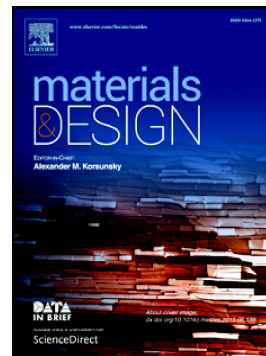


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Supramolecular hydrogel hybrids having high mechanical property, photoluminescence and light-induced shape deformation capability: design, preparation and characterization

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Abstract:

Integration of property, function, and intelligence in one single material obviously can further exploit applications of hydrogels, which remains a challenge. Physical mixing or chemical grating of functional components into hydrogels cannot easily achieve this goal. Here, we designed a new approach to prepare supramolecular hydrogel hybrids that presented high mechanical property, good photoluminescent function, and evident light-induced shape-deformation intelligence. Hydrogen bonding was constructed between nitrates in rare earth organic complex of Sm(TTA)Phen(NO₃)₃ (STPN) (TTA and Phen stand for α -thenoyltrifluoroacetone and

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