

Table 1

Conditions for preparation of S- or N-doped TiO<sub>2</sub> loaded with Fe<sub>2</sub>O<sub>3</sub> nanoparticles

| Photo-catalyst              | Surface area<br>(m <sup>2</sup> g <sup>-1</sup> ) | Theoretical amount of adsorbed Fe <sub>2</sub> O <sub>3</sub> (wt%) | Conditions for preparation |                       | Actual amount of adsorbed Fe <sub>2</sub> O <sub>3</sub> (wt%) |
|-----------------------------|---|---|----------------------------|-----------------------|--|
|                             |   |   | TiO <sub>2</sub> (g)       | FeCl <sub>3</sub> (g) |  |
| S-doped<br>TiO <sub>2</sub> | 126.1   | 0.5   | 3.00                       | 0.0260                | 0.37   |
|                             |   | 1.0   | 3.17                       | 0.0551                | 0.90   |
|                             |   | 5.0   | 3.04                       | 0.2647                | 4.22   |
| N-doped<br>TiO <sub>2</sub> | 90.5  | 0.5   | 3.03                       | 0.0272                | 0.36   |
|                             |   | 1.0   | 2.98                       | 0.0542                | 0.92   |
|                             |   | 5.0   | 2.98                       | 0.2697                | 4.40   |

Fig. 1

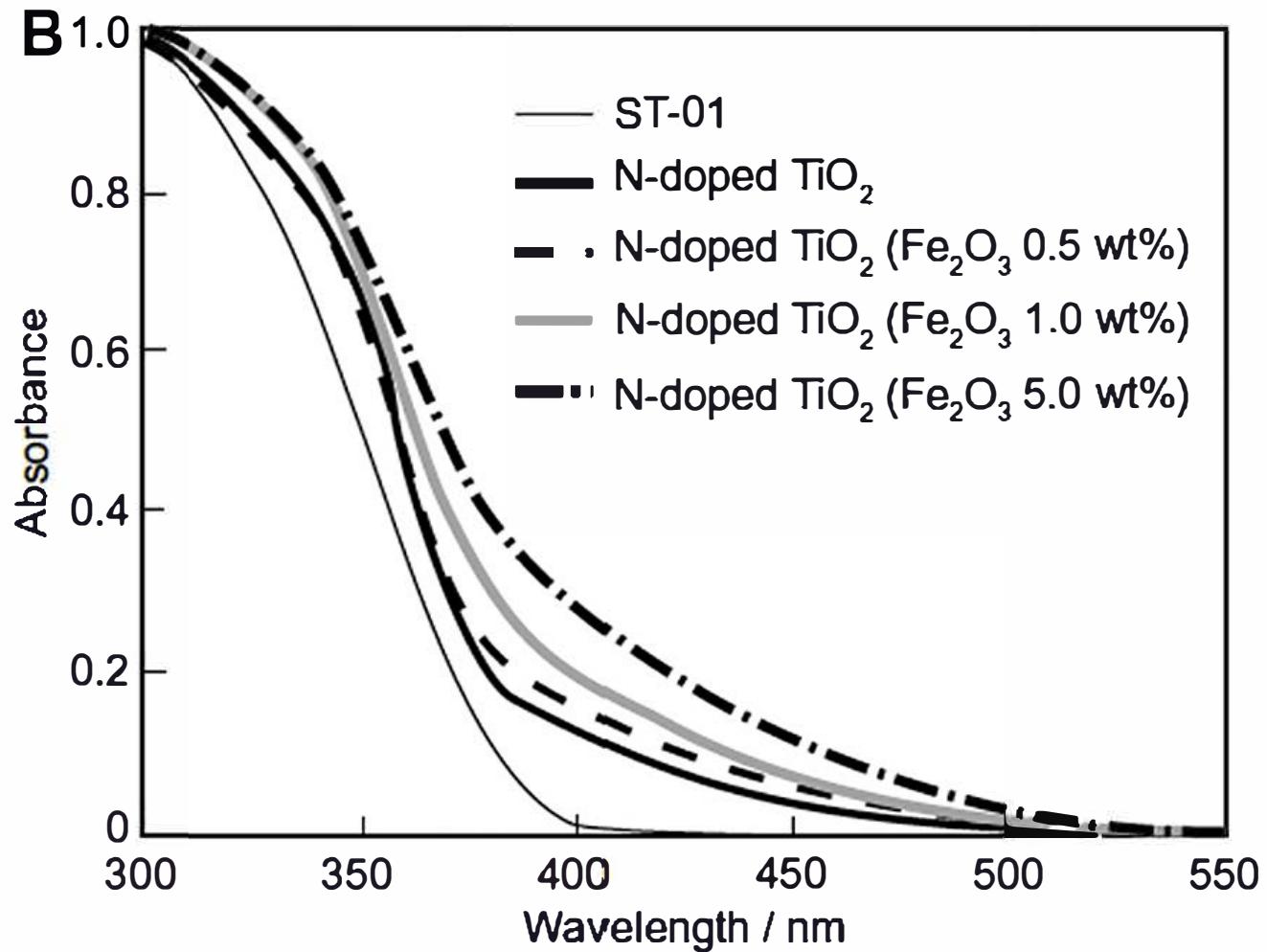
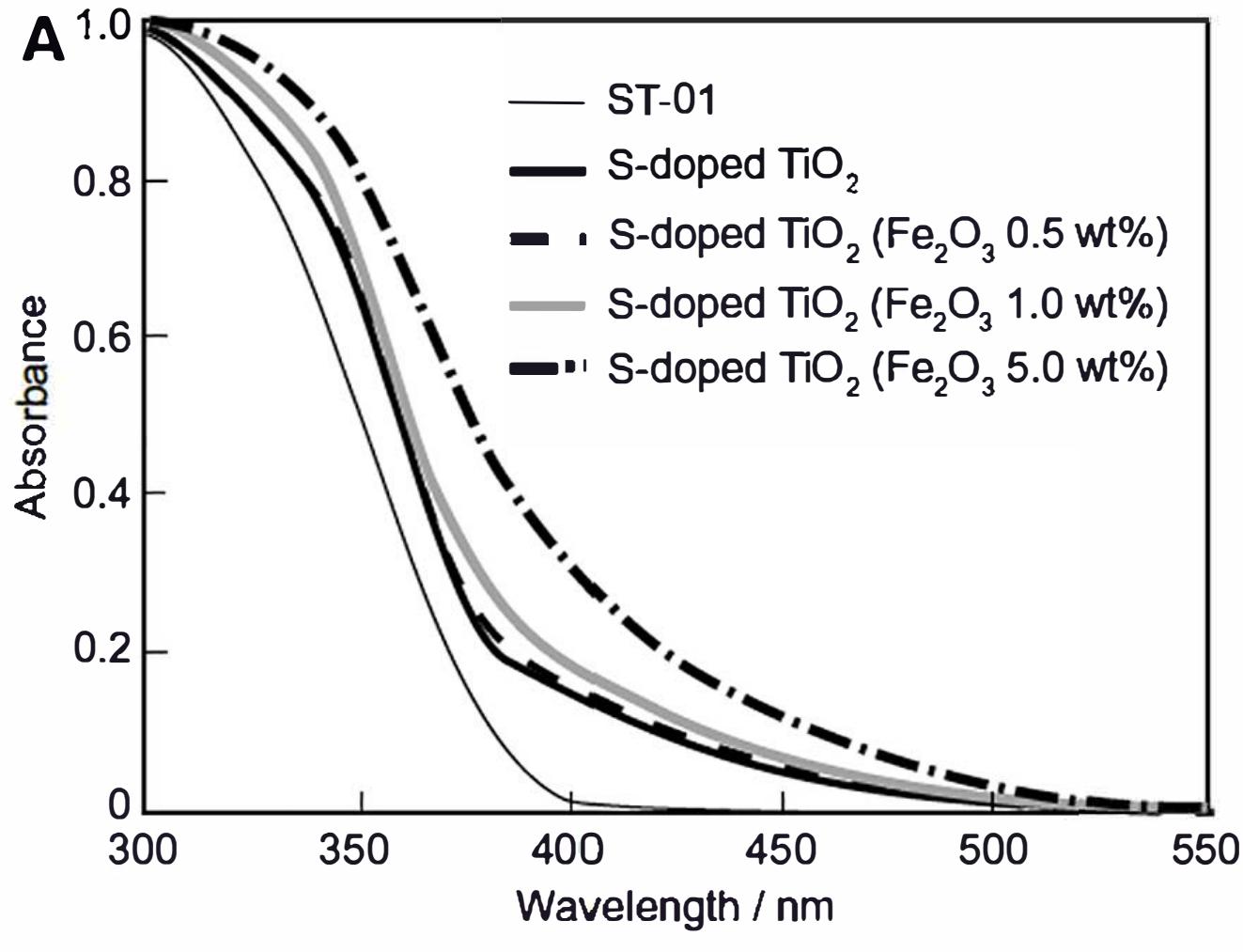


