

1. Record Nr.	UNINA9910349320503321
Autore	Ivrii Victor
Titolo	Microlocal Analysis, Sharp Spectral Asymptotics and Applications III : Magnetic Schrödinger Operator 1 / / by Victor Ivrii
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-30537-6
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XXI, 729 p. 1 illus.)
Disciplina	515
Soggetti	Mathematical analysis Analysis (Mathematics) Mathematical physics Analysis Mathematical Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Smooth theory in dimensions 2 and 3 -- Standard Theory -- 2D degenerating magnetic Schrödinger operator -- 2D magnetic Schrödinger near boundary -- Magnetic Schrödinger operator: short loops -- Dirac operator with strong magnetic field.
Sommario/riassunto	The prime goal of this monograph, which comprises a total of five volumes, is to derive sharp spectral asymptotics for broad classes of partial differential operators using techniques from semiclassical microlocal analysis, in particular, propagation of singularities, and to subsequently use the variational estimates in “small” domains to consider domains with singularities of different kinds. In turn, the general theory (results and methods developed) is applied to the Magnetic Schrödinger operator, miscellaneous problems, and multiparticle quantum theory. In this volume the methods developed in Volumes I and II are applied to the Schrödinger and Dirac operators in smooth settings in dimensions 2 and 3.