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Autore	Lau Janet T. F
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Nota di contenuto	A Zinc(II) Phthalocyanine Conjugated with an Oxaliplatin Derivative for Dual Chemo- and Photodynamic Therapy -- Zinc(II) Phthalocyanine-Polyamine Conjugates as Efficient Photosensitizers for Photodynamic Therapy -- A Redox-Responsive Silicon(IV) Phthalocyanine for Targeted Photodynamic Therapy -- A Dual pH- and Redox-Responsive Phthalocyanine-Based Photosensitizer for Targeted Photodynamic Therapy.
Sommario/riassunto	Janet Lau's thesis describes her studies into the use of phthalocyanine-based photosensitizers in combined chemo- and photodynamic therapy (PDT) and targeted PDT. In order to carry out this study, Lau uses several approaches: conjugation with a chemotherapeutic oxaliplatin derivative, use of a polyamine ligand 2 with a view to targeting the polyamine transporters over-expressed in tumor cells, and employment of a quencher that can inhibit their photodynamic activity but can still be removed under a tumor-associated environment such as low pH and high thiol concentration. This thesis reports dual activatable photosensitizers for the first time. Overall the studies included are original and the effects have been well demonstrated at the cellular level. The work in this thesis is of much current interest and importance, and can pave foundation for further developments. Accordingly, parts of the results have been published in prestigious

