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Titolo	NMR spectroscopy explained : simplified theory, applications and examples for organic chemistry and structural biology / / Neil E Jacobsen
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Descrizione fisica	1 online resource (686 pages)
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Soggetti	Nuclear magnetic resonance spectroscopy Chemistry, Organic Molecular biology
Lingua di pubblicazione	Inglese
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Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Fundamentals of NMR spectroscopy in liquids -- Interpretation of proton (^1H) NMR spectra -- NMR hardware and software -- Carbon-13 (^{13}C) NMR spectroscopy -- NMR relaxation - inversion-recovery and the nuclear Overhauser effect (NOE) -- The spin-echo and the attached proton test (APT) -- Coherence transfer: INEPT and DEPT -- Shaped pulses, pulsed field gradients and spin-locks: selective 1D NOE and 1D TOCSY -- Two-dimensional NMR spectroscopy: HETCOR, COSY and TOCSY -- Advanced NMR theory: NOESY and DQF-COSY -- Inverse heteronuclear 2D experiments: HSQC, HMQC and HMBC -- Biological NMR spectroscopy -- Appendix A: A pictorial guide to NMR spin states -- Appendix B: A survey of two-dimensional NMR experiments.
Sommario/riassunto	NMR Spectroscopy Explained : Simplified Theory, Applications and Examples for Organic Chemistry and Structural Biology provides a fresh, practical guide to NMR for both students and practitioners, in a clearly written and non-mathematical format. It gives the reader an

intermediate level theoretical basis for understanding laboratory applications, developing concepts gradually within the context of examples and useful experiments. Introduces students to modern NMR as applied to analysis of organic compounds. Presents material in a clear, conversational style that is appealing
