

< 2000 >

【学術論文】

1) Utilization of TiO₂ Photocatalysts in Green Chemistry

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2) Applications of Titanium Oxide Photocatalysts and Unique Second-generation TiO₂ Photocatalysts Able to Operate Under Visible Light Irradiation for the reduction of Environmental Toxins on a Global Scale

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4) Photocatalytic Decomposition of NO under Visible Light Irradiation on the Cr-Ion-Implanted TiO₂ Thin Film Photocatalyst

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5) Photoluminescence Properties of Mo-MCM-41 Mesoporous Molecular Sieves and Their Photocatalytic Reactivity for the Decomposition of NO_x

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6) Characterization of Fe-oxide Species Prepared onto ZSM-5 Zeolites and Their Role in the Photocatalytic Decomposition of N₂O into N₂ and O₂

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7) Effect of the Si/Al Ratio on the Local Structure of V-oxide/ZSM-5 Catalysts Prepared by the Solid-State Reaction of HZSM-5 with Vanadium Pentoxide and Their Photocatalytic Reactivity for the Decomposition of NO in the Absence and Presence of Propane

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8) Investigations on the Photoluminescence Properties of Mo-MCM-41 and the Photocatalytic Decomposition of NO in the Presence of CO

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10) Photocatalytic Decomposition of N₂O into N₂ and O₂ on Silver(I) Ion-Exchanged ZSM-5 Catalyst

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11) In-Situ Investigations of the Photocatalytic Reaction of NO with Propane on the Vanadium Silicalite-1 Catalyst

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12) Evidence of Three Kinds of Tetrahedral vanadium (V) Species in VSib Zeolite by Diffuse Reflectance UV-Visible and Photoluminescence Spectroscopies

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- 13) Photocatalytic Decomposition of NO on Transition Metal Ion-Exchanged Zeolite Catalysts**
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- 14) Photocatalytic Decomposition of Liquid Water on the Pt-Loaded TiO₂ Catalysts : Effects of the Oxidation States of Pt Species on the Photocatalytic Reactivity and the Rate of the Back Reaction**
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- 15) Characterization of the Excited States Responsible for the Action of Silver(I)-Doped ZSM-5 Zeolites as Photocatalysts for Nitric Oxide Decomposition**
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- 16) Photocatalytic Decomposition of NO on Ti-HMS Mesoporous Zeolite Catalysts**
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- 17) The Nature of the Active Sites of Titanium Oxide Photocatalysts Stabilized on an Active Carbon Surface. A Theoretical *ab initio* Study**
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- 18) Design and Development of Titanium and Vanadium Oxide Photocatalysts Incorporated within Zeolite Cavities and Their Photocatalytic Reactivities**
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- 19) In Situ Investigation of the Photocatalytic Decomposition of NO on the Ti-HMS under Flow and Closed Reaction Systems**
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- 20) Preparation of Efficient Titanium Oxide Photocatalysts by an Ionized Cluster Beam Method and their Application for the Degradation of Propanol Diluted in Water**
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- 21) クラスターイオンビーム法により調製した酸化チタン/活性炭素繊維系光触媒を利用する水浄化炭素**, **195**, 371-377 (2000).
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【総説・解説】

- 1) 可視光反応型光触媒の創製とその手法・ イオン注入法およびマグネトロンスパッター蒸着法の応用
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- 2) Photofunctional Zeolite: Synthesis, Characterization, Photocatalytic Reactions, Light Harvesting
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- 3) 触媒技術の動向と展望 2000 "可視光で作用する酸化チタン光触媒の創製と光触媒反応"
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- 4) Remediation of the Aquatic and Atmospheric Environments by Advanced Oxidation "Application of Ion Beam Technique for the Design of Efficient TiO₂ Photocatalysts Operatable under Visible Light Irradiation: Ion Implantation and Ionized Cluster Beam Method"
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