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5.4.2 Predator-Prey; 5.4.3 Bacterial Growth; 5.4.4 Seashell Patterns; 5.5 Physical Models; 5.5.1 Diffusion; 5.5.2 Snow Crystals; 5.5.3 Sandpile Model; 5.5.4 Lattice Gases; 5.5.5 Ising Spin; 5.5.6 Steady-State Heat Flow; 5.5.7 The Digital Universe of Konrad Zuse and Edward Fredkin; 6 Complexity; 6.1 Mind Over Matter; 6.2 Random Boolean Networks; 6.3 Autonomous Agents; 6.3.1 Honey Bees; 6.3.2 Slime Molds; 6.3.3 Bacterial Colonies; 6.3.4 Langton's Ant; 6.3.5 Multi-Ant Systems; 6.3.6 Traveling Salesman Problem; Appendix A; References; Index

Sommario/riassunto

An accessible and multidisciplinary introduction to cellular automata. As the applicability of cellular automata broadens and technology advances, there is a need for a concise, yet thorough, resource that lays the foundation of key cellular automata rules and applications. In recent years, Stephen Wolfram's *A New Kind of Science* has brought the modeling power that lies in cellular automata to the attention of the scientific world, and now, *Cellular Automata: A Discrete View of the World* presents all the depth, analysis, and applicability of the classic Wolfram text in a straightforward, introdu
