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Altri autori (Persone)	MohantyAshok Kumar LichtfouseEric
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Nota di contenuto	Chapter 1: Applications of Omics technologies in livestock production, improvement and sustainability -- Chapter 2: System biology research to advance understanding of canine cancer -- Chapter 3: Evolution of transgenic technology: From Random Transgenesis to Precise Genome Editing -- Chapter 4: Pregnancy associated cytokines for successful pregnancy establishment in bovines -- Chapter 5: Data-driven and AI approaches for system-wide prediction of the druggable proteome to drug discovery in farm animals -- Chapter 6: Recent Advances in the Role of Probiotics and Prebiotics in Animal Nutrition: An Overview -- Chapter 7: System biology-based understanding of gut microbiome role in cattle production and Health -- Chapter 8: Nanoparticles and their prospective solicitations in veterinary medicine.
Sommario/riassunto	This book presents advanced reviews on latest developments and future trends of animal biotechnology with focus on computational and experimental approaches. The articles in this book discusses the implications of recent methods in animal biotechnology to improve the livestock production. Applications of omics technologies and system

biology approaches for livestock production and animal disorders were discussed in detail. The evolution of transgenic technology, genome editing and markers for early pregnancy detection were elucidated in this book. A couple of chapters were dedicated to understanding the role of gut microbiome, probiotics and prebiotics on livestock health and production. The nanomaterials have been shown to have beneficial effects in biological applications. This book also discussed the veterinary applications of nanomaterials. The articles of this book provide state of the art information that is appropriate to academicians, researchers and students who are involved in the animal biotechnology research. .
