

1. Record Nr.	UNINA9910146284703321
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Titolo	Topics in Topology // by Stevo Todorcevic
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1997
ISBN	3-540-68338-0
Edizione	[1st ed. 1997.]
Descrizione fisica	1 online resource (VIII, 160 p.)
Collana	Lecture Notes in Mathematics, , 1617-9692 ; ; 1652
Classificazione	54C30
Disciplina	514
Soggetti	Topology Topological groups Lie groups Functions of real variables Topological Groups and Lie Groups Real Functions
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Contents: Topology of pointwise convergence -- A theorem of Eberlein -- Ptak's Lemma -- Namioka's theorem -- Rosenthal's theorem -- Properties of Baire and Ramsey -- Baire property of analytic sets -- Baire property of filters and ideals -- Selective coideals -- Baire's characterization theorem and its corollaries -- Borel sets -- A selective analytic ideal -- Bourgain-Fremlin-Talagrand's theorem -- A space of ultrafilters -- Glazer's theorem -- A topological proof of van der Waerden theorem -- A semigroup of variable words -- Countable chain conditions of topological groups -- Michael's selection theorem -- Inverse systems -- Haydon's theorem -- Quotient groups -- A decomposition of compact groups -- Pestov's theorems -- Free topological groups -- Exponentially complete spaces -- Vaught's homeomorphism theorem -- Resolving a space: Accumulation orders and spectra -- Accumulation spectra of hyperspaces -- List of all exponentials -- Multiplication of accumulation orders.
Sommario/riassunto	The book describes some interactions of topology with other areas of mathematics and it requires only basic background. The first chapter deals with the topology of pointwise convergence and proves results of

Bourgain, Fremlin, Talagrand and Rosenthal on compact sets of Baire class-1 functions. In the second chapter some topological dynamics of $\beta\mathbb{N}$ and its applications to combinatorial number theory are presented. The third chapter gives a proof of the Ivanovskii-Kuzminov-Vilenkin theorem that compact groups are dyadic. The last chapter presents Marjanovic's classification of hyperspaces of compact metric zero-dimensional spaces.
