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In this issue

Research Article

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Reprocessable Non-Isocyanate Polyurethane Vitrimers

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Non-isocyanate polyurethanes (NIPUs, polyhydroxyurethanes, PHUs), have emerged as sustainable alternatives to conventional isocyanate-polyol polyurethanes. However, the permanent cross-links in traditional linear, crosslinked polyhydroxyurethane polymer networks hinder their recyclability for high-value applications. In this study, we provide a comprehensive overview ...

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Optical spectroscopic analysis, supercapacitance, photocatalysis of BaTi_xFe₁₂-(4/3)xO₁₉ hexagonal nanoparticles

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Author(s): Amina Ibrahim Ghoneim*

Obviously, BaTixFe12-(4/3)xO19 Hexagonal nanocrystals are excellent candidates as photocatalysts in water purification, as well as using them as electrode materials for supercapacitors and energy storage applications. M-Type Hexagonal nanoparticles (BaTixFe12-(4/3)xO19, 0 x 1) with the magneto-plumbite structure were formerly synthesized by coprecipitation proced ...

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Reclamation of wastewater polluted with antihypertensive drug residues by the biological+solar-photocatalytic sequential treatment plant

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Author(s): Marina Aliste, Gabriel Pérez-Lucas, Abderrazak El Aatik, Virginia Hernández, Ginés Navarro, José Fenoll and Simón Navarro*

The quality of polluted wastewater processed by conventional Wastewater Treatment Plants (WWTPs) is in some cases insufficient to reach the degree of purity required. Pharmaceuticals are frequently identified in the aquatic environment, owing to their constant release from WWTPs. Thus, in recent years, they are cataloged as pseudo-persistent pollutants having been rec ...

Abstract View Full Article View DOI: 10.17352/ojc.000030