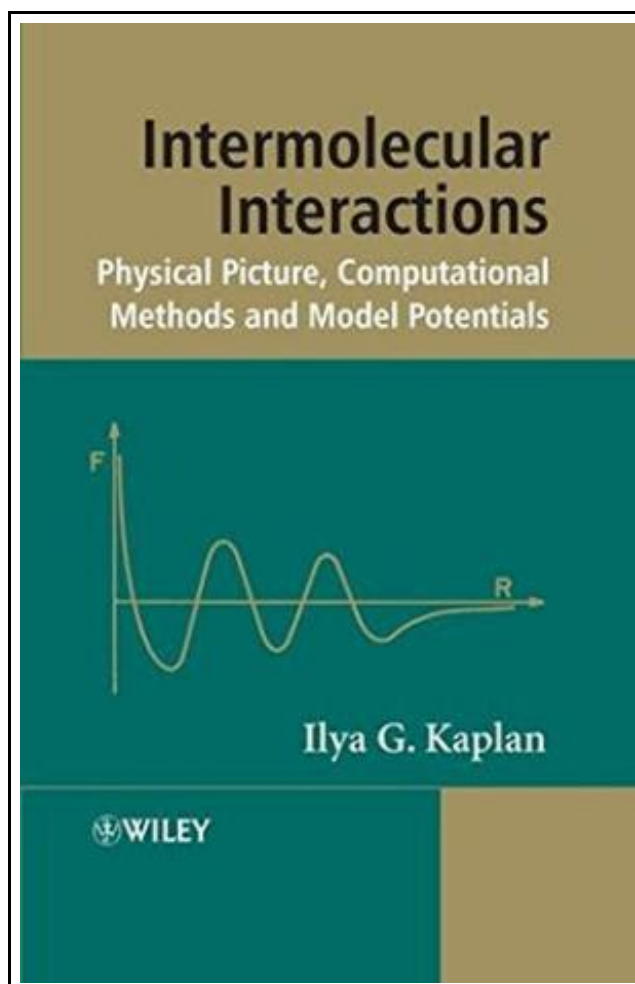


## Intermolecular Interactions: Physical Picture, Computational Methods and Model Potentials (Hardback)



Filesize: 5.47 MB

### ***Reviews***


*This book will not be simple to get going on reading but extremely exciting to read through. Yes, it can be play, still an interesting and amazing literature. I am very easily could possibly get a delight of reading a written book.*

*(Rene Olson)*

## INTERMOLECULAR INTERACTIONS: PHYSICAL PICTURE, COMPUTATIONAL METHODS AND MODEL POTENTIALS (HARDBACK)



John Wiley and Sons Ltd, United States, 2006. Hardback. Book Condition: New. 229 x 163 mm. Language: English . Brand New Book. The subject of this book - intermolecular interactions - is as important in physics as in chemistry and molecular biology. Intermolecular interactions are responsible for the existence of liquids and solids in nature. They determine the physical and chemical properties of gases, liquids, and crystals, the stability of chemical complexes and biological compounds. In the first two chapters of this book, the detailed qualitative description of different types of intermolecular forces at large, intermediate and short-range distances is presented. For the first time in the monographic literature, the temperature dependence of the dispersion forces is discussed, and it is shown that at finite temperatures the famous Casimir-Polder asymptotic formula is correct only at narrow distance range. The author has aimed to make the presentation understandable to a broad scope of readers without oversimplification. In Chapter 3, the methods of quantitative calculation of the intermolecular interactions are discussed and modern achievements are presented. This chapter should be helpful for scientists performing computer calculations of many-electron systems. The last two chapters are devoted to the many-body effects and model potentials. More than 50 model potentials exploited for processing experimental data and computer simulation in different fields of physics, chemistry and molecular biology are represented. The widely used global optimisation methods: simulated annealing, diffusion equation method, basin-hopping algorithm, and genetic algorithm are described in detail. Significant efforts have been made to present the book in a self-sufficient way for readers. All the necessary mathematical apparatus, including vector and tensor calculus and the elements of the group theory, as well as the main methods used for quantal calculation of many-electron systems are presented in the appendices.

 [Read Intermolecular Interactions: Physical Picture, Computational Methods and Model Potentials \(Hardback\) Online](#)

 [Download PDF Intermolecular Interactions: Physical Picture, Computational Methods and Model Potentials \(Hardback\)](#)

## Relevant eBooks

---



### **The Voyagers Series - Europe: A New Multi-Media Adventure Book 1**

Strength Through Communications, United States, 2011. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.The Voyagers Series is a new multi-media, multi-disciplinary approach to teaching...

[Read eBook »](#)

---



### **Homeschool Your Child for Free: More Than 1,400 Smart, Effective, and Practical Resources for Educating Your Family at Home**

Random House USA Inc, United States, 2009. Paperback. Book Condition: New. 2nd. 229 x 185 mm. Language: English . Brand New Book. Provide a solid education at home without breaking the bank. Introduced in 2000,...

[Read eBook »](#)

---



### **Readers Clubhouse Set a a Truck Can Help**

Barron s Educational Series, United States, 2006. Paperback. Book Condition: New. 229 x 145 mm. Language: English . Brand New Book. This is volume eight, Reading Level 1, in a comprehensive program (Reading Levels 1...

[Read eBook »](#)

---



### **Online Investigations: Snapchat**

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Snapchat messages. Are they really deleted?Snapchat is one of the most popular applications...

[Read eBook »](#)

---



### **Learn em Good: Improve Your Child s Math Skills: Simple and Effective Ways to Become Your Child s Free Tutor Without Opening a Textbook**

Createspace, United States, 2010. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.From a certified teacher and founder of an online tutoring website-a simple and...

[Read eBook »](#)