

Subject Index

- “Activated” monomer 6, 165
- Active end-groups transformation 13, 14
- Alkali metals
 - , adsorption of monomer on their surfaces 40–42
 - , in graphite layers 42
 - , negative ions of 35
 - , reactivity 36–38
 - , solutions of 31–38
- Alkali-earth
 - , dispersion 38
 - , polymerization initiated by 119–123
- Anionic polymerization
 - , of acrylonitrile 70, 71
 - , of butadiene 4, 129–133, 141–143, 150–152, 162, 163
 - , of caprolactone 11
 - , of ethylene oxide 9, 75, 152–158
 - , of isoprene 5, 129–133, 141–143, 162, 163
 - , of methacrylonitrile 5, 37
 - , of methyl methacrylate 41, 133–140
 - , of α -methyl styrene 21, 76, 90, 99–101
 - , of nitro-olefines 5, 69, 70
 - , of propylene oxide 9, 154–158
 - , of styrene 5, 8, 12, 19, 37, 41, 48, 60, 76, 90–110, 114, 118–127, 140–152
 - , of thiiranes 11, 158, 159
 - , of vinyl carbazole 74
 - , of vinyl pyridine 38, 116, 117, 138
- Block polymers 8, 10, 11, 41, 42, 146, 147
- Ceiling temperature 23–25
- Charge-transfer complexes 71, 72, 74, 75
- Complexes of alkali-ions with
 - , alkoxides 36, 48, 53
 - , amides 53
 - , crown-ethers, kryptates 32, 33, 37, 52, 53, 156, 159
- Cis-trans isomerization in dienes polymerization 130–132
- Co-polymerization 143–150, 165
- Dilithio-initiators 147–150
- Dimeric-Dianions 3, 46, 47, 50
- Diphenyl ethylene 45–47, 143, 144
- Dormant polymers 12, 13, 65, 66
- Electron
 - , solvated 33–36
 - , cation-pair 34, 35
 - , transfer 5, 39, 42, 43, 48–50
- Epoxide polymerization 9–11, 53, 152–158
- Electro-chemical initiation 76, 77, 132
- Flash-photolysis 43–46
- Initiation of anionic polymerization by
 - , Al-porphyrine complex 5
 - , alkali amides 5
 - , alkali metal-solvents 31
 - , betaines 72
 - , carbazole anions 53, 54
 - , electron-transfer 5, 39, 42, 43, 48–50
 - , electro-chemical 76, 77, 132
 - , fluorene anions 53, 55
 - , Grignard reagent 5, 140
 - , heterogeneous 38–42
 - , ionizing radiation 77, 78
 - , Lewis bases 69–73
 - , methoxy ions 5, 55
 - , Zn-Al oxides 10
- Ion-pairs 80, 90–113, 141
 - , heat of dissociation 103–107
 - , rate of dissociation 110–113
 - , pressure effect 113–115
 - , tight or loose 101–110
- Lithium 34, 36
 - , alkyls
 - , effect of Lewis bases 67, 68
 - , reactivity 59–71
 - , structure 56–59
 - , in liquid ammonia 31, 32, 37

