

## < 2001 >

### 【學術論文】

**1) Investigations of TiO<sub>2</sub> Photocatalysts for the Decomposition of NO in the Flow System**

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**2) The Photocatalytic Reduction of Nitrous Oxide with Propane on Lead Ion-exchanged ZSM-5 Catalysts**

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**3) Effect of Ion-exchanged Alkali Metal Cations on the Photolysis of 2-Pentanone Included within ZSM-5 Zeolite Cavities: a Study of Ab Initio Molecular Orbital Calculations**

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**4) Photocatalysis of Cations Incorporated within Zeolites**

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**5) Design and Development of Second-generation Titanium Oxide Photocatalysts to Better Our Environment: Approaches in Realizing the Use of Visible Light**

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**6) Photochemical Properties of Benzophenone Adsorbed on Ti-Al Binary Oxides: The Effects of the Surface Acidity**

*J. Phys. Chem. B*, **105**, 3218-3222 (2001).

**7) Direct Observation of Interfacial Hole Transfer from a Photoexcited TiO<sub>2</sub> Particle to an Adsorbed Molecule SCN<sup>-</sup> by Femtosecond Diffuse Reflectance Spectroscopy**

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**8) Direct Observation of a Picosecond Charge Separation Process in Photoexcited Platinum-loaded TiO<sub>2</sub> Particles by Femtosecond Diffuse Reflectance Spectroscopy**

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**10) Application of Ion Beam Techniques for Preparation of Metal Ion-implanted TiO<sub>2</sub> Thin Film Photocatalyst Available Under Visible Light Irradiation: Metal Ion-implantation and Ionized Cluster Beam Method**

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**12) Local Structure of Pb Ion Catalysts Anchored within Zeolite Cavities and Their Photocatalytic Reactivity for the Elimination of N<sub>2</sub>O**

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**13) Investigations on the Local Structure of Ag<sup>+</sup>/ZSM-5 Catalysts and Their Photocatalytic Reactivities for the Decomposition of N<sub>2</sub>O at 298K**

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**16) Preparation of Ti-Si Binary Oxide Thin Film Photocatalysts by the Application of an Ionized Cluster Beam Method**

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**25) Photoinduced Superhydrophilic Properties of Ti-B Binary Oxide Thin Films and Their Photocatalytic Reactivity for the Decomposition of NO**

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#### 【総説・解説】

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