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Nota di contenuto	Intro -- Preface -- Introduction: Aims, Scope, Approach, and Structure of the Book -- Background -- Aims of the Book -- Structure, Scope, and Approach of the Book -- Laying the Foundations -- 1 Introductory Concepts -- Abstract -- 1.1 Introduction -- 1.2 The Importance of Volcanism During Earth History and Today -- 1.3 Volcanoes and Their Diversity -- 1.4 Volcanic Provinces: Their Tectonic and Paleoenvironmental Context Through Geological Time -- 1.5 Effect of Environment on Eruption Styles, Processes, and Volcano Type -- 1.5.1 The Inaccessibility of Ocean Floor Volcanism, and the Technological Developments That Now Allow It -- 1.5.2 Benefits and Limitations of Studying Uplifted, Ancient Subaqueous Volcanic Successions -- 1.6 Process Spectrum in Volcanic Settings -- 1.7 Introduction to Terminology -- 1.8 The Facies Concept -- 1.8.1 Defining Facies and Understanding Facies Variations -- 1.8.2 Describing and Documenting Facies -- 1.8.2.1 Geometry -- 1.8.2.2 Lithology -- 1.8.2.3 Depositional Structures -- 1.8.2.4 Depositional Structures and Paleoflow/Paleotransport Directions and Patterns -- 1.8.2.5 Fossils -- 1.9 Facies Analysis, Interpretation, and the Importance of Associations of Facies -- 1.10 The Importance of Geological Mapping and

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Sommario/riassunto

This textbook on volcanology, authored by Ray Cas, Guido Giordano, and John V. Wright, provides a comprehensive exploration of volcanic processes, deposits, geology, and resources. Designed for students, researchers, and professionals in earth sciences, the book offers detailed insights into the dynamics of volcanic eruptions and their impact on Earth's evolution. It covers the formation of the Earth's crust, atmosphere, and oceans due to volcanic activity, and discusses how massive eruptions have influenced climate change and mass extinction events. The book aims to advance the understanding of volcanic hazards and their implications for society, while also highlighting the natural resources generated by volcanic activity.
