Korean Chemical Engineering Research

August 2018 Volume 56, Number 4	Korean Chem. Eng. Res., 56(4) 435-606 (9 PISSN 0304-128X, EISSN 2233-9558	:018)
Article Industrial Chemistry(Electrochemistry, Analytical Chemistry) · Drug Delivery Syste Optimization of Transesterification Process of Biodiesel from Nyamplung (<i>Calophyl</i> CaO Catalyst Heri Septya Kusuma, Ansori Ansori, Sasmitha W	lum inophyllum Linn) using Microwave with	erials 43
Physico-Chemical Pretreatment of Herbaceous Biomass by Organosolv Flow-Throu	gh Process	
Titania Nanotube-based Dye-sensitized Solar Cells		44
Validation of Factors Effect on Pretreatment of Brown Algae, Undaria, Using Respo of Lactic Acid Production	nse Surface Methodology and Prospect	44
Preparation of Poly-L-Lactic Acid (PLLA) Microspheres by Solvent-Evaporation M	ethod	45
Performance Comparison Between Stationary PEMFC MEA and Automobile MEA Sohyeong Oh, Mihwa Lee, Hakju Lee, V	under Pure Hydrogen Supply Condition	46 46
Process System Engineering · Plant Design · Process Safety · Plant Engineerin Measurement and Prediction of Fire and Explosion Properties of n-Ethylanilne	-	47
Fate Analysis and Impact Assessment for Vehicle Polycyclic Aromatic Hydrocarbon Multimedia Eugacity Model	s (PAHs) Emitted from Metropolitan City Using	47
Garrier Process Simulation and Economic Feasibility of Upgraded Biooil Production Plant fi	om Sawdust	479
Particle Technology · Particles with Chemical Reactions · Powder Treatment Synthesis of Macroporous TiO ₂ Microparticles for Anti-Bactericidal Application Seong	Process	
Particle Technology · Particles with Chemical Reactions · Powder Treatment Synthesis of Macroporous TiO ₂ Microparticles for Anti-Bactericidal Application Seong Separation Technology · Thermodynamics · Membrane Technology · Supercu Application of Flory-Treszczanowicz-Benson model and Prigogine-Flory-Patterson to of Propagol with Cyclobexane or n-Hexane	Process Hoon Roh, Jeong Keun Kim and Young-Sang Cho itical Fluid Extraction · Ionic Liquids heory to Excess Molar Volumes of Isomers	52
Particle Technology · Particles with Chemical Reactions · Powder Treatment Synthesis of Macroporous TiO2 Microparticles for Anti-Bactericidal Application Seong Separation Technology · Thermodynamics · Membrane Technology · Superce Application of Flory-Treszczanowicz-Benson model and Prigogine-Flory-Patterson for of Propanol with Cyclohexane or n-Hexane Suman Gahlya Biochemical Engineering · Biochip Technology · Biomedical Technology Effect of Malonic Acid-Catalyzed Pretreatment on the Hydrolysis of Gracilaria verr	Process h Hoon Roh, Jeong Keun Kim and Young-Sang Cho ritical Fluid Extraction · Ionic Liquids heory to Excess Molar Volumes of Isomers n, Sweety Verma, Manju Rani and Sanjeev Maken ucosa	52 53
Particle Technology · Particles with Chemical Reactions · Powder Treatment Synthesis of Macroporous TiO2 Microparticles for Anti-Bactericidal Application Seong Separation Technology · Thermodynamics · Membrane Technology · Superce Application of Flory-Treszczanowicz-Benson model and Prigogine-Flory-Patterson to of Propanol with Cyclohexane or n-Hexane Suman Gahlya Biochemical Engineering · Biochip Technology · Biomedical Technology Effect of Malonic Acid-Catalyzed Pretreatment on the Hydrolysis of Gracilaria verr Correfaction Effect on the Grindability Properties of Several Torrefied Biomasses Daru Setyawan, Jiho Yoo, Sangdo Kim, Hokyung Choi, Youngjoon Rhim, J Effect of Moisture on the Melting Point and High-Temperature Stability of NaKZn-O	Process Hoon Roh, Jeong Keun Kim and Young-Sang Cho ritical Fluid Extraction · Ionic Liquids heory to Excess Molar Volumes of Isomers n, Sweety Verma, Manju Rani and Sanjeev Maken <i>ucosa</i> Mi-Ra Park and Gwi-Taek Jeong recovery Technology eonghwan Lim, Sihyun Lee and Dong Hyuk Chun Chloride	52 53 54 54
