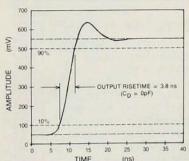


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letters

trol. The United States and a number of other countries also employ finger-printing for precisely the same purposes. Furthermore, it is inaccurate to say that in Japan only criminals and foreigners are fingerprinted, since all uniformed members of the police, the Air and Ground Self-Defense Forces and the immigration bureau, among others, are required to carry with them identification cards bearing their fingerprints.

▶ Altman's re-entry permit was called into question and denied because he deliberately refused to comply with the statutory requirement of fingerprinting—that is, he has refused, and expressed his intention to continue to refuse, to abide by the law.

▶ Altman calls on his colleagues in physics to help petition the Japanese government to abolish the fingerprinting requirement—and cites evidence of such petitions from various groups within Japan. Everyone residing in Japan is constitutionally guaranteed the right to freely express opinions and to criticize the legal system and government policies. Nevertheless, freedom of speech and petition does not provide Altman, or anyone else, with license to violate a law he objects to.

▶ Korean residents born in Japan have the avenue open to them to become citizens, and many have done so. But those who choose to preserve their Korean nationality are required to observe the same registration regulations that apply to all other foreign nationals living in Japan.

During the three decades since their enactment, a number of amendments have been made to the Alien Registration Law and related regulations with a view toward simplifying or otherwise easing fingerprinting and other requirements. Recently, a draft bill was submitted to the legislature that will, as a rule, require aliens to be fingerprinted only once, rather than every five years as at present.

ITARU UMEZU Japan Information Center Consulate General of Japan New York, New York

8/87

Leaders of LEED

In his article on vacuum tunneling (August 1986, page 26) Calvin F. Quate states that the famous 7×7 reconstruction of the silicon (111) surface "was first observed more than 25 years ago when Jim Lander at Bell Laboratories found 49 additional spots in his lowenergy electron-diffraction patterns." The 7×7 LEED pattern was first ob-



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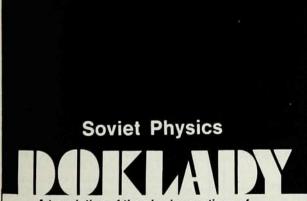
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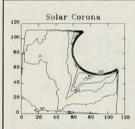
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letters

served by Robert E. Schlier and Harrison E. Farnsworth.1 Subsequently Lander reproduced their results in the new display-type LEED apparatus that had been developed by Lester Germer in 1960. Germer used a flat fluorescent screen-Lander's improvement was to use a curved screen. (He also introduced improved kinematical LEED analysis.) Details of the early LEED work of Farnsworth's laboratory, including the first observations of enlarged unit cells on Ge, InSb and GaSb as well as Si, appear in his Welch Memorial Lecture.2 The lab's success was based on the development of ion bombardment and annealing as a method of producing atomically clean surfaces on semiconductors. The first LEED measurements on semiconductor surfaces produced by cleavage in vacuum were also carried out in this laboratory.3

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- R. E. Schlier, H. E. Farnsworth, J. Chem. Phys. 30, 917 (1959).
- H. E. Farnsworth, J. Vac. Sci. Technol. 20, 271 (1982).
- D. Haneman, Phys. Rev. 119, 563, 567 (1960).

D. HANEMAN University of New South Wales Kensington, New South Wales, Australia

11/86

8/87

Needed: Ice advice

I am an Optical Society of America member who will be representing Puerto Rico in the sport of luge (the luge is a small sled raced on an ice track) at the XVth Winter Olympic Games, to be held in Calgary, Canada, in February 1988. I am seeking advice and suggestions from the physics community for improving the performance of my sled. I would particularly appreciate hearing from those with expertise in ice friction and aerodynamics. Those interested may contact me at Rd. 1, Box 399A, Nassau NY 12123.

GEORGE F. TUCKER Nassau, New York

Moe Berg in the movies

With my partner, Jerry Feldman, I have received a grant from the American Film Institute to continue work and research on our film about the life and times of Morris (Moe) Berg. Berg was a man who lived between two worlds. For 18 seasons he played major league baseball and was the celebrity