

عنوان مقاله:

Nuclear Radiations Induced Change in Thermal and Structural Properties of γ -[α -(γ -Hydroxybenzylideneamino) Phenylimino] Methyl Phenol (PAM) Schiff Base

محل انتشار:

مجله علوم و فنون هسته ای، دوره 31، شماره 2 (سال: 1389)

تعداد صفحات اصل مقاله: 0

نویسندگان:

H.G. Mohammadi - Department of Physics, Faculty of Science, Urmia University, P.O. Box: , Urmia- Iran

R Khodabakhsh - Department of Physics, Faculty of Science, Urmia University, P.O. Box: , Urmia- Iran

A. Hassanzadeh Hassanzadeh - γ - Department of Chemistry, Faculty of Science, Urmia University, P.O. Box: , Urmia- Iran
Research Center of Nanotechnology of Urmia University, P.O. Box: , Urmia- Iran

خلاصه مقاله:

The variation of thermal and structural properties of γ -[α -(γ -hydroxybenzylideneamino) phenylimino]methylphenol (PAM) Schiff base were studied using differential scanning calorimetry (DSC) and powder X-ray diffraction techniques before and after fast neutron (1.050 and 1.740 kGy), beta (11.01 Gy) and gamma (453.0 Gy) irradiations. Under fast neutron irradiation, the melting and decomposition enthalpies and temperatures were changed with increasing the irradiation time. The kinetic parameters were calculated using both model free isoconversional and Kissinger analysis methods. Gamma irradiation showed similar effect on structural and thermal properties.

کلمات کلیدی:

Schiff Base, Model- Free Isoconversional Method, Kissinger Analysis Method, Fast Neutron, Beta, Gamma Irradiations

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1366410>

