

Poster Session

Tuesday / July 31st, POSTER SESSION 2

P-122 Nanosensor design for toxic gas and VOCs based on mesocage, hollow sphere and nanowire metal oxides

N.D. Hoa, M.A. Shenashen, Sherif A. El-Safty

P-123 Experiments integrated modeling of TiO₂ nanoskeleton and its application by computational chemistry

Nozomu Hatakeyama, Mari Onodera, Kotaro Okushi, Ryo Nagumo, Ryuji Miura, Ai Suzuki, Hideyuki Tsuboi, Hiromitsu Takaba, Sumio Kozawa, Hiroshi Fukui, Mark C. Williams, Takeshi Endo, Hideki Sakai, Masahiko Abe, Naokiyo Koshikawa, Akira Miyamoto

P-124 Nanocasting mediated synthesis of urea-formaldehyde mesoporous carbon nitride and its catalytic application as metal free oxidation catalyst

Yong-Hwan Mo, Mohd Bismillah Ansari, Sang-Eon Park

P-125 Upgrading technology to transportation fuel from oil sand bitumen using USY zeolite catalyst

Hiroe Kubota, Kazuhiro Kashima

P-126 Interpenetrated metal-organic frameworks and their uptake of CO₂ at relatively low pressures

Qingxia Yao, Jie Su, Ocean Cheung, Qingling Liu, Niklas Hedin, Xiaodong Zou

P-127 Selective production of propylene from ethanol on nano-sized crystal zeolites

Yasuyuki Takamitsu, Satoshi Yoshida, Kazuaki Yamamoto, Hiroshi Ogawa

P-128 Toluene methylation over silica-modified ZSM-5

Eri Kousaka, Koichi Matushita, Chikanori Nakaoka

P-129 Development of large surface area alumina from kaolin for zeolite support

Abdulkarim Salawu Ahmed, Solomon Gajere Bawa

P-130 A study of water photo-reduction reaction using Al-Pt or Pd MOFs prepared by post-synthesis modification

Yuhei Miyazaki, Yusuke Kataoka, Manabu Mitsunashi, Wasuke Mori, Tatsuya Kawamoto

P-131 Effect of several catalysts on fast pyrolysis of jatropha residues by using pyrolyzer-GC/MS

Takehisa Mochizuki, Duangduen Atong, Makoto Toba, Yuji Yoshimura

P-132 Template synthesis of mesoporous platinum nanospheres for oxygen reduction reaction

You-Wei Hu, Po-Kai Chen, Chia-Min Yang

P-133 Fast proton conductive mesoporous silica film with perfluorosulfonic-acid group

Satoru Fujita, Naoki Hasegawa, Akihiko Koiwai, Atsuko Muto, Masaya Kawasumi, Shinji Inagaki

P-134 Kinetically controlled formation of *c2mm* mesoporous MMT-1 silica materials with extensive void defects

Nien-Chu Lai, Jhih-Yu Lin, Wei-Chia Huang, Chia-Min Yang

P-135 Nucleation rate of analcime at aging step: the effect of agitation

Jae Kyung Yang, Jong-Ho Kim, Chang Bock Chung, Gon Seo

P-136 Cation-exchange properties of the synthetic –LIT type zeolite

Takako Nagase, Takuji Ikeda, Norito Hiyoshi

P-137 SAPO-34 membranes for gas separation and vapor permeation -effect of zeolitic and non-zeolitic pathways-

Yuichiro Hirota, Kazuo Watanabe, Yoshiaki Uchida, Yasuyuki Egashira, Norikazu Nishiyama

P-139 Valence control of grafted zinc by utilizing MFI-type zeolite as a specific reaction field

Akira Oda, Hiroe Torigoe, Atsushi Itadani, Takahiro Ohkubo, Takashi Yumura, Hisayoshi Kobayashi, Yasushige Kuroda

P-140 Effect of dielectric constant of zeolite precursors on the morphology of MFI zeolite membrane in microwave-assisted hydrothermal synthesis

