Supplementary Information

Sulfamic acid-functionalized nano-titanium dioxide as an efficient, mild and highly recyclable solid acid nanocatalyst for chemoselective oxidation of sulfides and thiols

Elham Tabrizian, Ali Amoozadeh* and Salman Rahmani
Department of Organic Chemistry, Faculty of Chemistry, Semnan University, Semnan 35131-19111, Iran

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Methyl phenyl sulfoxide

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\begin{align*}
\text{S} \\
\text{O} \\
\end{align*}
\]

$^1$H NMR (CDCl$_3$, 400Hz, ppm): 2.45 (3H, s, Me), 7.25 (3H, m, Ph), 7.43 (2H, m, Ph)

*Figure 1.* $^1$H NMR of methyl phenyl sulfoxide
Ethyl phenyl sulfoxide

$\text{S}$

$^1\text{H NMR (CDCl}_3, 400\text{Hz, ppm)}: \delta = 1.20 (3\text{H, m, CH}_3), 2.70 (2\text{H, m, CH}_2), 7.52 (3\text{H, m, Ph}), 7.61 (2\text{H, m, Ph})$

Figure 2. $^1\text{H NMR of ethyl phenyl sulfoxide}$
Benzyl phenyl sulfoxide

\[ \text{S} \]

\(^1\)H NMR (CDCl\(_3\), 400Hz, ppm): \(\delta=3.98\ (1\text{H}, \text{d}, j=13\text{Hz}, \text{CH}_2\), 4.12 (1H, d, j=13Hz, CH\(_2\)), 6.95 (2H, m, Ph), 7.25 (2H, m, Ph), 7.42 (6H, m, Ph)\)

Figure 3. \(^1\)H NMR of benzyl phenyl sulfoxide
Diphenyl sulfoxide

\[ \begin{array}{c}
\text{S} \\
\text{O}
\end{array} \]

\[ ^1\text{H NMR (CDCl}_3, 400\text{Hz, ppm): } \delta = 7.49 \ (4\text{H, m, Ph}), \ 7.65 \ (6\text{H, m, Ph}) \]

Figure 4. \(^1\text{H NMR of diphenyl sulfoxide}\)