

Contents

Preface	vii
Introduction	ix
A Brief Introduction to Hilbert Space Frame Theory and its Applications PETER G. CASAZZA and RICHARD G. LYNCH	1
Unit norm tight frames in finite-dimensional spaces DUSTIN G. MIXON	53
Algebro-Geometric Techniques and Geometric Insights for Finite Frames NATE STRAWN	79
Preconditioning techniques in frame theory and probabilistic frames KASSO A. OKOUDJOU	105
Quantization, finite frames, and error diffusion ALEXANDER DUNKEL, ALEXANDER M. POWELL, ANNELIESE H. SPAETH, and ÖZGUR YILMAZ	143
Frames and Phaseless Reconstruction RADU BALAN	175
Compressed sensing and dictionary learning GUANGLIANG CHEN and DEANNA NEEDELL	201