

## CONTENTS

Preface	v
Foreword	vii
Volume inequalities for sets associated with convex bodies Stefano Campi and Paolo Gronchi	1
Integral geometry and Alesker's theory of valuations Joseph H.G. Fu	17
Area and perimeter bisectors of planar convex sets Paul Goodey	29
Radon Inversion: from lines to Grassmannians Eric Grinberg	37
Valuations in the affine geometry of convex bodies Monika Ludwig	49
Crofton measures in projective Finsler spaces Rolf Schneider	67
Random methods in approximation of convex bodies Carsten Schütt	99
Some generalized maximum principles and their applications to Chern type problems Young Jin Suh	107
Floating bodies and illumination bodies Elisabeth Werner	129
Applications of information theory to convex geometry Deane Yang	141
Containment measures in integral geometry Gaoyong Zhang and Jiazuo Zhou	153

On the flag curvature and S-curvature in Finsler geometry Xinyue Cheng	169
Double chord-power integrals of a convex body and their applications Peng Xie and Jun Jiang	177
$L_p$ dual Brunn-Minkowski type inequalities Chang-jian Zhao and Gang-song Leng	189
On the relations of a convex set and its profile Shougui Li and Yicheng Gong	199
Convex bodies with symmetric $X$ -rays in two directions Deyi Li and Ge Xiong	213
The kinematic measure of a random line segment of fixed length within a trapezoid Fengfan Xie and Deyi Li	221