Mixed aggregates 58, 63, 64, 143–146

Molecular weight

–, effect of temperature 86

–, – of impurities 83, 84

–, distribution 25, 81–86

Polymerization

–, basic steps of 5, 6

–, cationic 11, 27

–, diazomethane 12

–, “killing” of 8

–, simultaneous cationic and anionic 74

Radical-anions 39, 113

–, addition to 50, 51

–, dimerization of 43–47

Solvating agent

–, effect on initiation 52, 67

–, – on propagation 123–129, 150, 151

–, – on radical-ions 127

Stereo-specific polymerization 130, 131, 139,
140, 157–164

Transformation of active end-groups 13, 14

Trioxepane polymerization and
equilibrium 27–30

Triple-ions 115–119

Zwitter-ions 72, 73, 75

Author Index Volumes 1-49

- Allegra, G.* and *Bassi, I. W.*: Isomorphism in Synthetic Macromolecular Systems. Vol. 6, pp. 549-574.
- Andrews, E. H.*: Molecular Fracture in Polymers. Vol. 27, pp. 1-66.
- Anufrieva, E. V.* and *Gotlib, Yu. Ya.*: Investigation of Polymers in Solution by Polarized Luminescence. Vol. 40, pp. 1-68.
- Arridge, R. C.* and *Barham, P. J.*: Polymer Elasticity. Discrete and Continuum Models. Vol. 46, pp. 67-117.
- Ayrey, G.*: The Use of Isotopes in Polymer Analysis. Vol. 6, pp. 128-148.
- Baldwin, R. L.*: Sedimentation of High Polymers. Vol. 1, pp. 451-511.
- Basedow, A. M.* and *Ebert, K.*: Ultrasonic Degradation of Polymers in Solution. Vol. 22, pp. 83-148.
- Batz, H.-G.*: Polymeric Drugs. Vol. 23, pp. 25-53.
- Bekturov, E. A.* and *Bimendina, L. A.*: Interpolymer Complexes. Vol. 41, pp. 99-147.
- Bergsma, F.* and *Kruissink, Ch. A.*: Ion-Exchange Membranes. Vol. 2, pp. 307-362.
- Berlin, Al. Al., Volfson, S. A.,* and *Enikolopian, N. S.*: Kinetics of Polymerization Processes. Vol. 38, pp. 89-140.
- Berry, G. C.* and *Fox, T. G.*: The Viscosity of Polymers and Their Concentrated Solutions. Vol. 5, pp. 261-357.
- Bevington, J. C.*: Isotopic Methods in Polymer Chemistry. Vol. 2, pp. 1-17.
- Bhuiyan, A. L.*: Some Problems Encountered with Degradation Mechanisms of Addition Polymers. Vol. 47, pp. 1-65.
- Bird, R. B., Warner, Jr., H. R.,* and *Evans, D. C.*: Kinetic Theory and Rheology of Dumbbell Suspensions with Brownian Motion. Vol. 8, pp. 1-90.
- Biswas, M.* and *Maity, C.*: Molecular Sieves as Polymerization Catalysts. Vol. 31, pp. 47-88.
- Block, H.*: The Nature and Application of Electrical Phenomena in Polymers. Vol. 33, pp. 93-167.
- Böhm, L. L., Chmeliř, M., Löhr, G., Schmitt, B. J.* und *Schulz, G. V.*: Zustände und Reaktionen des Carbanions bei der anionischen Polymerisation des Styrols. Vol. 9, pp. 1-45.
- Bovey, F. A.* and *Tiers, G. V. D.*: The High Resolution Nuclear Magnetic Resonance Spectroscopy of Polymers. Vol. 3, pp. 139-195.
- Braun, J.-M.* and *Guillet, J. E.*: Study of Polymers by Inverse Gas Chromatography. Vol. 21, pp. 107-145.
- Breitenbach, J. W., Olaj, O. F.* und *Sommer, F.*: Polymerisationsanregung durch Elektrolyse. Vol. 9, pp. 47-227.
- Bresler, S. E.* and *Kazbekov, E. N.*: Macroradical Reactivity Studied by Electron Spin Resonance. Vol. 3, pp. 688-711.
- Bucknall, C. B.*: Fracture and Failure of Multiphase Polymers and Polymer Composites. Vol. 27, pp. 121-148.
- Burchard, W.*: Static and Dynamic Light Scattering from Branched Polymers and Biopolymers. Vol. 48, pp. 1-124.
- Bywater, S.*: Polymerization Initiated by Lithium and Its Compounds. Vol. 4, pp. 66-110.
- Bywater, S.*: Preparation and Properties of Star-branched Polymers. Vol. 30, pp. 89-116.
- Candau, S., Bastide, J.* and *Delsanti, M.*: Structural, Elastic and Dynamic Properties of Swollen Polymer Networks. Vol. 44, pp. 27-72.
- Carrick, W. L.*: The Mechanism of Olefin Polymerization by Ziegler-Natta Catalysts. Vol. 12, pp. 65-86.

