

Poster Session

Sunday / July 29th, POSTER SESSION 1

P-001 Structural property of methane confined phase in H-mordenite zeolite

Jean-Paul Coulomb, Nicole Floquet, Yves Grillet, Gilles André

P-002 Photochemical modifications of porous coordination polymers to control sorption behavior

Hiroshi Sato, Ryotaro Matsuda, Susumu Kitagawa

P-003 Synthesis of nanomorphous aluminophosphates using structure-directing surfactants

Yongbeom Seo, Jeongnam Kim, Jinwoong Lee, Ryong Ryoo

P-004 Preparation of microporous $(\text{NH}_4)_3\text{PW}_{12}\text{O}_{40}$ by a reaction of in-situ generated $\text{PW}_{12}\text{O}_{40}^{3-}$ with NH_4^+ in strong acidic solution

Koichi Sahiro, Yusuke Ide, Tsuneji Sano, Masahiro Sadakane

P-005 Fabrication of acid-tolerant magnetic Co@SiO_2 core-shell particles with dense silica shell

Tomohiko Okada, Nodoka Watanabe, Tetsuji Haeiwa, Toshio Sakai, Shozi Mishima

P-006 Effect of high temperature treatment of H-SSZ-13 on reactivity and selectivity of mono-molecular propane reaction

Jang Ho Yun, Raul F. Lobo

P-007 Acid strength distribution of zeolite: calculation from TPD spectrum and interpretation

Naonobu Katada, Satoko Sota, Nami Morishita, Hiroyuki Ikeda, Miki Niwa

P-008 Syntheses and characterizations of boron substituted chabazite zeolites

Jie Liang, Jie Su, Yingxia Wang, Jianhua Lin

P-010 Effect of co-modification with lanthanum and phosphorous on conversion of ethanol to propylene over HZSM-5(Ga)

Yoshiyasu Furumoto, Nao Tsunoji, Yusuke Ide, Masahiro Sadakane, Tsuneji Sano

P-011 Engineering MIL-53(Al) flexibility by controlling amino tags - homogeneity of MOF containing different linkers

Tristan Lescouet, Emanuel Kockrick, Gérard Bergeret, Sonia Aguado, David Farrusseng

P-012 Preparation and catalytic activity of copper(II)-terpy complexes in zeolite Y cages

Syuhei Yamaguchi, Akinori Suzuki, Yukari Baba, Toshihiro Tamura, Tomohiro Fukura, Hidenori Yahiro

P-013 Effects of adding zeolite NaA on properties of alumina hollow fiber membranes

Jia Shao, Jiangang Li, Zhengbao Wang, Yushan Yan

P-014 NaY zeolite membrane with high performance by variable-temperature synthesis

Zhenzhuo Wang, Izumi Kumakiri, Kazuhiro Tanaka, Xiangshu Chen, Hidetoshi Kita

P-015 Catalytic transformation of HMF to valeric biofuels

Paola Lanzafame, Domenico M. Temi, Siglinda Perathoner, Gabriele Centi, Anastasia Macario, Alfredo Aloise, Girolamo Giordano

P-016 Efficient one-pot oxidation reaction by designing Pd/SiO₂@Ti-containing mesoporous silica core-shell catalyst

Shusuke Okada, Shohei Ikurumi, Takashi Kamegawa, Kohsuke Mori, Hiromi Yamashita

P-017 Size control and rapid synthesis of ZSM-22 zeolite by microwave irradiation

Adedigba Abdul-lateef, Oki Muraza, Idris Bakare, Teruoki Tago, Asep B.D. Nandiyanto, Hiroki Konno, Zain H. Yamani, Takao Masuda

P-018 *BEA-MFI and LEV-CHA interzeolite conversions in the absence of organic structure-directing agent and seed crystal

Masaya Itakura, Ikuhiro Goto, Yusuke Ide, Masahiro Sadakane, Tsuneji Sano

P-019 Citric acid-catalyzed synthesis of ordered mesoporous carbon materials for efficient catalytic propane dehydrogenation and CO₂ capture

Lei Liu, Qing-Fang Deng, Tie-Zhen Ren, Zhong-Yong Yuan

P-020 Catalytic cracking of n-hexane to produce propylene on MCM-22 catalysts

Yong Wang, Toshiyuki Yokoi, Hiroyuki Imai, Seitaro Namba, Junko N. Kondo, Takashi Tatsumi

