

High-Performance Construction Materials

Science and Applications

Caijun Shi • Y L Mo

editors



World Scientific

Contents

Preface	v	
Biographical Sketch for each Author	xi	
Chapter 1	Introduction	1
	<i>Caijun Shi and Y. L. Mo</i>	
Chapter 2	High Performance Concrete	19
	<i>Caijun Shi, Y.L. Mo and H.B. Dhone</i>	
Chapter 3	High Performance Fiber Reinforced Cement Composites	91
	<i>Antoinie E. Naaman</i>	
Chapter 4	High Performance Steel Material and Structures for Earthquake Resistant Buildings	155
	<i>Keh-Chyuan Tsai, Ying-Cheng Lin, Jui-Liang Lin, Sheng-Lin Lin and Po-Chien Hsiao</i>	
Chapter 5	Advanced Fiber Reinforced Polymer Composites	207
	<i>L. C. Hollaway</i>	
Chapter 6	Enhancing the Performance of Masonry Structures	265
	<i>Richard E. Klingner</i>	
Chapter 7	Geosynthetics - Characteristics and Applications	299
	<i>P. E. Stevenson</i>	
Chapter 8	Coatings and Sealers	333
	<i>C. Vipulanandan and M. Isaac</i>	
Chapter 9	Smart Materials and Structures	387
	<i>D. D. L. Chung, G. Song, N. Ma and H. Gu</i>	
Index	427	