

NEW BOOKS ON PHYSICS

T. O. VREDEN-KOBETSKAYA

Usp. Fiz. Nauk 68, 359-366 (June, 1959)

Abdullaev, A. A., Энергия атомного ядра. (The Energy of the Atomic Nucleus). M., Uchpedgiz, 1958, 136 pp. illustr., 1 table ("Schoolboy's Library"). 25,000 copies, 2.00 rub.

Contents: Introduction. History of the atom. Nuclear energy. Radioactive isotopes. Cosmic radiation.

Antselovich, E. S., Радиотехнические измерения. (Radiotechnical Measurements). M.-L., Gosenergoizdat, 1958, 367 pp. with diagrams. Bibliography pp. 366-367 (34 titles). 10,000 copies, 11.25 rub.

Contents: Foreword. Chapters: 1. Methods of Measuring the Parameters of Oscillating Circuits. 2. Measurement of Current, Voltage and Power in the High and Microwave Frequency Range. 3. Measurement of Tube Parameters. 4. Methods of Measuring the Waveform and Spectrum of Oscillations. 5. Methods of Measuring the Frequency of Electric Oscillations. 6. Measurement of Receiving and Amplifying Systems. 7. Measurement of Transmitting Systems. 8. Measurement of Antenna Systems. 9. Measurement of the Electromagnetic Field. Literature.

Balabukha, V. S. and Fradkin, G. E., Накопление радиоактивных элементов в организме и их выведение. (The Accumulation and Elimination of Radioactive Elements by the Organism). M., Medgiz, 1958, 183 pp. illustr. Bibliography at the end of each section. 7500 copies, 4.70 rub.

Contents: Foreword. Introduction. Part I. Behavior of Radioactive Isotopes in the Organism. Acceleration of the Elimination of Radioactive Isotopes from the Organism under the Influence of Complex-forming Compounds. Part II. Radioactive Strontium. Radioactive Yttrium. Plutonium. Brief Data on the Behavior of Other Osteotropic Radioactive Isotopes in the Organism. General Conclusion.

Белорусский университет им. В. И. Ленина. Ученые записки. Серия физическая. (V. I. Lenin Belorussian University, Scientific Transactions, Physics Series), Issue 41. Minsk, Belorussian State University Press, 1958, 241 pp. with diagrams. Bibliography at the end of each paper, 700 copies, 12.00 rub.

Bethe, H. A. and Morrison, F., Elementary Nuclear Theory. Translated from the English by O. A. Vladimirov, edited by V. B. Berestetskii (2nd edition, amplified and revised), M., Foreign Literature Press, 1958.

Bogoroditskii, N. P. and Fridberg, I. D., Электрофизические основы высокочастотной керамики. (Electrophysical Basis of High-Frequency Ceramics). M.-L., Gosenergoizdat, 1958, 192 pp. illustr. Bibliography pp. 189-192 (89 titles). 5000 copies, 7.50 rub.

Contents: Introduction. High-Frequency Ceramics in Physics and Technology. Part I. Physical Processes in Inorganic Dielectrics. Features of Composition and Technology of High-frequency Ceramics. Literature.

Vavilov, N. F., Электронные лампы. (Electron Tubes). M., Voenizdat, 1958, 94 pp. with circuit diagrams (Radar Engineering) 1.60 rub.

Contents: Introduction. 1. General Information about Tubes. 2. Physical Characteristics and Parameters of Tubes. The Construction of Modern Tubes and their Utilization. Appendices: 1. The System of Tube Nomenclature. 2. Table of Correspondence Between New and Old Tube Designations.

Weiss, K. F., (Standard Radioactive Compounds). Properties, preparation and measurement of activity. Translated from the German. M., Fizmatgiz, 1958, 244 pp. with diagrams. Bibliography at the end of each chapter. 8000 copies, 8.45 rub.

Wolczek, O., (Isotopes in the Service of Man). Translated from the Polish by Yu. P. Terekhov, edited by U. Ya. Margulis, M., Fizmatgiz, 1958, 271 pp. illustr. 20,000 copies, 4.05 rub.

Contents: Foreword by the editor of the translation. Chapters: 1. Modern Ideas about the Structure of Matter. 2. The World of Isotopes. 3. Isotopes in the Service of Man.

