
文献清单：分离纯化技术研究 MDPI Purification

作者：writer 来源：科学网

本文原地址：<https://www.iikx.com/news/progress/39974.html>

本文仅供学习交流之用，版权归原作者所有，请勿用于商业用途！

文献清单：分离纯化技术研究 MDPI Purification。期刊名：Purification

期刊主页：<https://www.mdpi.com/journal/purification>

纯化技术的快速发展正推动化工、环境、医药等领域从传统粗放式分离向高效、绿色、精准的精制与资源回收模式转变。本专题汇集了发表于Purification的系列研究，系统展示了纯化技术在环境治理（水/空气/气体净化、污染物去除）、生物医药（生物基原料、抗体与疫苗纯化）、精细化工（超高纯物质、无机化学品精制）及食品工程（天然产物提取、杂质控制）等关键领域的创新应用。研究涵盖了从新型分离材料（功能化吸附剂、纳米膜、色谱固定相）、先进工艺强化技术（光催化氧化、电化学分离、膜耦合过程）到智能优化系统（化学计量学建模、设备数字化设计、批量纯化自动化控制）等核心技术突破，共同描绘了纯化科技赋能绿色制造、生态保护与大健康产业的未来图景。

1. Predictive Modeling of Air Purification Efficiency in Nano-TiO₂-Modified Photocatalytic Cementitious Composites Using High-Resolution EDS Mapping and Mercury Intrusion Porosimetry

纳米二氧化钛改性光催化水泥基复合材料空气净化效率预测建模——基于高分辨EDS图谱与压汞法

<http://www.mdpi.com/3042-6197/1/1/1>

Chilmon, K.; Kalinowski, M.; Jackiewicz-Rek, W. Predictive Modeling of Air Purification Efficiency in Nano-TiO₂-Modified Photocatalytic Cementitious Composites Using High-Resolution EDS Mapping and Mercury Intrusion Porosimetry. Purification 2025, 1, 1.

2. Salt Removal and Peptide Recovery by Crossflow Membrane Filtration of Calanus finmarchicus Hydrolysate

基于十字流膜过滤的北极哲水蚤水解液脱盐与多肽回收

<http://www.mdpi.com/3042-6197/1/1/2>

Manamperuma, L.D.; Dibdiakova, J.; Kjønnø, O.; Rusten, B.; Matic, J.; Wubshet, S.G.; Vik, E.A. Salt Removal and Peptide Recovery by Crossflow Membrane Filtration of Calanus finmarchicus Hydrolysate. .

Purification 2025, 1, 2.

3. Methodologies Used to Determine the Main Markers of Indoor Air Quality

室内空气质量关键指标检测方法综述

<http://www.mdpi.com/3042-6197/1/1/3>

Notardonato, I.; Di Fiore, C.; Avino, P. Methodologies Used to Determine the Main Markers of Indoor Air Quality. Purification 2025, 1, 3.

4. Mass Transfer Resistance Considerations for Dye Adsorption on Activated Carbon

活性炭吸附染料过程中的传质阻力研究

<http://www.mdpi.com/3042-6197/1/1/4>

Gwadera, M.; Brzoskwinia, P.; Hnatyk, S.; Kazberuk, G. Mass Transfer Resistance Considerations for Dye Adsorption on Activated Carbon. Purification 2025, 1, 4.

5. Enhanced Heparin Adsorption from Porcine Mucosa Using Beta Zeolites: Optimization and Kinetic Analysis

沸石强化猪黏膜肝素吸附及工艺优化与动力学分析

<http://www.mdpi.com/3042-6197/1/2/6>

Butt, L.; Das, A.; Tabibi, A.; Rehmani, M.; Karimi, B. Enhanced Heparin Adsorption from Porcine Mucosa Using Beta Zeolites: Optimization and Kinetic Analysis. Purification 2025, 2, 6.

