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Titolo	Monatomic two-dimensional layers : modern experimental approaches for structure, properties, and industrial use // edited by Iwao Matsuda
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Nota di contenuto	Basics and families of monatomic layers : single-layer 2D materials / Marie D'Angelo and Iwao Matsuda -- Surface science : single atomic layers on crystal surfaces / Alexander A. Saranin and Andrey V. Zotov -- Interplay of two dimensional lattices of atomic layers at the junction / Shu-Jung Tang and Iwao Matsuda -- Diffraction : determination of atomic structure / Yuki Fukaya -- Advanced photoelectron spectroscopies / Paolo Moras and Iwao Matsuda -- Transport measurement : carrier transport / Satoru Ichinokura and Shuji Hasegawa -- Operando soft X-ray spectromicroscopic measurement and the use for high-performance devices and circuits / Hirokazu Fukidome.
Sommario/riassunto	"Monatomic two-dimensional layers: modern experimental approaches for structure, properties and industrial use provides a detailed examination on basic principles and state-of-the-art experimental techniques for monatomic layers on model surfaces, and in operating devices. Both conventional surface science and novel 2D materials science are included. The reader is guided through an introduction to the basic science of the field that is followed by advanced science specific to the system. Characterization techniques, the principles of state-of-the-art instruments for monatomic layers, and topics, including positron diffraction, time-resolved photoemission spectroscopy, surface transport measurements, and operando nanospectroscopy are also covered. Researchers, graduate students

and professionals will find this volume invaluable to acquire a deeper knowledge of the basic science, preparation, and experimental characterization techniques for 2D materials. Industrial technicians and operators will find it a useful overview of surface science related methods for fabrication and characterization of 2D materials"--