Всесоюзное совещание по спектроскопии. (The All-Union Conference on Spectroscopy), 10th ed., L'vov, 1958, Materials... Editorial Board: the late G. S. Landsberg (Chief) et al., L'vov, L'vov University Press, 1958. (U.S.S.R. Min. of Higher Ed., L'vov I. Franko State University, Physics Collection). Volume 2. Atomic Spectroscopy, 568 pp. illustr. Issue 4 (9). Bibliography at the end of each paper. 3000 copies, 37.30 rub.

Gakhov, F. D., Краевые задачи. (Boundary-value Problems). M., Fizmatgiz, 1958, 543 pp. with diagrams. Bibliography pp. 534-540.

Contents: Foreword. Introduction. Chapters: 1. The Cauchy Type Integral. 2. Riemann's Boundary-value Problem. 3. Particular Integral Equations with Cauchy's Kernel. 4. Hilbert's Boundary-value Problem and Particular Integral

Equations with Hilbert's Kernel. 5. Various Generalized Boundary-value Problems. 6. Boundary-value Problems with Discontinuous Coefficients and with Open Contours. 7. Particular Integral Equations for the Case of Open Contours or Discontinuous Coefficients. Literature. Alphabetic Index.

Gel'fand, I. M., Minlos, R. A. and Shapiro, Z. Ya. Представления группы вращений и группы Лоренца, их применения. (Rotation and Lorentz Group Representations and their Applications). 368 pp. with drawings. Bibliography pp. 367-368. 7000 copies, 13.70 rub.

Contents: Foreword. Part I. Rotation Group Representations in Three-dimensional Space. Chapters: 1. The Rotation Group and its Representations. 2. Further Investigations of Rotation Group Representations. Part II. Lorentz Group Representations. 1. The Lorentz Group and its Representations. 2. Relativistically Invariant Equations. Supplement. Bibliography.

Goeppert-Mayer, M. and Jensen, J. H. D., Elementary Theory of Nuclear Shell Structure. Translated from the English by N. N. Kolesnikova, edited by D. D. Ivanenko, M., Foreign Literature Press, 1958.

Guggenheim, E. A. and Prue, J. Physiochemical Calculations. Translated from the English by E. P. Lebedev et al. M., Foreign Literature Press, 1958. (Interscience, New York, 1955).

Gurevich, S. B., Физические процессы в передающих телевизионных трубках. М., (Physical Processes in Television Camera Tubes), М., Fizmatgiz, 1958, 399 pp. illustra. ("Phys.-Math. Library for the Engineer"). Bibliography pp. 389-399 (224 titles). 20,000 copies, 11.50.

Contents: Foreword. Chapters: 1. Fundamental Principles of Image Transmission. 2. Physical Phenomena Utilized in Television Camera Tubes. 3. Electron Optics and Its Application in Television Camera Tubes. 4. Fundamental Processes in Camera Tubes with Charge Storage. 5. Characteristics of Camera Tubes with Charge Storage. 6. Camera Tubes with a Photoemission Storage. 7. Camera Tubes with a Secondary-Emission Storage. 8. The Super-Orthicon. 9. Camera Tubes with Photoconduction Storage. The Vidicon. Conclusion. Literature.

Gusev, N. G., Mashkovich, V. P. and Obvintsev, G. V. Гамма-излучение радиоактивных изотопов и продуктов деления. (Gamma Radiation of Radioactive Isotopes and Fission Products). Theory and Tables. М., Fizmatgiz, 1958, 208 pp. with diagrams. Bibliography pp. 85-89 (260 titles). 9000 copies, 10.75 rub.

Contents: Foreword. Parts: 1. Fundamental Characteristics of Gamma Radiation of Isotopes and Fission Products. 2. Radioactive Isotopes as Gamma Radiators. 3. Quantitative Characteristics of Beta and Gamma Radiation of Fission Products of U^{235} . Appendices: 1. Fundamental Units of Radioactivity. 2. Data Used in the Calculations. 3. Yields and Half-lives of Products of U^{235} by Thermal Neutrons.

Davydov, A. S., Теория атомного ядра. (Theory of the Atomic Nucleus). (Text book for state universities). М., Fizmatgiz, 1958, 611 pp. with drawings. Bibliography pp. 597-607 (433 titles). 12,000 copies, 13.55 rub.