- Casale, A. and Porter, R. S.*: Mechanical Synthesis of Block and Graft Copolymers. Vol. 17, pp. 1-71.
- Cerf, R.*: La dynamique des solutions de macromolécules dans un champ de vitesses. Vol. 1, pp. 382-450.
- Cesca, S., Priola, A. and Bruzzone, M.*: Synthesis and Modification of Polymers Containing a System of Conjugated Double Bonds. Vol. 32, pp. 1-67.
- Cicchetti, O.*: Mechanisms of Oxidative Photodegradation and of UV Stabilization of Polyolefins. Vol. 7, pp. 70-112.
- Clark, D. T.*: ESCA Applied to Polymers. Vol. 24, pp. 125-188.
- Coleman, Jr., L. E. and Meinhardt, N. A.*: Polymerization Reactions of Vinyl Ketones. Vol. 1, pp. 159-179.
- Crescenzi, V.*: Some Recent Studies of Polyelectrolyte Solutions. Vol. 5, pp. 358-386.
- Davydov, B. E. and Krentsel, B. A.*: Progress in the Chemistry of Polyconjugated Systems. Vol. 25, pp. 1-46.
- Dole, M.*: Calorimetric Studies of States and Transitions in Solid High Polymers. Vol. 2, pp. 221-274.
- Dreyfuss, P. and Dreyfuss, M. P.*: Polytetrahydrofuran. Vol. 4, pp. 528-590.
- Dušek, K. and Prins, W.*: Structure and Elasticity of Non-Crystalline Polymer Networks. Vol. 6, pp. 1-102.
- Eastham, A. M.*: Some Aspects of the Polymerization of Cyclic Ethers. Vol. 2, pp. 18-50.
- Ehrlich, P. and Mortimer, G. A.*: Fundamentals of the Free-Radical Polymerization of Ethylene. Vol. 7, pp. 386-448.
- Eisenberg, A.*: Ionic Forces in Polymers. Vol. 5, pp. 59-112.
- Elias, H.-G., Bareiss, R. und Watterson, J. G.*: Mittelwerte des Molekulargewichts und anderer Eigenschaften. Vol. 11, pp. 111-204.
- Elyashevich, G. K.*: Thermodynamics and Kinetics of Orientational Crystallization of Flexible-Chain Polymers. Vol. 43, pp. 207-246.
- Fischer, H.*: Freie Radikale während der Polymerisation, nachgewiesen und identifiziert durch Elektronenspinresonanz. Vol. 5, pp. 463-530.
- Fradet, A. and Maréchal, E.*: Kinetics and Mechanisms of Polyesterifications. I. Reactions of Diols with Diacids. Vol. 43, pp. 51-144.
- Fujita, H.*: Diffusion in Polymer-Diluent Systems. Vol. 3, pp. 1-47.
- Funke, W.*: Über die Strukturaufklärung vernetzter Makromoleküle, insbesondere vernetzter Polyesterharze, mit chemischen Methoden. Vol. 4, pp. 157-235.
- Gal'braikh, L. S. and Rogovin, Z. A.*: Chemical Transformations of Cellulose. Vol. 14, pp. 87-130.
- Gallot, B. R. M.*: Preparation and Study of Block Copolymers with Ordered Structures, Vol. 29, pp. 85-156.
- Gandini, A.*: The Behaviour of Furan Derivatives in Polymerization Reactions. Vol. 25, pp. 47-96.
- Gandini, A. and Cheradame, H.*: Cationic Polymerization. Initiation with Alkenyl Monomers. Vol. 34/35, pp. 1-289.
- Geckeler, K., Pillai, V. N. R., and Mutter, M.*: Applications of Soluble Polymeric Supports. Vol. 39, pp. 65-94.
- Gerrens, H.*: Kinetik der Emulsionspolymerisation. Vol. 1, pp. 234-328.
- Ghiggino, K. P., Roberts, A. J. and Phillips, D.*: Time-Resolved Fluorescence Techniques in Polymer and Biopolymer Studies. Vol. 40, pp. 69-167.
- Goethals, E. J.*: The Formation of Cyclic Oligomers in the Cationic Polymerization of Heterocycles. Vol. 23, pp. 103-130.
- Graessley, W. W.*: The Entanglement Concept in Polymer Rheology. Vol. 16, pp. 1-179.
- Graessley, W. W.*: Entagled Linear, Branched and Network Polymer Systems. Molecular Theories. Vol. 47, pp. 67-117.
- Hagihara, N., Sonogashira, K. and Takahashi, S.*: Linear Polymers Containing Transition Metals in the Main Chain. Vol. 41, pp. 149-179.
- Hasegawa, M.*: Four-Center Photopolymerization in the Crystalline State. Vol. 42, pp. 1-49.
- Hay, A. S.*: Aromatic Polyethers. Vol. 4, pp. 496-527.
- Hayakawa, R. and Wada, Y.*: Piezoelectricity and Related Properties of Polymer Films. Vol. 11, pp. 1-55.

