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- 1) **The Adsorption and Activation of CO Molecules on ZrO₂ Catalysts Having Low Coordinated Surface Sites**
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- 2) **Generation of Superoxide Ions at Oxide Surfaces**
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- 3) **Effect of Transition Metals on the Photoinduced Proton Transfer from Anthrone to 9-Anthrol in Glasses Prepared by the Sol-Gel Method**
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- 4) **Charge Carrier Dynamics of Standard TiO₂ Catalysts Revealed by Femtosecond Diffuse Reflectance Spectroscopy**
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- 5) **Characterization of Metal Ion-implanted Titanium Oxide Photocatalysts Operating under Visible Light Irradiation**
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- 6) **Characterization and Photocatalytic Reactivities of Cr-HMS Mesoporous Molecular Sieves**
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- 7) **Investigation of the Local Structure of Vanadium Silicalite Catalyst (VS-1) Using XAFS, FT-IR and Photoluminescence Spectroscopic Methods**
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- 8) **Characterization of the Local Structure of the Vanadium Silicalite (VS-2) Catalyst and Its Photocatalytic Reactivity for the Decomposition of NO into N₂ and O₂**
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- 9) **Photocatalytic Reduction of CO₂ with H₂O on Titanium Oxide Prepared within the FSM-16 Mesoporous Zeolites**
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- 10) **Preparation of Titanium Oxide Photocatalysts Loaded on Activated Carbon and their Photocatalytic Reactivity for the Degradation of 2-Propanol Diluted in Water**
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- 11) **Preparation of Titanium Oxide Photocatalysts Loaded on Activated Carbon by an Ionized Cluster Beam Method and their Photocatalytic Reactivities for the Degradation of 2-Propanol Diluted in Water**
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- 12) **Design and Development of Unique Titanium Oxide Photocatalysts Capable of Operating under Visible Light Irradiation by an Advanced Metal Ion-implantation Method**
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13) Fluorescence Properties of 2, 5-Bis(4-(diethylamino)phenyl)-1, 3, 4-oxadiazole Molecules Encapsulated in SiO₂ and Si-Ti Binary Oxide Matrices by the Sol-Gel Method

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14) Photocatalytic Oxidation of Ethylene to CO₂ and H₂O on Ultrafine Powdered TiO₂ Photocatalysts in the Presence of O₂ and H₂O

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15) イオン注入による酸化チタン光触媒の可視光化

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16) Synthesis of *BEA-Type Molecular Sieves Using Mesoporous Materials as Reagents

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【総説・解説】

1) 環境調和型触媒としての酸化チタン光触媒の基礎と応用

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2) 太陽光で稼働する「環境調和型光触媒」の開発

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【著書】

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