

图书基本信息

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《磁畴》

内容概要

《磁畴》是唯一一部研究生磁畴理论的专著，内容全面，权威，剪统性强，包括了许多未曾谋面的许多材料。磁畴理论是用量子理论从微观上说明铁磁质的磁化机理。所谓磁畴，是指磁性材料内部的一个个小区域，每个区域内部包含大量原子，这些原子的磁矩都象一个个小磁铁那样整齐排列，但相邻的不同区域之间原子磁矩排列的方向不同，如图所示。各个磁畴之间的交界面称为磁畴壁。宏观物体一般总是具有很多磁畴，这样，磁畴的磁矩方向各不相同，结果相互抵消，矢量和为零，整个物体的磁矩为零，它也就不能吸引其它磁性材料。也就是说磁性材料在正常情况下并不对外显示磁性。只有当磁性材料被磁化以后，它才能对外显示出磁性。

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