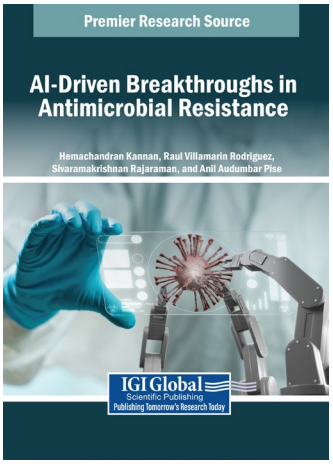
AI-Driven Breakthroughs in Antimicrobial Resistance



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Description:

AI-driven breakthroughs in antimicrobial resistance (AMR) are transforming the way we approach pressing global health challenges. As bacteria evolve to resist traditional antibiotics, the need for innovative solutions increases. AI plays a pivotal role in the accelerated discovery of new antimicrobial agents, optimized drug development, and improved diagnostics. By analyzing datasets, identifying patterns, and simulating molecular interactions, AI is enabling researchers to uncover new compounds, predict resistance mechanisms, and develop targeted treatments. Further research into these advancements may help with drug-resistant infection mitigation and preventing the consequences of antimicrobial resistance.

AI-Driven Breakthroughs in Antimicrobial Resistance explores the intersection of artificial intelligence and the global challenge of antimicrobial resistance. It delves into the innovative ways in which AI technologies are leveraged to discover new antibiotics, understand resistance mechanisms, and design interventions to revolutionize the treatment of infectious diseases. This book covers topics such as patient care, infectious diseases, and machine learning, and is a useful resource for computer engineers, data scientists, medical professionals, biologists, academicians, and researchers.

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Topics Covered:

- Antibiotics
- Antimicrobial Resistance
- Artificial Intelligence
- Bioinformatics
- Data Science
- Infection Control and Prevention
- Infectious Diseases
- Machine Learning
- Medical Diagnosis and Treatment
- Medical Technology
- Pathogen Evolution
- Patient Care

Subject: Medicine and Healthcare
Readership Level: Advanced-Academic Level (Research Recommended)

Classification: Edited Reference
Research Suitable For: Advanced Undergraduate Students; Graduate Students; Researchers; Academicians; Professionals; Practitioners

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