P-021 Synthesis of alternate layered nanostructures using thiol-ene reaction of organic-modified metal oxides

Dai Mochizuki, Kozue Kumagai, Masato Maitani, Yuji Wada

P-022 Structural and dynamics properties of methane confined phase in AlPO₄-5 model aluminophosphate: an illustrative example of quasi-(1D) phase transition

Jean-Paul Coulomb, Nicole Floquet, Céline Martin, Gilles André

P-023 Synthesis of hollow silica spheres with ordered mesoporous structure by removal of mesoporous core from core-shell structured spheres and their application to drug capsules

Masaki Okamoto, Huimin Huang

P-024 Microwave synthesis and gas sorption of calcium and strontium metal-organic frameworks with high thermal stability

Cheng-You Wu, Chun-Ting Yeh, Wei-Cheng Lin, Sheng-Han Lo, Chia-Her Lin

P-026 Silicon vacancy ordering in pure silica TMA-Nu-1: opening the pores of a clathrasil

Jacques Plévert, Takashi Tatsumi

P-027 Formation of 5-hydroxymethylfurfural from aqueous glucose solution by using exfoliated metal oxide nanosheet aggregates

Atsushi Takagaki, Shigenobu Hayashi, Ryuji Kikuchi, S. Ted Oyama

P-028 Structure determination from low-resolution powder diffraction data: crystal structure of the hydrous silicate RUB-52

B. Marler, R. Wandolski, X. Li, H. Gies

P-030 Effect of temperature on sorption kinetics and equilibrium capacity of carbon dioxide, nitrogen and methane on a natural clinoptilolite

Nathan K. Jensen, Guillaume Watson, Thomas Rufford, Dongke Zhang, K. Ida Chan, Eric F May

P-031 Evaluation of acid stability of CHA zeolite synthesized by interzeolite conversion of FAU zeolite

Naoki Yamanaka, Masaya Itakura, Yoshimichi Kiyozumi, Yusuke Ide, Masahiro Sadakane, Tsuneji Sano

- P-032 New zeolites COE-3 and COE-4 obtained by interlayer expansion of layered silicate RUB-36: structure analysis**
Bilge Yilmaz, Ulrich Müller, Bin Xie, Feng-Shou Xiao, Trees De Baerdemaeker, Bart Tijsebaert, Dirk De Vos, Weiping Zhang, Xinhe Bao, Hiroyuki Imai, Takashi Tatsumi, Hermann Gies
- P-033 Structural property of silicon tetrafluoride confined phase in silicalite-1 zeolite**
Jean-Paul Coulomb, Nicole Floquet, Yves Grillet, Gilles André
- P-034 Well-designed zeolite capsule catalyst for the controlled synthesis of target product in tandem catalysis**
Guohui Yang, Yoshiharu Yoneyama, Noritatsu Tsubaki
- P-035 Efficient way to synthesize hiroshima university silicate-1 (HUS-1) and the selective adsorption property of Ni²⁺ from seawater**
Nao Tsunoji, Yusuke Ide, Koutaro Honda, Masato Torii, Mayumi Miyamoto, Masahiro Sadakane, Tsuneji Sano
- P-036 Effect of pore structures on the catalytic properties of sulfonic acid-functionalized mesoporous silica**
Yi-Lin Chen, Shih-Yuan Chen, Ling-Yun Jang, Soofin Cheng
- P-039 Adsorptive separation of ethanol from ethanol-blended gasoline by zeolites**
Takashi Mukoyama, Ryosuke Kurihara, Kohei Urasaki, Shigeo Satokawa
- P-040 Preparation of nano-zeolite X by bead-milling and post-milling recrystallization**
Toru Wakihara, Koki Sato, Kaku Sato, Junichi Tatami, Katsutoshi Komeya, Takeshi Meguro
- P-041 In situ crystallisation studies of microporous materials using synchrotron radiation based X-ray techniques**
Gopinathan Sankar, Kerry Simmance, Andrew Smith
- P-043 Phospholipids as co-surfactant of CTAB for MCM-41 synthesis**
Yan-Ting Ge, Hon Pin Lin, Tseng-Chang Tsai
- P-044 Pore size control of monodispersed starburst carbon spheres**
Narihito Tatsuda, Kazuhisa Yano
- P-045 Catalytic performance of Ti-YNU-2 with an MSE topology in the phenol oxidation with H₂O₂**
Satoshi Inagaki, Yuya Sato, Yasuyuki Tuboi, Makiko Sasaki, Yoshihiro Kubota
- P-047 Effective and selective bisphenol A synthesis on a layered silicate with spatially arranged arylsulfonic acid**
Noriko Kagawa, Yusuke Ide, Masaya Itakura, Masahiro Sadakane, Tsuneji Sano
- P-048 Synthesis and characterization of SAPO-44 zeolite membrane for gas separation**
Siti Nadiyah, Leo Choe Peng, Abdul Latif Ahmad, Mohd Usman Junaidi, Chew Thiam Leng
- P-050 Preparation of rare-earth 1,3,5-benzenetriphosphonates composed of hybrid nanosheet layers**
Takahiro Araki, Atsushi Kondo, Kazuyuki Maeda
- P-051 Fabrication and characterization of polysulfone mixed matrix membrane incorporated with SAPO-34 zeolite**
Mohd Usman Mohd Junaidi, Leo Choe Peng, Abdul Latif Ahmad, Chew Thiam Leng, SitiNadiyah Mustafa Kamal

