



# **Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces**

*James M. Howe*

Download now

[Click here](#) if your download doesn't start automatically

# Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces

*James M. Howe*

## **Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces** James M. Howe

A thorough exploration of the atomic structures and properties of the essential engineering interfaces—an invaluable resource for students, teachers, and professionals

The most up-to-date, accessible guide to solid-vapor, solid-liquid, and solid-solid phase transformations, this innovative book contains the only unified treatment of these three central engineering interfaces. Employing a simple nearest-neighbor broken-bond model, *Interfaces in Materials* focuses on metal alloys in a straightforward approach that can be easily extended to all types of interfaces and materials. Enhanced with nearly 300 illustrations, along with extensive references and suggestions for further reading, this book provides:

- A simple, cohesive approach to understanding the atomic structure and properties of interfaces formed between solid, liquid, and vapor phases
- Self-contained discussions of each interface—allowing separate study of each phase transformation
- A comparative look at the different interfaces, including atomic structure and crystallography; anisotropy, roughening, and melting; interfacial stability and segregation; continuous and ledge growth models; and atomistic modeling
- An analysis of nearest-neighbor broken-bond results against thermodynamic and kinetic descriptions of the interfaces
- Problem sets at the end of each chapter, emphasizing the key concepts detailed in the text

Spanning the fields of chemical, electrical and computer engineering, materials science, solid-state physics, and microscopy, *Interfaces in Materials* bridges a major gap in the literature of surface and interface science.

 [Download Interfaces in Materials: Atomic Structure, Thermod ...pdf](#)

 [Read Online Interfaces in Materials: Atomic Structure, Therm ...pdf](#)

## **Download and Read Free Online Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces James M. Howe**

---

### **From reader reviews:**

#### **Andrew Nixon:**

What do you consider book? It is just for students because they are still students or the item for all people in the world, exactly what the best subject for that? Simply you can be answered for that issue above. Every person has different personality and hobby per other. Don't to be forced someone or something that they don't want do that. You must know how great in addition to important the book Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces. All type of book could you see on many options. You can look for the internet sources or other social media.

#### **Samuel Brown:**

This Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces tend to be reliable for you who want to certainly be a successful person, why. The reason why of this Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces can be on the list of great books you must have is usually giving you more than just simple examining food but feed you with information that perhaps will shock your preceding knowledge. This book is actually handy, you can bring it almost everywhere and whenever your conditions in the e-book and printed types. Beside that this Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces forcing you to have an enormous of experience such as rich vocabulary, giving you tryout of critical thinking that we understand it useful in your day exercise. So , let's have it appreciate reading.

#### **Michael Due:**

Do you one of the book lovers? If so, do you ever feeling doubt when you are in the book store? Aim to pick one book that you just dont know the inside because don't judge book by its handle may doesn't work the following is difficult job because you are scared that the inside maybe not since fantastic as in the outside appearance likes. Maybe you answer might be Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces why because the wonderful cover that make you consider in regards to the content will not disappoint a person. The inside or content is actually fantastic as the outside as well as cover. Your reading sixth sense will directly show you to pick up this book.

#### **Theresa Frost:**

A lot of book has printed but it takes a different approach. You can get it by world wide web on social media. You can choose the top book for you, science, comedian, novel, or whatever simply by searching from it. It is identified as of book Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces. You can contribute your knowledge by it. Without leaving the printed book, it might add your knowledge and make you happier to read. It is most significant that, you must aware about e-book. It can bring you from one destination for a other place.

**Download and Read Online Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces James M. Howe  
#YNXQFRLO841**

# **Read Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces by James M. Howe for online ebook**

Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces by James M. Howe Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces by James M. Howe books to read online.

## **Online Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces by James M. Howe ebook PDF download**

**Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces by James M. Howe Doc**

**Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces by James M. Howe Mobipocket**

**Interfaces in Materials: Atomic Structure, Thermodynamics and Kinetics of Solid-Vapor, Solid-Liquid and Solid-Solid Interfaces by James M. Howe EPub**