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	ISBN	3-030-52074-9
	Edizione	[1st ed. 2020.]
	Descrizione fisica	1 online resource (VII, 353 p. 4 illus.)
	Disciplina	519.5
	Soggetti	Linear models (Statistics) Mathematical statistics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	1 A Brief Introduction -- 2 Selected Matrix Algebra Topics and Results -- 3 Generalized Inverses and Solutions to Sytems of Linear Equations -- 4 Moments of a Random Vector and of Linear and Quadratic Forms in a Random Vector -- 5 Types of Linear Models -- 6 Estimability -- 7 Least Squares Estimation for the Gauss-Markov Model -- 8 Least Squares Geometry and the Overall ANOVA -- 9 Least Squares Estimation and ANOVA for Partitioned Models -- 10 Constrained Least Squares Estimation and ANOVA -- 11 Best Linear Unbiased Estimation for the Aitken Model -- 12 Model Misspecification -- 13 Best Linear Unbiased Prediction -- 14 Distribution Theory -- 15 Inference for Estimable and Predictable Functions -- 16 Inference for Variance-Covariance Parameters -- 17 Empirical BLUE and BLUP.
	Sommario/riassunto	This book contains 296 exercises and solutions covering a wide variety of topics in linear model theory, including generalized inverses, estimability, best linear unbiased estimation and prediction, ANOVA, confidence intervals, simultaneous confidence intervals, hypothesis testing, and variance component estimation. The models covered include the Gauss-Markov and Aitken models, mixed and random effects models, and the general mixed linear model. Given its content, the book will be useful for students and instructors alike. Readers can also consult the companion textbook Linear Model Theory - With Examples and Exercises by the same author for the theory behind the

exercises.