

diation by γ rays at dose rate $1 \times 10^4 \text{ Gy/h}$. The space charge peak's value and peak temperature are dramatically decreased with doses below $1 \times 10^3 \text{ Gy}$ and then tend to a certain value respectively. The mechanism of decreasing the trap depth has been investigated by means of the comparing with TSC spectra of amorphous PET electret. It has been confirmed that the main species of charge carriers of amorphous PET are the holes.

KEY WORDS Thermally Stimulated Current Electret; Trapping; Space charge; Species of charge carriers; Initial density of charge carriers.

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DIELECTRIC SPECTRA OF IRRADIATED TRIOXANE AND ITS POLYMER

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ABSTRACT The molecular motion and structure transitions of γ -irradiated trioxane and its polymer have been studied by the dielectric measurement. It was found that there was a change of microstructure (crystal lattice defect) in trioxane between 45°C and 55°C . Release from defect and recombination of active species (R^+) produced by radiation took place with rise of the temperature of the system. Since the polarity and the molecule motion lessened after postpolymerization of irradiated trioxane, the dielectric loss tangent ($\text{tg}\delta$) was decreased. The transition from trioxane to polyoxymethylene has been observed from the dielectric spectra. The structure change of polyoxymethylene resulted from radiation degradation has been discussed by means of the dielectric spectrum.

KEY WORDS Trioxane; Polyoxymethylene; Irradiation; Postpolymerization; Dielectric loss tangent; Temperature; Frequency; Structure transition; Molecular motion.

我国著名放射生物学家朱壬葆教授在京逝世

辐射研究与辐射工艺学会名誉理事,我国著名的医学教育家、放射生物学家、生理学家、中科院生物学部委员、一级研究员朱壬葆教授因病于1987年10月24日在北京逝世,终年78岁。

半个世纪以来,朱壬葆教授为发展我国的医学科学和教育事业,呕心沥血,终日操劳。他领导研制成我国第一代抗辐射药物,完成了我国放射病的第一个药物预防方案,为保证部队的需要作出了重要贡献,并在1985年获国家级科学技术进步奖特等奖。五十年来,他先后在国内外发表著作和论文80余篇,为祖国的科学事业付出了心血,做出了重大贡献。

红烛燃尽光犹在,朱壬葆教授一生对祖国无限的热爱,对事业执着的追求,将永远激励着我们努力工作。

朱壬葆教授的逝世是我国医学界、放射生物学界的一大损失。

(本刊讯)