Turki N.M. Baroud, Oki Muraza, Faheemuddin Patel, Evelyn N. Wang, Tahar Laoui

P-141 Adsorption process of CO₂ on silicalite-1 by single-crystal X-ray method

Shinjiro Fujiyama, Natsumi Kamiya, Koji Nishi, Yoshinobu Yokomori

P-142 Nano-ZSM-5 zeolite as a gas sensor

Magha P. Mahabole, Madhuri Lakhane, Anand Padman, Rajendra S. Khairnar

P-143 Hybrid catalysts from Cu and Al-SBA-15 for DME steam reforming: comparison between one-pot synthesis and physical mixing

Son-Ki Ihm, Myung-Ji Suh

P-144 Characterization of gas diffusion in nanoporous materials by frequency response method

A. Matsumoto, Y. Shibata, S. Nakano

P-145 Preparation of finite particles of a layered niobate (KCa₂Nb₃O₁₀) for improved materials performance

Shota Igarashi, Soh Sato, Makoto Ogawa

P-147 Synthesis, characterization and acid property of group 13 atoms incorporated CDS-1 zeolites with CDO topology

Kenichi Komura, Satoshi Takegawa, Tomoyuki Murase, Hiroya Suzuoki, Takashi Ushiro, Mamoru Koketsu

P-148 Deactivation of ZSM-5 in catalytic cracking of *n*-hexane

Lixia Wang, Kohei Urata, Kenichi Ozawa, Takayuki Komatsu

P-149 Investigation of influence the presence Al₂O₃ on SBA-15 support on distribution VOX species and their catalytic activity in ODH reactions of light hydrocarbons (C₂, C₃ and C₄)

M. Setnička, P. Čičmanec, Š. Botková, A. Kalužová, L. Čapek, A. Zukal, J. Mayerová, R. Bulánek

P-150 Synthesis of a novel complex metal oxide based on molybdenum, vanadium, and bismuth with micropores

Zhenxin Zhang, Shoko Izumi, Toru Murayama, Wataru Ueda

P-151 Ordered mesoporous silicoaluminophosphates assembled from dissolved LTA precursor

Ryosuke Fukui, Norihito Nakatani, Shunsuke Tanaka, Yoshikazu Miyake

P-153 Adsorption process of aromatic compounds into the silicalite-1

Natsumi Kamiya, Wataru Iwama, Tomokazu Kudo, Shinjiro Fujiyama, Koji Nishi, Yoshinobu Yokomori

P-154 Catalytic cracking of palm oil methyl esters over Cr and Ni impregnated natural zeolite catalysts

Totok E. Suharto

P-155 Synthesis and pervaporation performance of the new high silica CHA membrane MSM-1

Miki Sugita, Naoko Fujita, Hidekazu Miyagi, Mikio Hayashi, Kazunori Oshima, Takahiko Takewaki

P-156 Inorganic-organic hybrid photocatalyst based on mesoporous silica materials: enhanced photoluminescence emission and visible-light driven photocatalytic activity of anchored Pt(II) pyridyl complex

Kohsuke Mori, Kentaro Watanabe, Hiromi Yamashita

P-157 Textural indices of low-temperature mordenite-zirconium catalysts for *n*-butane to isoparaffins conversion

D. B. Tagiyev, S. I. Abasov, R. V. Starikov

P-158 Catalytic cracking of *n*-hexane over mono-dispersed nano-crystalline MFI-type zeolite

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

P-159 The additive effect of phosphorus to ZSM-5 catalysts for ethanol conversion into propylene

Qingxia Atsushi Takahashi, Wei Xia, Isao Nakamura, Hiromichi Shimada, Tadahiro Fujitani

P-160 Fabrication of Fe metals supported N-doped porous carbon nanocomposites and their Applications as cathodic electrocatalysts in fuel cell

Shou-Heng Liu, Jyun-Ren Wu, Tsung-Han Ho

P-161 Crystal growth of large crystalline metal-organic frameworks (MOFs) and photoluminescent properties

Eiji Hosono, Yu Kimitsuka, Shintaro Ueno, Yoshifumi Mizuno, Masashi Okubo, Haoshen Zhou, Shinobu Fujihara

P-164 Development of a screening assay system for protein refolding using zeolite beta

Shun-ichi Matsuura, Takayuki Y. Nara, Manami Chiba, Masahiko Hirai, Tatsuo Tsunoda

