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Nota di contenuto	1. Introduction -- 2. Instrumentation -- 3. Theory of x-ray scattering from liquid surfaces -- 4. Experiments on liquid surfaces and interfaces.
Sommario/riassunto	The availability of synchrotron x-ray sources and the subsequent developments described in this book have led to substantial progress in our understanding of molecular ordering at liquid interfaces. This practical guide enables graduate students and researchers working in physics, chemistry, biology and materials science to understand and carry out experimental investigations into the basic physical and

chemical properties of liquid surfaces and interfaces. The book examines the surfaces of bulk liquids, thin wetting films and buried liquid-liquid interfaces. It discusses experiments on simple and complex fluids, including pure water and organic liquids, liquid crystals, liquid metals, electrified liquid-liquid interfaces and interfacial monolayers of amphiphiles, nanoparticles, polymers and biomolecules. A detailed description of the apparatus and techniques required for these experiments is provided, and theoretical approaches to data analysis are described, including approximate methods such as the Master formula, the Born approximation, Parratt's algorithm and the Distorted Wave Approximation.

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