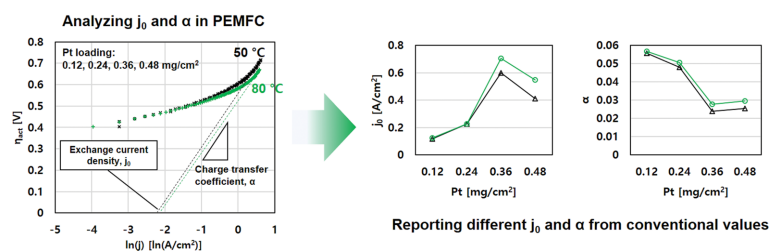
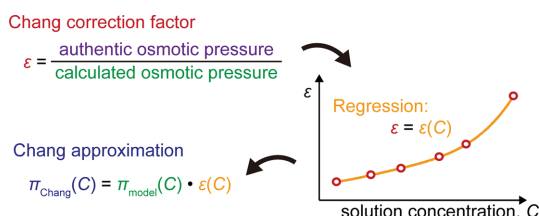


RAPID COMMUNICATION

- Hyungwook Lee, Changhee Han, and Taehyun Park 577 **Experimental investigation of charge transfer coefficient and exchange current density in standard fuel cell model for polymer electrolyte membrane fuel cells**



- Ho Nam Chang, Kyeong Rok Choi, Sang Yup Lee, Mi-Hyang Seon, and Yoon-Seok Chang 583 **Chang approximation for the osmotic pressure of dilute to concentrated solutions**

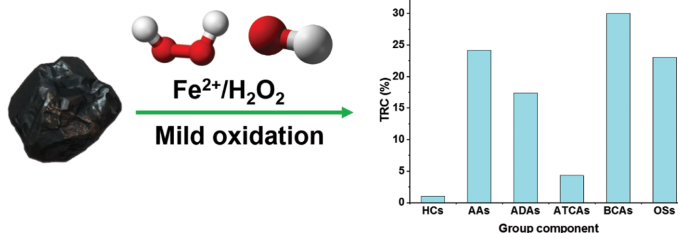


PROCESS SYSTEMS ENGINEERING, PROCESS SAFETY

- Gustavo Matheus de Almeida, Song Won Park, Sung Chan Kim, and Chang Jun Lee 588 **A sampling-based stochastic optimization for a boiler process in a pulp industry**

CATALYSIS, REACTION ENGINEERING

- Shuai Chen, Wei Zhou, Mingjun Liu, Guangbo Zhao, Qingxi Cao, Bojun Zhao, Kaikai Kou, and Jihui Gao 597 **Oxidation of Zhundong subbituminous coal by $\text{Fe}^{2+}/\text{H}_2\text{O}_2$ system under mild conditions**



- Pengfei Feng, Ding Chen, Yucheng Cao, and Yaotong Chen 604 **Numerical analysis on the performance of an SCR monolith reactor**
- Abdul Haleem, Sidra Bibi Syaal, Muhammad Ajmal, Jaweria Ambreen, Sajid Rauf, Nasir Ali, Saz Muhammad, Afzal Shah, Muhammad Abid Zia, and Muhammad Siddiq 614 **Silver and palladium nanoparticle embedded poly(n-isopropylacrylamide-co-2-acrylamido-2-methylpropane sulfonic acid) hybrid microgel catalyst with pH and temperature dependent catalytic activity**
- Zhinan Yan, Yong Kang, Dan Li, and Yu Chun Liu 623 **Catalytic oxidation of sulfur dioxide over $\alpha\text{-Fe}_2\text{O}_3/\text{SiO}_2$ catalyst promoted with Co and Ce oxides**
- Abdullahi Abubakar, Changming Li, Lin Huangfu, Shiqiu Gao, and Jian Yu 633 **Simultaneous removal of particulates and NO by the catalytic bag filter containing $\text{V}_2\text{O}_5\text{-MoO}_3/\text{TiO}_2$**

ENVIRONMENTAL ENGINEERING

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- Yang Ling, Xiaokun Man, Wenbo Zhang, Daolei Wang, Jiang Wu, Qizhen Liu, Mingyan Gu, Yuyu Lin, Ping He, and Tao Jia 641 **Molybdenum trioxide impregnated carbon aerogel for gaseous elemental mercury removal**
- Norasikin Saman, Gamal Abdulaziz Mohammed Alaghbari, Safia Syazana Mohtar, Helen Kong, Khairiraihanna Johari, Noorhalieza Ali, and Hanapi Mat 652 **Adsorption behavior of Ag(I) onto elemental sulfur-encapsulated silica nanocapsules for industrial applications**
- Xu Zhou, Wenbiao Jin, Lan Wang, Lin Che, Chuan Chen, Shao-feng Li, Xue-Ting Wang, Renjie Tu, Song-Fang Han, Xiaochi Feng, and Nan-Qi Ren 663 **Alum sludge conditioning with ferrous iron/peroxymonosulfate oxidation: Characterization and mechanism**

BIOTECHNOLOGY

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- Seungho Baek, Heekyung Park, Keyao Chen, Hakyoung Park, and Donghyun Lee 677 **Development of an implantable PCL/alginate bilayer scaffold to prevent secondary infections**

SEPARATION TECHNOLOGY, THERMODYNAMICS

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- Boyu Li, Yingjie Li, Wan Zhang, Yuqi Qian, and Zeyan Wang 688 **Simultaneous NO/SO₂ removal by coconut shell char/CaO from calcium looping in a fluidized bed reactor**
- Derya Unlu 698 **Synthesis of inorganic doped polyvinyl alcohol/hydroxypropyl methyl cellulose mixed matrix membrane for pervaporative separation of dimethyl carbonate/methanol mixtures**
- Yao Lu, Dongshu Sun, Yang Lu, Yongsheng Yan, and Bo Hu 707 **Zwitterion imprinted composite membranes with obvious antifouling character for selective separation of Li ions**

MATERIALS (Organic, Inorganic, Electronic, Thin Films)

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- Chun-Il Park, Wang-Soo Kim, and Kee-Kahb Koo 716 **Size control of azilsartan by drowning-out crystallization with phase transformation**
- Hamid Heydari, Salman Ahmadipouya, Amirhossein Shoaee Maddah, and Mohammad-Reza Rokhforouz 724 **Experimental and mathematical analysis of electroformed rotating cone electrode**
- Hyunmin Jung, Youngsang Park, Sreedevi Gedi, Vasudeva Reddy Minnam Reddy, Gérald Ferblantier, and Woo Kyoung Kim 730 **Al-doped zinc stannate films for photovoltaic applications**
- Chaesu Kwak, Hyunsu Park, Jun Hyuk Kim, Sehyeong Lim, Jeewon Yang, Jieun Kim, Jieun Kim, Jun Hyup Lee, and Joohyung Lee 736 **Surfactant-free fabrication of phase change material emulsions (PCMEs) using mineral oxide Pickering emulsifiers**