

Supplementary information for

**Synthesis and structure of $\text{Bi}_2\text{Ce}_2\text{O}_7$: A new
compound exhibiting high solar photocatalytic
activity**

*Dipankar Saha, Giridhar Madras and Tayur N. Guru Row**

*[†]Solid State and Structural Chemistry Unit, Indian Institute of Science, Bangalore 560 012,
INDIA.*

* Corresponding author: E-mail: ssctng@sscu.iisc.ernet.in Tel: +91-80-2292796 Fax: +91-80-3601310

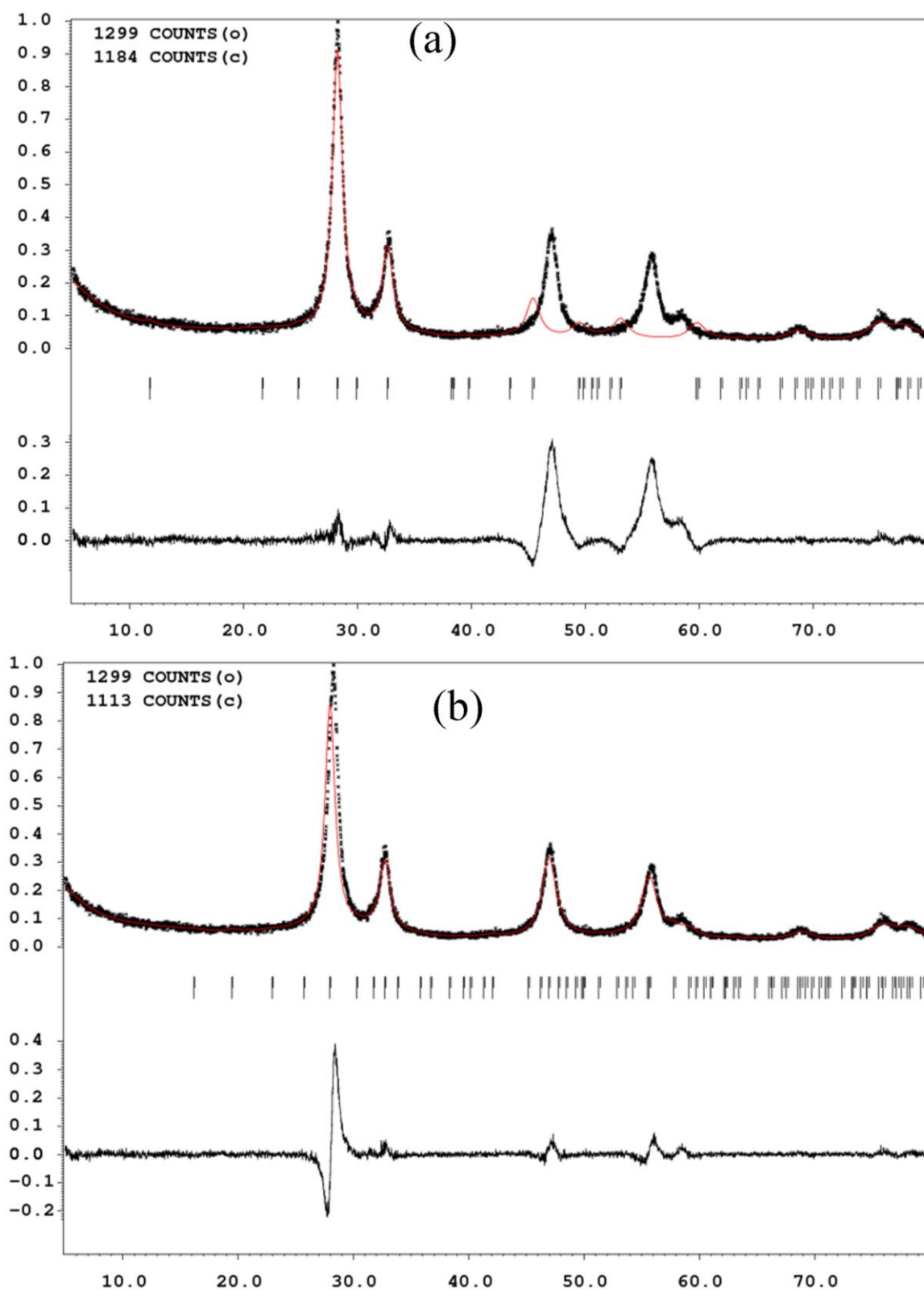


Fig. S1 Profile fitting with model (a) Ce_2BiO_2 (Space group $I4/mmm$, $a=4.0340$, $b=13.7360$) and (b) $\text{Bi}_{7.38}\text{Ce}_{0.62}\text{O}_{12.31}$ (Space group $P-42_1c$, $a=7.7386$, $c=5.6347$)