P-052 Hydroformylation of olefins over metal-organic framework supported Rh catalysts of different structure

Hendrik Kosslick, V.V. Toan, V. A Tuan, N. D. Tuyen, A. Schulz

P-053 Adsorption properties of chalcogen (S, Se, and Te) atoms and anthracene molecules in AlPO₄-5 and SAPO-5

Tetsuya Kodaira, Tomohiro Sekikawa, Takao Sekiya, Takuji Ikeda

P-054 Aluminophosphate zeolites as packings of building units

Maxim V. Peskov, Udo Schwingenschl□gl

P-055 FT-IR study on the initial state of methanol-to-olefin reaction

Hiroshi Yamazaki, Hiroyuki Imai, Toshiyuki Yokoi, Takashi Tatsumi, Junko N. Kondo

P-056 Effect of acidity on hydrogenation of pyrene using supported Pd catalysts

Qiang Lin, Ken-ichi Shimizu, Atsushi Satsuma

P-057 Investigation into low-temperature transformations of PAN and PFA deposited on MCM-41

Rafał Janus, Anna Wach, Piotr Kuśtrowski, Barbara Dudek, Marek Drozdek, Ana Maria Si-Ivestre Albero, Francisco Rodríguez-Reinoso, Pegie Cool

P-058 Densely packed monolayer of metal complex on gold surface as platform for selective catalysis

Kenji Hara, Sachin Jagtap, Yoshinori Kaji, Atsushi Fukuoka

P-059 Cyclohexane oxidation catalyzed by ligand-assisted chromium-modified periodic mesoporus organosilicas

Chen Yue Liu, Ying Zhang, Guo Ling Xu, Shu Xing Mei

P-060 Low-temperature synthesis, organic anion exchange, and photoluminescent properties of Ln³⁺-doped layered yttrium hydroxides

Shinobu Fujihara, Kaori Sakuma

P-062

Preparation of crystalline mesoporous tungsten oxide by hard template method and its photocatalytic activity under visible light irradiation

Teruhisa Hongo, Yoshihiro Usami, Atsushi Yamazaki

P-063 Alkylation of benzene over aluminum-rich organotemplate-free zeolite beta

Trees De Baerdemaeker, Bart Tijsebaert, Bilge Yilmaz, Ulrich Müller, Dirk De Vos

P-064 Efficient and selective photocatalytic cyclohexane oxidation on an iron oxide-modified layered titanate under sunlight

Hideya Hattori, Yusuke Ide, Masahiro Sadakane, Tsuneji Sano

P-065 Preparation of randomly oriented silicalite-1 membrane on a tubular support

Masahiko Matsukata, Motomu Sakai, Yasushi Sekine, Eiichi Kikuchi

P-066 Synthesis and structure of a zeolite betarelated material: SU-78

Zheng-Bao Yu, Yu Han, Lan Zhao, Shiliang Huang, Qi-Yu Zheng, Shuangzheng Lin, Armando Córdoba, Xiaodong Zou, Junliang Sun

