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Synthesis and optical properties of novel Tröger's base derivatives

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## Graphical Abstract

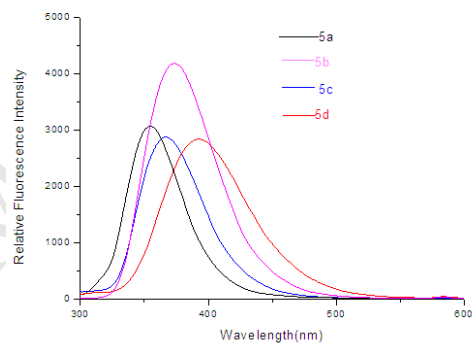
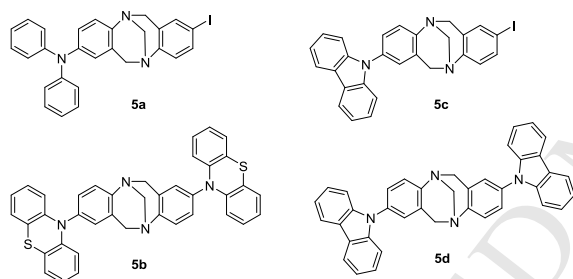
### Synthesis and optical properties of novel Tröger's base derivatives

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Diphenylamine, phenothiazine or carbazole were introduced into Tröger's base skeleton *via* Ullmann or Suzuki coupling to afford new TB derivatives. Their optical properties tests, density functional theory (B3LYP; 6-31G\*) calculations were investigated. Incidentally anti-cancer activity against human hepatoma HepG2 cells in vitro (MTT assay) were investigated. All the results indicated that these novel compounds have the potential as fluorescence materials.



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