Fig. 2

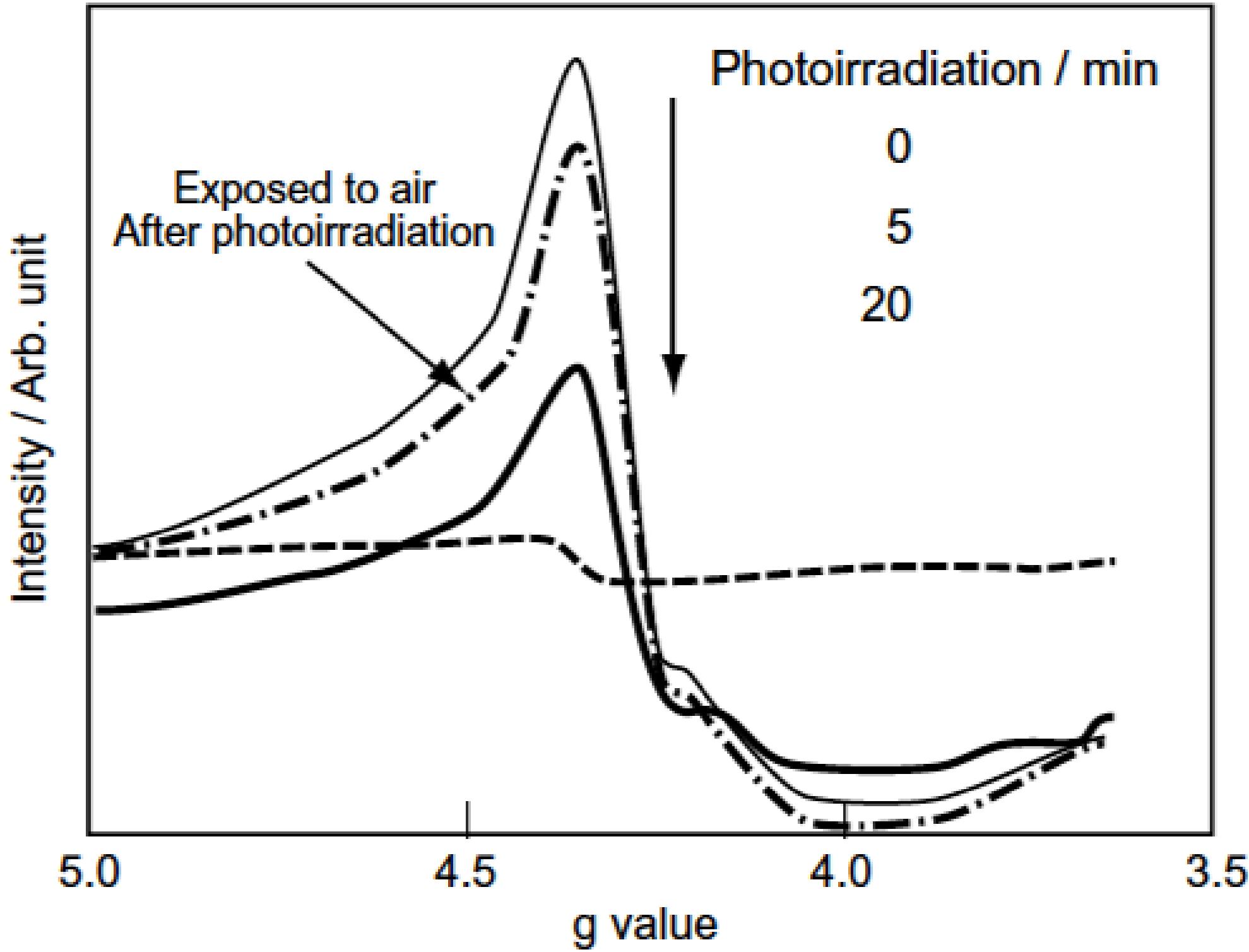


Fig. 3

