

ADVANCED FUNCTIONAL MATERIALS

NANOPOROUS SORBENTS

The importance of rare-earth elements in the global economy is booming as they are used in numerous advanced technologies. However, industrially, their extraction and purification remain tedious. Functional nanoporous hybrid materials, represented by D. Larivière, F. Kleitz, and co-workers as an asteroid preferentially cycling around a rare-earth planet, demonstrate enhanced affinity for the rare-earths with a high level of reusability, which increases their marketable potential. The image emphasizes the selectivity and reusability of these new extraction materials towards rare-earths, rather than gravitating around actinide and other metal contaminants.