- Heidemann, E. and Roth, W.*: Synthesis and Investigation of Collagen Model Peptides. Vol. 43, pp. 145-205.
- Heitz, W.*: Polymeric Reagents. Polymer Design, Scope, and Limitations. Vol. 23, pp. 1-23.
- Helferich, F.*: Ionenaustausch. Vol. 1, pp. 329-381.
- Hendra, P. J.*: Laser-Raman Spectra of Polymers. Vol. 6, pp. 151-169.
- Henrici-Olivé, G. und Olivé, S.*: Kettenübertragung bei der radikalischen Polymerisation. Vol. 2, pp. 496-577.
- Henrici-Olivé, G. und Olivé, S.*: Koordinative Polymerisation an löslichen Übergangsmetall-Katalysatoren. Vol. 6, pp. 421-472.
- Henrici-Olivé, G. und Olivé, S.*: Oligomerization of Ethylene with Soluble Transition-Metal Catalysts. Vol. 15, pp. 1-30.
- Henrici-Olivé, G. und Olivé, S.*: Molecular Interactions and Macroscopic Properties of Polyacrylonitrile and Model Substances. Vol. 32, pp. 123-152.
- Hermans, Jr., J., Lohr, D. and Ferro, D.*: Treatment of the Folding and Unfolding of Protein Molecules in Solution According to a Lattice Model. Vol. 9, pp. 229-283.
- Holzmüller, W.*: Molecular Mobility, Deformation and Relaxation Processes in Polymers. Vol. 26, pp. 1-62.
- Hutchison, J. and Ledwith, A.*: Photoinitiation of Vinyl Polymerization by Aromatic Carbonyl Compounds. Vol. 14, pp. 49-86.
- Iizuka, E.*: Properties of Liquid Crystals of Polypeptides: with Stress on the Electromagnetic Orientation. Vol. 20, pp. 79-107.
- Ikada, Y.*: Characterization of Graft Copolymers. Vol. 29, pp. 47-84.
- Imanishi, Y.*: Syntheses, Conformation, and Reactions of Cyclic Peptides. Vol. 20, pp. 1-77.
- Inagaki, H.*: Polymer Separation and Characterization by Thin-Layer Chromatography. Vol. 24, pp. 189-237.
- Inoue, S.*: Asymmetric Reactions of Synthetic Polypeptides. Vol. 21, pp. 77-106.
- Ise, N.*: Polymerizations under an Electric Field. Vol. 6, pp. 347-376.
- Ise, N.*: The Mean Activity Coefficient of Polyelectrolytes in Aqueous Solutions and Its Related Properties. Vol. 7, pp. 536-593.
- Isihara, A.*: Intramolecular Statistics of a Flexible Chain Molecule. Vol. 7, pp. 449-476.
- Isihara, A.*: Irreversible Processes in Solutions of Chain Polymers. Vol. 5, pp. 531-567.
- Isihara, A. and Guth, E.*: Theory of Dilute Macromolecular Solutions. Vol. 5, pp. 233-260.
- Janeschütz-Kriegl, H.*: Flow Birefringence of Elastico-Viscous Polymer Systems. Vol. 6, pp. 170-318.
- Jenkins, R. and Porter, R. S.*: Unperturbed Dimensions of Stereoregular Polymers. Vol. 36, pp. 1-20.
- Jennings, B. R.*: Electro-Optic Methods for Characterizing Macromolecules in Dilute Solution. Vol. 22, pp. 61-81.
- Johnston, D. S.*: Macrozwitterion Polymerization. Vol. 42, pp. 51-106.
- Kamachi, M.*: Influence of Solvent on Free Radical Polymerization of Vinyl Compounds. Vol. 38, pp. 55-87.
- Kawabata, S. and Kawai, H.*: Strain Energy Density Functions of Rubber Vulcanizates from Biaxial Extension. Vol. 24, pp. 89-124.
- Kennedy, J. P. and Chou, T.*: Poly(isobutylene-co- β -Pinene): A New Sulfur Vulcanizable, Ozone Resistant Elastomer by Cationic Isomerization Copolymerization. Vol. 21, pp. 1-39.
- Kennedy, J. P. and Delvaux, J. M.*: Synthesis, Characterization and Morphology of Poly(butadiene-g-Styrene). Vol. 38, pp. 141-163.
- Kennedy, J. P. and Gillham, J. K.*: Cationic Polymerization of Olefins with Alkylaluminium Initiators. Vol. 10, pp. 1-33.
- Kennedy, J. P. and Johnston, J. E.*: The Cationic Isomerization Polymerization of 3-Methyl-1-butene and 4-Methyl-1-pentene. Vol. 19, pp. 57-95.
- Kennedy, J. P. and Langer, Jr., A. W.*: Recent Advances in Cationic Polymerization. Vol. 3, pp. 508-580.
- Kennedy, J. P. and Otsu, T.*: Polymerization with Isomerization of Monomer Preceding Propagation. Vol. 7, pp. 369-385.
- Kennedy, J. P. and Rengachary, S.*: Correlation Between Cationic Model and Polymerization Reactions of Olefins. Vol. 14, pp. 1-48.