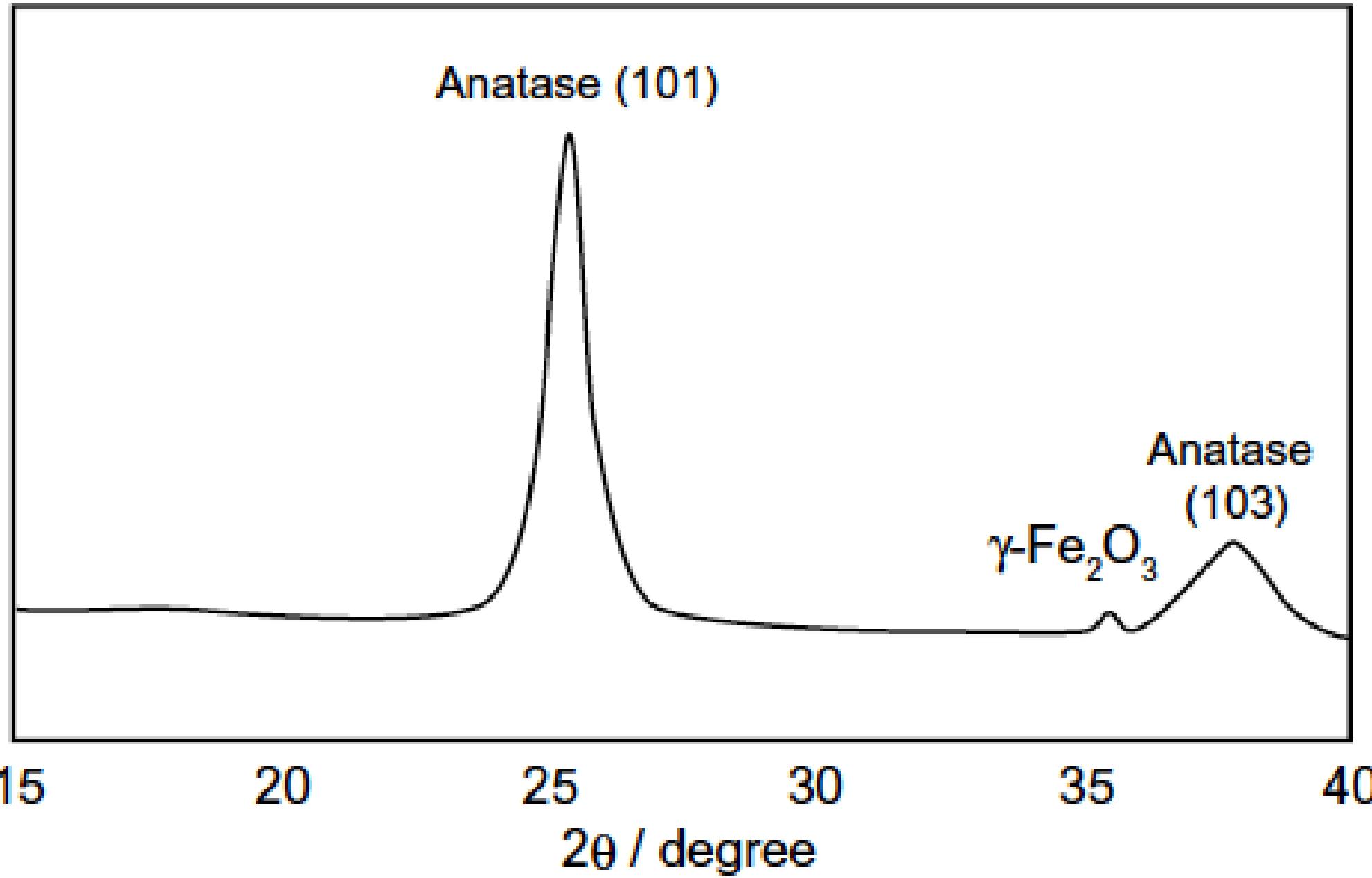


Fig. 4

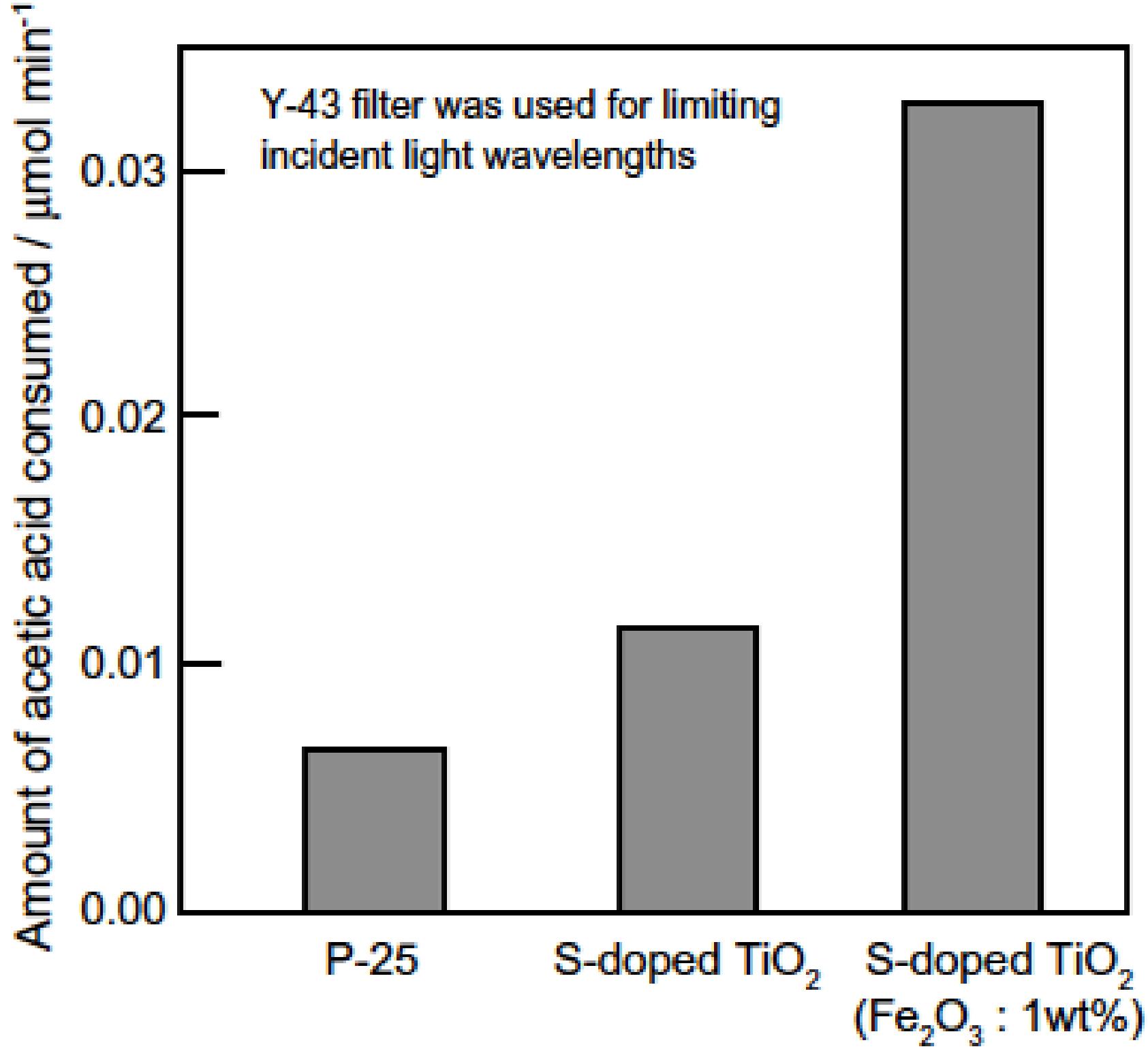


