

1. Record Nr.	UNINA9911019326203321
Titolo	Advanced ESR methods in polymer research // edited by Shulamith Schlick
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Interscience, c2006
ISBN	9786610649075 9781280649073 1280649070 9780470053508 047005350X 9780470053492 0470053496
Descrizione fisica	1 online resource (369 p.)
Altri autori (Persone)	SchlickShulamith
Disciplina	547/.7046
Soggetti	Electron paramagnetic resonance - Research Polymers - Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Continuous-wave and pulsed ESR methods / Gunnar Jeschke, Shulamith Schlick -- Double resonance ESR methods / Gunnar Jeschke -- Calculating slow-motion ESR spectra of spin-labeled polymers / Keith A. Earle, David E. Budil -- ESR imaging / Shulamith Schlick -- ESR study of radicals in conventional radical polymerization using radical precursors prepared by atom transfer radical polymerization / Atsushi Kajiwar, Krzysztof Matyjaszewski -- Local dynamics of polymers in solution by spin-label ESR / Jan Pilar -- Site-specific information on macromolecular materials by combining CW and pulsed ESR on spin probes / Gunnar Jeschke -- ESR methods for assessing the stability of polymer membranes used in fuel cells / Emil Roduner, Shulamith Schlick -- Spatially resolved degradation in heterophasic polymers from 1D and 2D spectral-spatial ESR imaging experiments / Shulamith Schlick, Krzysztof Kruczala -- ESR studies of photooxidation and stabilization of polymer coatings / David R. Bauer, John L. Gerlock -- Characterization of dendrimer structures by ESR techniques / M.

Francesca Ottaviani, Nicholas J. Turro -- High-field ESR spectroscopy of conductive polymers / Victor I. Krinichnyi.

Sommario/riassunto

A definitive work on ESR and polymer science by today's leading authoritiesThe past twenty years have seen extraordinary advances in electron spin resonance (ESR) techniques, particularly as they apply to polymeric materials. With contributions from over a dozen of the world's top polymer scientists, Advanced ESR Methods in Polymer Research is the first book to bring together all the current trends in this exciting field into one comprehensive reference.Part I establishes the fundamentals of ESR, from experimental techniques to data analysis, and serves as a valuable ov
