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2.3 Heteroepitaxy of Disk-Like Organic Molecule on Para-Sexiphenyl Ultrathin Film by Vapor Deposition; 2.3.1 p-6P and Planar Metal Phthalocyanines; 2.3.2 p-6P and Nonplanar Metal Phthalocyanine
2.3.3 Heteroepitaxy Growth of Perylene Diimide Derivatives on p-6P2.4 Evolution of Film Growth 2,5-Bis (4-Biphenylyl) Bithiophene (BP2T); 2.4.1 Growth Behavior of BP2T Thin Films; 2.4.2 Heteroepitaxy Growth of ZnPc on BP2T Thin Films; 2.5 Heteroepitaxy Between Disk-Like Molecules; 2.5.1 Stability of H2Pc Film Fabricated by WEG; 2.5.2 WEG of H2Pc Film by Kinetic Control; 2.5.3 Heteroepitaxy Growth of F16CuPc on H2Pc Thin Film; 2.6 Perspectives; 2.6.1 Nucleation Process of Organic Ultrathin Film; 2.6.2 Contacted and Oriented Process of the Nucleus on the Substrate
2.6.3 Liquid-Crystal-Like Behavior and Flexible Boundary of Organic Ultrathin Film2.6.4 Extent of Liquid-Crystal-Like Behavior of Organic Ultrathin Film; 2.6.5 Weak Epitaxy Growth of Organic Ultrathin Film; References; 3 Interfacial Electronic Structure in Organic Semiconductor Heterojunctions; 3.1 Ambipolar Organic Transistors and Organic Heterostructures; 3.2 CuPc/F16CuPc Heterojunction Effect; 3.2.1 Normally On Operation Mode of CuPc/F16CuPc Heterojunction Transistors; 3.2.2 Experiment of Planar Heterojunction Diode; 3.2.3 Carrier Accumulation at CuPc/F16CuPc Heterojunction Interface
3.2.4 CuPc/F16CuPc Heterojunction Diodes with Reverse Rectifying Characteristics3.2.5 Charge Accumulation Thickness in CuPc/F16CuPc Heterojunction Films; 3.2.6 Direct Measurement of CuPc/F16CuPc Interfacial Electronic Structure by UPS; 3.2.7 Difference in UPS Measurement Results; 3.3 Anderson Rule and Ideal Interfacial Electronic Structure of CuPc/F16CuPc Heterojunction; 3.3.1 Anderson Affinity Rule; 3.3.2 Ideal Interfacial Electronic Structure for the CuPc/F16CuPc Heterojunction; 3.4 Organic and Inorganic Semiconductor Heterojunction
3.4.1 Comparison of the Organic Accumulation Heterojunction and Inorganic p-n Homojunction

Sommario/riassunto

It is well known that most important electronic devices use Schottky junctions and heterojunctions. Unfortunately there is not an advanced book introducing heterojunctions systematically. Introduction to Organic Semiconductor Heterojunctions fills the gap. In this book, the authors provide a comprehensive discussion and systematic introduction on the state-of-the-art technologies as well as application of organic semiconductor heterojunctions. First book to systematically introduce organic heterojunctionsArms readers with theoretical, experimental and appl