P-165 Design and synthesis of poly aryl ether with the application in gas storage

Youwei Guan, Cuiying Pei, Teng Ben, Shilun Qiu

P-166 A novel post-treatment for hydrophobic MFI membranes

Mikihiro Nomura, Keita Kanemune, Yoshinori Kobayashi, Yuto Sugiyama

P-167 Separation of CO₂ from CO₂/N₂ binary gas mixture using Ba-SAPO-34 zeolite membrane: process optimization studies

Thiam Leng Chew, Abdul Latif Ahmad, Subhash Bhatia

P-168 Computational study of existence and stability of the paddle-wheel structures with Au, Ag, Ni and Co metal ions for potential application as SBU in MOFs

Miroslav Rangelov, Petko Petkov, Georgi Vayssilov, Thomas Heine

P-169 Effect of surfactant addition and Na/Al ratio on crystal size of FAU zeolite

Taichi Taniguchi, Saori Fujiwara, Yuta Nakasaka, Teruoki Tago, Takao Masuda

P-170 Nanosized MFI-type ferrisilicate catalysts for light olefin synthesis from dimethyl ether

Hiroki Kobayashi, Yuichiro Yamazaki, Masafumi Nakaya, Kiyoshi Kanie, Atsushi Muramatsu

P-171 Biocompatible, surface functionalized mesoporous titania nanoparticles for intracellular imaging and anticancer drug delivery

Kevin C.-W. Wu, Shih-Hsiang Liao

P-172 Application of mesoporous membrane catalyst containing chiral salen complexes for the synthesis of optically pure epoxides

Da Yong Jang, Ju hyun Lee, Gae Ryung Kim, Da Min Park, Geon-Joong Kim

P-173 Enrichment of tritiated water using mesoporous silica

Akira Taguchi, Yuji Torikai, Masao Matsuyama

P-175 Large mordenite single crystal synthesis with NaCl additive

Koji Nishi, Kenjiro Sadamori, Masahiro Kasukawa, Minako Mizobuchi, Natsumi Kamiya, Yoshinobu Yokomori

P-176 Structural analysis of Fe species in zeolites using XAFS and UV-Vis spectroscopy

Hirokazu Takahashi, Hideyuki Oka

P-177 Characterization of Fe-TiO₂ produced from Fe-Ti composite coagulant flocculated sludge

Young Jun Lee, Jong Beom Kim, Ki Won Lee, Se Min Park, Ho Kyong Shon, Geon-Joong Kim, Jong-Ho Kim

P-178 Effect of aluminum content of H-ZSM-5 on hexane cracking activity

Hiroshi Mochizuki, Hiroyuki Imai, Toshiyuki Yokoi, Seitaro Namba, Junko N. Kondo, Takashi Tatsumi

P-179 Preparation of mesostructured silica films by a super-slow dip-coating process

Masahiko Takahashi, Wataru Kubo, Atsushi Komoto, Kohei Okamoto, Hirokatsu Miyata

P-180 Preparation and characterizations of hollow mesoporous carbons via hard-templating of hollow mesoporous silica capsules

Yong-Kyung Hwang, Seong Huh

P-181 Modification of acid properties of beta zeolites for dehydration of monosaccharides

Ryoichi Otomo, Toshiyuki Yokoi, Hiroyuki Imai, Junko N. Kondo, Takashi Tatsumi

P-182 Modified mesoporous silica nanoparticles for high performance cells labeling of induced pluripotent stem cell

Wei Chen, Ping-Hsing Tsai, Yann Hung, Shih-Hwa Chiou, Chung-Yuan Mou

P-183 Effect of the atomic arrangement of amorphized zeolite on the recrystallization behavior to crystalline zeolite

Kaku Sato, Toru Wakihara, Shinji Kohara, Junichi Tatami, Satoshi Inagaki, Yoshihiro Kubota, Katsutoshi Komeya, Takeshi Meguro

P-184 Gate adsorption of CO₂ on a flexible copper-based coordination polymer crystal

Ryosuke Kotani, Atsushi Kondo, Kazuyuki Maeda

P-186 Analysis of coordination environment of aluminum species in zeolites by X-ray absorption and emission spectroscopy