Contents: Foreword. Chapters: 1. Fundamental Properties of Atomic Nuclei. 2. Isotopic Spin of the Nucleus. 3. Energy States of Light Nuclei. 4. Models of Nuclear Structure. 5. Alpha Decay and Nuclear Fission. 6. Fundamentals of Beta Decay Theory. 7. Elements of the General Theory of the Scattering of Particles by a Potential Field. 8. Theory of Nuclear Reactions. 9. Formal Theory of Scattering. 10. General Theory of Polarization of Particles in Nuclear Reactions. 11. Theory of Interaction of Nuclei with Electromagnetic Radiation. 12. Interaction of Slow Neutrons with Nuclei. 13. Optical Model of Nuclear Interactions at Low Energies. 14. Theory of Nuclear Reactions without Formation of a Compound Nucleus. 15. Theory of Nuclear Reactions at High Energies. Appendices: I. General Properties of the Eigenfunctions of the Angular Momentum Operators. II. Electric Multipole Moments of a System of Particles. III. Wave Fields Described by Dirac's Equation. IV. The Classical Energy of Surface Oscillations of the Nucleus in the Hydrodynamic Approximation. Literature. Subject Index.

Davydov, G. B., Основы теории и расчета фазокорректирующих цепей. (Fundamentals of the Theory and Calculation of Phase Correcting Circuits). М. Svyaz'izdat, 1958, 293 pp. with drawings. 4300 copies, 11.20 rub.

Contents: Foreword. Introduction. Chapters: 1. The Influence of Electric Circuits with a Non-linear Phase Frequency Characteristic on the Waveforms of the Signals. 2. The Connection between Amplitude and Phase Frequency Characteristics in Linear Two-Port Networks. 3. Lattice Phase-Shift Networks and their Characteristics. 4. Influence of Losses and Element Tolerances on the Characteristics of Phase-Shift Networks. Appendix A. Appendix B. Table I. Table II.

Demkov, Yu. N., Вариационные принципы в теории столкновений. (Variational Principles in the Theory of Collisions). М., Fizmatgiz, 1958, 168 pp.

with drawings. Bibliography, pp. 166-168 (75 titles). 6000 copies, 5.85 rub.

Contents: Foreword. Chapters: 1. Formulation of the Variational Principle. 2. Connection between Various Formulations of Variational Principles and their Application to the Theory of Collisions. 3. The Symmetry of Functionals, the Principle of Detailed Equilibrium, and the Uniqueness of the Scattering Operator. 4. Scale Variation and the Virial Theorem for Scattering Problems. Conclusion. Literature.

Деформация атомных ядер. (Nuclear Deformation). Generalized Nuclear Model and the Method of Coulomb Excitation. Collection of Articles. Translated from the English, edited by L. A. Sliv, M., Foreign Literature Press, 1958, 383 pp. with graphs. (Physics Problems), bibliography at the end of each article, 17.75 rub.

Contents: Foreword. Alder, Bohr, Huus, Mottelson, and Winther, A Study of Nuclear Structure in Coulomb Excitation by Ions. S. Nilsson, Bound States of Individual Nucleons in Strongly Deformed Nuclei. A. Edmons, Angular Momenta in Quantum Mechanics. A. Simon, Table of Numerical Values of Clebsch-Gordan Coefficients.

Seith, W., Diffusion in Metals. Processes of Position Interchanges. Translated from the second revised and amplified German edition by G. S. Kulikov and R. Sh. Malkovich, edited by B. I. Boltaks, M., Foreign Literature Press, 1958. [Edwards Brothers, Ann Arbor, Michigan 1943].

Zisman, G. A. and Todes, O. M., Курс общей физики. (A Course of General Physics). (Text for Higher Technical Schools). Volume 1, Molecular Physics, Oscillations, and Waves. M., Fizmatgiz, 1958, 320 pp. illustr., 25,000 copies, 7.00 rub.

Contents: Foreword. Introduction. I. Physical Basis of Mechanics. II. Fundamentals of Molecular Physics and Thermodynamics. III. Aggregate States and Phase Transitions. IV. Oscillations and Waves. Subject Index.

