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Nota di contenuto	Chapter 1: Overview of Nanolayers: Formulation and Characterization Methods; 1.1. Introduction; 1.2. Formulation of Nanolayers; 1.2.1. Monolayers at Interface; 1.2.1.1. Monolayer at gas (air)-liquid interface; 1.2.1.2. Monolayer at gas-solid interface; 1.2.1.3. Monolayer at liquid-solid interface; 1.2.1.4. Monolayer at finite interface; 1.2.2. Multilayers at Interface; 1.3. Characterization Methods of Nanolayers; 1.3.1. Characterization of Nanolayers by Microscopy 1.3.1.1. Transmission electron microscope 1.3.1.2. Atomic force microscope; 1.3.2. Characterization of Nanolayers by Electromagnetics; 1.3.2.1. Light scattering; 1.3.2.2. Small angle scattering; 1.3.2.3. Reflectometry; 1.3.3. Characterization of Nanolayers by Spectroscopy; 1.3.3.1. X-ray spectroscopy; 1.3.3.2. Vibration spectroscopy; 1.3.3.3. Surface plasmon resonance spectroscopy; 1.4. Conclusions; Acknowledgments; References; Chapter 2: Electrical Double Layer at Nanolayer Interface; 2.1. Introduction; 2.2. Gouy-Chapman-Stern Model for Electrical Double Layer 2.3. Electrical Double Layer Around a Planar Surface 2.4. Electrical Double Layer Around Spherical and Cylindrical Surfaces; 2.4.1. Spherical Surface; 2.4.2. Cylindrical Surface; 2.5. Electrical Double Layer Across a Nanolayer of Porous Material; 2.6. Electrical Double Layer Across a Nanolayer of Polyelectrolytes; 2.7. Discrete Charge Effect; 2.8. Modified Poisson-Boltzmann Equation; 2.9. Conclusion; References;

Chapter 3: Scanning Probe Microscopy Techniques for Modern Nanomaterials; 3.1. Introduction; 3.2. Submolecular Imaging of Two-Dimensional Supramolecular Systems by SPM
3.3. On-Site STM Imaging of Covalently Bonded 2D Supramolecular Structures by Surface-Mediated Selective Polycondensation
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3.11. Conclusions and Outlook; References; Chapter 4: Surface-Enhanced Spectroscopy for Surface Characterization; 4.1. Introduction; 4.2. Types of Surface-Enhanced Spectroscopies; 4.3. Metallic Nanostructures for Surface Enhanced Spectroscopies; 4.4. Physicochemical Phenomenon of Materials in the Vicinity of Metal Nanostructures; 4.5. Practical Methods for Surface-Enhanced Spectroscopies; 4.6. Recent Applications: Beyond the Spectroscopies; 4.7. Conclusions; References