Particle Technology · Particles with Chemical Reactions · Powder Treatment Synthesis of Macroporous TiO ₂ Microparticles for Anti-Bactericidal Application Seong Separation Technology · Thermodynamics · Membrane Technology · Supercu Application of Flory-Treszczanowicz-Benson model and Prigogine-Flory-Patterson to of Propanol with Cyclohexane or n-Hexane Suman Gahlya Biochemical Engineering · Biochip Technology · Biomedical Technology Effect of Malonic Acid-Catalyzed Pretreatment on the Hydrolysis of <i>Gracilaria verr</i> Correfaction Effect on the Grindability Properties of Several Torrefied Biomasses Daru Setyawan, Jiho Yoo, Sangdo Kim, Hokyung Choi, Youngjoon Rhim, J Effect of Moisture on the Melting Point and High-Temperature Stability of NaKZn-O Lee Jeong Hwan, Kim Young, Y Electrochemical Characteristics of Silicon/Carbon Anode Materials using Petroleum	Process Hoon Roh, Jeong Keun Kim and Young-Sang Cho ritical Fluid Extraction · Ionic Liquids heory to Excess Molar Volumes of Isomers n, Sweety Verma, Manju Rani and Sanjeev Maken <i>ucosa</i> Mi-Ra Park and Gwi-Taek Jeong ecovery Technology eonghwan Lim, Sihyun Lee and Dong Hyuk Chun Chloride Yoon Seok Ho, Lee Kong Hoon and Choi Jun Seok Pitch	52 53 54 54
Particle Technology · Particles with Chemical Reactions · Powder Treatment Synthesis of Macroporous TiO ₂ Microparticles for Anti-Bactericidal Application Seong Separation Technology · Thermodynamics · Membrane Technology · Superce Application of Flory-Treszczanowicz-Benson model and Prigogine-Flory-Patterson to of Propanol with Cyclohexane or n-Hexane Suman Gahlya Biochemical Engineering · Biochip Technology · Biomedical Technology Effect of Malonic Acid-Catalyzed Pretreatment on the Hydrolysis of <i>Gracilaria verr</i> Energy/Environment · New Renewable Energy · Waste Treatment/Energy Reference on the Grindability Properties of Several Torrefied Biomasses Daru Setyawan, Jiho Yoo, Sangdo Kim, Hokyung Choi, Youngjoon Rhim, J Effect of Moisture on the Melting Point and High-Temperature Stability of NaKZn-C Lee Jeong Hwan, Kim Young, Y Electrochemical Characteristics of Silicon/Carbon Anode Materials using Petroleum Study on the Adsorption of Antibiotics Trimethoprim in Aqueous Solution by Activa	Process Hoon Roh, Jeong Keun Kim and Young-Sang Cho ritical Fluid Extraction · Ionic Liquids heory to Excess Molar Volumes of Isomers n, Sweety Verma, Manju Rani and Sanjeev Maken <i>ucosa</i> Mi-Ra Park and Gwi-Taek Jeong ecovery Technology eonghwan Lim, Sihyun Lee and Dong Hyuk Chun Chloride Yoon Seok Ho, Lee Kong Hoon and Choi Jun Seok Pitch Su Hyeon Lee and Jong Dae Lee ted Carbon Prepared from Waste Citrus Peel	52 53 54 54 55 55
Particle Technology · Particles with Chemical Reactions · Powder Treatment Synthesis of Macroporous TiO ₂ Microparticles for Anti-Bactericidal Application Seong Separation Technology · Thermodynamics · Membrane Technology · Superce Application of Flory-Treszczanowicz-Benson model and Prigogine-Flory-Patterson i of Propanol with Cyclohexane or n-Hexane Suman Gahlya Biochemical Engineering · Biochip Technology · Biomedical Technology Effect of Malonic Acid-Catalyzed Pretreatment on the Hydrolysis of <i>Gracilaria verr</i> Correfaction Effect on the Grindability Properties of Several Torrefied Biomasses Daru Setyawan, Jiho Yoo, Sangdo Kim, Hokyung Choi, Youngjoon Rhim, J Effect of Moisture on the Melting Point and High-Temperature Stability of NaKZn-O Lee Jeong Hwan, Kim Young, Y Electrochemical Characteristics of Silicon/Carbon Anode Materials using Petroleum Study on the Adsorption of Antibiotics Trimethoprim in Aqueous Solution by Activa	Process Hoon Roh, Jeong Keun Kim and Young-Sang Cho ritical Fluid Extraction · Ionic Liquids heory to Excess Molar Volumes of Isomers n, Sweety Verma, Manju Rani and Sanjeev Maken <i>ucosa</i> Mi-Ra Park and Gwi-Taek Jeong covery Technology eonghwan Lim, Sihyun Lee and Dong Hyuk Chun Chloride Yoon Seok Ho, Lee Kong Hoon and Choi Jun Seok Pitch Su Hyeon Lee and Jong Dae Lee ted Carbon Prepared from Waste Citrus Peel Min-Gyu Lee and Sang-Kyu Kam ction of Wood-based Fiberboard	52 53 54 54 55 56 56