Krivoglaz, M. A. and Smirnov, A. A., Теория упорядочивающихся сплавов. (Theory of Ordered Alloys). M., Fizmatgiz, 1958, 388 pp. with diagrams. Bibliography pp. 381-388 (377 titles), 5000 copies, 14.80 rub.

Contents: Foreword. Chapters: 1. General Considerations about the Phenomenon of Ordered Alloys. 2. Thermodynamic Theory of Ordering. 3. Statistical Theory of Ordering. 4. Theory of Diffusion and Ordered Alloys. 5. Problem of the Motion of a Particle in the Field of the Crystal Lattice of an Ordered Alloy. 6. Diffraction of Various Types of Waves by the Crystal Lattice of an Ordered Alloy. 7. Theory of Residual

Electric Resistance of Alloys. 8. Magnetic, Galvanomagnetic, Optical, and Mechanical Properties of Alloys. Literature.

Kubis, L. P., Эрнест Резерфорд. (Ernest Rutherford). Outline of his Life and of his Scientific Activity. M., Uchpedgiz, 1958, 83 pp. illustr. (Classics of Physics). Bibliography at the end of the book (25 titles). 15,000 copies, 1.50 rub.

Курс лекций по физике. (Physics Lecture Course). (For technological departments of correspondence colleges). In 3 volumes. Vol. 1. M., "Soviet Science," 1958. Authors on title page: B. M. Yavorskii, A. A. Detlaf, L. B. Milkovskaya, G. P. Sergeev. Vol. 1. Mechanics, Molecular Physics and Thermodynamics. 1958, 277 pp. with drawings. 30,000 copies, 6.00 rub.

Лабораторные работы по физике. (Laboratory Experiments in Physics). For students of correspondence colleges. Edited by B. A. Sadikov, 4th ed., M., "Soviet Science," 1958, 250 pp. with drawings. (U.S.S.R. Ministry of Higher Education). Authors on title page: G. I. Dluzhnevskii, S. N. Nemirov, B. A. Sadikov, L. F. Sukhodolskaya. 39,500 copies, 3.00 rub.

Landau, L. D. and Lifshitz, E. M., Теоретическая физика. (Theoretical Physics). (Revised). Vol. 1. M., Fizmatgiz, 1958, Vol. 1. Mechanics, 1958, 206 pp. with drawings, 35,000 copies, 5.25 rub.

Contents: Foreword. Chapters: 1. Equations of Motion. 2. Conservation Laws. 3. Integration of the Equations of Motion. 4. Particle Collisions. 5. Small Oscillations. 6. Motion of a Solid Body. 7. Canonical Equations. Subject Index.

Lebedev, V. L., Случайные процессы в электрических и механических системах. (Random Processes in Electrical and Mechanical Systems). M., Fizmatgiz, 1958, 176 pp. with drawings. Bibliography pp. 175-176 (42 titles). 10,000 copies, 6.45 rub.

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Mamonkin, I. G., Импульсные усилители. (Pulse Amplifiers). M.,-L., Gosenergoizdat, 1958, 208 pp. with drawings. Bibliography at the end of the book. 36,000 copies, 10.40 rub.

Contents: Foreword. Chapters: 1. General Information on Pulse Amplifiers. 2. Methods of Circuit Analysis of Pulse Amplifiers. 3. Basic Circuits of Pulse Amplifier Stages. 4. Feedback

Pulse Amplifiers. 5. Auxiliary Circuits of Amplifiers. 6. Multistage Amplifiers. 7. Fourier Transformation and Approximation Methods for the Estimate of Pulse Distortion. Appendix 1. Appendix 2. Literature.

International Conference on the Peaceful Use of Atomic Energy. Geneva, 1955. Reports of the International Conference on the Peaceful Use of Atomic Energy, which took place in Geneva on August 8-20, 1955. (United Nations). Vol. 6. Geology of Uranium and Thorium. M., 1958. 966 pp., 67.90 rub.

Morse, M. and Feshbach, H. Methods of Theoretical Physics (In 2 volumes). Translated from the English, edited by S. P. Alliluyev et al., vol. 1, M., Foreign Literature Press, 1958. (McGraw-Hill, New York, 1953).

