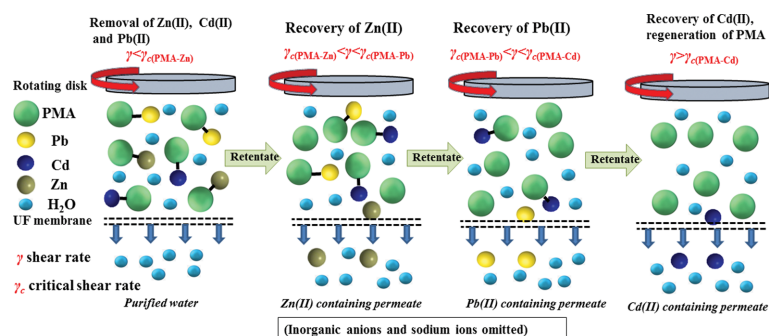


TRANSPORT PHENOMENA

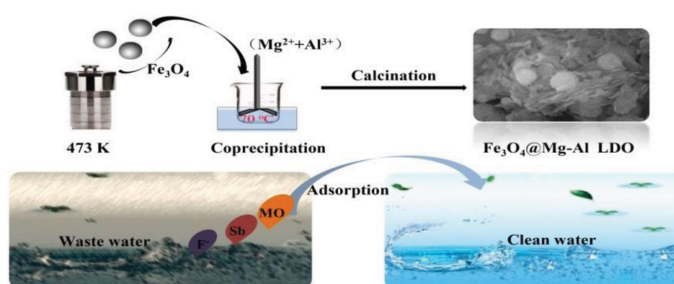
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|---|-----|---|
| Yaquan Sun, Junzhi Yu, Weibing Wang, Shanglin Yang, Xue Hu, and Jingan Feng | 743 | Design of vortex finder structure for decreasing the pressure drop of a cyclone separator |
| Jie Jin and Ying Fan | 755 | PIV experimental study on flow structure and dynamics of square stirred tank using modal decomposition |

ENVIRONMENTAL ENGINEERING

- | | | |
|---|-----|---|
| Xiaoting Zhang, Chenghui Ma, Kang Wen, and Rungping Han | 766 | Adsorption of phosphate from aqueous solution by lanthanum modified macroporous chelating resin |
| Xinghao Liu, Shuheng Hu, Di Xu, and Dadong Shao | 776 | Removal of U(VI) from aqueous solution using carboxymethyl cellulose-modified Ca-rectorite hybrid composites |
| Hui-Shang Le and Yun-Ren Qiu | 784 | Selective separation of Cd(II), Zn(II) and Pb(II) from Pb-Zn smelter wastewater via shear induced dissociation coupling with ultrafiltration |



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| Xinyue Zhang, Bushi Dai, Shucheng Ren, Zenan Hu, Xin Zheng, Yao Wang, Hongbin Sun, Dun Niu, and Linshan Wang | 792 | Iron diffusion-doped magnesium-aluminum layered double oxides as a multi-functional adsorbent for removal of F^-, Sb(III) and methyl orange contaminants from water |
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| Hossein Esmaili, Rauf Foroutan, Dariush Jafari, and Mohammad Aghil Rezaei | 804 | Effect of interfering ions on phosphate removal from aqueous media using magnesium oxide@ferric molybdate nanocomposite |
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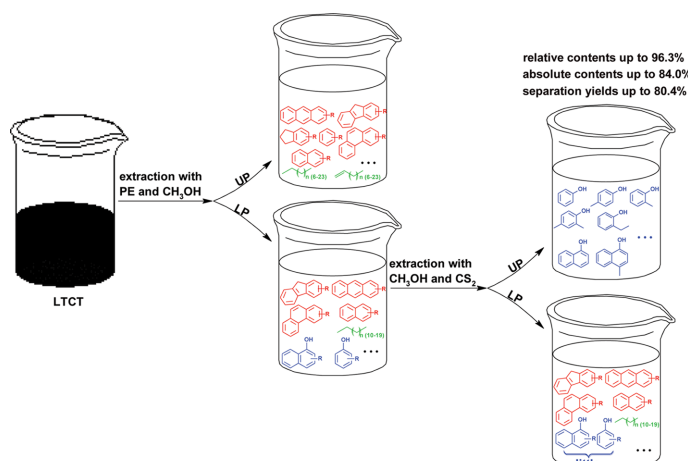
BIOTECHNOLOGY

