



Showcasing research from Zong-Wan Mao's laboratory, School of Chemistry and Chemical Engineering, Sun Yat-sen University, Guangzhou, China.

Cyclometalated iridium(III) complexes as lysosome-targeted photodynamic anticancer and real-time tracking agents

In this work, four cyclometalated iridium(III) complexes with pH-responsive singlet oxygen ($^1\text{O}_2$) production and lysosome-specific imaging properties have been presented. They show highly selective phototoxicities against cancer cells. Interestingly, the pH-responsive phosphorescence of these complexes can be utilized to monitor the lysosomal integrity upon photodynamic therapy (PDT), which provides a convenient method for *in-situ* monitoring of therapeutic effect and real-time assessment of treatment outcome.

As featured in:



See Cai-Ping Tan,
Zong-Wan Mao *et al.*,
Chem. Sci., 2015, 6, 5409.



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Registered charity number: 207890