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Nota di contenuto	Intro -- LIGHT-EMITTING DIODES AND OPTOELECTRONICS -- LIGHT-EMITTING DIODES AND OPTOELECTRONICS -- CONTENTS -- PREFACE -- APPROACHES FOR FABRICATING HIGH EFFICIENCY ORGANIC LIGHT EMITTING DIODE FOR FLAT PANEL DISPLAY AND SOLID STATE LIGHTING: AN OVERVIEW -- ABSTRACT -- 1. INTRODUCTION -- 2. APPROACHES FOR HIGHLY EFFICIENT DEVICES -- 2.1. Device Structure -- 2.1.1. Low Carrier Injection Barrier -- 2.1.2. Effective Carrier Confinement -- 2.1.3. Effective Excitons Generation on Host -- 2.1.4. Effective Host-Guest Energy Transfer -- 2.1.5. Balanced Carrier Injection -- 2.1.6. Carrier Modulation Layer -- 2.1.7. Polymeric Nanodots (PNDs) -- 2.2. Light Outcoupling -- 2.2.1. Substrate Surface Modifications -- 2.2.2. Texturing Mesh Surfaces -- 2.2.3. Multilayer Cathode Structures -- 2.2.4. Aperiodic Dielectric Stacks -- 2.2.5. Microlens Arrays -- 2.2.6. Low Index Grids -- 2.2.7. Effect of Microcavities -- 2.2.8. Surface Plasmons -- 2.2.9. Photonic Crystal -- 2.2.10. Effect of Nano Porous Films, Nano Wires, Nano Particles and Nano Pillars -- CONCLUSION -- ACKNOWLEDGMENTS -- REFERENCES -- RELIABILITY ESTIMATION FROM THE JUNCTION TO THE PACKAGING OF LED -- I. CONTEXT AND OBJECTIVES -- II. STATE OF ART OF THE LED MODULE -- III. MODEL OF THE LED MODULE -- 1. Thermal Simulation -- 2. Optical Models -- a. Optical Power Characterizations -- b. Spectral Characterizations -- 3. Electrical Model -- IV. FAILURE

ANALYSES -- 1. Ageing Test Conditions - Active Storage -- 2. Analysis of Recombination Current Drift -- a) Failure Mechanism Diagnostic Using Electrical Characterizations -- b. Failure Mechanism Diagnostic Using Optical Characterizations -- 3. Analyses of Leakage Current -- V. RELIABILITY ESTIMATION -- 1. Relation between Degradation Law and Lifetime Estimation -- 2. Reliability Investigations Using Technological Dispersion -- CONCLUSION -- REFERENCES.

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