1.	Record Nr.	UNINA9910782276403321
	Autore	Hida Takeyuki <1927-2017.>
	Titolo	Selected papers of Takeyuki Hida [[electronic resource] /] / edited by L. Accardi ... [et al.]
	Pubbl/distr/stampa	Singapore ; ; River Edge, N.J., : World Scientific, c2001
	ISBN	1-281-93455-0
		9786611934552
		981-279-461-1
	Descrizione fisica	1 online resource (496 p.)
	Altri autori (Persone)	AccardiL <1947-> (Luigi)
	Disciplina	519.5
	Soggetti	Stochastic processes
		Probabilities
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references.
	Nota di contenuto	Preface; Contents; I. General Theory of White Noise Punctionals; [1] Analysis of Brownian Functionals; [2] Quadratic Functionals of Brownian Motion; [3] Generalized Brownian Functionals; [4] The Role of Exponential Functions in the Analysis of Generalized Brownian Functionals; [5] Causal Calculus and An Application to Prediction Theory; [6] Generalized Gaussian Measures; [7] The Impact of Classical Functional Analysis on White Noise Calculus; II. Gaussian and Other Processes; [8] Canonical Representations of Gaussian Processes and Their Applications
		[9] Analysis on Hilbert Space with Reproducing Kernel Arising from Multiple Wiener Integral[10] The Square of a Gaussian Markov Process and Nonlinear Prediction; III. Infinite Dimensional Harmonic Analysis and Rotation Group; [11] Sur l'invariance Projective pour les Processus Symetriques Stables; [12] Note on the Infinite Dimensional Laplacian Operator; [13] L'analyse Harmonique sur l'espace des Fonctions Generalisees; [14] Conformal Invariance of White Noise; [15] Transformations for White Noise Functionals; [16] On Projective Invariance of Brownian Motion
		[17] Infinite Dimensional Rotations and Laplacians in Terms of White Noise Calculus[18] Infinite Dimensional Rotation Group and White Noise Analysis; IV. Quantum Theory; [19] On Quantum Theory in Terms of

White Noise; [20] White Noise Analysis and Its Applications to Quantum Dynamics; [21] Boson Fock Representations of Stochastic Processes; V. Feynman Integrals and Random Fields; [22] Generalized Brownian Functionals and the Feynman Integral; [23] Dirichlet Forms and White Noise Analysis; [24] Dirichlet Forms in Terms of White Noise Analysis I: Construction and QFT Examples
[25] Dirichlet Forms in Terms of White Noise Analysis II: Closability and Diffusion ProcessesVI. Variational Calculus and Random Fields; [26] Multidimensional Parameter White Noise and Gaussian Random Fields; [27] A Note on Generalized Gaussian Random Fields; [28] White Noise and Stochastic Variational Calculus for Gaussian Random Fields; [29] Variational Calculus for Gaussian Random Fields; [30] Innovations for Random Fields; VII. Application to Biology; [31] Functional Word in a Protein I Overlapping Words; Comments on [11] [14] [19] [20] and [21]; Comments on [6] [8] [10] [27] and [29]
Comments on [9] [11] [14] [16] [17] and [18]Comments on [1] [2] [4] and [5]; Comments on [12] [13] [16] and [17]; Comments on [15] and [31]; Comments on [26] [28] and [30]; Comments on [20] [22] [23] [24] and [25]; My Mathematical Journey; List of Publications

| Sommario/riassunto | The topics discussed in this book can be classified into three parts:. (i) Gaussian processes. The most general and in fact final representation theory of Gaussian processes is included in this book. This theory is still referred to often and its developments are discussed. (ii) White noise analysis. This book includes the notes of the series of lectures delivered in 1975 at Carleton University in Ottawa. They describe the very original idea of introducing the notion of generalized Brownian functionals (nowadays called "generalized white noise functionals", and sometimes "Hida distribution". (|