Synthesis and photophysical properties of the 2-(3-(2-alkyl-6,8-diaryl-4-oxo-1,2,3,4-tetrahydroquinazolin-2-yl)propyl)-6,8-diarylquinazolin-4(3H)-ones

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Abstract:

Iodine-catalyzed condensation of 2-amino-3,5-dibromobenzamide with cyclohexane-1,3-dione derivatives in refluxing toluene afforded the corresponding bisquinazolinones. Suzuki-Miyaura cross-coupling of the latter with arylboronic acids afforded tetraarylquinazolinones. The electronic absorption and emission properties of these tetraarylquinazolinones were measured in dimethylsulfoxide (DMSO) and acetic acid by means of UV-Vis and fluorescence spectroscopic techniques in conjunction with quantum chemical methods to understand the influence of substituents on intramolecular charge transfer (ICT)

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