Particle Technology · Particles with Chemical Reactions · Powder Treatment Synthesis of Macroporous TiO ₂ Microparticles for Anti-Bactericidal Application Seong Separation Technology · Thermodynamics · Membrane Technology · Superce Application of Flory-Treszczanowicz-Benson model and Prigogine-Flory-Patterson to of Propanol with Cyclohexane or n-Hexane Suman Gahlya Biochemical Engineering · Biochip Technology · Biomedical Technology Effect of Malonic Acid-Catalyzed Pretreatment on the Hydrolysis of <i>Gracilaria verr</i> Correfaction Effect on the Grindability Properties of Several Torrefied Biomasses Daru Setyawan, Jiho Yoo, Sangdo Kim, Hokyung Choi, Youngjoon Rhim, J Effect of Moisture on the Melting Point and High-Temperature Stability of NaKZn-C Current Lee Jeong Hwan, Kim Young, Y Electrochemical Characteristics of Silicon/Carbon Anode Materials using Petroleum Study on the Adsorption of Antibiotics Trimethoprim in Aqueous Solution by Activa Using Box-Behnken Design	Process Hoon Roh, Jeong Keun Kim and Young-Sang Cho ritical Fluid Extraction · Ionic Liquids heory to Excess Molar Volumes of Isomers n, Sweety Verma, Manju Rani and Sanjeev Maken <i>ucosa</i> Mi-Ra Park and Gwi-Taek Jeong reovery Technology eonghwan Lim, Sihyun Lee and Dong Hyuk Chun Chloride Yoon Seok Ho, Lee Kong Hoon and Choi Jun Seok Pitch Su Hyeon Lee and Jong Dae Lee ted Carbon Prepared from Waste Citrus Peel Min-Gyu Lee and Sang-Kyu Kam ction of Wood-based Fiberboard Oong-uk Ahn, Gyu-Seong Han and Seung Won Oh gy · Semiconductor Technology · Microreactor Drop Fluidized Reactor (MDFR) Process	52 53 54 55 56 56 57
Particle Technology · Particles with Chemical Reactions · Powder Treatment Synthesis of Macroporous TiO ₂ Microparticles for Anti-Bactericidal Application Seong Separation Technology · Thermodynamics · Membrane Technology · Superce Application of Flory-Treszczanowicz-Benson model and Prigogine-Flory-Patterson to of Propanol with Cyclohexane or n-Hexane Suman Gahlya Biochemical Engineering · Biochip Technology · Biomedical Technology Effect of Malonic Acid-Catalyzed Pretreatment on the Hydrolysis of <i>Gracilaria verr</i> Correfaction Effect on the Grindability Properties of Several Torrefied Biomasses Daru Setyawan, Jiho Yoo, Sangdo Kim, Hokyung Choi, Youngjoon Rhim, J Effect of Moisture on the Melting Point and High-Temperature Stability of NaKZn-C Lee Jeong Hwan, Kim Young, Y Electrochemical Characteristics of Silicon/Carbon Anode Materials using Petroleum	Process Hoon Roh, Jeong Keun Kim and Young-Sang Cho ritical Fluid Extraction · Ionic Liquids heory to Excess Molar Volumes of Isomers n, Sweety Verma, Manju Rani and Sanjeev Maken <i>ucosa</i> Mi-Ra Park and Gwi-Taek Jeong covery Technology eonghwan Lim, Sihyun Lee and Dong Hyuk Chun Chloride Yoon Seok Ho, Lee Kong Hoon and Choi Jun Seok Pitch Su Hyeon Lee and Jong Dae Lee ted Carbon Prepared from Waste Citrus Peel Min-Gyu Lee and Sang-Kyu Kam ction of Wood-based Fiberboard Oong-uk Ahn, Gyu-Seong Han and Seung Won Oh gy · Semiconductor Technology · Microreactor Drop Fluidized Reactor (MDFR) Process Si Woo Yang, Yong Kang and Ho Kang I Analysis · Transport Phenomena mthesized SO ₄ ²⁻ /CeO ₂ -Al ₂ O ₃	494 524 534 545 555 564 577 585 585