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Nota di contenuto	Foreword -- Preface -- Abbreviations -- 1. Introduction -- 2. Simulation on dissolution mechanisms of tricalcium silicate -- 3. Simulation on mixed-control of dissolution and diffusion mechanisms of tricalcium silicate -- 4. Simulation on mixed-control of dissolution and boundary nucleation and growth mechanisms of tricalcium silicate -- 5. Simulation on the influence of particle internal pores,- 6. Simulation on ionic diffusion using virtual tricalcium silicate microstructure -- Appendix.
Sommario/riassunto	This book is written based on authors' research on cement hydration during the past decade. It establishes simulation model to evaluate the influence of crystal defects on the dissolution of tricalcium silicate and morphology change of particles and explores the hydration kinetics and microstructure development of tricalcium silicate under the mixed control of dissolution, diffusion, as well as boundary nucleation and growth. It also provides a theoretical basis for regulating the microstructure and performance of cement-based materials. It is designed as a reference work for professionals or practitioners and as a textbook for undergraduates or postgraduates. This book provides

valuable knowledge and useful methods that can be applied in the field of cement hydration.
