Supporting Information

A photocatalytic sp³ C–S, C-Se and C-B bonds formation through C–C bond cleavage of cycloketone oxime esters

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General Information.

Unless otherwise noted, all reactions were performed in a 10 mL test tube at room temperature. Photo-irradiation was carried out with a 5 W blue LED. For chromatography, 200-300 mesh silica gel (Qindao, China) was employed. ¹H NMR and ¹³C NMR spectra were measured in CDCl₃ and recorded on Brucker ARX 400 spectrometer. Chemical shifts (δ) were given in ppm, referenced to the residual proton resonance of CDCl₃ (7.26), to the carbon resonance of CDCl₃ (77.16). Coupling constants (J) were given in Hertz (Hz). The term, d, t, m, dd referred to doublet, triplet, multiplet, doublet of doublet. Exact masses (HRMS) were recorded on a high resolution magnetic mass spectrometer using ESI or APCI ionization techniques. Cyclobutanones¹ and O-acyl oximes² were prepared according to the previous reported procedures. Materials obtained from commercial suppliers were used without further purification.

References:
$^{1}H$ NMR and $^{13}C$ NMR spectrum of products