Fig. 5

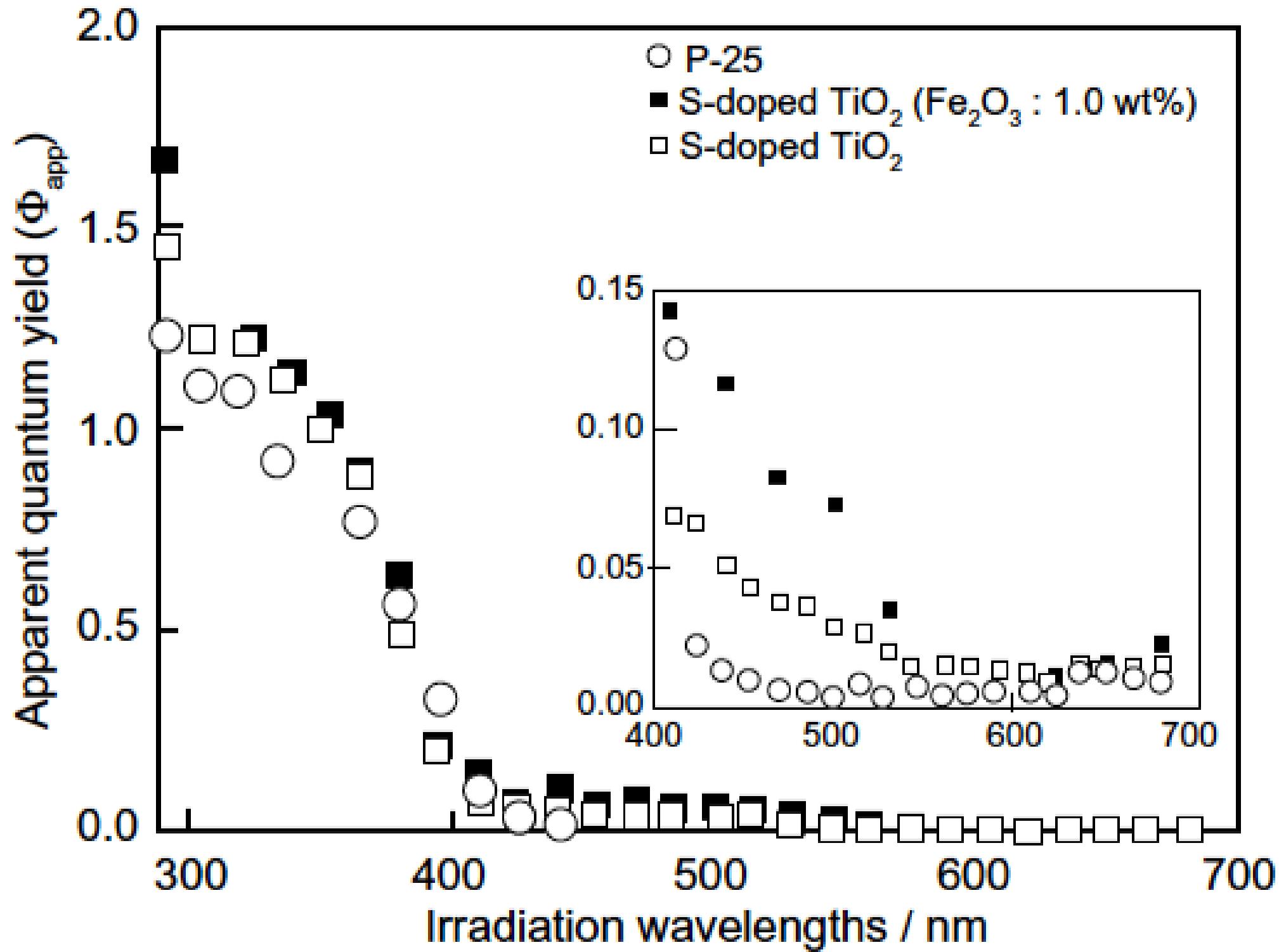


Fig. 6

