377 München, Germany

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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