

## SUPPORTING INFORMATION

# Photocatalysis in dimethyl carbonate green solvent: degradation and partial oxidation of phenanthrene on supported TiO<sub>2</sub>

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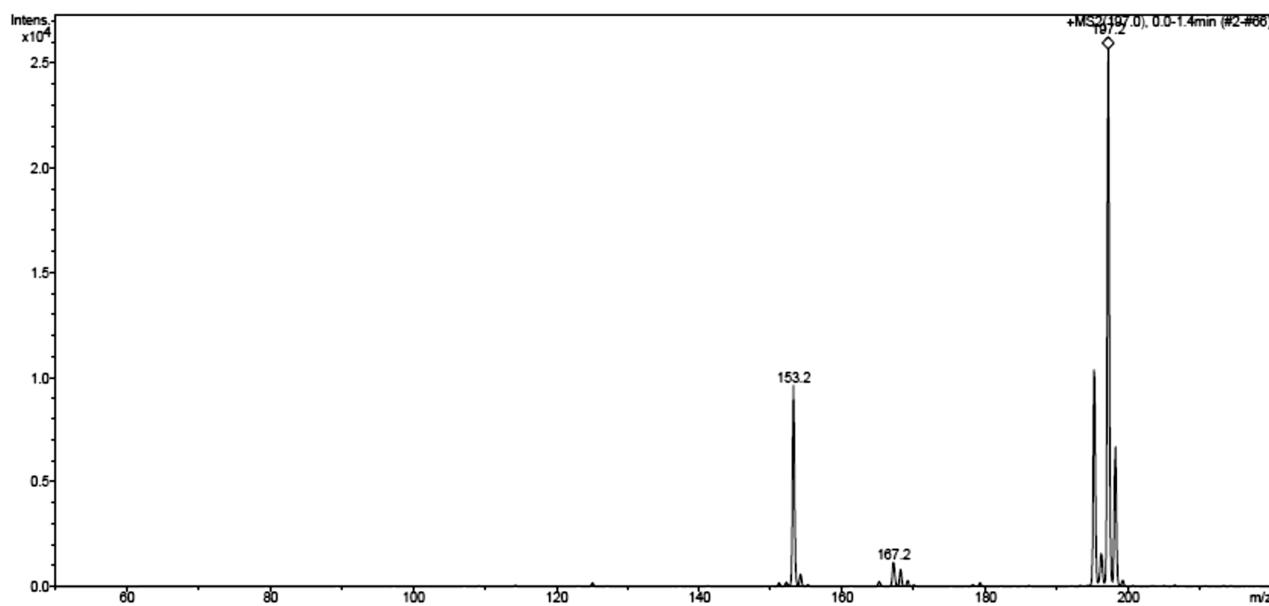


Fig. S1: CID of  $m/z$  197 obtained by ESI-MS of the isolated 6H-benzo[c]chromen-6-one.

