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Nota di contenuto	Front matter -- Preface -- Contents -- Part I Description of the CaO–SiO ₂ –Al ₂ O ₃ –Fe Oxides Chemical System -- Chapter 1 One-Component Chemical Systems: CaO, SiO ₂ , Al ₂ O ₃ and Fe Oxides -- Chapter 2 Binary Chemical Systems -- Chapter 3 Ternary Chemical Systems -- Chapter 4 Quaternary Chemical Systems -- Chapter 5 Quinary Chemical Systems -- Part II Applications of the CaO–SiO ₂ –Al ₂ O ₃ –Fe Oxides Chemical System -- Chapter 6 Applications to Hydraulic Binders -- Chapter 7 Application to Metal Refining -- Chapter 8 Application to Refractory Materials -- Chapter 9 Application of the Glassy Products -- Chapter 10 Application of Ceramic Products -- Chapter 11 Application as Fillers
Sommario/riassunto	This book describes and comments on the results of research devoted to the studies of phase assemblages in the CaO-SiO ₂ -Al ₂ O ₃ -Fe oxides chemical system, their stability and their evolution in our environment (temperature, pressure). Its aim is to be a research support, not only for researchers and development engineers but also more generally for others interested in materials sciences. The book is divided in two parts; the first devoted to a description of 'the system' using phase diagrams. The second explores the properties and uses of some of the minerals that are in widespread industrial and commercial use. Much of the work presented in this book is fully original and corresponds to the research undertaken by François Sorrentino from his time at the chemistry department of the University of Aberdeen during the early 1970's, to recent years when he has

resumed his interest in mineral research, particularly related to the synthesis of calcium silicates and calcium aluminates, and their industrial manufacture.