6. Methodology for Assessing Phosphorus Adsorption Kinetics in Novel Constructed Wetland Materials

新型人工湿地基质磷吸附动力学评价方法构建

<http://www.mdpi.com/3042-6197/1/2/7>

Hilgenfeldt, V.; Rübner, K.; Hahn, A.; Steinmetz, H. Methodology for Assessing Phosphorus Adsorption Kinetics in Novel Constructed Wetland Materials. Purification 2025, 2, 7.

7. Dewatering of Sweet Whey Using Forward Osmosis on an Industrial Scale

工业级正渗透技术应用用于甜乳清脱水浓缩研究

<http://www.mdpi.com/3042-6197/2/1/1>

Greisner, B.; Rieñcker, M.; Rögener, F.; Lerch, A. Dewatering of Sweet Whey Using Forward Osmosis on

an Industrial Scale. Purification 2025, 2, 1.

8. Photo-Fenton Reaction Catalyzed by Natural Iron Ore from a City of Bandj é li in Northwestern Togo for the Elimination of Paracetamol in Aqueous Media

多哥班杰利天然铁矿催化光芬顿降解水体对乙酰氨基酚

<http://www.mdpi.com/3042-6197/2/1/3>

Kessouagni, M.J.; Koriko, M.; Fiaty, K.; Charcosset, C.; Tchangbedji, G. Photo-Fenton Reaction Catalyzed by Natural Iron Ore from a City of Bandj é li in Northwestern Togo for the Elimination of Paracetamol in Aqueous Media. Purification 2025, 2, 3.

9. Engineering Enhanced Alkaline Stability of Recombinant Protein A for Improved Monoclonal Antibody Affinity Purification in Industrial Applications

重组 A 蛋白碱性稳定性改造及其工业级单抗亲和纯化应用

<http://www.mdpi.com/3042-6197/2/2/4>

Serban, S.; Li, Y.J.; Li, G.; Gu, T.N.; Liu, L.; Lei, X.J.; Tinsley, C.; Kou, X.K.; Basso, A. Engineering Enhanced Alkaline Stability of Recombinant Protein A for Improved Monoclonal Antibody Affinity Purification in Industrial Applications. Purification 2025, 2, 4.

10. Leaching of Platinum Group Metals from Spent Automotive Catalytic Converters Using Deep Eutectic Solvents: A Review

低共熔溶剂浸出废旧汽车催化剂铂族金属研究综述

<http://www.mdpi.com/3042-6197/2/2/5>

Spathariotis, S.; Zagoraiou, E.; Moschovi, A.M.; Polyzou, E.; Yakoumis, I. Leaching of Platinum Group Metals from Spent Automotive Catalytic Converters Using Deep Eutectic Solvents: A Review. Purification 2025, 2, 5.

11. Pulsed Electric Field Conditioning for Purification-Oriented Ethanol – Water Leaf Extraction: Translation Indices and Pareto Screening

脉冲电场调控叶类生物质醇水萃取及纯化效能转化与帕累托筛选

<http://www.mdpi.com/3042-6197/2/2/6>

Pappas, V.M. Pulsed Electric Field Conditioning for Purification-Oriented Ethanol – Water Leaf Extraction: Translation Indices and Pareto Screening. Purification 2025, 2, 6.

期刊介绍

主编： Francesco Vegliò 教授

工业与信息工程及经济系，拉奎拉大学，意大利

期刊Purification (ISSN 3042-6197) 是一个国际开源期刊，为化学、生物学、环境工程等领域中纯化相关的理论、新型技术及应用提供了高水平交流平台，主要刊载综述和常规研究论文，鼓励科研工作者尽可能详细地发表其实验与理论成果，因此对论文篇幅不设限制，要求作者提供完整的实验细节以确保研究结果的可重复性，其研究范围涵盖超纯物质、水净化、空气净化、气体净化、生物基原料/产品纯化、无机化学纯化、纯化技术、各类过滤器设计、色谱柱设计（形状、固定相填充）、批量纯化及化学计量学在纯化中的应用等领域。

来源：Purification

更多 科学进展 请访问 <https://www.iikx.com/news/progress/>

本文版权归原作者所有，请勿用于商业用途，[爱科学iikx.com](https://www.iikx.com)转发