Takashi Yamamoto, Tomoyuki Kudo, Tomohiro Yamamoto, Jun Kawai

P-187 Photochemistry of acriflavine in Zeolite L

Wilaiporn Insuwan, Kunwadee Rangsrwatananon

P-188 Enlargement of periodicity in the uniaxially aligned mesostructured silica films using a mixture of structure directing agents

Saeko Hayase, Wataru Kubo, Yosuke Kanno, Yuta Fukushima, Hirokatsu Miyata, Kazuyuki Kuroda

P-189 Formation of intracrystalline mesopores in ZSM-5 using carbon nanoparticles - acid activity in the cyclohexane cracking

Edilene Deise da Silva, Ernesto A. Urquieta-González

P-190 Attempts to incorporate heteroelements into layered alkali silicates, octosilicate and magadiite

Masashi Morita, Yu Horiuchi, Masaya Matsuoka, Makoto Ogawa

P-191 Characterization of the coffee effluent with the environmental perspective and possible treatment using zeolites

P. Shiva Prasad, S. M. Prasanna, M. V. D'Souza, Jayarama

P-192 Simple approach for synthesizing of nanocrystal zeolite

Leifeng Liu, Junliang Sun

P-193 Synthesis of mesoporous silica containing sulfonic acid groups linked to the surface through Si-C covalent bond

Tsuyoshi Kugita, Yuji Tobaru, Kanako Ambo

P-194 FAU zeolite membrane combined with palladium metal membrane for catalytic reactions

Koichi Sato, Mayumi Natsui, Yasuhisa Hasegawa, Masateru Nishioka

P-195 The photocatalytic activity of magnetic photocatalyst with core-shell structure

Hua-Wei Chen, Gui-Bing Hong, Yu-Lin Kuo, Yu-Huan Li, Chyow-San Chiou

P-196 Syntheses of L-theanine using glutaminase immobilized on a mesoporous silica modified by several surface modifications

Takuji Yokoyama, Koichi Kitahata, Ryo Ishii, Tetsuji Ito, Syun-ichi Matsuura, Tatsuo Tsuno-da, Satoshi Hamakawa, Fujio Mizukami, Hironobu Nanbu, Takaaki Hanaoka

P-197 Production of propylene from methanol and unutilized light olefins: demonstration of DTP[®] Process

Atsushi Okita, Nobuyasu Chikamatsu, Chizu Inaki, Jumpei Takahashi, Michio Nakamura, Kazunori Honda

P-198 Effect of the reaction temperature on catalytic conversion of ethanol on FSM-16 doped with nickel

Shigeru Su iyama, Yasuhiro Okada, Keizo Nakagawa, Ken-Ichiro Sotowa

P-199 Tripodal tetradentate copper complexes incorporated in porous silica frameworks for catalyzing toluene aliphatic C-H bond oxidation at room temperature

Chih-Cheng Liu, Chung-Yuan Mou

P-200 Crystal structure and hydration state of Co- and Sr-exchanged GTS type titanosilicates

Rositsa Hristova Titorenkova, Keiko Fujiwara, Tatsuya Tamaki, Chika Kishimori, Akihiko Nakatsuka, Noriaki Nakayama

P-201 Synthesis of Cu nanoparticles in mesoporous silica SBA-15 functionalized with carboxylic acid groups

Ching-Shiun Chen, Hsien-Ming Kao

P-202 Controlling morphology of magnesium ammonium phosphate for facile ammonia uptake and repeated use

Takanobu Masuda, Isao Ogino, Shin R. Mukai

P-203 Acid strength control through incorporation of Al³⁺ and Fe³⁺ in MFI zeolite for methanol-to-propylene (MTP) reaction

Ki-Yong Lee, Seung-Woo Lee, Son-Ki Ihm

P-204 Post-treatment of a MOR zeolite membrane for improvement of water permselectivity

Mikihiro Nomura, Ryuhei Ono, Daiki Tamashiro, Shogo Sakai

P-205 Preparation of NiO/SBA-15 for biomass gasification gas conversion to useable energy

Baowang Lu, Katsuya Kawamoto

P-208 Hydrogel template-assisted synthesis of nanometric Fe₂O₃ supported on exfoliated clay for the catalytic dehydrogenation of ethylbenzene

