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エラグ酸エステル誘導体の相転移と分子集合体構造

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Phase Transition and Molecular Assembly Structure of Ellagic Acid Ester Derivative

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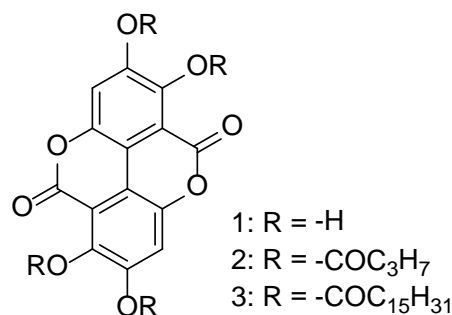


Figure 1. Molecular structures of 1, 2, and 3.

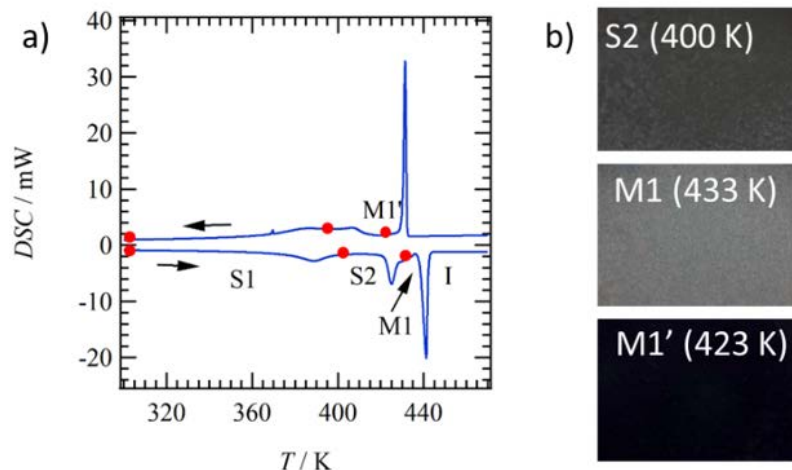


Figure 2. Phase transition behaviour of 3. a) First DSC cycle chart and b) POM images of the S2, M1, and M1' phases under a cross-Nicol optical arrangement.

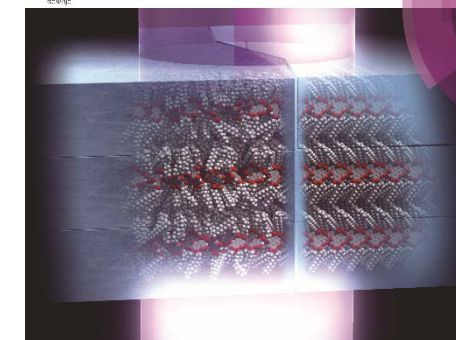
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Ellagic acid and its esters were examined in terms of phase transition, electronic structure, dielectric constant, and molecular assembly. The alternating layer arrangement of the one-dimensional π -stack and hydrophobic alkyl chains were observed in ellagic acid esters, and the in-plane amorphous glass state was observed at an optically isotropic assembly.

エラグ酸とそのエステル誘導体の相転移挙動、電子構造、誘電率、分子集合体を調べた。1次元 π スタックと疎水性アルキルとの交互積層構造が観測され、面内の分子配列がガラス状態であることが光学的に等方的な集合体である事から確認された。