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Autore	Osipov V.I
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- 1. Stresses in soils -- Types of stresses -- External stresses -- Internal stresses -- 2. Terzaghi theory of effective stresses -- 3. Physicochemical theory of effective stresses -- Types of contacts in clays -- Number of contacts -- Area of contacts -- Effective contact stress in water-saturated soils -- Effective contact stress in unsaturated soils -- Actual total effective stress in soils -- Conclusion.
Sommario/riassunto	This book presents a new theory of effective stresses in soils, which takes into account the internal stresses caused by the molecular, electrostatic, and structural mechanical forces. These forces exist in thin hydrate films of adsorbed water molecules at the contacts of structural elements, producing the so-called disjoining effect. They can be evaluated by incorporating theoretical achievements of molecular physics and colloidal chemistry. The novel theory described in this book considers not only external but also internal stresses and gives different results for effective forces compared with the Terzaghi theory widely applied in soil mechanics. The book provides equations for the

actual effective stresses at the contacts of particles, thus improving the Terzaghi theory in physicochemical context.
