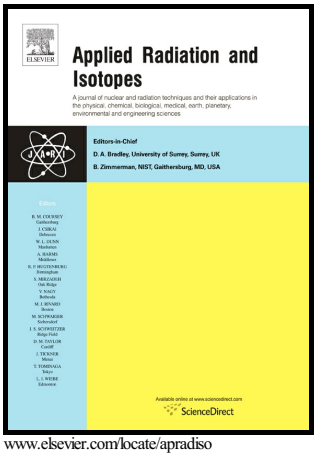

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Green approach for radium isotopes removal from TENORM waste using humic substances as environmental friendly

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Abstract

Humic substances (HS) of the dark-colored are found in all soils and sediments as natural organic matter (NOM). HS has high affinity interacted with various organic and inorganic pollutants. Therefore, the HS were isolated from agriculture soil and their potential to remove radium species ($^{226+228}$Ra) from TENORM scale waste produced from oil production was investigated. Different factors affecting on the efficient removal of radium species by natural humic and natural fulvic acids (NHA and NFA) were investigated by batch technique. These