Naïmark, M. A., Линейные представления группы Лоренца. (Linear Representations of the Lorentz Group). M., Fizmatgiz, 1958, 376 pp. with drawings. Bibliography pp. 374-376 (38 titles). 7000 copies, 14.15 rub.

Contents: Foreword. Chapters: 1. The Rotation Group of Three Dimensional Space and the Lorentz Group. 2. Representations of the Rotation Group of Three Dimensional Space. 3. Irreducible Linear Representations of the Proper and Complete Lorentz Group. 4. Invariant Equations. Appendices I-IX. Literature.

Некоторые вопросы теоретической физики. (Some Problems of Theoretical Physics). Collection of Articles. Edited by A. I. Alekseeva. M., Atomizdat, 1958, 187 pp. with drawings, (U.S.S.R. Ministry of Higher Education, Moscow Engineering-Physics Institute). Bibliography at the end of each article. 1500 copies, 8.20 rub.

Новые методы контроля и дефектоскопии в машиностроении и приборостроении. (New Methods of Quality Control and Fault Detection in the Construction of Machines and Instruments). [Conference Reports. Editorial Board: I. I. Greben', G. N. Savin (Chief) et al.]. Kiev, Gostekhizdat, 1958. 265 pp. illustr. (Academy of Sciences Ukr. S.S.R., Scientific-Technical Society of the Instrument Building Industry of the Ukrainian Republic). Bibliography at the end of each paper. 4700 copies, 10.50 rub.

Новые полупроводниковые материалы. (New Semiconducting Materials). Physical Properties and Applications of Semiconducting Compounds of the Type AIII BV. Collection of Papers. Translated from the English by G. A. Kurov, edited by B. T. Kolomiets, M., Foreign Literature Press, 1958. 229 pp. with graphs. Bibliography pp. 224-228 and at the end of each paper. 10.75 rub.

Макс Планк. (Max Planck) Collection on the Occasion of the Hundredth Anniversary of his Birthday, 1858-1958. Edited by A. F. Ioffe and A. T. Grigor'yan, M., U.S.S.R. Acad. Sci. Press, 1958. 278 pp. illustr. (U.S.S.R. Academy of Sciences, Institute of History of Natural Sciences and Technology). Bibliography pp. 247-277 (376 titles). 3000 copies, 10.30 rub.

Contents: Greetings of the U.S.S.R. Academy of Sciences to the German Academy of Sciences in Berlin. Max Planck. Articles, writings, speeches about Max Planck. List of Max Planck's main works and of the literature about him.

Полупроводники в науке и технике. (Semiconductors in Science and Technology), Collection of Articles. Chief Editor A. F. Ioffe. M.-L., U.S.S.R. Acad. Sci. Press (Leningrad Division), 1958. (U.S.S.R. Academy of Sciences, Semiconductor Institute.) Vol. 2, 1958, 659 pp. illustr. Bibliography at the end of each chapter. 17,000 copies, 30.00 rub.

Полупроводниковые приборы и их применение. (Semiconductor Devices and their Applications). Collection of Articles. Edited by Ya. A. Fedotov. M., "Soviet Radio," 1958, vol. 3, 1958, 352 pp. illustr. Bibliography at the end of each article, 10.20 rub.

Prager, W., Problems in the Theory of Plasticity. Translated from the German by A. I. Smirnov, edited by E. I. Grigolyuk, M., Fizmatgiz, 1958.

Применение спектрального анализа. (Application of Spectral Analysis). Collection of articles. M., Cent. Tech. Inform. Bureau of the Automobile Industry, 1958, 12 pp. with drawings. (Main Admin. for Design, U.S.S.R. State Planning Committee. Technological Research Institute of the Automobile Industry. Experience of the Automobile Industry Plants). 1000 copies, no price.

Проблемы современной физики. (Problems of Modern Physics). Collection of translations and surveys from foreign periodicals. Nos. 1-6. M., Foreign Literature Press, 1958. 8.40 rub.

Radiation Dosimetry. (Edited by J. Hain and H. Brownell). Translated from the English, edited by N. G. Gusev and K. A. Trukhanova. M., Foreign Literature Press, 1958.

