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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 Kajiwarara, 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

Sommario/riassunto

A definitive work on ESR and polymer science by today's leading authorities. The 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
