

CONTENT

INTRODUCTION.....	5
1 PREPARATION OF AMORPHOUS SILICON.....	6
1.1 Overview of preparation techniques of amorphous hydrogenated silicon.....	6
1.2 Microwave magnetoactive plasma source.....	7
1.3 Microwave magnetoactive ion source.....	10
1.4 Silicon Evaporation.....	13
1.5 Microwave Electron-Cyclotron-Resonance Plasma-Enhanced Chemical-Vapor-Deposition (MW ECR PE CVD) Method.....	15
2 THERMAL DESORPTION SPECTROSCOPY.....	16
2.1 Introduction.....	16
3 POLYSILYLENES.....	23
3.1 General Properties.....	23
3.2 Evaporated films of PMPSi.....	25
3.3 Oriented thin films of PDMSi AND their properties.....	30
3.4 Preparation of PDMSi organic LED (OLED).....	32
4 SILOXANES BASED COMPOSITE INTERPHASES PREPARED IN PLASMA.....	34
4.1 Deposition apparatus.....	36
4.2 Scratch tester.....	38
References.....	38