

1. Record Nr.	UNINA9910254481703321
Titolo	Bone Morphogenetic Proteins: Systems Biology Regulators / / edited by Slobodan Vukicevic, Kuber T. Sampath
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-47507-X
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XII, 445 p. 43 illus., 32 illus. in color.)
Collana	Progress in Inflammation Research, , 0379-0363
Disciplina	616.079
Soggetti	Immunology Cytology Cytokines Growth factors Proteins Systems biology Cell Biology Cytokines and Growth Factors Protein Science Systems Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- BMPs: Historic and Future Perspectives -- BMP – Biology -- BMPs in Development -- BMP signaling -- BMP Antagonists - Biology -- BMP and BMP Antagonists - Structure and Function -- BMPs in Orthopaedic Medicine: Promises and Challenges -- BMP6 and Bone Repair -- BMPs in Dental Medicine: Promises and Challenges -- BMPs in Spine -- BMPs in Articular Joints -- BMP Signaling & FOP -- BMP-7 Biology and its Therapeutic Utility for Chronic Kidney Diseases -- BMPs in Inflammation -- BMPs and Angiogenesis -- BMP Signaling in Iron Homeostasis -- BMP Signaling in Pulmonary Arterial Hypertension -- BMP Signaling and Cancer -- BMP Biology in Rare Diseases.
Sommario/riassunto	This book focuses on the salient features of the biology of Bone Morphogenetic Proteins and the advances in our understanding of their structure and function and of downstream signaling, as well as their

governance in systems biology from bone and dentin to kidney, cancer, diabetes, iron homeostasis and angiogenesis, including rare musculoskeletal disorders. BMPs, also referred to as growth and differentiation factors, are members of the TGF-beta superfamily and are highly conserved from fruit flies to mammals and are responsible for the formation of practically every organ during embryo development and involved in adult tissue injury and repair. BMPs establish their extracellular gradient by interacting with their respective antagonists and regulate their function through SMAD-dependent down-stream signaling effector genes. This volume is aimed at scientists and professionals dealing with metabolic disorders, nutrition, systems biology diseases, rare musculoskeletal conditions, and disorders related to iron metabolism, including anemia of chronic disease, hereditary hemochromatosis and beta thalassemia.

2. Record Nr.	UNINA9910254345803321
Titolo	Cybernetics and Mathematics Applications in Intelligent Systems : Proceedings of the 6th Computer Science On-line Conference 2017 (CSOC2017), Vol 2 // edited by Radek Silhavy, Roman Senkerik, Zuzana Kominkova Oplatkova, Zdenka Prokopova, Petr Silhavy
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-57264-4
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIV, 446 p. 214 illus.)
Collana	Advances in Intelligent Systems and Computing, , 2194-5365 ; ; 574
Disciplina	001.53
Soggetti	Computational intelligence Artificial intelligence Computational Intelligence Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Cost-Effective Computational Modelling of Fault Tolerant Optimization

of FinFET-based SRAM Cells -- Application of Risk Theory Approach to Fuzzy Abduction -- Enhanced TDS Stability Analysis Method via Characteristic Quasipolynomial Polynomization.- Dissipativity of Multistep Runge–Kutta Methods for Nonlinear Neutral Delay Integro Differential Equations with Constrained Grid -- Maze Navigation in the Ball & Plate Model -- Large Networks of Diameter Two Based on Cayley Graphs.- Analysis of the IoT WiFi mesh network. - Lightning Impulse Voltage Evaluation..- Big Data Process Advancement.- LDPC Binary Vectors Coding Enhances Transmissions and Memories Reliability.

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#### Sommario/riassunto

This book presents new methods for and approaches to real-world problems as well as exploratory research describing novel mathematics and cybernetics applications in intelligent systems. It focuses on modern trends in selected fields of technological systems and automation control theory. It also introduces new algorithms, methods and applications of intelligent systems in automation, technological and industrial applications. This book constitutes the refereed proceedings of the Cybernetics and Mathematics Applications in Intelligent Systems Section of the 6th Computer Science On-line Conference 2017 (CSOC 2017), held in April 2017.

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