



# Validated and potential mechanisms for photothermal actuators, modulators and transducers

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In most of the scientific literature, photothermal effects have been exploited to characterize the optical or thermal properties of materials, or to induce photoacoustic effects, which are in turn used to characterize mechanical material properties. The present contribution highlights a selection of photothermal effects that have been or could potentially be exploited for remote actuation, modulation or transduction in an interdisciplinary context. Estimates are given for the magnitude of the effects, and an assessment is made of the feasibility for exploitation.