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Edizione	[Fourth edition /]
Descrizione fisica	1 online resource (]xiii], 375 pages, 4 unnumbered pages of plates) : illustrations (some colour)
Disciplina	631.4/1
Soggetti	Soil chemistry Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous edition by Hinrich Bohn.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1 Introduction to Soil Chemistry -- Chapter 2 Properties of Elements and Molecules -- Chapter 3 Characteristics of Chemicals in Soils -- Chapter 4 Soil Water Chemistry -- Chapter 5 Redox Reactions in Soils -- Chapter 6 Mineralogy and weathering processes in soils -- Chapter 7 Chemistry of soil clays -- Chapter 8 Production and chemistry of soil organic matter -- Chapter 9 Surface properties of soil colloids -- Chapter 10 Adsorption processes in soils -- Chapter 11 Measuring and predicting sorption processes in soils -- Chapter 12 Soil acidity -- Chapter 13 Salt-affected soils.
Sommario/riassunto	Soil is key to sustaining life—affecting air and water quality, the growth of plants and crops, and the health of the entire planet. Soil Chemistry 4e provides comprehensive coverage of the chemical interactions among organic and inorganic solids, air, water, microorganisms, and the plant roots in soil. The fourth edition of Soil Chemistry has been revised and updated throughout and provides a basic description of important research and fundamental knowledge in the field. The text covers chemical processes that occur in soils, including: distribution and species of nutrients and contaminants in soils; aqueous chemistry of soil solutions and mineral dissolution; oxidation and reduction reactions in soils; soil mineral formation processes and properties; the

formation and reactivity of soil organic matter; surface chemistry and cation, anion, and organic compound adsorption reactions; modelling soil chemical reactions; and reactions in acid and salt affected soils. Although extensively revised with updated figures and tables, the fourth edition maintains the focus on introductory soil chemistry that has distinguished earlier editions. New chapters on properties of elements relevant to soil chemistry, and a chapter with special focus on soil surface characteristics have been added. Special Topics boxes are also included in the Fourth Edition that includes examples, noteworthy topics, and case studies. End of chapter questions are included as a resource for teaching.