Радиоизмерения на миллиметровых волнах. (Radio Measurements at Millimeter Wavelengths). Edited by Prof. G. D. Burdun, Khar'kov, Khar'kov University Press, 1958, 122 pp. with drawings. Names of authors on title page: G. D. Burdun, R. A. Vatov, L. N. Bryanskiĭ, V. D. Kukush, and V. I. Pronenko. Bibliography pp. 118-120. 5000 copies, 4.00 rub.

Contents: Foreword. Chapters: 1. Generators

and Indicators of Millimeter Waves. Waveguide; Methods, and Instruments for the Realization and Control of the Matching of Waveguide Elements. 2. Measurements of Wavelength and Frequency. 3. Methods and Instruments for Output Measurements. 4. Attenuation Measurements. Division of Power. 5. Measurement of Dielectric and Magnetic Constants of Dielectrics.

Radovskii, M. I., Вениамин Франклин и его связи с Россией. (Benjamin Franklin and his Communications with Russia). M.-L., U.S.S.R. Acad. Sci. Press, 1958. 76 pp. illustr. (U.S.S.R. Academy of Sciences, Institute of History of Natural Science and Technology). 3000 copies, 3.45 rub.

Расслоенные пространства и их приложения. (Stratified Spaces and their Applications.) Collection of translations. Edited by V. G. Boltyanskiĭ et al. M., Foreign Literature Press, 1958, 460 pp., bibliography pp. 451-458, 30.15 rub.

Руководство к лабораторным работам по физике. (Manual of Laboratory Experiments in Physics). Part 3. Optics and Atomic Physics. Compiled by: I. A. Voitsekhovskaya, A. G. Grammakov, N. M. Lyatkovskaya, and V. M. Orlova. Edited by Prof. A. G. Grammakov. L., 1958, 110 pp. [V. I. Ul'yanov (Lenin) Leningrad Electrotechnical Institute.] 1500 copies, no price.

Selwood, P. W., Magnetochemistry. Translated from the English by A. B. Neiding. 2nd revised and enlarged edition. M., Foreign Literature Press, 1958. (Interscience, New York, 1943.)

Semenov, N. N., О некоторых проблемах химической кинетики и реакционной способности. (Certain Problems in Chemical Kinetics and Reactivity). (Free Radicals and Chain Reactions). 2nd revised and enlarged edition, M., U.S.S.R. Acad. Sci. Press, 1958. 686 pp. with drawings (U.S.S.R. Academy of Sciences, Division of Chemical Sciences). Bibliography at the end of each chapter. 7000 copies, 24.25 rub.

Sokolov, A. A., Введение в квантовую электродинамику. (Introduction to Quantum Electrodynamics). M., Fizmatgiz, 1958, 534 pp. with drawings. 10,000 copies, 18.05 rub.

Contents: Foreword. Chapters: 1. General Free Field Theory. 2. Interaction of Electrons with the Second-Quantization Electromagnetic Field. 3. Positron Theory. 4. Theory of the Electron-Positron Vacuum. Subject Index.

Tumerman, L. A., Новые источники света. (New Light Sources.) M., "Znanie" Press, 1958, 32 pp., (All-Union Society for Dissemination of Political and Scientific Knowledge. Series 8, issue 2). 35,000 copies, 0.60 rub.

Fainboim, I. B., Эрнест Резерфорд—человек, заглянувший в глубь атома. (Ernest Rutherford —

the Man who Looked Deep into the Atom). M., "Znanie" Press, 1958, 47 pp. illustr. (All-Union Society for the Dissemination of Political and Scientific Knowledge. Series 8, issue 2, no. 7). 53,000 copies, 0.60 rub.

Fermi, Laura, Atoms in the Family. About the Italian Physicist E. Fermi. Translated from the English by M. P. Bogoslovskaya and S. P. Bobrov. Foreword by O. Pisarzhevskii. M., Foreign Literature Press, 1958.

Progress in Cosmic Ray Physics. Compiled by a group of authors. Edited by J. Wilson. M., Foreign Literature Press, 1958, vol. 3. Translated from the English by V. N. Baĭer et al. Edited by N. G. Birger and I. L. Rozental'. 1958. (Interscience, New York. 1955).

Phillips, K., Gas Chromatography. Translated from the English by O. V. Al'tshuler and M. I. Yanovskii. Edited by S. Z. Roginskiĭ. M., Foreign Literature Press, 1958.

