

Supporting Information for

A facile acid treatment for P25 modification with enhanced Photocatalytic H₂ evolution -- Effect of Brønsted acid sites and oxygen vacancies

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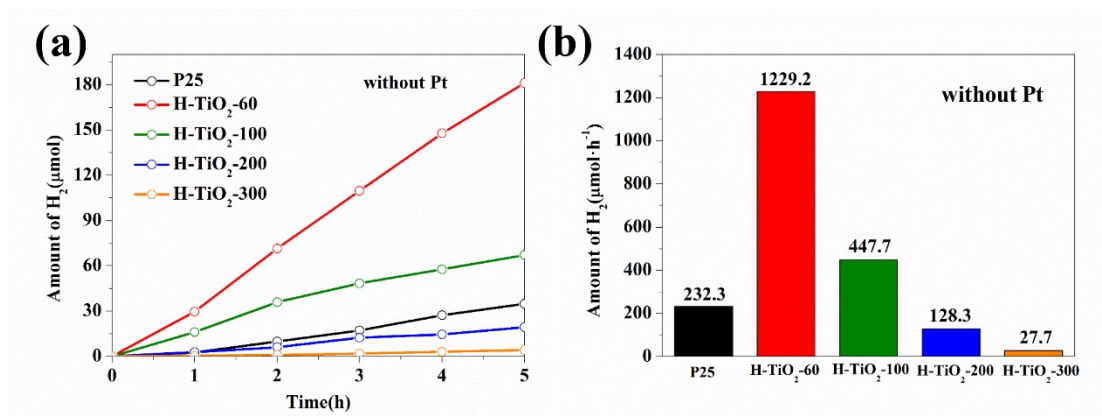


Fig. S1. Photocatalytic capacity for the H₂ production from water splitting over P25 and HP25-x (x = 60, 100, 200 and 300) under the conditions without co-catalyst.

Table S1

The calculation of energy band structure related parameters of P25 and HP25-x (x = 60, 100, 200 and 300).

| catalysis | E_{CB} (V vs NHE) | Band gap energy | E_{VB} (V vs NHE) |
|-----------|---------------------|-----------------|---------------------|
| P25 | -0.01 | 3.15 eV | 3.14 |
| HP25-60 | -0.11 | 3.10 eV | 2.99 |
| HP25-100 | -0.01 | 3.07 eV | 3.06 |
| HP25-200 | -0.01 | 3.11 eV | 3.10 |
| HP25-300 | -0.11 | 3.11 eV | 3.00 |