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Solid-state physics - Wikipedia

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### Physicists describe a new type of amorphous solid bodies

In solid state physics one usually encounters lattices which exhibit a discrete translational symmetry.

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Figure  $\{\{3\}\}$ : Packing structures for solids from left to right: (a) simple cubic, (b) body-centered cubic (BCC), and (c) face-centered cubic (FCC). Each crystal structure minimizes the energy of the system. The energy of the sodium ions is not entirely due to attractive forces between oppositely charged ions.

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Solid-state physics refers to that branch of physics that deals with the study of solid matter that is rigid. It is done through an assortment of techniques including quantum mechanics, electromagnetism,

metallurgy, and crystallography and structures the theoretical foundation of materials science.

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