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【学術論文】

1) Preparation and Characterization of Unique Inorganic-Organic Hybrid Mesoporous Materials Incorporating Arenetricarbonyl Complexes [-C₆H₄M(CO)₃-] (M = Cr, Mo)

T. Kamegawa, T. Sakai, M. Matsuoka, M. Anpo

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2) Preparation and Characterization of the Visible Light Responsive TiO₂ Thin Film Photocatalysts Prepared by Magnetron Sputtering Method and Their Photocatalytic Activities for the Water Splitting Reactions

M. Matsuoka, M. Kitano, M. Takeuchi, M. Anpo, J. M. Thomas

Mater. Sci. Forum, **486-487**, 81-84 (2005).

3) Photocatalytic Water Splitting on Visible Light-responsive TiO₂ Thin Films Prepared by a RF Magnetron Sputtering Deposition Method

M. Matsuoka, M. Kitano, M. Takeuchi, M. Anpo, J. M. Thomas

Topics Catal., **35**, 305-310 (2005).

4) Preparation and Characterization of Pt/Al-ZSM-5 Catalysts and Their Reactivities for the Oxidation of CO with N₂O at Low Temperatures

M. Matsuoka, K. Iino, H. Chen, Y. Yamasaki, G. Martra, S. Coluccia, M. Anpo

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5) Local Structures of Ag (I) Clusters Prepared within Zeolites by Ion-exchange Method and Their Photochemical Properties

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6) Investigations of the Structure of H₂O Clusters Adsorbed on TiO₂ Surfaces by Near-infrared Absorption Spectroscopy

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7) Mechanism of photoinduced superhydrophilicity on the TiO₂ photocatalyst surface

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8) Theoretical ab initio study of the intrinsic band gap in semiconductor oxides based on modified titanium dioxides

N. U. Zhanpeisov, M. Anpo

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9) Preparation of Visible Light-responsive TiO₂ Thin Film Photocatalysts by an RF Magnetron Sputtering Deposition Method and Their Photocatalytic Reactivity

M. Kitano, M. Takeuchi, M. Matsuoka, J. M. Thomas, M. Anpo

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10) The Preparation and Characterization of Highly Efficient Titanium Oxide-Based Photofunctional Materials

M. Anpo, S. Dohshi, M. Kitano, Y. Hu, M. Takeuchi, M. Matsuoka
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11) Synthesis, Characterization and Photocatalytic Reactivities of Mo-MCM-41 Mesoporous Molecular Sieves: Effect of the Mo Content on the Local Structures of Mo-Oxides

S. Higashimoto, Y. Hu, R. Tsumura, K. Iino, M. Matsuoka, H. Yamashita, Y.G. Shul, M. Che and M. Anpo
J. Catal., **235**, 272-278 (2005).

12) Selective Photooxidation of Methane into Methanol by Nitric Oxide over V-MCM-41 Mesoporous Molecular Sieves

Y. Hu, S. Higashimoto, S. Takahashi, Y. Nagai and M. Anpo
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13) Preparation of unique TiO₂ nano-particle photocatalysts by a multi-gelation method for control of the physicochemical parameters and reactivity

B. Neppolian, H. Yamashita, Y. Okada, H. Nishijima and M. Anpo
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15) Effect of gamma-ray irradiation on the wettability of TiO₂ single crystals

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16) Photoluminescence and photoactivity of titania particles prepared by the sol-gel technique: effect of calcination temperature

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17) Synthesis of La³⁺ doped mesoporous titania with highly crystallized walls

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18) Preparation of controllable crystalline titania and study on the photocatalytic properties

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19) Photophysical and photochemical properties of Coumain-6 molecules incorporated within MCM-48

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21) A novel deposition precipitation method for preparation of Ag-loaded titanium dioxide

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23) Photoreduction of carbondioxide on surface functionalized nanoporous catalysts

J. Hwang, J. Chang, SE. Park, K. Ikeue, M. Anpo

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24) High photocatalytic activity TiO₂ photocatalysts prepared by a modified sol-gel method: characterization and their photocatalytic activity for the degradation of XRG and X-GL

J. Zhu, J. Zhang, F. Chen, K. Iino, M. Anpo

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26) Synthesis of hydrothermally stable and long-range ordered Ce-MCM-48 and Fe-MCM-48 materials

Y. Shao, L. Wang, J. Zhang, M. Anpo

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27) Novel synthesis of high hydrothermal stability and long-range order MCM-48 with a convenient method

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28) Preparation of organic-inorganic material from MCM-48 and pyrylium salt

D. Li, J. Zhang, M. Anpo

Optic. Mater., **27**, 671-673 (2005).

【総説・解説】

1) 可視光で機能する二酸化チタン光触媒の開発

北野政明, 安保重一

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2) 時間分解ホトルミネッセンス測定と反応ダイナミクス

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【著書】

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2) 固体表面キャラクタリゼーションの実際

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