Record Nr. UNINA990009387750403321 Autore Unione italiana di termofluidodinamica **Titolo** Proceedings UIT 2011 XXIX Heat Transfer Conference: Torino, 20-22 June / Unione Italiana di Termofluidodinamica Torino: UIT, 2011 Pubbl/distr/stampa Locazione **DETEC** 00 C3261 Collocazione 00 C3262 Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Record Nr. UNINA9910706906703321 **Autore** Berdan Jean Milton **Titolo** Leperditicopid ostracodes from Ordovician rocks of Kentucky and nearby states and characteristic features of the Order Leperditicopida / / by Jean M. Berdan; prepared in cooperation with the Commonwealth of Kentucky, University of Kentucky, Kentucky Geological Survey Pubbl/distr/stampa Washington:,: Department of the Interior, U. S. Geological Survey,, 1984 Descrizione fisica 1 online resource (iv, J40 pages, 11 unnumbered pages of plates): illustrations, maps Collana Geological Survey professional paper; ; 1066-J Contributions to the Ordovician paleontology of Kentucky and nearby states Leperditicopida Soggetti Paleontology - Ordovician Paleontology - Kentucky Ordovician Geologic Period

Paleontology Kentucky

Lingua di pubblicazione

Inglese

Formato

Materiale a stampa

Livello bibliografico	Monografia
Note generali	Title from title screen (viewed October 9, 2014). "Descriptions and illustrations of 16 ostracode taxa, including 2 new genera, 3 new species, and 1 new subspecies, with discussions of their paleoecologic and stratigraphic significance."
Nota di bibliografia	Includes bibliographical references (pages J37-J40).
Record Nr.	UNINA9910373934503321
Autore	Alase Abhijeet
Titolo	Boundary Physics and Bulk-Boundary Correspondence in Topological Phases of Matter / / by Abhijeet Alase
Pubbl/distr/stampa	Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019
ISBN	3-030-31960-1
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XVII, 200 p. 23 illus., 19 illus. in color.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	530.41
Soggetti	Solid state physics
	Phase transformations (Statistical physics)
	Mathematical physics
	Physics
	Semiconductors
	Solid State Physics
	Phase Transitions and Multiphase Systems
	Mathematical Physics Mathematical Methods in Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter1: Introduction Chapter2: Generalization of Bloch's theorem to systems with boundary Chapter3: Investigation of topological boundary states via generalized Bloch theorem Chapter4: Matrix factorization approach to bulk-boundary correspondence Chapter5: Mathematical foundations to the generalized Bloch theorem

3.

Chapter6: Summary and Outlook.

Sommario/riassunto

This thesis extends our understanding of systems of independent electrons by developing a generalization of Bloch's Theorem which is applicable whenever translational symmetry is broken solely due to arbitrary boundary conditions. The thesis begins with a historical overview of topological condensed matter physics, placing the work in context, before introducing the generalized form of Bloch's Theorem. A cornerstone of electronic band structure and transport theory in crystalline matter, Bloch's Theorem is generalized via a reformulation of the diagonalization problem in terms of corner-modified block-Toeplitz matrices and, physically, by allowing the crystal momentum to take complex values. This formulation provides exact expressions for all the energy eigenvalues and eigenstates of the single-particle Hamiltonian. By precisely capturing the interplay between bulk and boundary properties, this affords an exact analysis of several prototypical models relevant to symmetry-protected topological phases of matter, including a characterization of zero-energy localized boundary excitations in both topological insulators and superconductors. Notably, in combination with suitable matrix factorization techniques, the generalized Bloch Hamiltonian is also shown to provide a natural starting point for a unified derivation of bulk-boundary correspondence for all symmetry classes in one dimension.