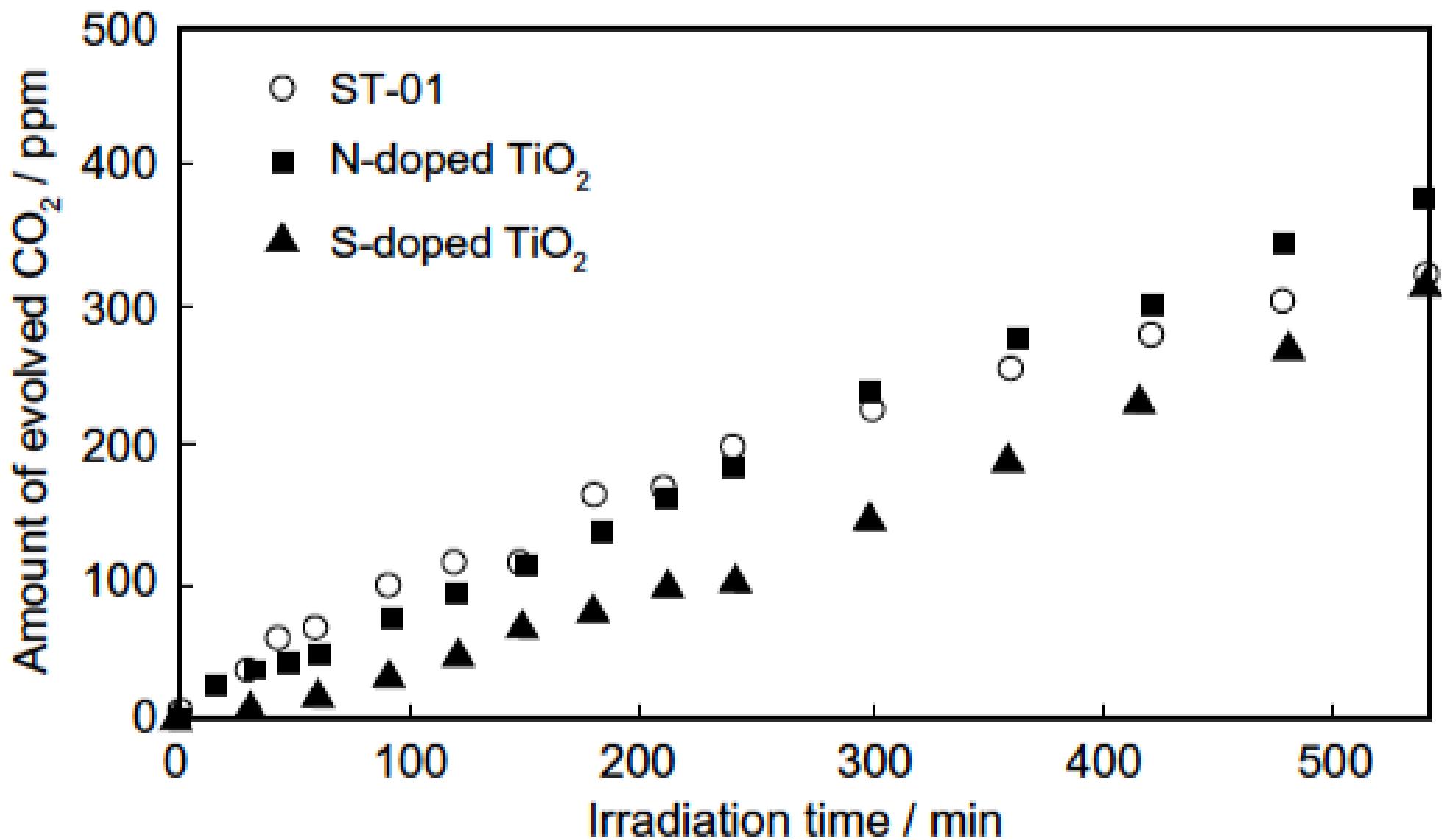


Fig. 7

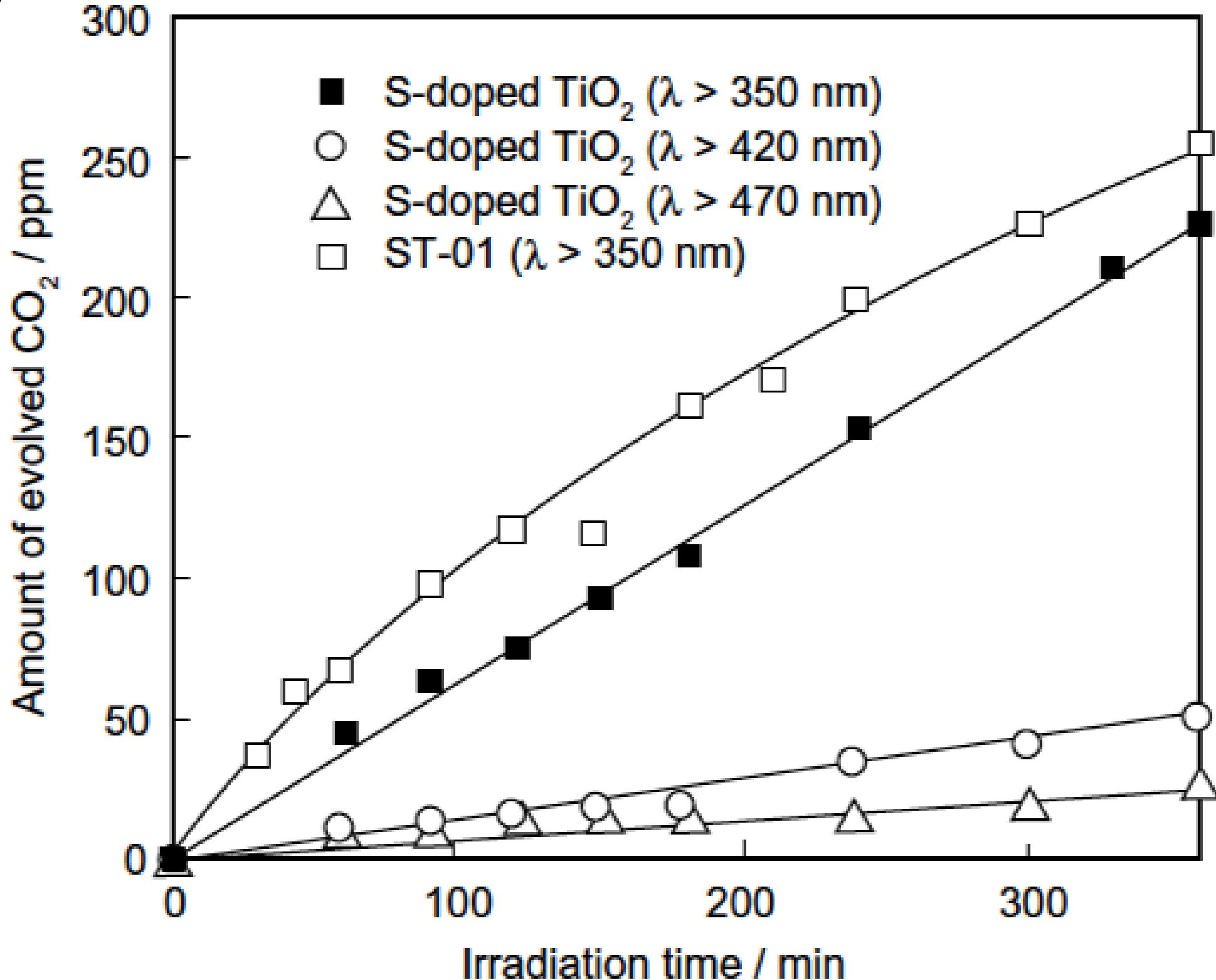


