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Titolo	Dyadic Walsh Analysis from 1924 Onwards Walsh-Gibbs-Butzer Dyadic Differentiation in Science Volume 2 Extensions and Generalizations : A Monograph Based on Articles of the Founding Authors, Reproduced in Full / / by Radomir Stankovic, Paul Leo Butzer, Ferenc Schipp, William R. Wade, Weiyi Su, Yasushi Endow, Sandor Fridli, Boris I. Golubov, Franz Pichler
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Nota di contenuto	Early Work in Gibbs Differentiation in China -- Gibbs-Butzer Calculus and Pseudo-differential Operators on Local Fields -- Early Work in Gibbs Differentiation in Soviet Union – SSSR -- Research in Dyadic Differentiation in Russia -- Generalized Derivatives and Integrals on Vilenkin Groups -- Calculus on Walsh and Vilenkin Groups -- Gibbs Derivatives on Groups -- My Research in Gibbs Derivatives on Finite Groups -- Efcient Computation of Gibbs Derivatives on Finite Abelian Groups -- Gibbs Derivative and Walsh Harmonizable DSP -- My Involvement in Gibbs Derivatives and Walsh Harmonizable Processes -- Open Problems in Theory and Applications of Dyadic Derivatives.
Sommario/riassunto	The second volume of the two volumes book is dedicated to various extensions and generalizations of Dyadic (Walsh) analysis and related applications. Considered are dyadic derivatives on Vilenkin groups and various other Abelian and finite non-Abelian groups. Since some important results were developed in former Soviet Union and China, we provide overviews of former work in these countries. Further, we

present translations of three papers that were initially published in Chinese. The presentation continues with chapters written by experts in the area presenting discussions of applications of these results in specific tasks in the area of signal processing and system theory. Efficient computing of related differential operators on contemporary hardware, including graphics processing units, is also considered, which makes the methods and techniques of dyadic analysis and generalizations computationally feasible. The volume 2 of the book ends with a chapter presenting open problems pointed out by several experts in the area.