- | | | |
|---|-----|---|
| Seyed Ali Jafari, Shahriar Osfour, and Reza Azin | 815 | Modelling of batch biomethanation process for maximizing income based on values of consumed and produced gases |
| Renjie Tu, Wenbiao Jin, Song-Fang Han, Binbin Ding, Shu-hong Gao, Xu Zhou, Shao-feng Li, Xiaochi Feng, Qing Wang, Qinhui Yang, and Yu Yuwen | 827 | Treatment of wastewater containing linear alkylbenzene sulfonate by bacterial-microalgal biological turndtable |

SEPARATION TECHNOLOGY, THERMODYNAMICS

Hua-Shuai Gao, Zhi-Min Zong,
Zheng Yang, Dao-Guang Teng,
Xiu-Hua Sun, Li Yan, Xian-Yong Wei,
Qing-Jie Guo, Tian-Sheng Zhao,
and Hong-Cun Bai

835 Separation of arenols from a low-temperature coal tar by liquid-liquid extraction



Synopsis: Liquid-liquid extraction has the potential to be considered as a sustainable alternative for separating arenols.

Yonghui Li, Mingkai Wang,
Xingxing Cao, and Zhongfeng Geng

839 Particle resolved CFD simulation on vapor-phase synthesis of vinyl acetate from ethylene in fixed-bed reactor

Russel J. Galanido, Dong Sun Kim,
and Jungho Cho

850 Separation of methanol-chloroform mixture using pressure-swing distillation: Modeling and optimization

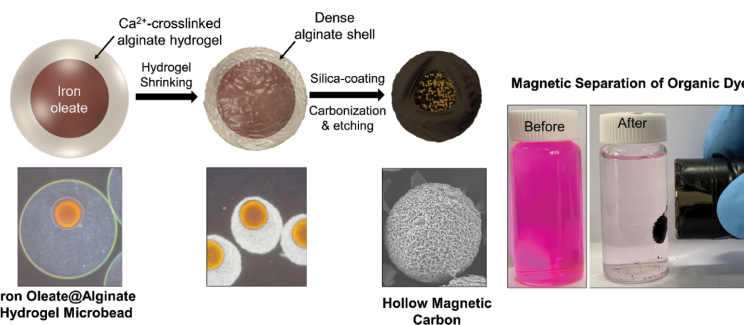
Sayed Mohsen Hosseini, Fatemeh Karami,
Samaneh Koudzari Farahani,
Samaneh Bandehali, Jiangnan Shen,
Ehsan Bagheripour, and Amin Seidypoor

866 Tailoring the separation performance and antifouling property of polyethersulfone based NF membrane by incorporating hydrophilic CuO nanoparticles

MATERIALS (Organic, Inorganic, Electronic, Thin Films)

Soo Young Yun, Jun Yup Lee,
and Jaeyun Kim

875 Synthesis of hollow magnetic carbon microbeads using iron oleate@alginate core-shell hydrogels and their application to magnetic separation of organic dye



Uniform iron-oleate@alginate core-shell microgels were fabricated by electrostatic extrusion. Under carbonization of core-shell microgels, hollow magnetic carbon microbeads were fabricated by in-situ formation of iron oxide nanoparticles and porous carbon shells. The alginate-derived hollow magnetic carbon microbeads were used for magnetic separation of water-polluting organic dyes.

Longfei Liu, Zhongli Ji, and Xin Luan

883 Multi-objective optimization model of high-temperature ceramic filter

Ji-Hoon Han, Seung Pil Park,
and Sungwook Chung

891 Solvo-hydrothermal synthesis of calcium phosphate nanostructures from calcium inositol hexakisphosphate precursor in water-ethanol mixed solutions

Quang Nhat Tran, Il Tae Kim,
Jaehyun Hur, Ji Hyeon Kim,
Hyung Wook Choi, and Sang Joon Park

898 Composite of nanocrystalline cellulose with tin dioxide as Lightweight Substrates for high-performance Lithium-ion battery

POLYMER, INDUSTRIAL CHEMISTRY

Fan-Long Jin, Rong-Rong Hu,
and Soo-Jin Park

905 Improved impact strength of poly(lactic acid) by incorporating poly(butylene succinate) and silicon dioxide nanoparticles

- Guang-jin Zhu, Hai-yan Tang,
Peng-hui Qing, Hong-ling Zhang,
Xi-chuan Cheng, Zai-hua Cai,
Hong-bin Xu, and Yi Zhang
- 911 **A monophosphonic group-functionalized ion-imprinted polymer for a removal of Fe³⁺ from highly concentrated basic chromium sulfate solution**
- Woong Gi Lee and Sang Wook Kang
- 921 **Preparation and characterization of porous cellulose acetate with copper (II) nitrate additives for separator applications**