

Benzothiazole fluorine–boron core complex: quantum luminescence controls

손영아[†], 김형주, 이효천

충남대학교 유기소재 · 섬유시스템공학과

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Young-A Son[†], Hyungjoo Kim, Xiaochuan Li

Department of Advanced Organic Materials and Textile System Engineering, Chungnam National University

yason@cnu.ac.kr, 042-821-6620

Abstract

To control luminescence emission property, a novel series of strong fluorescent fluorine-boron complexes were synthesized in higher yield. The resulting structural analysis was completed. Small molecules with a built-in fluorine-boron core structural architecture has been attracted considered attention as the key emissive elements due to the their good properties such as bipolar charge transport and high photo efficiency. Thus, new type of fluorine-boron(F-B) complexes are designed and prepared. Changing the substituent position on fluorophore ring provided a deep understanding on the relationship between structure and optical properties.

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