- Kennedy, J. P. and Trivedi, P. D.*: Cationic Olefin Polymerization Using Alkyl Halide - Alkylaluminum Initiator Systems. I. Reactivity Studies. II. Molecular Weight Studies. Vol. 28, pp. 83-151.
- Kennedy, J. P., Chang, V. S. C. and Guyot, A.*: Carbocationic Synthesis and Characterization of Polyolefins with Si-H and Si-Cl Head Groups. Vol. 43, pp. 1-50.
- Khoklov, A. R. and Grosberg, A. Yu.*: Statistical Theory of Polymeric Lyotropic Liquid Crystals. Vol. 41, pp. 53-97.
- Kissin, Yu. V.*: Structures of Copolymers of High Olefins. Vol. 15, pp. 91-155.
- Kitagawa, T. and Miyazawa, T.*: Neutron Scattering and Normal Vibrations of Polymers. Vol. 9, pp. 335-414.
- Kitamaru, R. and Horii, F.*: NMR Approach to the Phase Structure of Linear Polyethylene. Vol. 26., pp. 139-180.
- Knappe, W.*: Wärmeleitung in Polymeren. Vol. 7, pp. 477-535.
- Kolarik, J.*: Secondary Relaxations in Glassy Polymers: Hydrophylic Polymethacrylates and Polyacrylates: Vol. 46, pp. 119-161.
- Koningsveld, R.*: Preparative and Analytical Aspects of Polymer Fractionation. Vol. 7.
- Kovacs, A. J.*: Transition vitreuse dans les polymers amorphes. Etude phénoménologique. Vol. 3, pp. 394-507.
- Krässig, H. A.*: Graft Co-Polymerization of Cellulose and Its Derivatives. Vol. 4, pp. 111-156.
- Kraus, G.*: Reinforcement of Elastomers by Carbon Black. Vol. 8, pp. 155-237.
- Kreutz, W. and Welte, W.*: A General Theory for the Evaluation of X-Ray Diagrams of Biomembranes and Other Lamellar Systems. Vol. 30, pp. 161-225.
- Krimm, S.*: Infrared Spectra of High Polymers. Vol. 2, pp. 51-72.
- Kuhn, W., Ramel, A., Walters, D. H., Ebner, G. and Kuhn, H. J.*: The Production of Mechanical Energy from Different Forms of Chemical Energy with Homogeneous and Cross-Striated High Polymer Systems. Vol. 1, pp. 540-592.
- Kunitake, T. and Okahata, Y.*: Catalytic Hydrolysis by Synthetic Polymers. Vol. 20, pp. 159-221.
- Kurata, M. and Stockmayer, W. H.*: Intrinsic Viscosities and Unperturbed Dimensions of Long Chain Molecules. Vol. 3, pp. 196-312.
- Ledwith, A. and Sherrington, D. C.*: Stable Organic Cation Salts: Ion Pair Equilibria and Use in Cationic Polymerization. Vol. 19, pp. 1-56.
- Lee, C.-D. S. and Daly, W. H.*: Mercaptan-Containing Polymers. Vol. 15, pp. 61-90.
- Lipatov, Y. S.*: Relaxation and Viscoelastic Properties of Heterogeneous Polymeric Compositions. Vol. 22, pp. 1-59.
- Lipatov, Y. S.*: The Iso-Free-Volume State and Glass Transitions in Amorphous Polymers: New Development of the Theory. Vol. 26, pp. 63-104.
- Mano, E. B. and Coutinho, F. M. B.*: Grafting on Polyamides. Vol. 19, pp. 97-116.
- Mark, J. E.*: The Use of Model Polymer Networks to Elucidate Molecular Aspects of Rubberlike Elasticity. Vol. 44, pp. 1-26.
- Mengoli, G.*: Feasibility of Polymer Film Coating Through Electroinitiated Polymerization in Aqueous Medium. Vol. 33, pp. 1-31.
- Meyerhoff, G.*: Die viscosimetrische Molekulargewichtsbestimmung von Polymeren. Vol. 3, pp. 59-105.
- Millich, F.*: Rigid Rods and the Characterization of Polyisocyanides. Vol. 19, pp. 117-141.
- Morawetz, H.*: Specific Ion Binding by Polyelectrolytes. Vol. 1, pp. 1-34.
- Morin, B. P., Breusova, I. P. and Rogovin, Z. A.*: Structural and Chemical Modifications of Cellulose by Graft Copolymerization. Vol. 42, pp. 139-166.
- Mulvaney, J. E., Oversberger, C. C. and Schiller, A. M.*: Anionic Polymerization. Vol. 3, pp. 106-138.
- Neuse, E.*: Aromatic Polybenzimidazoles. Syntheses, Properties, and Applications. Vol. 47, pp. 1-42.
- Okubo, T. and Ise, N.*: Synthetic Polyelectrolytes as Models of Nucleic Acids and Esterases. Vol. 25, pp. 135-181.
- Osaki, K.*: Viscoelastic Properties of Dilute Polymer Solutions. Vol. 12, pp. 1-64.
- Oster, G. and Nishijima, Y.*: Fluorescence Methods in Polymer Science. Vol. 3, pp. 313-331.
- Overberger, C. G. and Moore, J. A.*: Ladder Polymers. Vol. 7, pp. 113-150.