P-067 Synthesis of spin-on porous silica low-*k* films using Tween series surfactants as the templates

Ting-Yi Li, Chun-Hsien Yu, Hsin-Yan Lu, Ben-Zu Wan

P-068 Novel catalysts supported on AIPO Type AQSOA[®] zeolites for selective catalytic reduction of NO_x

Haijun Chen, Takeshi Matsuo, Daisuke Nishioka, Kazunori Oshima, Kenichi Kiyono, Takahiko Takewaki

P-069 Synthesis zeolite FAU-LTA core-shell composites and their gas adsorption properties

Yifeng Yun, Zhengyang Wang, Qinglin Liu, Wei Wan, Jie Su, Wilder Carrillo-Cabrera, Guangshan Zhu, Niklas Hedin, Xiaodong Zou

P-070 MCM-48 nanofibers: a pseudomorphic synthesis of an isotropic mesostructure and anisotropic morphology

Albert T. Chang, Chia-Min Yang

P-071 Storage and release of gaseous small molecules into and from micropore of zeolites by sealing pore voids with disilane compounds

Masahiro Fujiwara, Yoshiharu Fujio, Yoko Satou, Hiroaki Sakurai, Izumi Kumakiri

P-072 A remarkable structural change of synthetic –LIT zeolite by the ammonia ion exchange

Takuji Ikeda, Takako Nagase, Norihito Hiyoshi, Yasunori Oumi

P-074 Green chemical transformation of phenolic pollutants using mesoporous NiO nanocatalysts

Mohamed Khairy, Mohamed Ismael, Sherif A El-Safty

P-076 Capillary condensation in mesoporous silica with surface roughness: a molecular simulation study

Hideki Tanaka, Natsumi Nishiyama, Kengo Mori, Takahiro Nishino, Minoru T. Miyahara

P-077 Aerosol synthesis of mesoporous silica particles from photonic industrial waste powder for CO₂ capture

Liang-Yi Lin, Hsunling Bai

P-078 *p*-Xylene selectivity of MFI type galloaluminosilicate coated with inert silicalite-1 in aromatization of propane and *n*-butane

Manabu Miyamoto, Kota Mabuchi, Yuichiro Hirota, Yasunori Oumi, Norikazu Nishiyama, Shigeyuki Uemiya

P-079 Novel composite spherical granulates with catalytic outer layer and improved conversion efficiency and selectivity

Franz Schmidt, Hagen Klemm, Katrin Schönfeld, Almuth Gerds, Wolfgang Hungerbach, Constant J. Van Lookeren Campagne, Stefan Kaskel

P-080 Adsorption of aqueous tetramethylammonium on the organic derivative of Hiroshima University Silicate-1 (HUS-1) with silane coupling reagents

Masato Torii, Yusuke Ide, Nao Tsunoji, Masahiro Sadakane, Tsuneji Sano

P-081 Synthesis of targeted silica hollow spheres by vesicle templating of silicon oil surfactant

Bo Sun, Caiyun Guo, Yuan Yao, Zhehao Huang, Shunai Che

P-082 Fundamental study of butanol, water and acetone adsorption on various zeolites for biobutanol separation

Yasunori Oumi, Ryuji Nakamura, Hideyuki Negishi, Toru Ikegami, Keiji Sakaki, Manabu Miyamoto, Shigeyuki Uemiya

P-083 NR-PVC-zeolite mixed matrix membrane formation and properties

Wirach Taweepreda, Kritsada Phatcharasit, Apichat Boontawan

P-084 Li_2MSiO_4 (M= Fe, Mn) particles dispersed in periodic mesoporous carbons for lithium re-chargeable batteries

Takashi Kawase, Noboru Okamoto, Hideaki Yoshitake

P-085 Adsorption of nitric oxide by local clinoptilolite-rich natural zeolitic material

Guler Narin, Semra Ulku

P-086 Zeolite Y deposition on aluminum substrate by hydrothermal hot-pressing techniques

Takamasa Onoki

P-087 Synthesis of cubic-shaped porous ZnO particles by using metal-organic frameworks as self-template

