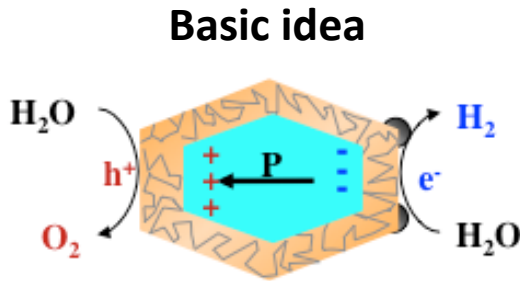


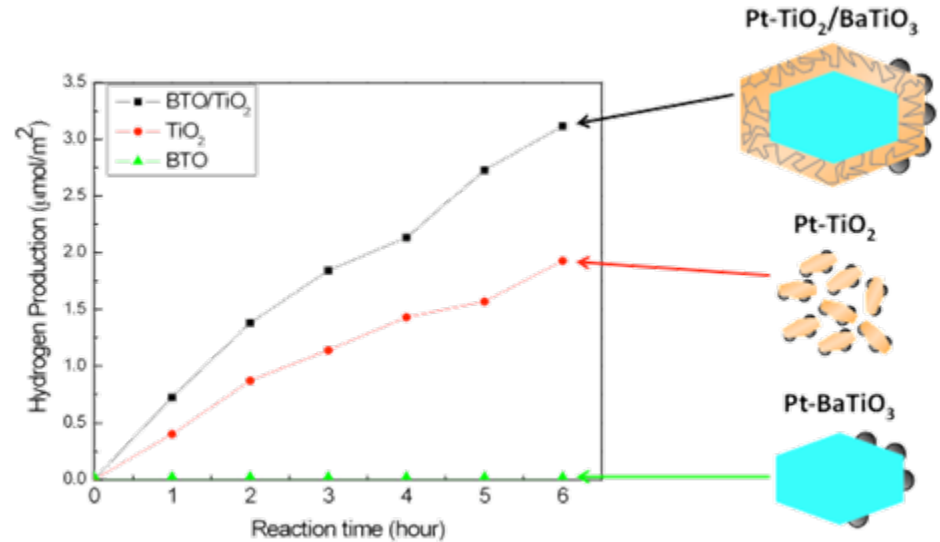
Photochemical properties of titania/ferroelectric heterostructures

Greg Rohrer and Paul Salvador
 Dept. of Materials Science and Engineering,
 Carnegie Mellon University



- Titania can be used to make H_2 by water photolysis.
- Ferroelectric substrates can be used to improve the properties of titania photocatalysts.
- Dipolar fields separate photogenerated electrons and holes, inhibiting recombination and increasing efficiency.

Composite effect in hydrogen synthesis



Visible light photoactivity by titania