- Patai, F., Killmann, E. und Schiebener, C.:* Die Absorption von Makromolekülen aus Lösung. Vol. 3, pp. 332-393.
- Patterson, G. D.:* Photon Correlation Spectroscopy of Bulk Polymers. Vol. 48, pp. 125-159.
- Penczek, S., Kubisa, P. and Matyjaszewski, K.:* Cationic Ring-Opening Polymerization of Heterocyclic Monomers. Vol. 37, pp. 1-149.
- Peticolas, W. L.:* Inelastic Laser Light Scattering from Biological and Synthetic Polymers. Vol. 9, pp. 285-333.
- Pino, P.:* Optically Active Addition Polymers. Vol. 4, pp. 393-456.
- Plate, N. A. and Noah, O. V.:* A Theoretical Consideration of the Kinetics and Statistics of Reactions of Functional Groups of Macromolecules. Vol. 31, pp. 133-173.
- Plesch, P. H.:* The Propagation Rate-Constants in Cationic Polymerisations. Vol. 8, pp. 137-154.
- Porod, G.:* Anwendung und Ergebnisse der Röntgenkleinwinkelstreuung in festen Hochpolymeren. Vol. 2, pp. 363-400.
- Pospíšil, J.:* Transformations of Phenolic Antioxidants and the Role of Their Products in the Long-Term Properties of Polyolefins. Vol. 36, pp. 69-133.
- Postelnek, W., Coleman, L. E., and Lovelace, A. M.:* Fluorine-Containing Polymers. I. Fluorinated Vinyl Polymers with Functional Groups, Condensation Polymers, and Styrene Polymers. Vol. 1, pp. 75-113.
- Rempp, P., Herz, J., and Borchard, W.:* Model Networks. Vol. 26, pp. 107-137.
- Rigbi, Z.:* Reinforcement of Rubber by Carbon Black. Vol. 36, pp. 21-68.
- Rogovin, Z. A. and Gabrielyan, G. A.:* Chemical Modifications of Fibre Forming Polymers and Copolymers of Acrylonitrile. Vol. 25, pp. 97-134.
- Roha, M.:* Ionic Factors in Steric Control. Vol. 4, pp. 353-392.
- Roha, M.:* The Chemistry of Coordinate Polymerization of Dienes. Vol. 1, pp. 512-539.
- Safford, G. J. and Naumann, A. W.:* Low Frequency Motions in Polymers as Measured by Neutron Inelastic Scattering. Vol. 5, pp. 1-27.
- Schuerch, C.:* The Chemical Synthesis and Properties of Polysaccharides of Biomedical Interest. Vol. 10, pp. 173-194.
- Schulz, R. C. and Kaiser, E.:* Synthese und Eigenschaften von optisch aktiven Polymeren. Vol. 4, pp. 236-315.
- Seanor, D. A.:* Charge Transfer in Polymers. Vol. 4, pp. 317-352.
- Seidl, J., Malinský, J., Dušek, K. und Heitz, W.:* Makroporöse Styrol-Divinylbenzol-Copolymere und ihre Verwendung in der Chromatographie und zur Darstellung von Ionenaustauschern. Vol. 5, pp. 113-213.
- Semjonow, V.:* Schmelzviskositäten hochpolymerer Stoffe. Vol. 5, pp. 387-450.
- Semlyen, J. A.:* Ring-Chain Equilibria and the Conformations of Polymer Chains. Vol. 21, pp. 41-75.
- Sharkey, W. H.:* Polymerizations Through the Carbon-Sulphur Double Bond. Vol. 17, pp. 73-103.
- Shimidzu, T.:* Cooperative Actions in the Nucleophile-Containing Polymers. Vol. 23, pp. 55-102.
- Shutov, F. A.:* Foamed Polymers Based on Reactive Oligomers, Vol. 39, pp. 1-64.
- Silvestri, G., Gambino, S., and Filardo, G.:* Electrochemical Production of Initiators for Polymerization Processes. Vol. 38, pp. 27-54.
- Slichter, W. P.:* The Study of High Polymers by Nuclear Magnetic Resonance. Vol. 1, pp. 35-74.
- Small, P. A.:* Long-Chain Branching in Polymers. Vol. 18.
- Smets, G.:* Block and Graft Copolymers. Vol. 2, pp. 173-220.
- Sohma, J. and Sakaguchi, M.:* ESR Studies on Polymer Radicals Produced by Mechanical Destruction and Their Reactivity. Vol. 20, pp. 109-158.
- Sotobayashi, H. und Springer, J.:* Oligomere in verdünnten Lösungen. Vol. 6, pp. 473-548.
- Sperati, C. A. and Starkweather, Jr., H. W.:* Fluorine-Containing Polymers. II. Polytetrafluoroethylene. Vol. 2, pp. 465-495.
- Sprung, M. M.:* Recent Progress in Silicone Chemistry. I. Hydrolysis of Reactive Silane Intermediates. Vol. 2, pp. 442-464.
- Stahl, E. and Brüderle, V.:* Polymer Analysis by Thermofractography. Vol. 30, pp. 1-88.
- Stannett, V. T., Koros, W. J., Paul, D. R., Lonsdale, H. K., and Baker, R. W.:* Recent Advances in Membrane Science and Technology. Vol. 32, pp. 69-121.
- Staverman, A. J.:* Properties of Phantom Networks and Real Networks. Vol. 44, pp. 73-102.
- Stauffer, D., Coniglio, A. and Adam, M.:* Gelation and Critical Phenomena. Vol. 44, pp. 103-158.

