

of trap states associated with structural defects in space-charge-limited conduction in homomolecular van der Waals crystals and films. This book contains a comprehensive account of his work on this topic carried out during the past decade and makes his results readily available for the first time in English.

Organic Molecular Crystals is translated by J. Eiduss of a revised version of a 1978 Russian monograph by Silinsh. The literature references have been updated through early 1980. The major subjects considered by the author are the electrostatics of charges in dielectric crystals, the nature of structural defects in van der Waals crystals, the generation of localized trap states by these defects, and the experimental consequences of such trap states on exciton spectroscopy and charge carrier space-charge-limited transport. His examination of structural defects and exciton spectroscopy is confined to planar aromatic hydrocarbons, with heavy emphasis on anthracene. A generous sampling of data and analyses of space-charge-limited conduction includes a consideration of several heterocyclic species as well as aromatic hydrocarbons.

As Silinsh himself stresses, this monograph is a personal account of his own work rather than a review or text. Citations of the contributions of others are often incomplete, and these contributions are rarely discussed in depth or incorporated in figures and tables. In spite of the generality of its title, the book does not include any systematic consideration of topics like thermal motions and thermodynamic properties. Moreover, many of the interpretations and concepts advanced by the author are subjects of controversy. Hence, the monograph is not well suited for use as a text even at the graduate level. Its primary audience is professionals working on transport in organic solids. For this group the monograph is a useful and convenient synopsis of the author's contributions to the subject: contributions which are considerable in both breadth and importance and which previously were largely unavailable in the English literature.

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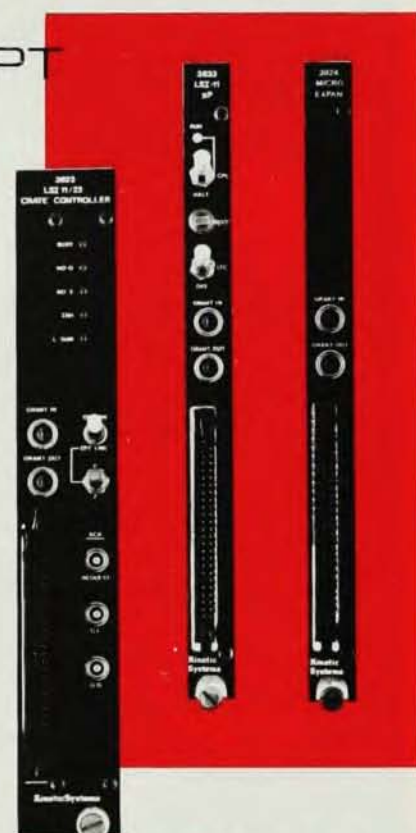
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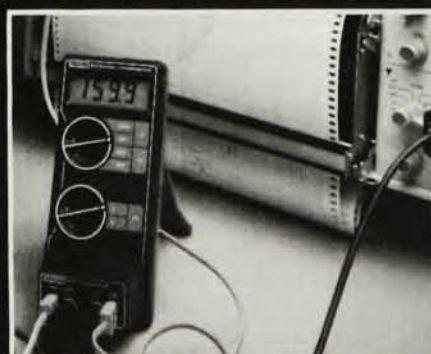
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