Piotr Natkański, Piotr Kuśtrowski, Krystyna Fajfer, Anna Białas, Janusz Surman

P-209 *n*-Hexane steam cracking using ZSM-5 catalysts

Aritomo Yamaguchi, Dingfeng Jin, Takuji Ikeda, Koichi Sato, Tomoya Inoue, Norihito Hiyoshi, Masayuki Shirai, Fujio Mizukami, Takaaki Hanaoka

P-210 Synthesis and properties of iron component nano-faujasite

Satoshi Yamazaki, Yuji Ohsuna, Hideki Nishino, Hiroshi Isobe

P-211 Structural effect of platinum supported ordered mesoporous carbon catalysts for aqueous phase reforming of ethylene glycol

Tae-Wan Kim, Ho-Dong Kim, Jung-Hyun Kim, Hyun Ju Park, Kwang-Eun Jeong, Ho-Jeong Chae, Soon-Yong Jeong, Chang-Ha Lee, Chul-Ung Kim

P-212 Solvothermal synthesis of 2D metal-organic framework with magnetic and gas sorption properties

Cheng-You Wu, Chia-Her Lin

P-214 Effect of particle size of Ti-SBA-15 for oxidative desulfurization of refractory aromatic sulfur compounds

Joo-Wan Kim, Tae-Wan Kim, Kwang-Eun Jeong, Ho-Jeong Chae, Soon-Yong Jeong, Chul-Ung Kim, Min-Ji Kim

P-215 Absorption of CO over Cu-Ni-mordenite and Ni-mordenite catalysts

Fernando Chavez-Rivas, G. Berlier, Vitalii Petranovski, S. Coluccia, René Obeso Estrella, Andrey Simakov, Felipe Francisco Castellón Barraza, Miguel-Ángel Hernández Espinosa

P-216 Novel porous NiS films forming through sulfurization of Ni films and study sulfurization temperature effect for gas sensor applications

Jen-Bin Shi, Yu Cheng Chen, Po Feng Wu

P-217 Synthesis of zeolite-A from aluminium dross using alkali fusion

Takaaki Wajima

P-218 Synthesis and catalytic properties of nickel nanoparticles/hollow silica (core/shell) nanocomposites

Takashi Harada, Takuji Misaka, Tomohiko Sugita, Shigeru Ikeda, Michio Matsumura

P-219 CO₂/CH₄ separation via commercial zeolites

Meihua Yang, Hsunling Bai

P-220 Preparation and characterization of cobalt oxide/titania nanocomposites for photocatalytic hydrogen production

Meng-Chun Hsieh, Yu-Fen Wang, Chia-Min Yang

P-221 The selective removal of the odorants in fuel gas using zeolites

Hoang Phuoc Ho, So Yun Lee, Woo Hyeong Kim, Suk Bong Hong, Suk Hee Lee, Hee Chul Woo

P-222 Synthesis of mesostructured materials from layered perovskite type K_2NbO_3F and alkylamine

Masataka Ogasawara, Atsunori Ono, Ysusaku Amamoto, Sumio Kato, Shinichi Nakata

P-223 Co-doped mesoporous titania nanomaterials from a peroxy-titanium complex solution

Ibrahim El Saliby, Ho Kyong Shon, Laszlo Erdei, Jong Beom Kim, Jong-Ho Kim

P-224 Synthesis of cyclohexene carbonates from CO_2 and cyclohexene oxides using MIL-101(Cr)/*n*-Bu₄NBr as a catalyst system

Chen-Yu Li, Cheng-You Wu, Chia-Her Lin, Bao-Tsan Ko

P-225 Incorporation of TiO_2 in the pores of mesoporous silica films by LP-CVD: dependence of the loading on the mesoporous structure.

