

Table of Contents

Preface

Processing of Thin Film Silicon Solar Cells under Ionic Bombardment Control

M. Kondo and A. Matsuda 1

Influence of the Plasma Regime on the Structural, Optical, Electrical and Morphological Properties of a-Si:H Thin Films

H. Aguas, R. Martins, Y. Nunes, M.J.P. Maneira and E. Fortunato 11

Silicon Films Produced by PECVD under Powder Formation Conditions

R. Martins, H. Águas, V. Silva, I. Ferreira, A. Cabrita and E. Fortunato 21

Microgravity Experiments in the MIR Space Station

A.P. Nefedov 31

Laser-Excited Mach Cones in Plasma Crystals

A. Melzer, S. Nunomura, D. Samsonov and J. Goree 41

Laser Excitation of Oscillations and Waves in Dust Crystals: a Tutorial

A. Piel 47

Charging Kinetics of Dust Particles with a Variable Mass

S.A. Trigger 59

Influence of Dust Particles on Sheaths in an Oblique Magnetic Field

Y.I. Chutov, O.Y. Kravchenko and V.S. Yakovetsky 63

Radio Frequency Discharge with Dust Particles

Y.I. Chutov, W.J. Goedheer, O.Y. Kravchenko, V.M. Zuz and M. Yan 69