Yu Kimitsuka, Eiji Hosono, Shintaro Ueno, Haoshen Zhou, Shinobu Fujihara

P-088 Hollow silica nanospheres templated by inverse microemulsion

Chen-Han Lin, Jen-Hsuan Chang, Chung-Yuan Mou

P-089 Facile synthesis of hydroxy-modified MOF-5 for improving hydrogen adsorption properties by lithium doping

Masaru Kubo, Tatsuya Okubo

P-091 Synthesis of HEU type zeolite with high Si/Al ratio

Satoru Akiyama, Yuma Tomitsuka, Kohei Urasaki, Shigeo Satokawa

P-092 Anisotropic electrolyte electroreflectance studies of Nb/Re-doped MoSe_2 layered crystals

Sheng-Yao Hu, Kwong-Kau Tiong, Ying-Sheng Huang, Yueh-Chien Lee

P-093 Complex analysis of Al siting and distribution in silicon rich zeolites. Combined multispectroscopic and periodic DFT study of mordenite

Stepan Sklenak, Jiri Dedecek

P-094 Selective insertion of rare earth metal oxides into micropores of SBA-15

Yoshimi Kawamoto, Yusuke Ide, Tsuneji Sano, Masahiro Sadakane

P-095 The Al-Si ordering in the framework of heulandite, origin of its thermal instability and phase diagram

Tetsuo Takaishi, Mana H Yasui, Teruhisa Hongo, Atsushi Yamazaki, Satoshi Yamazaki

P-096 Reaction center for C_3H_8 -SCR of NO_x under water vapor presence in Co-BEA* zeolites

Jiri Dedecek, H. Jirglova, Z. Sobalik, S. Sklenak, P. Sazama, V. Kreibich

P-097 Mesoporous mordenite having lamellar morphology

Sang-Eon Park, Hyo-Sang You, Seung-Yeop Lee, Hailian Jin

P-098 New method for transparent zeolite thin film by hydrothermal hot-pressing techniques

Takamasa Onoki

P-099 Chemical etching route to prepare nanometer sized porous titania particles from titania-octadecylamine hybrid particles

Kota Shiba, Ken Onaka, Makoto Ogawa

P-100 MFI zeolite nanosheet thinner than crystal-unit-cell generated by gemini surfactant

Changbum Jo, Jinhwan Jung, Kanghee Cho, Ryong Ryoo

P-101 Catalytic cracking property of zeolite-containing silica-alumina prepared by the sol-gel method with malic acid

Atsushi Ishihara, Kentarou Inui, Tadanori Hashimoto, Hiroyuki Nasu

P-102 Structural characteristics and catalytic performance for SO₃H-bearing microporous carbons

Kiichi Fukuhara, Masaaki Kitano, Kiyotaka Nakajima, Shigenobu Hayashi, Michikazu Hara

P-103 Chirality of metal nanoparticles in chiral mesopore: three type chirality-imparted plasmonic circular dichroism

Junjie Xie, Zhehao Huang, Shunai Che

P-104 Synthesis of silica microhoneycombs including nafion nanoparticles via the ice templating method

Yoshitaka Satoh, Yuichiro Miura, Isao Ogino, Shin R. Mukai

P-105 Effect of zeolite pore size and channel space on esterification reaction in liquid phase: intercrystalline diffusion and reactant condensation in the pore

Junya Ohyama, Daigo Hayashi, Atsushi Satsuma

P-106 Preparation and adsorption properties of pillared carbons

Yoshiaki Matsuo, Sakae Ueda, Kentaro Konishi

P-107 Synthesis of mesoporous silica adsorbents from rice husk ash for CO₂ capture

Wan Ting Zeng, Liang-Yi Lin, Hsunling Bai

P-108 Solid acid catalysis of protonated titanate nanotubes: effect of structural distortion on the acidity of the titanate nanotubes

Masaaki Kitano, Emiko Wada, Kiyotaka Nakajima, Shigenobu Hayashi, Michikazu Hara

P-109 Isopropylation of biphenyl over ZSM-12 zeolites

Y. Sugi, H. Kawagoe, S. Watanabe, Y. Moriyama, K. Komura, Y. Kubota, J.-H. Kim, G. Seo, V.P. Subramaniam, A. Chokkalingam, A. Vinu