Fig. 8

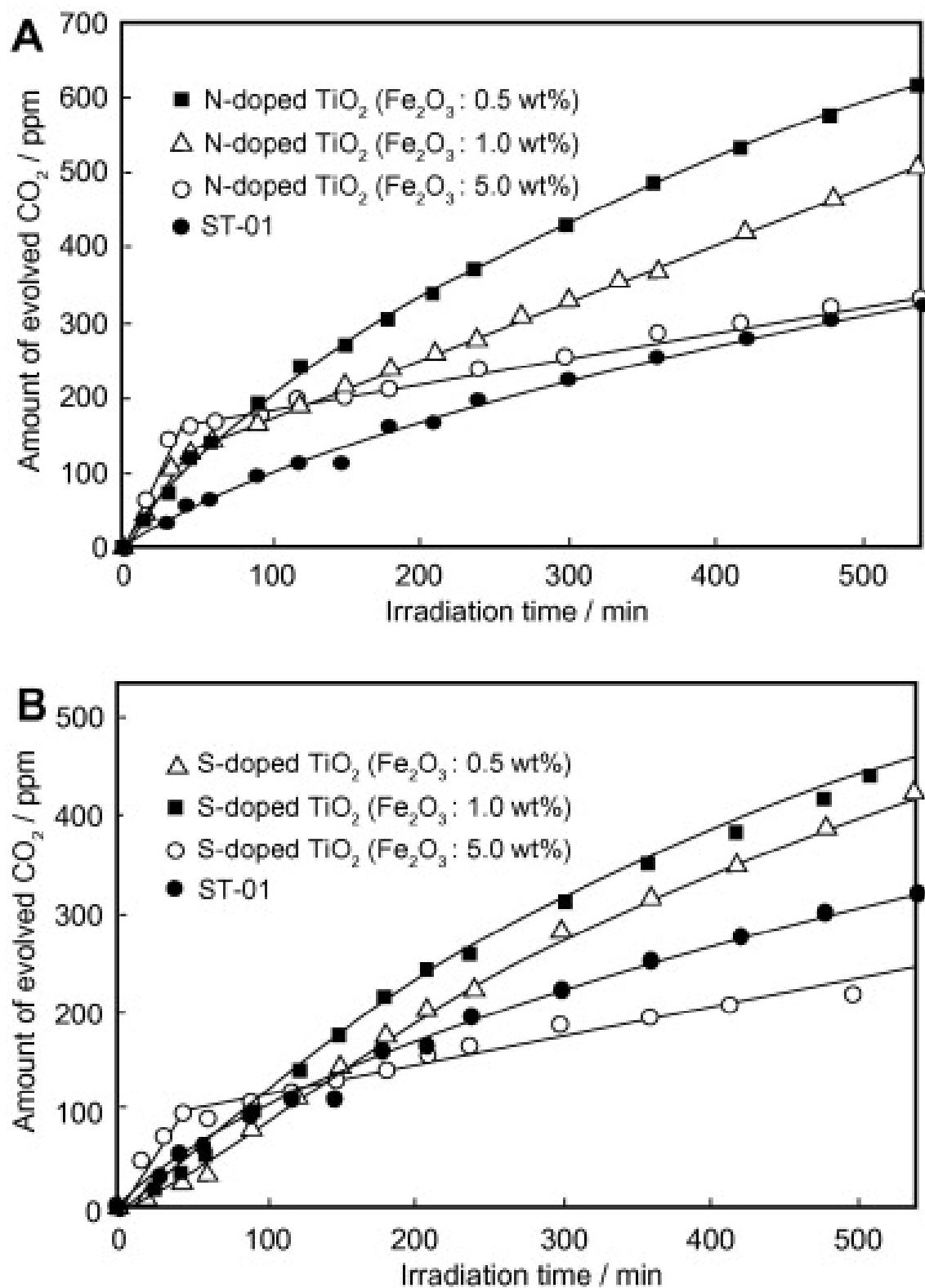


Fig. 9

