

Contents

Some Aspects of Classical Surface Thermodynamics	
P. L. de Bruyn, <i>Massachusetts Institute of Technology</i> . . .	1
Modern Theory of Fluid Surface Tension	
Edward W. Hart, <i>General Electric Research Laboratory</i> . .	37
Nucleation in Homogeneous Vapors	
K. C. Russell, <i>Massachusetts Institute of Technology</i> . . .	43
Nucleation Processes in Deposition onto Substrates	
J. P. Hirth and K. L. Moazed, <i>Ohio State University</i> . . .	63
Nucleation and Condensation in Polymer Systems	
Fraser P. Price, <i>General Electric Research Laboratory</i> . . .	85
Panel Discussion: Session I.	105
Surface Self-Diffusion at High Temperatures	
P. G. Shewmon, <i>Carnegie Institute of Technology</i>	111
Self-Diffusion on Nearly Pure Metallic Surfaces	
C. E. Birchenall and J. M. Williams, <i>University of Delaware</i>	133
Defects Near Ionic Crystal Surfaces	
Che-Yu Li and J. M. Blakely, <i>Cornell University</i>	153
Effect of Surfaces on Mechanical Behavior of Metals	
I. R. Kramer, <i>Martin Company</i>	171
Ultrafine Particles in the Gas Phase	
John Turkevich, <i>Princeton University</i>	195
Panel Discussion: Session II.	213
Index	223