



Advanced Composite and Laser-Processed Glasses for Optoelectronic and Photonic Applications

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Message from the Guest Editor

Recent years, the incorporation of perovskite nanocrystals, 2D materials and metal nanoparticles within inorganic oxide glasses has been a promising way to producing composite glasses with advanced optical features. The encapsulation approach readily resolves stability issues upon exposure to ambient environments, as well as potential toxicity issues. These advantages render composite glasses suitable candidates for various types of optoelectronic and photonic applications.

The formation of laser-induced periodic structures represents an additional tool for tailoring and further tuning the optical properties of the composite glasses, upon generating interesting light and plasmon coupling effects between the glass matrix and the incorporated material.

This Special Issue aims to gather recent findings on the development of advanced composite glasses upon incorporating functional materials such as perovskites/2D materials/metal particles within the hosting glass matrix, and/or by employing laser processing to further advance the photonic properties of the designed glass architectures.

Based on the above, it is my great pleasure to invite you to submit a manuscript for this SI.





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Message from the Editor-in-Chief

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