The Radiation Chemistry of Macromolecules: Volume II: v. 2

The Radiation Chemistry of Macromolecules, Volume II is a collection of papers that discusses radiation chemistry of specific systems. Part 1 deals with radiation chemistry of substituted vinyl polymers, particularly polypropylene (PP) as its structure is intermediate between polyethylene and polyisobutylene. This part also discusses polypropylene oxide (PPOx) for it can be prepared in the atactic, isotactic, and optically active forms. One paper focuses on the fundamental chemical processes and the changes in physical properties that give rise to many different applications of polystyrene. Another paper analyzes poly(methyl methacrylate) and poly(isobutylene)two important polymers of nongelling substances subject to radiation. Part 2 describes the radiation chemistry of some miscellaneous polymers including the formation of free radicals and their termination. One paper also considers the radiation chemistry of polytetrafluoroethyle (PTFE), which is widely used in industry. Part 3 discusses the effect of radiation on oxidation, mechanical properties, and physical state of polymers. Part 4 addresses macromolecules, particularly the radiation chemistry of biopolymers because of their role in radiation chemistry. The damage done to biopolymers through radiation can affect the responses of living organisms to ionizing radiation. This book can prove valuable to scientists and researchers in the fields of nuclear biology, nuclear science, microchemistry, and cellular biology.

(Volume 39, Issue 11, pp. 37073970). - Macromolecules (ACS 2. Survey of Radiation Chemistry. Upon irradiation with high-energy radiation (electron number, and V, is the volume fraction of polymer in the system. We first **Macromolecules (ACS Publications) - American Chemical Society** Institute of Macromolecular Chemistry, Czechoslovak Academy of Sciences, G. V. Akimov State Research Institute of Materials Protection, . + ye[t re(i - + ye)~l = (1 - y)C(Ye)j + (Yo)i-l = [I - + (ye)i-l(i - ehl/(l - 76) (5) i-2 Saito in The Radiation Chemistry of Macromolecules,. Vol. I, M. Dole, Ed., Academic Press, New **January 1, 1986 (Volume 19, Issue 1, pp. 1250). - Macromolecules** lecular weights of 1.1 X lo5 and 3.9 x lo5 (Pressure Chemical Co.) were used without that the number of macromolecules subjected to both cross-linking 0 1980 American Chemical Society GPC calibration curves of the elution volume vs. the I I log M. Figure 2. Molecular weight distributions of polystyrene before. **PDF w - American Chemical Society** Feb 22, 2005 Radiation Chemistry, Photochemistry, and Photographic and Other Volume 38, Issue 4 Functionalization studies in the presence of 2 equiv of trioctylamine .. Tin(II) Ethyl Hexanoate Catalyzed Precipitation Polymerization of . Grinberg, Elena V. Kalinina, Vladimir I. Lozinsky, Vladimir O. Aseyev, **January 28, 2014 (Volume 47, Issue 2, pp. 471 - ACS Publications** The Radiation Chemistry of Macromolecules v1 and v.2 by (1973), The radiation is absorbed uniformly over the volume of the reactor, which can be **Macromolecules (ACS Publications) - American Chemical Society** Feb 20, 2001 Gas solubility coefficients of PPhSiDPA are 2?3 times lower than those of PPrSiDPA. Free volume size and size distribution were characterized **The Radiation Chemistry of Macromolecules - Google Books Result** Equilibriums, Chemical Equilibriums, and Solutions Radiation Chemistry, Photochemistry Volume 8, Issue 2 . Conformational Properties of Poly(L-azetidine-2-carboxylic acid) in Solution as Studied . G. Manzini, V. Crescenzi, R. Furlanetto II. Theoretical Considerations. Olagoke Olabisi, Robert Simha. pp 211218. Macromolecules. Radiation Degradation Study of Poly(methy1 a-chloroacrylate) and the values were determined from Ml vs. dose and MW-l vs. dose plots. Analysis of .. ii?,/Mn. dL/g. Te,e C. 2 (unfrac-. 41/59. 1.4. 5.9. 4.5. . 3.7. 129. 2 (a). 41/59 .. (16) M. Dole, Radiation Chemistry of Macromolecules, Vol. 11,. **Computer Simulations of Radiation-Cured Networks - American** Feb 25, 2003 Pharmacology Plant Biochemistry Radiation Biochemistry Volume 36, Issue 4 Archana Bhaw-Luximon, Dhanjay Jhurry, Joel Belleney and V. Goury . Synthesis and Chemical Properties of ?-Conjugated Poly(imidazole-2,5-diyl)s Cobalt(II)-Mediated Catalytic Chain Transfer Polymerization of **Macromolecules (ACS Publications) - American Chemical Society** May 30, 2006 Publication Date (Web): May 2, 2006 (Communication to the Editor) Katrien V. Bernaerts, Nicolas Willet, Wim Van Camp, Robert Jerome and Filip E. Du RAFT Polymerization under UV?Vis Radiation: Effect of Radiation Wave Range Heteroaromatic Thiols as Co-initiators for Type II Photoinitiating **Macromolecules (ACS Publications) - American Chemical Society** Buy Radiation Chemistry of Macromolecules: v. 2 on ? FREE SHIPPING on qualified orders. **Macromolecules (ACS Publications) - American Chemical Society** Mar 16, 1981 in three ways: (i) end-to-end, thus forming a longer chain (ii) N.Y., 1979 Chapter V. (32) Dole, M., Ed. The Radiation Chemistry of Macromolecules . a function of the volume fraction v2 of PDMS in cyclohexane. Squares **The radiation chemistry of macromolecules / edited by Malcolm Dole** Articles ASAP (As Soon As Publishable). ASAP articles are edited and published online ahead of issue. See all ASAP articles. **The radiation chemistry of macromolecules - CERN Document Server** Apr 20, 1999 Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Volume 32, Issue 8 2. Preparation and Characterization of Isotactic Poly(vinyl alcohol) Re(V)-Mediated Living Radical Polymerization of Styrene: .. A Potential Class of NII Side Chain Liquid Crystalline Polymers? V. **Volume Dependence of the Elastic Equation of State. 2. Solution** Jan 29, 2002 Radiation Chemistry, Photochemistry, and Photographic and Other Volume 35, Issue 3 Facile Reduction of Poly(2,5-dialkoxy-p-phenylene ethynylene)s: An . Polymerization of Lactide by Monomeric Sn(II) Alkoxide Complexes .. Polyelectrolytes in Multivalent Salt Solutions: Monomolecular versus **Fundamentals of Radiation Chemistry - Google Books Result** Sep 29, 2016 Macromolecules , Article ASAP X-ray scattering (SAXS) experiment using synchrotron radiation revealed The structural evolution advanced to Stage 2 when ?overall was . the volume fraction (?II) of the NPs in Phase II further increased, The absolute SAXS intensity IINP,t(q Rp) from the volume Vir **Macromolecules (ACS Publications) - American Chemical Society** Jun 1, 2004 Volume 37, Issue 11 Taken from: Jain, S. Bates, F. S. Macromolecules 2004, 37, 1511-1523. Synthesis of Poly(2,5-thienyleneethynylene)s by Alkyne Metathesis Isotactic Block Length Distribution in Polypropylene: Bernoullian vs .. Samuel J. Lord, Sergei S. Sheiko, Isaac LaRue, Hyung-Il Lee and **and the Methyl Methacrylate Copolymer - American Chemical Society** volume. Physical Description. 2 v. : ill. 24 cm. Subjects. Radiochemistry. Online version Dole, Malcolm, 1903- Radiation chemistry of macromolecules. **The Radiation Chemistry Of Macromolecules Volume I And Volume II** The Radiation Chemistry of Macromolecules, Volume II is a collection of

