Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics)

G P Malik

Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics)

G P Malik

Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) G P Malik

Given the Debye temperature of an elemental superconductor (SC) and its T_c, BCS theory enables one to predict the value of its gap Δ_0 at T = 0, or vice versa. This monograph shows that non-elemental SCs can be similarly dealt with via the generalized BCS equations (GBCSEs) which, given any two parameters of the set $\{T_c, \Delta_{10}, \Delta_{20} > \Delta_{10}\}$, enable one to predict the third. Also given herein are new equations for the critical magnetic field and critical current density of an elemental and a non-elemental SC — equations that are derived directly from those that govern pairing in them.

The monograph includes topics that are usually not covered in any one text on superconductivity, e.g., BCS-BEC crossover physics, the long-standing puzzle posed by $SrTiO_3$, and heavy-fermion superconductors — all of which are still imperfectly understood and therefore continue to avidly engage theoreticians. It suggests that addressing the T_cs, Δs and other properties (e.g., number densities of charge carriers) of high-T_c SCs via GBCSEs incorporating chemical potential may lead to tangible clues about raising their T_cs. The final chapter in this monograph deals with solar emission lines and quarkonium spectra because of a feature common between them and superconductivity: existence of a bound state in a medium at finite temperature. This is a problem on which the author has worked for more than 25 years. The treatment in the text is elementary — even those who have only a cursory familiarity with Feynman diagrams should be able to follow it without much difficulty.

Download and Read Free Online Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) G P Malik

---

From reader reviews:

Gale Gibbs:

Playing with family in the park, coming to see the ocean world or hanging out with good friends is thing that usually you may have done when you have spare time, after that why you don't try matter that really opposite from that. One activity that make you not feeling tired but still relaxing, trilling like on roller coaster you already been ride on and with addition details. Even you love Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics), you may enjoy both. It is excellent combination right, you still wish to miss it? What kind of hang-out type is it? Oh come on its mind hangout folks. What? Still don't understand it, oh come on its called reading friends.

Sandra Jordon:

Your reading sixth sense will not betray you, why because this Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) guide written by well-known writer we are excited for well how to make book which can be understand by anyone who all read the book. Written with good manner for you, still dripping wet every ideas and publishing skill only for eliminate your personal hunger then you still question Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) as good book not just by the cover but also from the content. This is one e-book that can break don't evaluate book by its include, so do you still needing another sixth sense to pick this kind of!? Oh come on your examining sixth sense already alerted you so why you have to listening to an additional sixth sense.

Erica Lewis:

It is possible to spend your free time to study this book this reserve. This Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) is simple to bring you can read it in the park your car, in the beach, train as well as soon. If you did not have got much space to bring often the printed book, you can buy the particular e-book. It is make you better to read it. You can save typically the book in your smart phone. Thus there are a lot of benefits that you will get when you buy this book.

Lorraine Cox:

Don't be worry when you are afraid that this book will probably filled the space in your house, you could have it in e-book technique, more simple and reachable. That Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) can give you a lot of pals because by you considering this one book you have factor that they don't

and make an individual more like an interesting person. This kind of book can be one of a step for you to get success. This guide offer you information that probably your friend doesn't learn, by knowing more than various other make you to be great individuals. So , why hesitate? Let's have Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics).

Read Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) by G P Malik for online ebook

Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) by G P Malik 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 Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) by G P Malik books to read online.

Online Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) by G P Malik ebook PDF download

Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) by G P Malik Doc

Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) by G P Malik Mobipocket

Superconductivity:A New Approach Based on the Bethe-Salpeter Equation in the Mean-Field Approximation (Series on Directions in Condensed Matter Physics) by G P Malik EPub