



Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses)

Alex Frano

Download now

[Click here](#) if your download doesn't start automatically

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses)

Alex Frano

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) Alex Frano

This thesis presents the results of resonant and non-resonant x-ray scattering experiments demonstrating the control of collective ordering phenomena in epitaxial nickel-oxide and copper-oxide based superlattices. Three outstanding results are reported: (1) LaNiO₃-LaAlO₃ superlattices with fewer than three consecutive NiO₂ layers exhibit a novel spiral spin density wave, whereas superlattices with thicker nickel-oxide layer stacks remain paramagnetic. The magnetic transition is thus determined by the dimensionality of the electron system. The polarization plane of the spin density wave can be tuned by epitaxial strain and spatial confinement of the conduction electrons. (2) Further experiments on the same system revealed an unusual structural phase transition controlled by the overall thickness of the superlattices. The transition between uniform and twin-domain states is confined to the nickelate layers and leaves the aluminate layers unaffected. (3) Superlattices based on the high-temperature superconductor YBa₂Cu₃O₇ exhibit an incommensurate charge density wave order that is stabilized by heterointerfaces. These results suggest that interfaces can serve as a powerful tool to manipulate the interplay between spin order, charge order, and superconductivity in cuprates and other transition metal oxides.

 [Download Spin Spirals and Charge Textures in Transition-Met ...pdf](#)

 [Read Online Spin Spirals and Charge Textures in Transition-M ...pdf](#)

Download and Read Free Online Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) Alex Frano

From reader reviews:

Samuel Hamby:

Here thing why this Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) are different and dependable to be yours. First of all studying a book is good nonetheless it depends in the content of computer which is the content is as tasty as food or not. Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) giving you information deeper since different ways, you can find any book out there but there is no reserve that similar with Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses). It gives you thrill looking at journey, its open up your current eyes about the thing this happened in the world which is probably can be happened around you. It is easy to bring everywhere like in recreation area, café, or even in your approach home by train. When you are having difficulties in bringing the published book maybe the form of Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) in e-book can be your substitute.

Donald Dickens:

A lot of people always spent their own free time to vacation or go to the outside with them family or their friend. Were you aware? Many a lot of people spent that they free time just watching TV, or playing video games all day long. If you want to try to find a new activity that is look different you can read some sort of book. It is really fun in your case. If you enjoy the book that you simply read you can spent 24 hours a day to reading a reserve. The book Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) it doesn't matter what good to read. There are a lot of folks that recommended this book. We were holding enjoying reading this book. Should you did not have enough space to deliver this book you can buy typically the e-book. You can mOore very easily to read this book through your smart phone. The price is not very costly but this book features high quality.

Walter Feuerstein:

Do you have something that you like such as book? The reserve lovers usually prefer to pick book like comic, quick story and the biggest the first is novel. Now, why not trying Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) that give your entertainment preference will be satisfied by simply reading this book. Reading routine all over the world can be said as the means for people to know world considerably better then how they react to the world. It can't be claimed constantly that reading practice only for the geeky man but for all of you who wants to always be success person. So , for all of you who want to start examining as your good habit, you may pick Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) become your personal starter.

Joyce Tower:

A lot of book has printed but it differs from the others. You can get it by world wide web on social media.

You can choose the most beneficial book for you, science, comic, novel, or whatever by searching from it. It is named of book Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses). You can add your knowledge by it. Without leaving the printed book, it may add your knowledge and make anyone happier to read. It is most critical that, you must aware about e-book. It can bring you from one spot to other place.

Download and Read Online Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) Alex Frano #6KNV4JWLPEB

Read Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano for online ebook

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano 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 Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano books to read online.

Online Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano ebook PDF download

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano Doc

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano Mobipocket

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano EPub