P-110 Dehydration of fructose to hydroxymethyl furfural using ordered Al-SBA15 catalyst

Nishita Lucas, C. V. V. Satyanarayana

P-111 Spontaneous dispersion of gold nanoparticles loaded on USY zeolites as analyzed by XAFS, XRD, and TEM

Chika Murakami, Kazu Okumura, Takashi Sanada, Naonobu Katada

P-112 Synthesis and characterization of two new scandium based metal organic frameworks, CPO-65-Sc-NH₂ and CPO-65-Sc-(NH₂)₂, with amino functionalized linkers

Marc Enßle, Pascal D.C. Dietzel, Helmer Fjellvåg

P-114 Unique catalytic properties of titanosilicates for oxidation of polyalcohols

Toshiyuki Yokoi, Naoya Tamura, Hiroyuki Imai, Junko N. Kondo, Takashi Tatsumi

P-115 Layered Nb₂O₅-WO_x sheet catalyst composed of nanofibers that are active in Friedel-Crafts reactions

Soichiro Ishida, Ryota Takahata, Kazu Okumura, Naonobu Katada, Miki Niwa

P-116 Kinetics for catalytic cracking of *n*-hexane over MFI-type zeolites with different crystal sizes

Takuya Okamura, Hiroki Konno, Yuta Nakasaka, Teruoki Tago, Takao Masuda

P-117 Gold and silver nanoparticles supported on zeolites as bactericides of *Escherichia coli* and *Salmonella typhi*

Enrique Lima, Ariel Guzman, Sandra Loera

P-118 Preparation of nanometer size Zn-Cr(III) layered double hydroxide

Shota Naito, Makoto Ogawa

P-119 CO₂ separation of hydrophobic silica and zeolite RHO composite membrane for synthetic biogas purification

Sadao Araki, Takao Sugita, Hideki Yamamoto

P-120 SO₂ poisoning effect on low temperature selective catalytic reduction process

Shi-Yuan Yu, Hsunling Bai

P-121 Electrooptic behavior of the liquid crystals of colloidal inorganic nanosheets prepared from a layered niobate

Yoshihiro Nono, Teruyuki Nakato

Recent Research Reports

Sunday / July 29th, Recent Research Reports 1

RRR-1 Linkage isomerism in layered silicates

Anton V.Maevsky, Alexey.A.Tsyganenko

RRR-2 New insights on the structural control of carbon dioxide adsorption in small pore zeolites

M. M. Lozinska, J. P. S. Mowat, E. Mangano, A. Shepherd, R. F. Howe, S. Brandani, P. A. Wright

RRR-3 Hybrid Porous Materials by Covalent Linking of Siloxane Cages with Diols

Yuko Wada, Kenta Iyoki, Masaru Kubo, Tatsuya Okubo, Atsushi Shimojima

RRR-5 Doughnut-shape mesoporous material supported by metallocene used for polymerization of ethylene

Yu Kang, Mingsen Zhang

RRR-6 Selective Adsorption and Removal of Toxic Heavy Metals from Natural Waters by Mesoporous Sorbents Functionalized with Mono-/Di-/Tri-amine

Xinqing Chen, Tsz Nok NG, King Lun Yeung

RRR-7 Synthesis, characterization and photocatalytic properties of TiO₂/Cr-Beta zeolite

Shu-Hua Chien, Kuo-Pin Yu, Bai-Lin Chen, Rong-Feng Lu, Ming-Chih Kuo

RRR-8 Synthesis of MCM-41 Using Flyash Without Hydrothermal Method

U. D. Joshi, R. B. Mane, A. Yamaguchi, M. Shirai, C. V. Rode

RRR-9 Hydrogen permeation performance and hydrothermal stability of silica membranes fabricated at high temperatures

Takanori Sasaki, Masakoto Kanezashi, Tomohisa Yoshioka, Toshinori Tsuru

RRR-10 Preparation of organic–inorganic hybrid silica membranes of catalytic membrane reactors for dehydrogenation of methylcyclohexane

Takuya Niimi, Yoshihiro Shimomura, Masakoto Kanezashi, Tomohisa Yoshioka, Toshinori Tsuru

