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## Sommario/riassunto

This book reports on topics at the interface between mechanical and materials engineering, emphasizing aspects related to design, simulation, and manufacturing. It covers advanced methods in design and process engineering applied to mechatronic systems, industrial equipment, turbines, and drives. It covers cutting-edge theoretical and experimental findings relating to material behavior, composites, nanomaterials, and coatings design. Based on the 7th International Conference on Design, Simulation, Manufacturing: The Innovation Exchange (DSMIE-2024), held on June 4–7, 2024, in Pilsen, Czech Republic, this second volume of a 2-volume set provides academics and professionals with extensive information on technologies, trends, challenges, and practice-oriented experience in all the above-mentioned areas.

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