

CONTENTS

Preface	ix	
Organization of the book	xiii	
Notation	xv	
Chapter I.	Landau-Kolmogorov and related inequalities	1
Chapter II.	An inequality ascribed to Wirtinger and related results	66
Chapter III.	Opial's inequality	114
Chapter IV.	Hardy's, Carleman's and related inequalities	143
Chapter V.	Hilbert's and related inequalities	187
Chapter VI.	Inequalities of Lyapunov and of De la Vallée Poussin	216
Chapter VII.	Zmorovič's and related inequalities	240
Chapter VIII.	Carlson's and related inequalities	259
Chapter IX.	Inequalities involving kernels	275
Chapter X.	Convolution, rearrangement and related inequalities	285
Chapter XI.	Inequalities of Čaplygin type	314
Chapter XII.	Inequalities of Gronwall type of a single variable	353
Chapter XIII.	Gronwall inequalities in higher dimension	401
Chapter XIV.	Gronwall inequalities on other spaces: discrete, functional and abstract	433
Chapter XV.	Integral inequalities involving functions with bounded derivatives	468
Chapter XVI.	Inequalities of Bernstein-Mordell type	485
Chapter XVII.	Methods of proofs for integral inequalities	500
Chapter XVIII.	Particular inequalities	522
Name Index		574