Part 1 deals with radiation chemistry of substituted vinyl polymers, Volume, v.2. **Macromolecules (ACS Publications) - American Chemical Society** Dec 3, 2010 Macromolecules 2010, 43, 1019110195 10191. DOI: 10.1021/ma1023318 Polymerization under Air Using Tris(2,2. 0 compared to a solar irradiation, (ii) the stability of this irradiation source . 10192 Macromolecules, Vol. 43, No. .. 13603. (6) (a) Cunningham, A. F. Desobry, V. In Radiation Curing in. **Macromolecules (ACS Publications) - American Chemical Society** In early work on radiation cross-linked polyethylene, values for g between 1 and 3 added diluent and v2 the volume fraction of polymer in the swollen network. **0122198026 - Radiation Chemistry of Macromolecules: V 2 by** Jan 28, 2014 Journal of Combinatorial Chemistry . Biomacromolecules Macromolecules External and Reversible CO2 Regulation of Ring-Opening . Dominik Konkolewicz, Pawel Krys, Joana R. Gois, Patricia V. Mendonca, Mingjiang Zhong, .. Alina K. Higham, Leah A. Garber, David C. Latshaw II, Carol K. Hall, **Statistics of Degradation and Cross-Linking of Polymer Chains with** Dec 10, 2013 Macromolecules, Volume 2: of chemistry, physics, and structure and 2: Radiation Chemistry of Macromolecules: v. 2 [Malcolm Dole] on **Fast Neutron Irradiation Effects on Polymers. 2. Cross-Linking and Next Article - ACS Publications - American Chemical Society** Volume 24, Issue 9. Pages 2143-2648 . 2. Degradations involving random chain scissions and volatilization of low molecular weight products . Isotacticity effect on crystallization and melting in polypropylene fractions. II. .. Critical behavior of a trifunctional, randomly branched polymer: percolation versus cascade theory. **Macromolecules (ACS Publications) - American Chemical Society** 2. Synthesis of novel linear tertiary copolycarbonates by phase-transfer catalysis Moo Il Chung, H. Harry Szmant. pp 25 .. R. V. Todesco, Prashant V. Kamat. **Macromolecules (ACS Publications) - American Chemical Society** Jun 14, 2005 Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Volume 38, Issue 12 . V. Butun, I. Bannister, N. C. Billingham, D. C. Sherrington and S. P. Armes Bismuth(III) n-Hexanoate and Tin(II) 2-Ethylhexanoate Initiated Copolymerizations of ?-Caprolactone and l-Lactide. **Radiation Chemistry of Macromolecules: v. 2: Malcolm Dole** Jan 26, 2010 Volume 43, Issue 2. Pages 581- .. Copolymerization of Oxetane with Tetrahydropyran: Microstructure of Polymers vs Kinetics of Chain Growth.