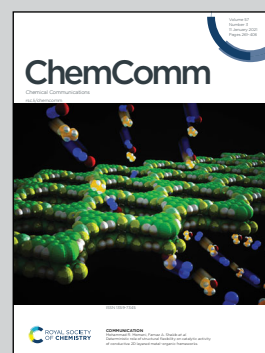


Showcasing research from Professor Kudo's laboratory,  
Department of Applied Chemistry, Tokyo University of  
Science, Tokyo, Japan.

Highly crystalline  $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$  of a photocatalyst  
valence-band-controlled with  $\text{Bi(III)}$  for solar water splitting

A highly crystalline  $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$  powder with a perovskite  
structure was successfully synthesized using a NaCl-flux  
method. The powdered photocatalyst in which the valence  
band consisted of  $\text{Bi(III)}$  showed a 5.1% apparent quantum  
yield at 350 nm for water splitting.

As featured in:



See Akihiko Kudo *et al.*,  
*Chem. Commun.*, 2021, **57**, 323.