- Stille, J. K.*: Diels-Alder Polymerization. Vol. 3, pp. 48-58.
- Stolka, M. and Pai, D.*: Polymers with Photoconductive Properties. Vol. 29, pp. 1-45.
- Subramanian, R. V.*: Electroinitiated Polymerization on Electrodes. Vol. 33, pp. 33-58.
- Sumitomo, H. and Okada, M.*: Ring-Opening Polymerization of Bicyclic Acetals, Oxalactone, and Oxalactam. Vol. 28, pp. 47-82.
- Szegö, L.*: Modified Polyethylene Terephthalate Fibers. Vol. 31, pp. 89-131.
- Szwarc, M.*: Termination of Anionic Polymerization. Vol. 2, pp. 275-306.
- Szwarc, M.*: The Kinetics and Mechanism of N-carboxy- α -amino-acid Anhydride (NCA) Polymerization to Poly-amino Acids. Vol. 4, pp. 1-65.
- Szwarc, M.*: Thermodynamics of Polymerization with Special Emphasis on Living Polymers. Vol. 4, pp. 457-495.
- Szwarc, M.*: Living Polymers and Mechanisms of Anionic Polymerization. Vol. 49, pp. 1-177.
- Takahashi, A. and Kawaguchi, M.*: The Structure of Macromolecules Adsorbed on Interfaces. Vol. 46, pp. 1-65.
- Takemoto, K. and Inaki, Y.*: Synthetic Nucleic Acid Analogs. Preparation and Interactions. Vol. 41, pp. 1-51.
- Tani, H.*: Stereospecific Polymerization of Aldehydes and Epoxides. Vol. 11, pp. 57-110.
- Tate, B. E.*: Polymerization of Itaconic Acid and Derivatives. Vol. 5, pp. 214-232.
- Tazuke, S.*: Photosensitized Charge Transfer Polymerization. Vol. 6, pp. 321-346.
- Teramoto, A. and Fujita, H.*: Conformation-dependent Properties of Synthetic Polypeptides in the Helix-Coil Transition Region. Vol. 18, pp. 65-149.
- Thomas, W. M.*: Mechanism of Acrylonitrile Polymerization. Vol. 2, pp. 401-441.
- Tobolsky, A. V. and DuPré, D. B.*: Macromolecular Relaxation in the Damped Torsional Oscillator and Statistical Segment Models. Vol. 6, pp. 103-127.
- Tosi, C. and Ciampelli, F.*: Applications of Infrared Spectroscopy to Ethylene-Propylene Copolymers. Vol. 12, pp. 87-130.
- Tosi, C.*: Sequence Distribution in Copolymers: Numerical Tables. Vol. 5, pp. 451-462.
- Tsuchida, E. and Nishide, H.*: Polymer-Metal Complexes and Their Catalytic Activity. Vol. 24, pp. 1-87.
- Tsuji, K.*: ESR Study of Photodegradation of Polymers. Vol. 12, pp. 131-190.
- Tsvetkov, V. and Andreeva, L.*: Flow and Electric Birefringence in Rigid-Chain Polymer Solutions. Vol. 39, pp. 95-207.
