1. Record Nr. UNINA9910812508403321

| | |
|---|---|
| Autore | Joud Jean-Charles |
| Titolo | Physical chemistry and acid-base properties of surfaces / / Jean-Charles Joud, Marie-Genevieve Barthes-Labrousse |
| Pubbl/distr/stampa | Hoboken, NJ : , : Wiley, , 2015 |
| ISBN | 1-119-14541-4<br>1-119-14538-4<br>1-119-14539-2 |
| Descrizione fisica | 1 online resource (156 p.) |
| Collana | Focus materials in science series |
| Disciplina | 541.3/3 |
| Soggetti | Surface chemistry<br>Acids-Basicity<br>Technology |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Table of Contents; Title; Copyright; Introduction; Chapter 1: Wettability of an Ideal Surface: Overview; 1.1. Wetting angle; 1.2. Adhesion effect; 1.3. Surface tension and free surface energy; Chapter 2: Real Surfaces; 2.1. Wenzel's model - topological defects; 2.2. Cassie-Baxter model: chemical defects; 2.3. Superhydrophilic surfaces; 2.4. Superhydrophobic surfaces; 2.5. Application; Chapter 3: Components of the Surface Energy; 3.1. Overview; 3.2. Molecular interactions and components of the energy; 3.3. The hydrogen bond; 3.4. Lewis acid-base interactions<br>3.5. The effective components of the interaction energy3.6. Application; Chapter 4: The Acid-Base Component in the Work of Adhesion; 4.1. Overview; 4.2. Use of the acid-base component; 4.3. The Owens-Wendt approximation; 4.4. Van Oss-Good description; Chapter 5: Experimental Determination through Wettability Measurements; 5.1. One liquid method; 5.2. Two liquid method. Surfaces with high surface energy; 5.3. Applications of the two liquid method; 5.4. Comparison between Owens-Wendt and van Oss-Good methods; Chapter 6: Acid-Base Properties of Surfaces: Experimental Approaches; 6.1. Overview |