

1. Record Nr.	UNINA9910303454203321
Autore	Garoni Carlo
Titolo	Generalized Locally Toeplitz Sequences: Theory and Applications : Volume II // by Carlo Garoni, Stefano Serra-Capizzano
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-030-02233-1
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XI, 194 p. 1 illus.)
Disciplina	512.9434
Soggetti	Numerical analysis Matrix theory Algebra Partial differential equations Operator theory Measure theory Numerical Analysis Linear and Multilinear Algebras, Matrix Theory Partial Differential Equations Operator Theory Measure and Integration
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Notes to the Reader -- 2 Mathematical Background -- 3 Multilevel Toeplitz Sequences -- 4 Multilevel Locally Toeplitz Sequences -- 5 Multilevel Generalized Locally Toeplitz Sequences -- 6 Summary of the Theory -- 7 Applications -- 8 Future Developments.
Sommario/riassunto	Based on the authors' research experience, this two-volume reference textbook focuses on the theory of generalized locally Toeplitz sequences and its applications. The first volume discusses the univariate version of the theory and the related applications in the unidimensional setting, while this second volume, which addresses the multivariate case, is mainly devoted to concrete PDE applications. This book systematically develops the multivariate version of the theory of

generalized locally Toeplitz (GLT) sequences and presents some of its main applications to the numerical discretization of partial differential equations (PDEs). Written for applied mathematicians, engineers, physicists, and scientists who (perhaps unknowingly) encounter GLT sequences in their research, it is also of interest to those working in the fields of Fourier and functional analysis, spectral analysis of PDE discretization matrices, matrix analysis, numerical analysis, linear and multilinear algebra. Further, it can be used as a textbook for graduate or advanced undergraduate courses in numerical analysis.
