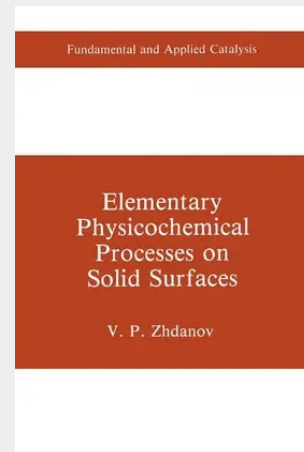


Elementary Physicochemical Processes on Solid Surfaces

vi industrial process or a class of catalysts forms the basis of other books, with information on: fundamental science of the topic, the use of the process or catalysts, and engineering aspects. Single topics in catalysis are also treated in the series, with books giving the theory of the underlying science, and relating it to catalytic practice. We believe that this approach is giving a collection of volumes that is of value to both academic and industrial workers. The series editors welcome comments on the series and suggestions of topics for future volumes. Martyn Twigg Michael Spencer Billingham and Cardiff Contents Introduction. 1. Chapter 1. Vibrational Relaxation of Adsorbed Particles. 5 1.1. General Approach to Describing Vibrational Relaxation. 5 1.2. Phonon Mechanism of Relaxation. 8 1.2.1. Relationship between the Simple Perturbation Theory and the Adiabatic Approximation. 9. 1.2.2. One-Mode Approximation. 11 1.2.3. Relaxation Caused by Correlation Potential Proportional to Displacement of Adsorbed Particle from Equilibrium. 12 1.2.4. Relaxation Caused by Correlation Potential Proportional to Displacement of Surface Atom from Equilibrium. 14 1.2.5. Results and Discussion. 15 1.3. Vibrational Relaxation via Interaction with Conduction Electrons. 18. 1.3.1. Dipole Approximation. 18.

vi industrial process or a class of catalysts forms the basis of other books, with information on: fundamental science of the topic, the use of the process or catalysts, and engineering aspects. Single topics in catalysis are also treated in the series, with books giving the theory of the underlying science, and relating it to catalytic practice. We believe that this approach is giving a collection of volumes that is of value to both academic and industrial workers. The series editors welcome comments on the series and suggestions of topics for future volumes. Martyn Twigg Michael Spencer Billingham and Cardiff Contents Introduction 1 Chapter 1. Vibrational Relaxation of Adsorbed Particles 5 1.1. General Approach to Describing Vibrational Relaxation 5 1.2. Phonon Mechanism of Relaxation 8 1.2.1. Relationship between the Simple Perturbation Theory and the Adiabatic Approximation 9 . 1.2.2. One-Mode Approximation 11 1.2.3. Relaxation Caused by Correlation Potential Proportional to Displacement of Adsorbed Particle from Equilibrium 12 1.2.4. Relaxation Caused by Correlation Potential Proportional to Displacement of Surface Atom from Equilibrium 14 1.2.5. Results and Discussion 15 1.3. Vibrational Relaxation via Interaction with Conduction Electrons 18 1.3.1. Dipole Approximation 18 .



160,49 €

149,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780306437793

Medium: Buch

ISBN: 978-0-306-43779-3

Verlag: Humana

Erscheinungstermin: 30.11.1991

Sprache(n): Englisch

Auflage: 1991

Serie: Fundamental and Applied Catalysis

Produktform: Gebunden

Gewicht: 1420 g

Seiten: 314

Format (B x H): 160 x 241 mm

