

Quasicrystals : 2D Tiles in 3D Superclusters (Paperback)

By Antony J. Bourdillon

AUTHORHOUSE, United States, 2010. Paperback. Book Condition: New. 224 x 150 mm. Language: English . Brand New Book ***** Print on Demand *****.Quasicrystalline material contained, for twenty five years, the most fundamental unsolved structural problem in condensed matter physics. Quasicrystals 2D tiles in 3D superclusters compiles further illustrations of the solution proposed in Quasicrystals - and quasi drivers. This is new.and interesting. Reviews scatter widely as is expected for novel theories. The structural driving force is the icosahedral subcluster. Agglomerations rapidly solidify into clusters and superclusters. The icosahedra share edges that outline 2D tiles. The tiles close the surface of a regular dodecahedron. In 3D, the tiles become pseudo space filling. The superclusters are supertiles that stretch and force the border . As in the diffraction pattern, the periodicity on the superclusters is logarithmic. In this geometry, the tiles, clusters and superclusters are uniquely oriented. New physical effects became apparent from the simulation of diffraction patterns: Angular Filtering that is responsible for the sharp diffraction; a Compromise Spacing Effect that determines dimensions; Logarithmically Periodic electronic band structures and dispersion curves, etc. Quasi science? Referees who can t answer rebuttals are zero, hence this book. The internet is free.



Reviews

Absolutely essential read publication. it absolutely was writtern very completely and valuable. It is extremely difficult to leave it before concluding, once you begin to read the book. -- Sarai Lebsack

Thorough guide for book enthusiasts. I am quite late in start reading this one, but better then never. Your lifestyle span will be transform when you total reading this article book. -- Lindsey Larson