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Yanqiu Long, Aihong Meng, Shen Chen, Hui Zhou, Yanguo Zhang,* and Qinghai Li

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7591

Near-Infrared Spectroscopy Coupled with Multivariate Methods for the Characterization of Ethanol Adulteration in Premium 91 Gasoline

Fazal Mabood,* Ricard Boqué,* Ahmad Hamaed, Farah Jabeen, Ahmed Al-Harrasi, Javid Hussain, Saif Alameri, Mohammed Albroumi, Mahmood M. O. Al Nabhani, Zakira Naureen, Mundhir Al Rawahi, and Fatma A. S. Al Futaisi

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7598

Reduction Kinetics of Ilmenite Ore as an Oxygen Carrier for Pressurized Chemical Looping Combustion of Methane

Yewen Tan,* Firas N. Ridha, Marc A. Duchesne, Dennis Y. Lu, and Robin W. Hughes

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7606

Effect of Chlorine on the Structure and Reactivity of Char Derived from Solid Waste

Binhang Hu, Qunxing Huang,* A. C. Thanos Bourtsalas, Mujahid Ali, Yong Chi, and Jianhua Yan

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7617

Effects of Inert Placement (Z_2) on Soot and Radiative Heat Flux in Turbulent Diffusion Flames

Akshay Gopan, Zhiwei Yang, Benjamin M. Kumfer, and Richard L. Axelbaum*

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Fuel Cells

7624

Performance Study on Microchannel Coated Catalytic Plate Reactor Using Electrophoresis Technique for Medium Temperature Shift (MTS) Reaction

Mahsa Bazdar and Abdullah Irankhah*

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7635

Photosynthetic Synergism for Sustained Power Production with Microalgae and Photobacteria in a Biophotovoltaic Cell

Rashmi Chandra, J. Shanthi Sravan, Manupati Hemalatha, Sai Kishore Butti, and S. Venkata Mohan*

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7645

Phosphate-Modified TiO_2/ZrO_2 Nanofibrous Web Composite Membrane for Enhanced Performance and Durability of High-Temperature Proton Exchange Membrane Fuel Cells

Chammin Lee, Jeongho Park, Yukwon Jeon, Joo-il Park, Hisahiro Einaga, Yen B. Truong, Illias L. Kyratzis, Isao Mochida, Jonghyun Choi,* and Yong-Gun Shul*

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Process Engineering

7653

Oxidative Stability of Base Lubricant Oil Monitored by Gas Chromatography–Mass Spectrometry: Influence of Sawdust-Derived Antioxidants

Imtiaz Ahmad,* Jan Ullah, M. Ishaq, Hizbulah Khan, Razia Khan, Waqas Ahmad, and Kashif Gul

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7662

Structure and Optimization of a Two-Stage Equal-Density Dense Medium Cyclone

Yuling Wang, You Zhou, and Jianguo Yang*

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7673

Droplet Crystallization in Water-in-Crude Oil Emulsions: Influence of Salinity and Droplet Size

D. Kolotova,* K. Brichka, G. Simonsen, S. C. Simon, S. Derkach, K. G. Paso, and J. Sjöblom

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7682

Molecular-Level Structural Insight into Clarified Oil by Nuclear Magnetic Resonance (NMR) Spectroscopy: Estimation of Hydrocarbon Types and Average Structural Parameters

Sujit Mondal,* Anil Yadav, Ravindra Kumar, Veena Bansal, S. K. Das, J. Christopher, and G. S. Kapur

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7693

Variations in the True Density and Sulfur Removal Forms of Petroleum Coke during an Ultrahigh-Temperature Desulfurization Process

Tao Liu, Mu jun Long,* Wenxiang Jiang, Dengfu Chen,* Sheng Yu, Huamei Duan, Junhao Sheng, and Chunmei Chen

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Additions and Corrections

7700

Correction to Impact of Organics and Carbonates on the Oxidation and Precipitation of Iron during Hydraulic Fracturing of Shale

Adam D. Jew,* Megan K. Dustin, Anna L. Harrison, Claresta M. Joe-Wong, Dana L. Thomas, Katharine Maher, Gordon E. Brown Jr., and John R. Bargar

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