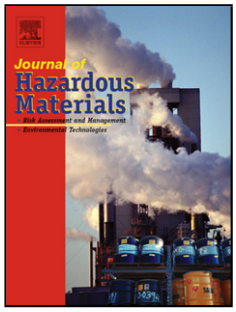

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Experimental design and optimization of leaching process for recovery of valuable chemical elements (U, La, V, Mo and Yb and Th) from low-grade uranium ore

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Highlights

The experimental design for optimization of leaching process of uranium from low-grade ores was applied

Multi-objective optimization method based on desirability approach was employed

The recovery of associated metals like vanadium, molybdenum and lanthanides was considered

The effects of factors were identified by 3-D surface plots

The optimum condition for valuable metals: P=5 bar, T=120 ^{o}C and t=90 min has been determined

Abstract