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Titolo	New Polymeric Materials Based on Element-Blocks [[electronic resource] /] / edited by Yoshiki Chujo
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Sommario/riassunto	This book introduces the recent progress that has resulted from utilizing the idea of "element-block polymers". A structural unit consisting of various groups of elements is called an "element-block." The design and synthesis of new element-blocks, polymerization of these blocks, and development of methods of forming higher-order structures and achieving hierarchical interface control in order to yield the desired functions are expected to result in manifold advantages. These benefits will encourage the creation of new polymeric materials that share, at a high level, electronic, optical, and magnetic properties not achievable with conventional organic polymeric materials as well as forming properties of molding processability and flexible designability that inorganic materials lack. By pioneering innovative synthetic

processes that exploit the reactivity of elements and the preparation techniques employed for inorganic element-blocks, the aim is (1) to create a new series of innovative polymers based on the novel concept of element-block polymers, in which the characteristics of elements are extensively combined and utilized, and (2) to formulate theories related to these polymers. This book demonstrates especially the design strategies and the resulting successful examples offering highly functional materials that utilize element-block polymers as a key unit. .