

1. Record Nr.	UNINA9910298639003321
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Titolo	Atom-Probe Tomography : The Local Electrode Atom Probe / / by Michael K. Miller, Richard G. Forbes
Pubbl/distr/stampa	New York, NY : , : Springer US : , : Imprint : Springer, , 2014
ISBN	1-4899-7430-X
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (437 p.)
Disciplina	530.41
Soggetti	Materials science Solid state physics Spectrum analysis Microscopy Nanotechnology Characterization and Evaluation of Materials Solid State Physics Spectroscopy and Microscopy
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 at the end of each chapters and index.
Nota di contenuto	Introduction to Atom Probe Tomography -- Introduction to the Physics of Field Ion Emitters -- Field Evaporation and Related Topics -- The Art of Specimen Preparation -- The Local Electrode Atom Probe -- Data Reconstruction -- Data Analysis -- Appendices.
Sommario/riassunto	This book aims to provide an introduction and overview of atom-probe tomography from a materials science perspective, a full introduction to underlying theory and to current understanding of the theory of laser-pulsed APT, and a careful account of how to prepare specimens, set up the appropriate conditions for tomography, analyse the experimental data, and present results. A special feature of this book is that it includes an updated historical account of the development of the underlying theory (including field evaporation), allowing readers to appreciate how theoretical understanding of the science behind the technique reached its present state. This book is ideal for: . . . beginners as well as more experienced researchers and

scientists · those interested mainly in using the pulsed-laser local electrode atom probe for materials science · those interested in developing the technique and understanding the details of how it works.

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