



Showcasing research from Professor Wojciech Macyk's laboratory (Team of Photocatalysis), Faculty of Chemistry, Jagiellonian University, Kraków, Poland.

Phototransformations of $\text{TiO}_2/\text{Ag}_2\text{O}$ composites and their influence on photocatalytic water splitting accompanied by methanol photoreforming

Photocatalytic water splitting and photoreforming of methanol by a $\text{TiO}_2/\text{Ag}_2\text{O}$ system was explored. The lack of exchange of charge carriers between TiO_2 and Ag_2O and the fast phototransformation of Ag_2O into silver nanoparticles were evidenced. Silver oxide can be considered a beneficial precursor for *in situ* photocatalytic growth of silver nanoparticles, which boost the photoactivity of the system by acting as electron sinks for electrons photogenerated within TiO_2 .

As featured in:



See Wojciech Macyk *et al.*,
Nanoscale Adv., 2023, 5, 1926.