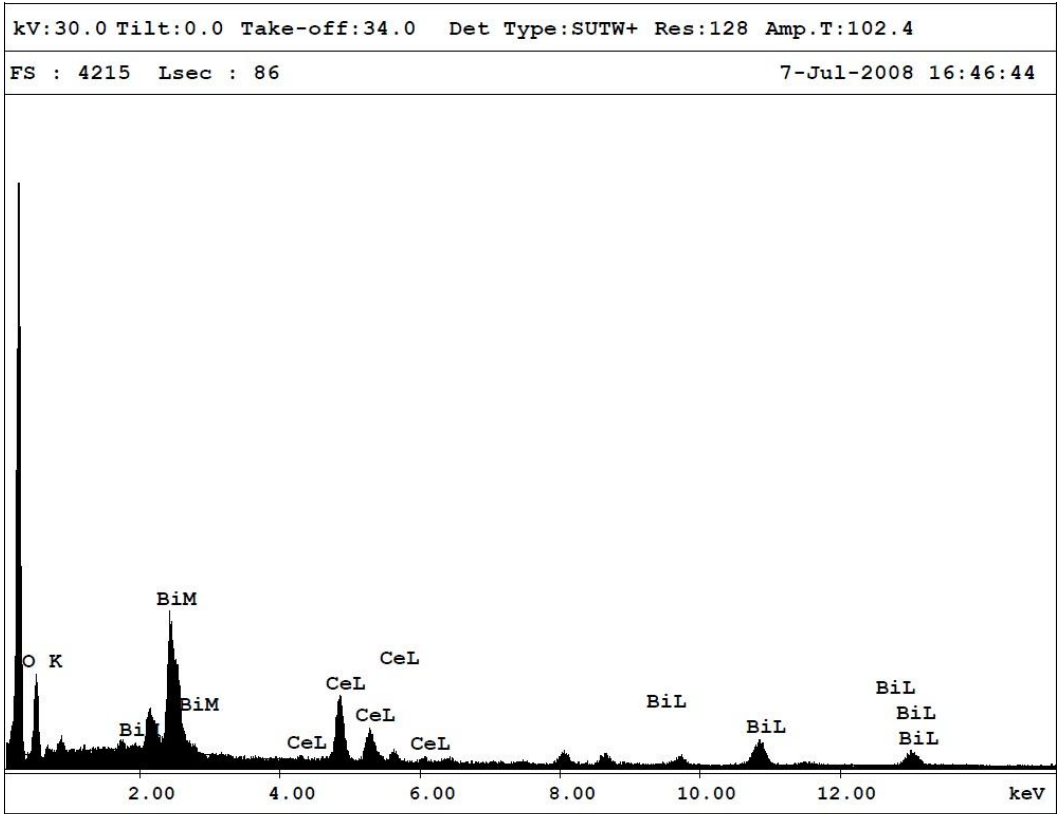


Fig. S2 EDX images for BCO

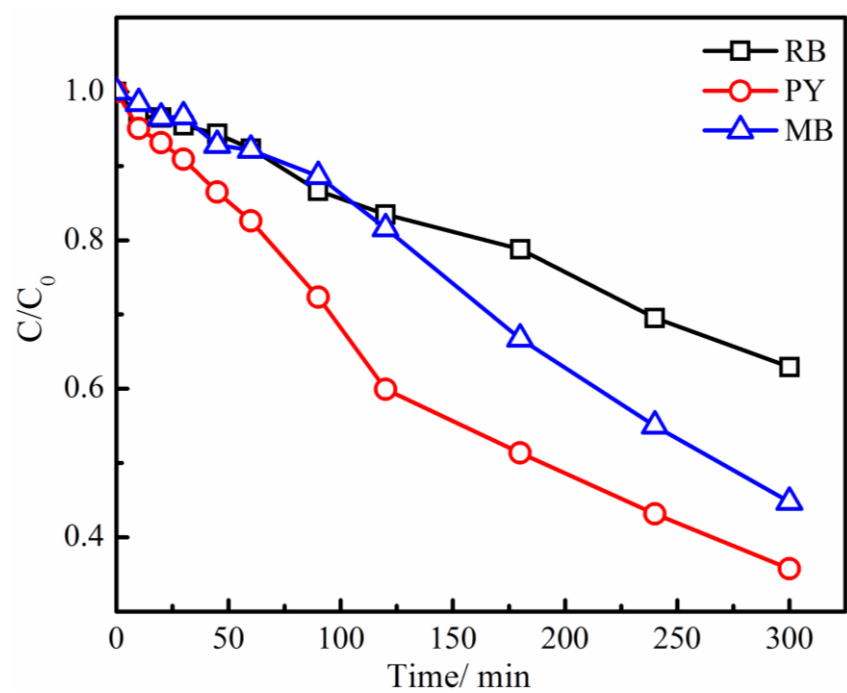


Fig. S3 Degradation profiles for various dyes in presence of BCO under solar radiation