- Tuzar, Z., Kratochvíl, P., and Bohdanecký, M.*: Dilute Solution Properties of Aliphatic Polyamides. Vol. 30, pp. 117-159.
- Valvassori, A. and Sartori, G.*: Present Status of the Multicomponent Copolymerization Theory. Vol. 5, pp. 28-58.
- Voorn, M. J.*: Phase Separation in Polymer Solutions. Vol. 1, pp. 192-233.
- Werber, F. X.*: Polymerization of Olefins on Supported Catalysts. Vol. 1, pp. 180-191.
- Wichterle, O., Šebenda, J., and Králíček, J.*: The Anionic Polymerization of Caprolactam. Vol. 2, pp. 578-595.
- Wilkes, G. L.*: The Measurement of Molecular Orientation in Polymeric Solids. Vol. 8, pp. 91-136.
- Williams, G.*: Molecular Aspects of Multiple Dielectric Relaxation Processes in Solid Polymers. Vol. 33, pp. 59-92.
- Williams, J. G.*: Applications of Linear Fracture Mechanics. Vol. 27, pp. 67-120.
- Wöhrle, D.*: Polymere aus Nitrilen. Vol. 10, pp. 35-107.
- Wolf, B. A.*: Zur Thermodynamik der enthalpisch und der entropisch bedingten Entmischung von Polymerlösungen. Vol. 10, pp. 109-171.
- Woodward, A. E. and Sauer, J. A.*: The Dynamic Mechanical Properties of High Polymers at Low Temperatures. Vol. 1, pp. 114-158.
- Wunderlich, B. and Baur, H.*: Heat Capacities of Linear High Polymers. Vol. 7, pp. 151-368.
- Wunderlich, B.*: Crystallization During Polymerization. Vol. 5, pp. 568-619.
- Wrasidlo, W.*: Thermal Analysis of Polymers. Vol. 13, pp. 1-99.
- Yamashita, Y.*: Random and Block Copolymers by Ring-Opening Polymerization. Vol. 28, pp. 1-46.
- Yamazaki, N.*: Electrolytically Initiated Polymerization. Vol. 6, pp. 377-400.
- Yamazaki, N. and Higashi, F.*: New Condensation Polymerizations by Means of Phosphorus Compounds. Vol. 38, pp. 1-25.

- Yokoyama, Y. and Hall H. K.:* Ring-Opening Polymerization of Atom-Bridged and Bond-Bridged Bicyclic Ethers, Acetals and Orthoesters. Vol. 42, pp. 107-138.
- Yoshida, H. and Hayashi, K.:* Initiation Process of Radiation-induced Ionic Polymerization as Studied by Electron Spin Resonance. Vol. 6, pp. 401-420.
- Yuki, H. and Hatada, K.:* Stereospecific Polymerization of Alpha-Substituted Acrylic Acid Esters. Vol. 31, pp. 1-45.
- Zachmann, H. G.:* Das Kristallisations- und Schmelzverhalten hochpolymerer Stoffe. Vol. 3, pp. 581-687.
- Zambelli, A. and Tosi, C.:* Stereochemistry of Propylene Polymerization. Vol. 15, pp. 31-60.