Cadmium Dysprosium solar Glass

What are the color coordinates of dysprosium doped glass?
The color coordinates of the most intense dysprosium doped glass (SBP:Dy1) were (0.383,0.426). Considering the Dy 3+emission in blue (484nm),yellow (575nm) and red (663 and 755nm) regions a cool white light emission is possible from dysprosium doped single phosphor due to the blending of the three colors.

What is the composition of dysprosium oxide-doped glasses?
Dysprosium oxide-doped glasses with a composition of 60B 2 O 3 -10Sb 2 O 3 -10Al 2 O 3 -10NaF- (10-x) LiF-xDy 2 O 3(x = 0.1,0.5,1.0,1.5,2.0,2.5 mol%) were prepared using a conventional melt-quenching technique.

Are cadmium-free CIGSe solar cells efficient?
Additionally,cadmium-free (Zn,Mg)O buffers were explored to address environmental concerns. Optimizing the intrinsic ZnO layer via atomic layer deposition further enhanced the device performance of Cd-free CIGSe solar cells,achieving 17.81% efficiency.

Does Dy 3+ emit white light in barium Gallo-germanate glass?
In addition to intense orange-red emission of Eu 3+,intense blue and yellow emissions of Dy 3+resulted in white light emissionin their study. Marta et al. reported about the white light emission from barium gallo-germanate glass doped with Dy 3+/Ce 3+and Dy 3+/Tm 3+.

CdSe quantum dot-sensitized solar cells based on an efficient bifunctional structured layer composed of long afterglow SrAl2O4:Eu,Dy phosphors on top of a transparent ...

Enhanced performance of cadmium selenide quantum dot-sensitized solar cells by incorporating long afterglow europium, dysprosium co-doped strontium aluminate phosphors

The molten glass was poured on a brass plate maintained at 400 °C. After quenching, glass samples were annealed at 400 °C for 8 h to remove the thermal strain and ...

High-efficiency cadmium-free CIGSe solar cells on ultra-thin glass substrates ZnMgO has been investigated as a Cd-free buffer layer for CIGSe solar cells to address ...

Dy3+-doped glass-ceramics from the system Na2O-Al2O3-SiO2-B2O3-Dy2O3 are prepared. Crystalizing phases, crystal part, average size, and size distribution are determined. ...

Article: Enhanced performance of cadmium selenide quantum dot-sensitized solar cells by incorporating long afterglow europium, dysprosium co-doped

Enhanced performance of cadmium selenide quantum dot-sensitized solar cells by incorporating long afterglow europium, dysprosium co-doped strontium aluminate phosphors by Sun H, et ...

Comparative study of cadmium telluride solar cell performance on different TCO-coated substrates under concentrated light intensities Dan Lamb, Oxide and Chalcogenide ...

The study of the electronic, thermal and optical properties of dysprosium-doped cadmium oxide reveals high electron mobility, rendering the material suitable for plasmonic ...

The Li + ion connects with the glass former cations, that is with B 3+ ions, and enhances ring-type structures and coordination numbers, which also leads to a increase in ...

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