

Contents

Plasma Chemistry of Fluorocarbons as Related to Plasma Etching and Plasma Polymerization	
E. Kay, J. Coburn and A. Dilks	1
The Mechanism and Kinetics of Plasma Polymerization	
A. T. Bell	43
Elementary Processes at Solid Surfaces Immersed in Low Pressure Plasmas	
H. F. Winters	69
Author Index Volumes 50-94	127

Plasma Chemistry of Fluorocarbons as Related to Plasma Etching and Plasma Polymerization

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This chapter deals with the physical and chemical processes which take place in fluorocarbon plasmas. Emphasis is given to plasma diagnostic techniques which are well suited to investigate the neutral and ionized gas phase species as well as plasma-surface interactions. Special attention is given to a description of mechanisms which control plasma etching and plasma polymerization. Structural characterization techniques which work well with a variety of fluorocarbon thin films prepared in a plasma are given and key physical properties of such films are reviewed.

Table of Contents

1 General Considerations of Fluorocarbon Plasmas	3
2 Experimental Methods Used in the Study of Etching and Polymerizing Plasmas	5
2.1 Plasma Characterization	5
2.1.1 Electron Density N_e and Energy Distribution $f(E)$	5
2.1.2 Plasma Potential	7
2.1.3 Gas Flow Parameters	8
2.1.4 Species Identification and Measurement	9
2.2 Characterization of Plasma-Surface Interactions	11
2.2.1 Etch Rate or Polymerization Rate Measurements	11
2.2.2 Surface and Thin Film Characterization	13
3 Mechanisms in Plasma Etching	13
3.1 Chemical Aspects of Plasma Etching	16
3.1.1 Role of Oxygen	16
3.1.2 Fluorine-Deficient Discharges and Etch Rate Selectivity	17
3.2 The Role of Ion Bombardment in Plasma Etching — Mechanisms for Directional Etching	20
3.3 Consumption of the Active Species by the Etching Process — The Loading Effect	23
3.4 Simplifying Concepts	25
4 Plasma Polymerization of Fluorocarbons	27
4.1 Gas Phase Species in a Tetrafluoroethylene Plasma	28

4.2 Plasma Polymerization Mechanisms	29
4.3 Polymer Characterization	31
4.4 Some Physical Properties of Plasma Polymerized Fluorocarbons	32
5 Simultaneous Plasma Etching and Polymerization	35
5.1 Metal Containing Fluorocarbon Polymers	36
5.2 Structural Aspects of the Metal Containing Fluorocarbon Polymers	36
5.3 Control of Composition of Metal Containing Fluorocarbon Polymers	39
References	40

The Mechanism and Kinetics of Plasma Polymerization

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Table of Contents

1 Introduction	44
2 Reactor Configurations	44
3 Physical Characteristics of the Plasma	45
4 Elementary Processes Involved in Plasma Polymerization	49
5 Models of Plasma Polymerization Kinetics	53
6 Conclusions	67
7 References	67

Elementary Processes at Solid Surfaces Immersed in Low Pressure Plasmas

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Table of Contents

1 Introduction	71
2 The Interaction of Ions with Surfaces	72
2.1 Neutralization and Secondary-Electron Emission	72
2.1.1 Basic Potential (Mechanisms Ejection)	72
2.1.2 Basic Mechanisms (Kinetic Ejection)	77
2.1.3 The Influence of Ion-Induced Secondary-Electron Emission on Plasmas	80
2.2 Phenomena Induced by Momentum-Transfer	81
2.2.1 General Considerations	81
2.2.2 Theoretical Considerations	83
2.2.3 Reflection and Trapping of Incident Ions	86
2.2.3.1 Theory and Experiment	86
2.2.3.2 Reflection and Trapping of Particles in a Plasma Environment	92
2.2.4 Sputtering	93
2.2.4.1 Sputtering — Theoretical	93
2.2.4.2 Sputtering — Experimental	96
2.2.4.3 Comments on Sputtering in a Glow Discharge	97
2.2.5 The Altered Layer	100
2.2.6 Ion-Induced Chemical Reactions	103
2.2.6.1 Cooperative Effects in Ion-Induced Chemical Reactions	103
2.2.6.2 Chemical Reactions Involving Constituents of the Incident Ion	106
3 The Interaction of Electrons with Surfaces	108
3.1 Secondary-Electron Emission	108
3.2 Electron-Induced Dissociation of Sorbed Molecules	110
3.3 Electron-Induced Chemical Reactions	114

4 The Interaction of Neutral Species with Surfaces	114
4.1 General Comments	114
4.2 The Interaction of Radicals and Atoms with Surfaces	117
4.3 The Interaction of Electronically Excited Molecules with Surfaces	120
5 References	122