Shin Kitamura, Masahiko Takahashi, Hirokatsu Miyata

P-226 Immobilization of sulfonated phenyl group in mesoporous silicas

Takanori Nakamura, Minoru Sohmiya, Makoto Ogawa

P-227 Acylation of *p*-xylene and 2-methoxynaphthalene over zeolite SSZ-33

Dana Vitvarová-Prochazková, Lenka Kurfířtová, Martin Kubů

P-228 One-step cellulose-to-fructose conversion using cellulase and isomerase Bi-enzymes immobilized, Fe_3O_4 -encapsulated mesoporous silica nanoparticles as a novel recyclable biocatalyst

Yi-Chun Lee, Ching-Tien Chen, Kevin C.-W. Wu

P-229 Control of intercrystalline pathways of a MFI zeolite membrane for water treatment

Koji Iida, Marina Ikegami, Masaro Machida, Mikihiro Nomura

P-230 Study of physicochemical and catalytic properties of natural and synthetic sorbents and application of W-containing catalysts on their basis

Galina Savelieva, Svetlana Tungatarova, Damir Abdukhalykov

P-231 Development of a hydrogen purification system with hybrid membrane -An efficient high-purity hydrogen purification technology built using zeolite membranes-

Hideo Tsuneoka, Saki Tamura, Kaori Takano, Shunsuke Maekawa, Minoru Ogawa, Masakazu Ikeda

P-233 Hydrothermal synthesis of Na-birnessite from manganese residues and ore

Bruno Apolo Miranda Figueira, Rômulo Simões Angelica, Marcondes Lima da Costa, Herbert Pöllmann, Karla Schenzel

P-234 Synthesis and characterization of silicoaluminophosphate/aluminophosphate composites with core-shell structure

Tomohiro Mitsui, Yuka Morishita, Takaki Mizuno, Takahiro Yashima, Akira Nakashima

P-236 Preparation and characterization of pillared magadiite

Yusuke Yamauchi, Yoshiaki Matsuo

P-237 Cracking of cyclohexane on H-zeolites: activity and selectivity toward light olefins

Alexandre A. S. Gonçalves, Ernesto A. Urquieta-Gonzalez

P-238 Room-temperature synthesis of ZIF-8 crystals in an aqueous solution

Koji Kida, Muneyuki Okita, Yosuke Ito, Shunsuke Tanaka, Yoshikazu Miyake

P-239 Equilibrium and thermodynamic of adsorption of lead ions on kaolin waste from Pará-Brazil

Marta Helena Tavares Pinheiro, Vanda Porpino Lemos, Bruno Apolo Miranda Figueira, Kelly das Graças Fernandes, Taynara Lima Valentim

P-240 Selective dehydration of lactic acid into acrylic acid over zeolite catalysts

Yumiko Matsuura, Ayumu Onda, Kazumichi Yanagisawa

P-241 Synthesis, characterization and reactivity of $\text{MPMo}_{11}\text{VO}_{40}$ polyoxometallate (M: Fe, Ni, Co) in isobutene oxidation

T. Mazari, S. Benadji, C. R. Marchal, C. Rabia

P-242 Bifunctional catalysts for the direct conversion of syngas to gasoline range hydrocarbons

Sina Sartipi, Johannes E. van Dijk, Kshitij Parashar, Jorge Gascon, Freek Kapteijn

Recent Research Reports

Tuesday / July 31st, Recent Research Reports 2

RRR-28 Synthesis and MTO reaction activity of CON-type zeolites with trivalent heteroatoms

Masato Yoshioka, Toshiyuki Yokoi, Junko N. Kondo, Takashi Tatsumi

RRR-29 Detection of the local structure related to strong acid sites for high-alkane-cracking on ammonium-treated USY zeolite using ²⁷Al and ¹⁷O MQMAS NMR

Takashi Sanada, Kazu Okumura, Kazuhiro Kamiguchi, Jun Ashida, Naonobu Katada

RRR-30 OSDA-free Synthesis of MAZ-Type Zeolite based on “Composite Building Unit Hypothesis”

Akari Ogawa, Kenta Iyoki, Yoshihiro Kamimura, Keiji Itabashi, Tatsuya Okubo

RRR-33 Generation of nanoparticles of Y-type zeolites during treatment of USY zeolites with an aqueous solution of ammonium nitrate

Jota Ohyama, Kazu Okumura, Naonobu Katada

RRR-34 Suppression of Pd dissolution and side reaction in Suzuki coupling reaction catalyzed by Pd/USY

