

Preface

A semiconductor is a material with electrical conductivity between that of a conductor and an insulator. Its conductivity can be modified by adding impurities ("doping") to its crystal structure. When two regions with different doping levels are present in the same crystal, they form a semiconductor junction. However the term "semiconductors" is sometimes used to refer to semiconductor devices such as microchips and computer processors, which work using the physical properties of semiconductors.¹

In the present book, ten typical literatures about semiconductor published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on semiconductor. We hope this book can demonstrate advances in semiconductor as well as give references to the researchers, students and other related people.

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¹ <https://en.wikipedia.org/wiki/Semiconductor>