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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Creation of an Adaptive Gear Variator (Stepless CVT) and Study of Its Quality Indicators -- Face-Milling cutting Simulation of Bevel Gears Using Ring-Dexel Method -- Kinematic Characteristics Analysis of Gear Teeth in Harmonic Drive -- Tooth Flank Modification of Line Contact Spiral Bevel Gears -- Analysis of Transmission Errors and Load Sharing of Compound Stepped Planetary Gear Drives Considering Mesh Phasing -- Tooth profile design theory of asymmetrical involute cylindrical worm in face worm gear drive -- Tooth profile calculation of a cylindrical gear pair to achieve a non-constant ratio -- Synthesis of Contact in Loaded Multi-Pair Gears with a Big Contact Ratio -- An antibacklash method for wolfrom reducers -- Design of Harmonic Drive with Double-circular-arc Tooth Profile -- Design of Reconfigurable Actuation in Tendon-Driven Robot Hands: Analysis of Potential and Challenges -- Time-dependent errors influence on the transmission errorin planetary gears with different mesh phasingPlanetary Gear

Trains with High Speed Reduction Ratio -- Experimental validation of models for the structural simulation of crossed roller wire-race bearing.

Sommario/riassunto

This book gathers the proceedings of the 16th IFToMM World Congress, which was held in Tokyo, Japan, on November 5–10, 2023. Having been organized every four years since 1965, the Congress represents the world’s largest scientific event on mechanism and machine science (MMS). The contributions cover an extremely diverse range of topics, including biomechanical engineering, computational kinematics, design methodologies, dynamics of machinery, multibody dynamics, gearing and transmissions, history of MMS, linkage and mechanical controls, robotics and mechatronics, micro-mechanisms, reliability of machines and mechanisms, rotor dynamics, standardization of terminology, sustainable energy systems, transportation machinery, tribology and vibration. Selected by means of a rigorous international peer-review process, they highlight numerous exciting advances and ideas that will spur novel research directions and foster new multidisciplinary collaborations.