Frenkel', Ya. I., Собрание избранных трудов (Collection of Selected Works). (Editorial Board: Academician N. N. Semenov et al.). M.-L., U.S.S.R. Acad. Sci. Press (Leningrad Division), 1958. Vol. 6. Scientific Papers. (Chief Editor Academician N. N. Semenov. Introductory Article by Ya. G. Dorfman), 1958, 600 pp. "List of Printed Works by Ya. I. Frenkel'," pp. 585-598. Bibliography at the end of each section. 3000 copies, 40.45 rub.

Contents: Yakov Il'ich Frenkel' (1894-1952), **Ya. G. Dorfman**. The Scientific Legacy of Ya. I. Frenkel', **A. F. Ioffe**. Sections: 1. Electron Theory of Metals, Semiconductors and Dielectrics. Papers by Ya. I. Frenkel' on the Electron Theory of Solids, **S. V. Vonsovskii**. 2. Molecular Physics. Papers by Ya. I. Frenkel' on Molecular Physics, **S. E. Bresler**. A. Kinetic Theory of Solids and Fluids. B. Mechanical Properties of Solids. C. Physical Properties of Compounds of High Molecular Weight. 3. Theory of Atoms and Nuclei. Papers by Ya. I. Frenkel' on the Theory of Electrons and Nuclei, **Ya. A. Smorodinskiĭ** and **I. E. Tamm**. 4. Geophysics. Papers by Ya. I. Frenkel' on Geophysics, **V. V. Bazilevich** and **K. S. Shifrin**. List of published papers by Ya. I. Frenkel'.

Shapiro, I. S., Элементарные частицы. (Elementary Particles). M., "Znanie" Press, 1958, 32 pp. illustr. (All-Union Society for the Dissemination of Political and Scientific Knowledge. Series 8, issue 2, no. 17). 35,000 copies, 0.60 rub.

Shmilovskii, N. N. and **Mel'tser, L. V.**, Применение ядерных излучений в устройствах автоматического контроля технологических процессов. (The Utilization of Nuclear Radiations in Devices for Automatic Control of Technological Processes).

M.-L., Gosenergoizdat, 1958, 96 pp. with drawings ("Automation Library," issue 1). Bibliography pp. 92-96 (66 titles). 13,000 copies, 2.80 rub.

Центры окраски в щелочногалогенидных кристаллах. (Color Centers in Alkali-Halide Crystals). Collection of Articles. Translation and Introductory Article by A. S. Kheinman and K. B. Tolpygo. M., Foreign Literature Press, 1958, 341 pp. with drawings.

Tsukkerman, I. I., Электронная оптика в телевидении. (Electron Optics in Television). M.-L., Gosenergoizdat, 1958, 247 pp. with drawings. Bibliography pp. 241-247 (170 titles). 14,600 copies, 8.70 rub.

Contents: Chapters: 1. Electron Optical Elements of Television Tubes. 2. Fundamentals of Electron Optics. 3. Emission Systems. 4. Focusing of Beams. 5. Deflection of Beams. 6. Formation of Electronic Image. Literature.

Элементарный учебник физики. (Elementary Physics Textbook). Edited by Academician G. S. Landsberg. M., Fizmatgiz, 1958. Vol. 3, Oscillations and

Waves. Optics. Structure of the Atom. 2nd revised edition, 1958, 507 pp. illustr. 50,000 copies, 11.60 rub.

Contents: Foreword to the second edition. Foreword to the first edition. Parts: 1. Oscillations and Waves. 2. Geometrical Optics. 3. Physical Optics. 4. Atomic Physics. Answers to Exercises. List of Tables.

Ядерные реакции при малых и средних энергиях. (Nuclear Reactions at Low and Medium Energies). Proceedings of the All-Union Conference. November 1957. Editorial Board: F. P. Denisov . . . , I. M. Frank (Chief) et al. M., U.S.S.R. Acad. Sci. Press, 1958, 614 pp. with drawings (U.S.S.R. Academy of Sciences. Div. of Phys.-Math. Sciences). Bibliography at the end of each paper. 3000 copies, 32.60 rub.

Translated by Z. Barnea