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Vacuum Technology

Nanotechnology has reached a level where almost every new development and even every new product uses features of nanoscopic properties of materials. As a consequence, an enormous amount of scientific instruments is used in order to synthesize and analyze new structures and materials. Due to the surface sensitivity of such materials, many of these instruments require ultrahigh vacuum that has to be provided under extreme conditions like very high voltages.

In this book, Yoshimura provides a review of the UHV related development during the last decades. His very broad experience in the design enables him to present us this detailed reference. After a general description how to design UHV systems, he covers all important issue in detail, like pumps, outgasing, Gauges, and Electrodes for high voltages.

Thus, this book serves as reference for everybody using UVH in his scientific equipment.

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Contents

1	Designing of Evacuation Systems	1
	Selection of Pumping Speed	2
	Pumping-down Characteristics	2
	Steady-State Evacuation	3
	Roughing System	3
	Backstreaming of RP Oil Vapor	4
	Backstreaming of DP Oil Vapor	6
	Overload in High-Vacuum Evacuation Systems	8
	DP In-Series System	14
	Ultrahigh Vacuum Electron Microscopes	27
	Know-how Technology in Designing UHV Evacuation Systems	31
	References	32
2	Vacuum Pumps	35
	Mechanical Pumps	35
	Diffusion Pumps	38
	Turbomolecular Pumps	41
	Dry Vacuum Pumps	45
	Cryopumps	51
	Vapor Pressures for Gases	55
	Sputter Ion Pumps	56
	Noble Pumps for Inert Gases	60
	Getter Pumps	68
	Titanium-Sublimation Pumps	68
	Non-Evaporable Getter (NEG) Pumps	69
	Methods for Measuring Pumping Speeds	70
	Orifice Method	70
	Three-Gauge Method (Pipe Method)	71
	Three-Point Pressure Method (3PP Method)	72
	References	76

3	Simulation of Pressures in High-Vacuum Systems	85
	Conventional Calculation of System Pressures	85
	3A Vacuum Circuits	87
	Basic Concept of Vacuum Circuits	87
	Designing of Vacuum Circuits	89
	Simulation of Pressures	91
	Resistor-Network Simulation Method	91
	Matrix Calculation of Pressures	94
	3B Molecular-Flow Conductance	108
	Conductance	108
	Transmission Probability	109
	3C Gas-Flow Patterns	117
	References	119
4	Outgassing	123
	Process of Outgassing	123
	Diffusion	124
	Recombination-limited Outgassing	134
	Data of Outgassing	136
	Stainless Steel	136
	Electro-polishing and Vacuum Firing	137
	Aluminum Alloy, Copper and Titanium	147
	Permeation Through Elastomer Seals	148
	Evaporation	156
	Methods for Measuring Outgassing Rates	157
	Differential Pressure-rise Method [4-41]	159
	Variable Conductance Method [4-43]	161
	Conductance Modulation Method [4-44]	164
	Two-Point Pressure Method and One-Point Pressure Method [4-45]	167
	References	168
5	Phenomena Induced by Electron Irradiation	175
	5A Electron/Photon Stimulated Desorption (ESD/PSD)	176
	5B Polymerization of Hydrocarbon Molecules	182
	Transport of Hydrocarbon Molecules in High Vacuum	182
	Transport of Hydrocarbon Molecules in Ultrahigh Vacuum	185
	Materials to be Polymerized by Electron Beam Irradiation	192
	5C Darkening in Secondary Electron Images in SEM	195
	5D Etching of Carbonaceous Specimens	198
	References	199
6	Vacuum Gauges	205
	Mechanical Gauges	207
	Capacitance Manometer	207
	Thermal Conductivity Gauges	209

Pirani Gauge	209
Viscosity Gauges	211
Spinning Rotor Gauge	211
Crystal Oscillation Gauge	214
Ionization Gauges	217
Penning Gauge	217
Sputter Ion Pump as a Pressure Indicator	220
Bayard-Alpert Ionization Gauge	221
Extractor Gauge	228
Hot-Cathode Magnetron Ionization Gauge	231
Cold-Cathode Ionization Gauge for UHV	232
Magnetic Sector [6-24]	234
Quadrupole Mass-Filter [6-24]	236
Mass Spectra Cracking Patterns	238
Outgassing from Ionization Gauges with Incandescent Filaments	239
Gas Species Emitted from Ionization Gauges with Incandescent Filaments	244
New Gauges for Measuring Extreme High Vacuum	247
References	257
7 Microdischarges in High Vacuum	265
7A Microdischarges over Insulator Surfaces	266
Factors	266
Charging of Dielectric Surfaces	266
Gas Molecules on Insulator Surfaces	275
Triple Junction	278
Surface Flashover in SF ₆ Gas	280
Review	281
7B Microdischarges between High-Voltage Electrodes	282
Anode-Initiation Mechanism	282
Ion-Exchange Process and Total-Voltage Effect	286
Projection (Whisker) on Cathode	291
Gas Molecules on Electrode Surfaces	291
Ar-Glow Conditioning	292
High-Voltage Conditioning (HVC)	293
Conditioning Effect	294
Review	296
References	296
8 Emitters for Fine Electron Probes	301
Keywords	301
8A W FE Emitter	304
Characteristics	304
Remolding	306
Emission Noise	312

Build-up Treatment	317
FE-Initiated Vacuum Arc	318
Morphological Changes of Tip	320
FE-Related Technology	321
Review	324
8B ZrO/W Emitter	325
Characteristics	325
Surface Geometry	326
Properties	329
8C LaB ₆ Emitter	332
Characteristics	332
Mounting Methods	333
Material Loss	338
Properties	340
Review	340
8D Other FE Emitters	341
References	341
Index	345