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Selective recovery of valuable metals from crushed electronic waste (Conference Paper)

Akhmetvaliyeva, Z.M.(a) Email Author, Kulenova, N.A.(a), Takasaki, Y.(b), Mamyachenkov, S.V.(c), Anisimova, O.S.(c), Mudashiru, L.K.(d), Fokina, E.L.(e), Bast, J.(f)

a)East Kazakhstan State Technical University, 19 Serikbayev street, Ust-Kamenogorsk, 070010, Kazakhstan

b)Akita University, 1-1 Tegata Gakuen machi, Akita, 010-8502, Japan

c)Ural Federal University, 17 Mira street, Ekaterinburg, 620002, Russian Federation

Краткое описание

This research was carried out to recover valuable metals from the electronic waste (e-waste). E-waste samples were crushed and thermally activated under 450 °C within 1 hour. The optimal temperature of the thermal treatment, at which all organic phases are removed and metal's forms turned into oxides was determined. Leaching of thermally activated material using EDTA at room temperature, pH 7 for 1 hour resulted in greater than 95 % extraction of lead. Non-ferrous metals were extracted at 85 °C with a leaching solution of 2 M H2SO4 which resulted in recovery of more than 98 % of copper within 3 hours. © Published under licence by IOP Publishing Ltd.