Recent Publications of Members

In this section are printed the abstracts of articles published recently by the members of the Physical Society of the Republic of China in foreign journals.

A Physical Theory of Acupuncture Anesthesia

CHUN CHIANG

Biophysics Laboratory, Institute of Physics, Academia Sinica, NanKang, Taipei, Taiwan, Republic of China

[Physiol. Chem. and Phys. 6, pp. 85-86 (1974)]

This note proposes that the anesthesia effect of acupuncture is produced by blocking the pain signals from transmitting along the nerves, the blocking being due to pressure effect; the electrostatic effect and the piezoelectric effect. Some evidences are given.

Study of the $^{28}Si(^{3}He, \alpha)^{27}Si$ Reaction at 14 MeV Bombarding Energy

WEN-MING, C. S. LIN, P.S. SONG and J. C. CHOU

Institute of Nuclear Energy Research, Atomic Energy Council-Lungtan, Taiwan

[Il *Nuovo* Cimento, Serie 11, Vol. 27A, pag. 412-420 (1975)]

The angular distributions of the ^{3}He and α-particles emitted from a silicon target bombarded with a 14 MeV doubly charged ^{3}He beam have been measured at 20 angles between 10° and 110° with a surface barrier solid-state detector. The analysis of the elastic scattering $^{28}Si(^{3}He, ^{3}He)^{28}Si$ with the optical model and the analysis of the $^{28}Si(^{3}He, \alpha)^{27}Si$ angular distributions with the DWBA theory indicate that these reactions are mainly direct in nature. Within the limitations discussed in the text, spectroscopic factors of 2.92, 0.32, 0.39 and 0.61 were assigned to the ground state and the 0.78 MeV, 0.96 MeV and 2.65 MeV excited states, respectively.

Energy Levels and Transitions in ^{71}As from (p, γ) Reaction on ^{70}Ge

Y.C. LIU, T.H. HSU, E.K. LIN, P.K. TSENG, C.C. HSU and C. W. WANG

Tsing Hua University, Academia Sinica and Taiwan University, Hsinchu, Taiwan, Republic of China

[Journal of the Physical Society of Japan, Vol. 39, pp. 1-6, No. 1, July, 1975]

The $^{70}Ge(p, \gamma)^{71}As$ reaction has been investigated in the energy range from $E_p = 1.0$ to 2.5 MeV. Excitation function was obtained for the reaction over this energy region. High-resolution measurements of