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4 Other Uses of Electrospinning for Encapsulation; 4.5 Outlook and Conclusions; References; Chapter 5: Microencapsulation by Interfacial Polymerization; 5.1 Introduction; 5.2 Generalities; 5.3 Encapsulation by Heterophase Polymerization; 5.4 Microencapsulation by Polyaddition & Polycondensation Interfacial; 5.5 Microencapsulation by In Situ Polymerization; 5.6 Conclusion; References; Chapter 6: Encapsulation of Silica Particles by a Thin Shell of Poly(Methyl) Methacrylate; 6.1 Introduction
6.2 Synthesis of Silica (Nano)Particles and Their Surface Modification6.3 Encapsulation of Silica Particles in a Thin PMMA Shell; 6.4 Summary; References; Chapter 7: Organic Thin-Film Transistors with Solution-Processed Encapsulation; 7.1 Introduction; 7.2 Environment-Induced Degradations of OTFTs; 7.3 Encapsulation of OTFTs; 7.4 Summary and Outlook; References; Chapter 8: Tunable Encapsulation Property of Amphiphilic Polymer Based on Hyperbranched Polyethylenimine; 8.1 Introduction; 8.2 Synthesis of PEI-CAMs; 8.3 Unimolecularity versus Aggregate of PEI-CAMs
8.4 Host-Guest Chemistry of PEI-CAMs8.5 Charge Selective Encapsulation and Separation; 8.6 Recognition and Separation of Anionic-Anionic Mixtures by Core Engineering of a CAM; 8.7 Modulation of the Guest Release of a CAM; 8.8 Concluding Remarks; Acknowledgements; References; Chapter 9: Polymer Layers by Initiated CVD for Thin Film Gas Barrier Encapsulation; 9.1 Introduction; 9.2 Initiated CVD Polymerization; 9.3 Coating by Initiated CVD; 9.4 Advantages of iCVD in Hybrid Multilayer Gas Barriers; 9.5 Specific Requirements for the Use in Hybrid Multilayers
9.6 Multilayer Gas Barriers Containing Polymers by iCVD

Sommario/riassunto

"The process of encapsulation by which living creatures are engulfed in a protective shell is both well understood and widely used in industry. This work highlights the growing interest and use of nanotechnologies for the generation of nano-capsules or nano-containers with desirable properties and behaviors. It introduces readers to many significant processes and technologies that have been developed and applied successfully to generate encapsulated materials, addressing the high potential of these technologies and products in a large number of commercial processes"--