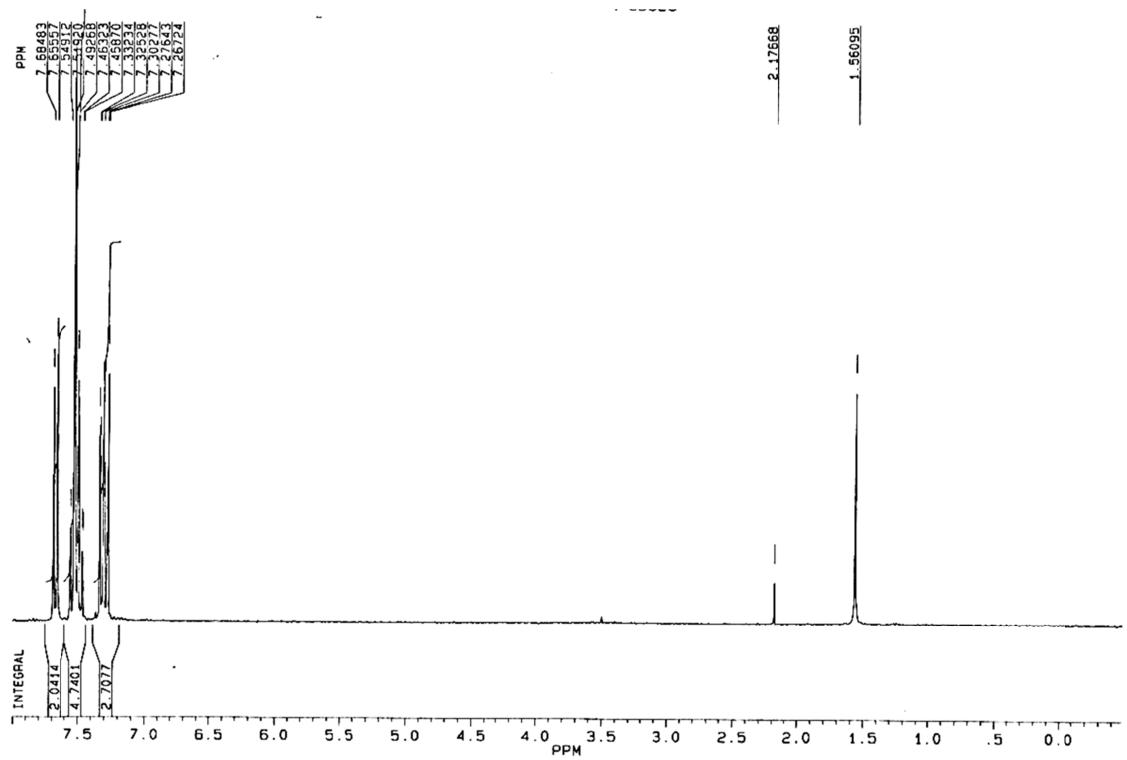
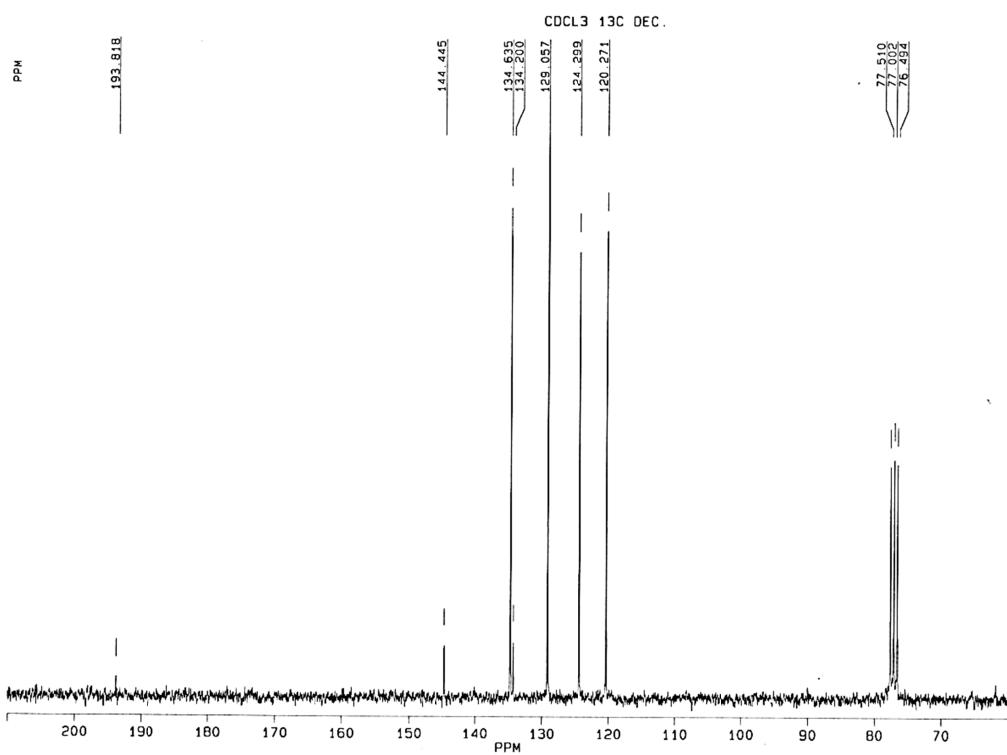
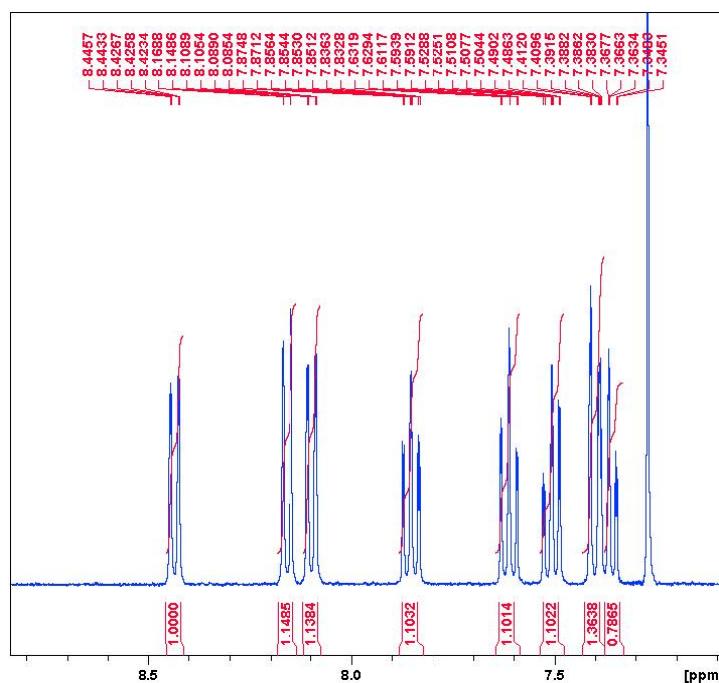


