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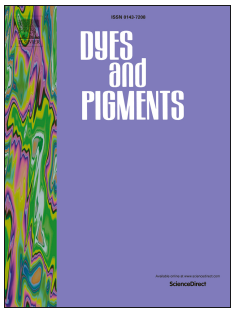

Exploring double proton transfer: A review on photochemical features of compounds with two proton-transfer sites

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Exploring Double Proton Transfer: a Review on Photochemical Features of Compounds with Two Proton-Transfer Sites

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Abstract

The review focuses on the investigations of molecular systems in which double intramolecular proton transfer can occur. Specific attention is paid to the transformations and deactivation processes in the electronically excited state of such compounds as well as their spectral, mainly fluorescent features. For each group of compounds thermodynamics, mechanisms and factors influencing double proton transfer are critically disscused. Moreover, an attempt was undertaken to correlate results of theoretical and experimental investigations as well as to estimate the perpectives in further design, investigations and applications of compounds of such a kind.