Hiroataka Okamoto, Takanori Osaki, Kazu Okumura, Naonobu Katada

RRR-35 On the formation mechanism of NaY zeolite membrane

Masahiko Matsukata, Makoto Toyoda, Taisuke Furuhashi, Yasushi Sekine, Eiichi Kikuchi

RRR-36 Conformation of Flexible Structure Directing Agents inside Zeolite Channel Probed with Rietveld Refinement of X-ray Diffraction Combined with Global Optimization

Sung June Cho,* and Suk Bong Hong

RRR-37 CO₂/CH₄ separation via commercial zeolites

Meihua Yang, Hsunling Bai

RRR-38 Synthesis and characteristics of novel layered silicate HUS-2

Nao Tsunogi, Takuji Ikeda, Yusuke Ide, Masahiro Sadakane, Tsuneji Sano

RRR-39 An Effective Sequent Cellulose-to-Glucose and Glucose-to-Fructose Conversion Using Cellulase and Isomerase Separately Immobilized, Fe₃O₄-Loaded Mesoporous Silica Nanoparticles as Recyclable Biocatalysts

Yi-Chun Lee, Ching-Tien Chen, Kevin C.-W. Wu

RRR-40 Measurement of Intracrystalline Diffusivities of Aromatics within Si-beta in Cyclohexane Solution

Yuta Nakasaka, Sayuri Katsuta, Teruoki Tago, Satoshi Inagaki, Yoshihiro Kubota, Takao Masuda

RRR-41 Preparation of Cadmium Selenide/Hexadecyltrimethylammonium-Layered Silicate Hybrids

Areeporn Ontam, Nithima Khaorapapong, Makoto Ogawa

RRR-42 Assembly 2D Metal–Organic Frameworks Exhibiting Magnetic Properties and Selective Gas Adsorption

Cheng-You Wu, Chia-Her Lin

RRR-43 Advantage of tetrakis(tris-*tert*-butoxysiloxy)titanium (TS4) as a precursor for the preparation of Ti-containing mesoporous silica with high catalytic performance

Kwang-Min Choi, Toshiyuki Yokoi, Takashi Tatsumi, Kazuyuki Kuroda

RRR-44 Fabrication of a Au Nanostructured Film by Electrodeposition Using a Mesoporous Silica Film as Template: Essential Role of Vertical Aligned Mesochannels
Yosuke Kanno, Takashi Suzuki, Yusuke Yamauchi, Kazuyuki Kuroda

RRR-47 Enhanced Photocatalytic Performances of Graphene Coated TiO₂ Nanoparticles Loaded on Mesoporous Silica
Waleeporn Donphaj, Daiki Yamahana, Metta Chareonpanich, Takashi Kamegawa, and Hiromi Yamashita

RRR-49 Monte Carlo Simulation of Crystal Growth in Nanoporous Materials
James Gebbie, Michael Anderson

RRR-50 Investigation of AIPO-based CHA and AEI Structures and their Intergrowths by Atomic Force Microscopy
Rachel. L. Smith, Michael. W. Anderson, Martin. P. Atfield, Duncan Akporiaye, Jasmina Hafizovic Cavka, Anna Lind

RRR-51 Catalytic Performance of Zeolites in Direct Conversion from Syngas to LPG
Shanchuan Li, Naoko Igarashi, Katsutoshi Yamamoto, Kenji Asami, Kaoru Fujimoto

RRR-52 Structural Characterization of Binary Silica Nanoparticle Superlattices
Yasuhiro Sakamoto, Susumu Toko, Yoshiyuki Kuroda, Toshiyuki Matsui, Kazuyuki Kuroda

RRR-53 Synthesis of a novel microporous copper 1,3,5-benzenetriphosphonate and adsorption of CO₂ and ethanol
Tokuya Satomi, Atsushi Kondo, Kanami Azuma, Kazuyuki Maeda

RRR-54 Synthesis of mesoporous silica adsorbents from rice husk ash for CO₂ capture
Wan Ting Zeng, Liang-Yi Lin, Hsunling Bai

RRR-55 Phenol Hydroxylation over Ti-MFI prepared via CVD treatment
Masahiko Matsukata, Mariko Ishii, Ryosuke Iwabuchi, Yasushi Sekine, Eiichi Kikuchi