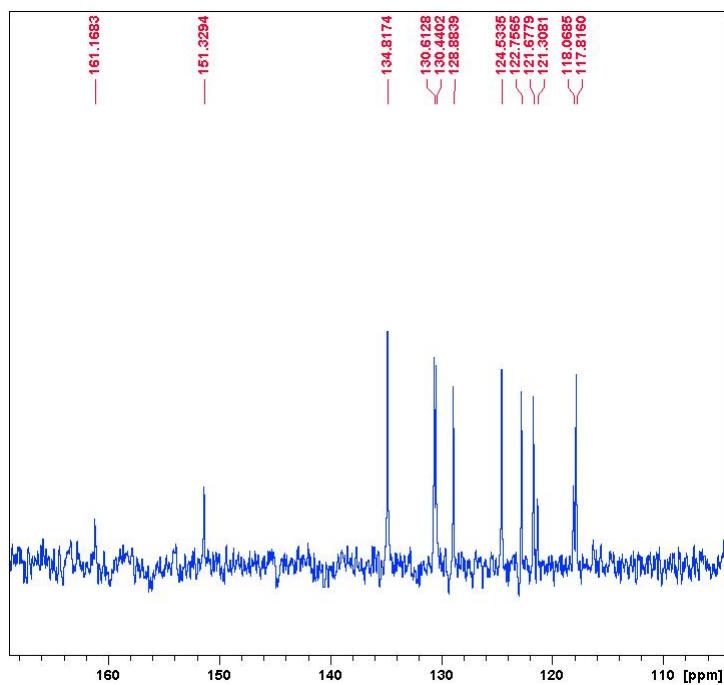
Fig. S2:  $^1\text{H}$ -NMR spectrum of the isolated 9-fluorenone in  $\text{CDCl}_3$ .



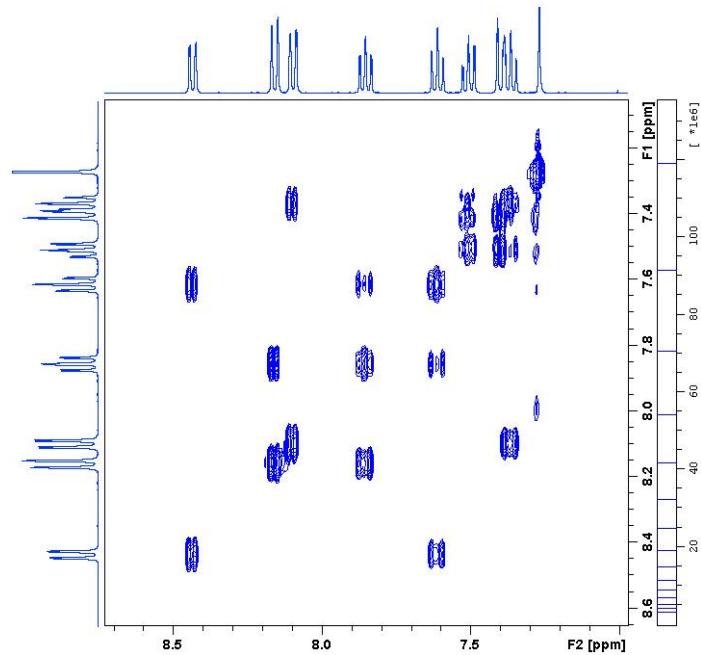
**Fig S3:** <sup>13</sup>C-NMR spectrum of the isolated 9-fluorenone in CDCl<sub>3</sub>.



