

烯酮类化合物发光行为的研究

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摘要 本工作合成了几种带桥键结构的烯酮类化合物, 研究了它们的光谱和光物理行为. 结果表明那些分子内的双键因桥键化而成环的化合物具有很强的荧光量子产率, 相反那些未桥键化或桥键化而双键未处于环内者则仅有较弱的荧光强度, 工作中还观察到该类化合物的"负溶致动力学效应"以及其荧光强度强烈地依赖于所用溶剂极性等现象, 对所得结果进行了初步的讨论.

关键词 [荧光染料](#) [烯酮](#) [化学发光](#) [激光染料](#) [光敏剂](#) [量子产率](#)

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A study on the luminescence behaviour of enone derivatives

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Abstract Several intramol. bridging enone compounds were synthesized and characterized. The mol. in which the double bond is bridged to form a ring has very strong fluorescence emission. By contrast, the mol. in which the double bond is not bridged or located outside the bridged ring has very low fluorescence quantum yield. The "neg. solvatokinetic effect" and the strong dependence of fluorescence intensity on the solvent polarity for these compounds were also observed. A preliminary explanation is proposed.

Key words [FLUORESCENCE DYES](#) [KETENE](#) [CHEMILUMINESSENCE](#) [LASER DYES](#) [PHOTOSENSITIVE DRUG](#)

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