RRR-11 Low-temperature fabrication of gas-separation membranes by plasma-enhanced chemical vapor deposition

Toshihiro Minamizawa, Hiroki Nagasawa, Masakoto Kanezashi, Tomohisa Yoshioka, Toshinori Tsuru

RRR-12 Molecular dynamics study of gas permeation properties through microporous silica membranes: Effect of outer- and pore surface modification with functional groups

Kazuki Mitsunari, Tomohisa Yoshioka, Hiroki Nagasawa, Masakoto Kanezashi, Toshinori Tsuru

RRR-13 Characterization of Void Structures of Microporous Materials by Gaseous Diffusion Method: Application to Zeolite and Amorphous Gels

Mariko Takahashi, Tomohisa Yoshioka, Takahiro Fujiwara, Hiroki Nagasawa, Masakoto Kanezashi, Toshinori Tsuru

RRR-14 Preparation of Amorphous Carbon (a-C) Membranes from Diamond Structure by Molecular Dynamics Simulation

Mingming Zhai, Tomohisa Yoshioka, Jianhua Yang, Jinqu Wang

RRR-15 Ti-incorporated SBA-15 as an Efficient Solid Catalyst for the Production of High Quality Jatropa Biodiesel Fuel

Shih-Yuan Chen, Takehisa Mochizuki, Yohko Abe, Makoto Toba, Yuji Yoshimura

RRR-16 Synthesis and catalytic applications of SFH-type zeolite with 14-membered ring

Ming Liu, Toshiyuki Yokoi, Takashi Tatsumi

RRR-17 Relationship among Brønsted Acid Strength, Activation Energy and Pre-exponential Factor for Cracking of Linear Alkanes on Zeolitic and Non-zeolitic Solid Acid Catalysts

Satoko Sota, Nami Morishita, Kazu Okumura, Miki Niwa, Naonobu Katada

RRR-18 Synthesis of Ti-containing Extra-Large-Pore Zeolites and Their Catalytic Applications

Jin-Gui Wang, Toshiyuki Yokoi, Takashi Tatsumi

RRR-19 Seed-assisted Synthesis of Zinco-aluminosilicate Zeolite Beta without Organic Structure-Directing Agent

Kenta Iyoki, Keiji Itabashi, Tatsuya Okubo

RRR-20 MFI Stannosilicate nanosheets as an effective catalyst for the Baeyer-Villiger oxidation of cyclic ketones with hydrogen peroxide

Helen Luo, Linh Bui, Elizabeth Min, Yuriy Román-Leshkov

RRR-21 Synthesis of Ferrierite with Different Si/Al Ratios and their Hydrophilic-hydrophobic Properties

Yoshihiro Kamimura, Kenji Yamanaka, Kenta Iyoki, Riichiro Kimura, Masaru Kubo, Keiji Itabashi, Marie Shimomura, Akira Endo, Tatsuya Okubo

RRR-22 Catalytically partial graphitization of CMK-3 electrodes by metal oxide catalysts

Satoshi Inagaki, Yuki Yokoo, Toshihiro Miki, Yoshihiro Kubota

RRR-23 Crystallization Process of Zeolite UZM-4 and Its Seed-Assisted Synthesis

Takahiko Moteki, Tatsuya Okubo

RRR-24 Synthesis of Zeolite β with Three-Level Pore Hierarchy by Using Structure Directing Surfactant

Kanghee Cho, Kyugnsu Na, Jaeheon Kim, Ryong Ryoo

RRR-25 Synthesis of Molybdenum Zeolite Catalysts from $\text{Mo}(\text{CO})_6$

Suwardiyanto, A. M. Shepherd, R. F. Howe, W. Skistad, S. Svelle

RRR-26 Sn-Beta Zeolites with Borate Salts Catalyze the Epimerization of Carbohydrates via an Intramolecular Carbon Shift

William R. Gunther, Yuran Wang, Yuewei Ji, Vladimir K. Michaelis, Robert G. Griffin, Yuriy Román-Leshkov

RRR-27 NMR studies on various cationic natural zeolite natrolite with a complete degree of Si-Al order in hydrated and dehydrated states

Min Bum Park, Suk Bong Hong, AurZlie Vicente, Christian Fernandez