Extraction of Lanthanides from Electronic Waste Using Zeolite Prepared from Low Coast Precursors

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One promising new process promises to more quickly and inexpensively with less environmental impact is using of acetic acid at the presence of small amount of nitric acid to leach and recover lanthanides metal ions and/or other precious metals from electronic devices. Activated zeolites were prepared in different forms by solid-solid reaction of silica and alumina (from low coast resources) with stabilizer and mineralizer. The reaction was confirmed by XDR. The prepared Zeolite was used as adsorbent for metal ions which leached from the e- waste via ion exchange process. The adsorption results were detected by ICP (Inductively Couple Plasma) 710AS Varian Spectrophotometer

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