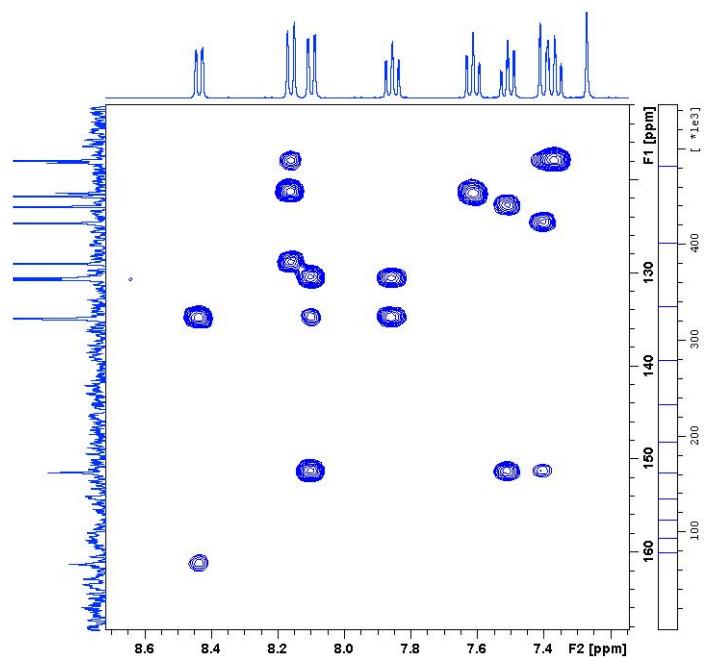
**Fig. S4:** <sup>1</sup>H-NMR spectrum of the isolated 6H-benzo[c]chromen-6-one in CDCl<sub>3</sub>.



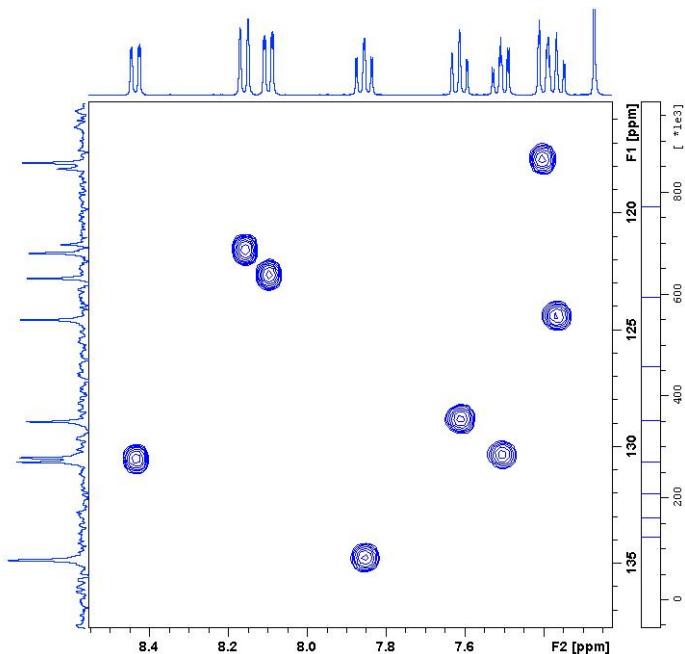
**Fig. S5:** <sup>13</sup>C-NMR spectrum of the isolated 6H-benzo[c]chromen-6-one in CDCl<sub>3</sub>.



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**Fig. S8:** HSQC-NMR spectrum of the isolated 6H-benzo[c]chromen-6-one in  $\text{CDCl}_3$ .