Green Photonics

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Green photonics describe any device or process that uses photonics in a sustainable way, yielding an environmentally sustainable outcome and improved public health. Four main areas were selected as targets in the field of green photonics: solid-state lighting, photovoltaics, optical communications and sensing with the common goals of generate/conserve energy, cut greenhouse emissions and pollution. Here, the contribution of organic-inorganic hybrid materials incorporating lanthanide ions will be revisited focusing applications as white-light LEDs and transparent large-area luminescent solar concentrators.