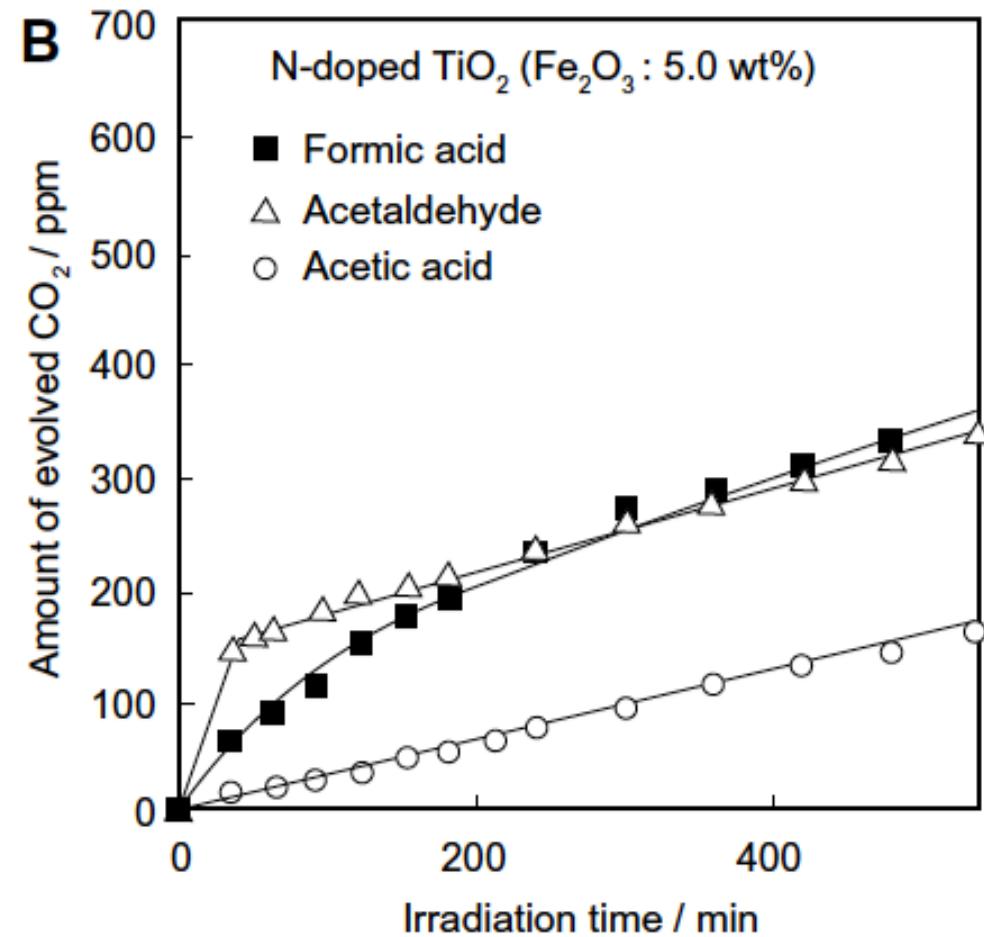
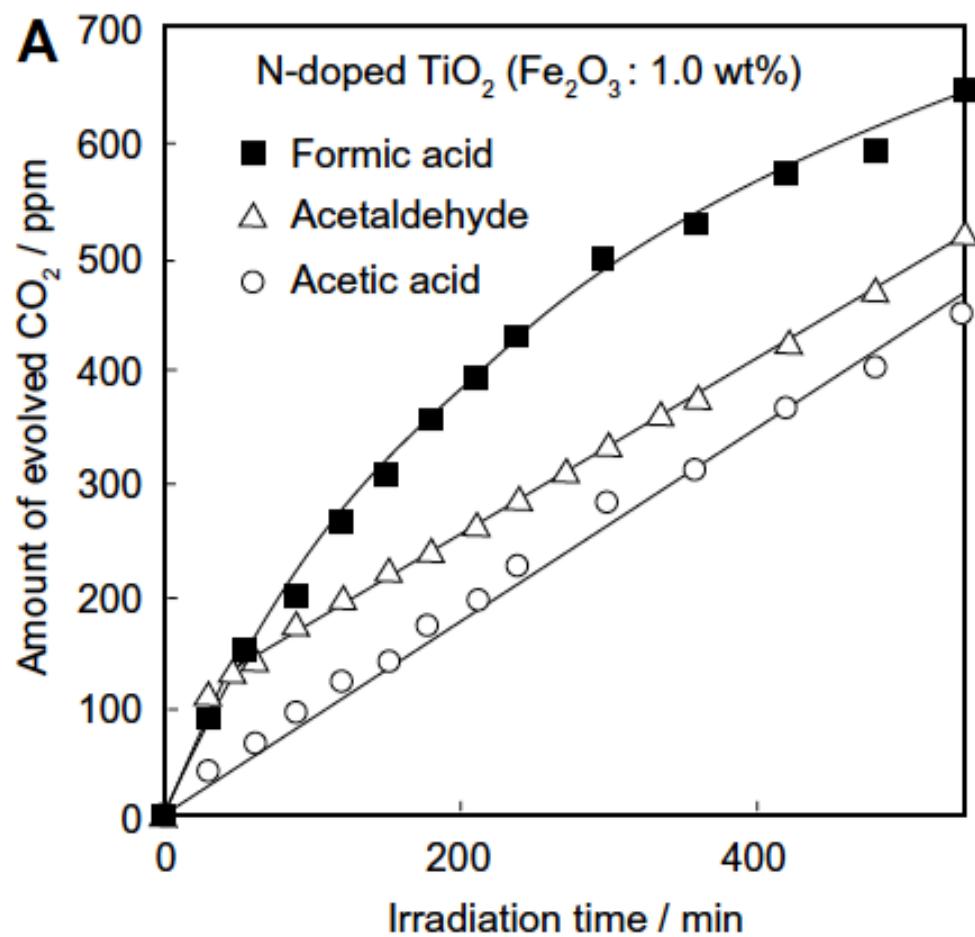


