

## CONTENTS

---

<b>Preface</b>	<b>vii</b>
<b>Acknowledgments</b>	<b>ix</b>
<b>Contributors</b>	<b>xi</b>
<b>1. Combinatorial Materials Science: Measures of Success</b>	<b>1</b>
<i>Michael J. Fasolka and Eric J. Amis</i>	
<b>2. Experimental Design in High-Throughput Systems</b>	<b>21</b>
<i>James N. Cawse</i>	
<b>3. Polymeric Discrete Libraries for High-Throughput Materials Science: Conventional and Microfluidic Library Fabrication and Synthesis</b>	<b>51</b>
<i>Kathryn L. Beers and Brandon M. Vogel</i>	
<b>4. Strategies in the Use of Atomic Force Microscopy as a Multiplexed Readout Tool of Chip-Scale Protein Motifs</b>	<b>81</b>
<i>Jeremy R. Kenseth, Karen M. Kwarta, Jeremy D. Driskell, Marc D. Porter, John D. Neill, and Julia F. Ridpath</i>	
<b>5. Informatics Methods for Combinatorial Materials Science</b>	<b>109</b>
<i>Changwon Suh, Krishna Rajan, Brandon M. Vogel, Balaji Narasimhan, and Surya K. Mallapragada</i>	
<b>6. Combinatorial Approaches and Molecular Evolution of Homogeneous Catalysts</b>	<b>121</b>
<i>L. Keith Woo</i>	
<b>7. Biomaterials Informatics</b>	<b>163</b>
<i>Nicole K. Harris, Joachim Kohn, William J. Welsh, and Doyle D. Knight</i>	
<b>8. Combinatorial Methods and Their Application to Mapping Wetting–Dewetting Transition Lines on Gradient Surface Energy Substrates</b>	<b>201</b>
<i>Karen M. Ashley, D. Raghavan, Amit Seghal, Jack F. Douglas, and Alamgir Karim</i>	
<b>9. Combinatorial Materials Science: Challenges and Outlook</b>	<b>225</b>
<i>Balaji Narasimhan, Surya K. Mallapragada, and Marc D. Porter</i>	
<b>Index</b>	<b>231</b>