Fig. 10

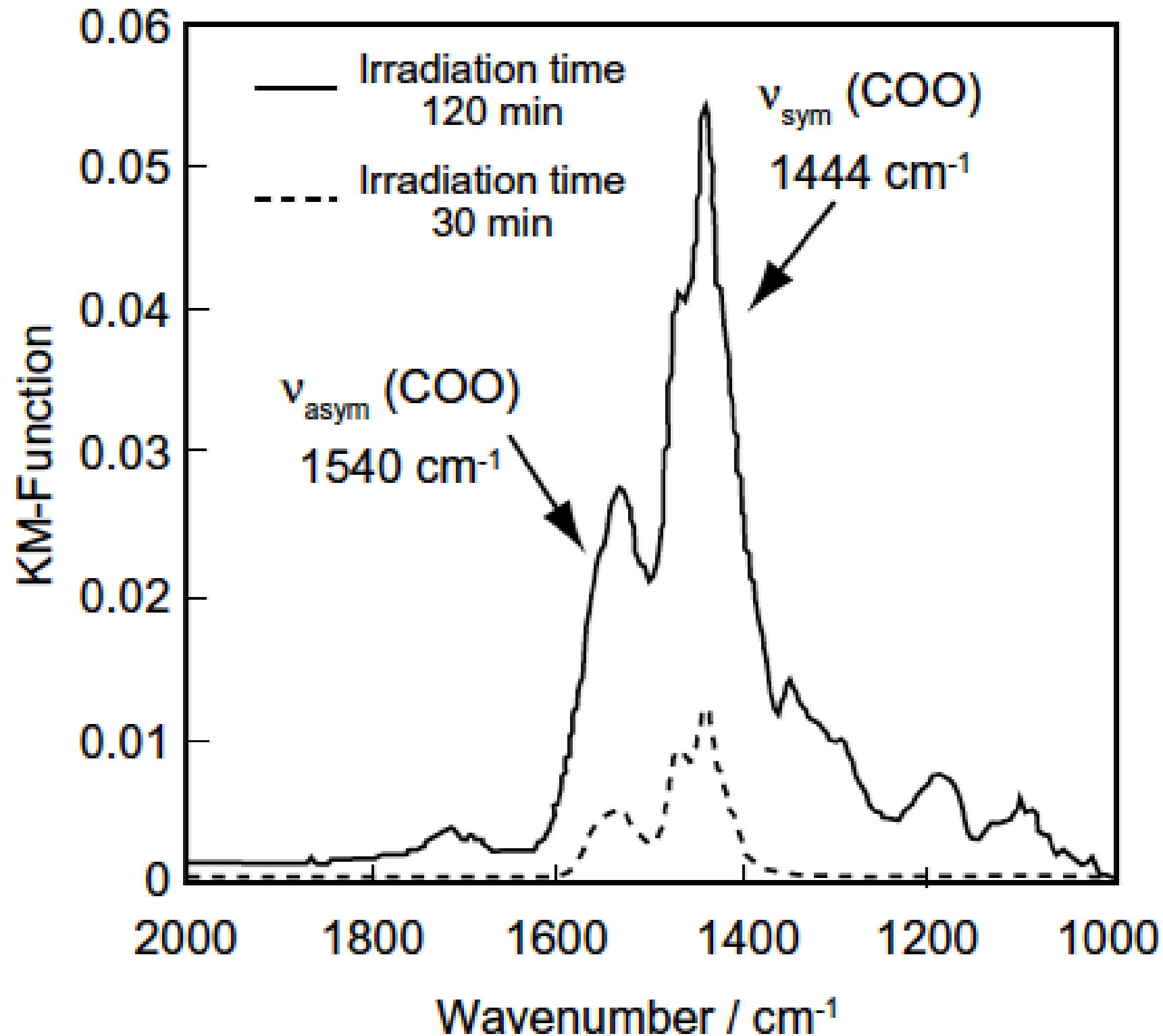


Fig. 11

