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Nota di contenuto	Chapter 1. Introduction to surface topography -- Chapter 2. The areal field parameters -- Chapter 3. The areal feature parameters -- Chapter 4. Areal filtering methods -- Chapter 5. Areal form removal -- Chapter 6. Fractal-related multiscale geometric characterisation of topographies -- Chapter 7. Feature-based characterisation of areal surface topography -- Chapter 8. Quantifying surface texture with deep learning on laser treated surfaces -- Chapter 9. In-process automated areal surface measurement -- Chapter 10. The relationship between friction and the areal texture of aggregate particles used in the road surface course -- Chapter 11. Automotive applications - cylinder liners and tool steel polishing for injection moulding of plastic parts -- Chapter 12. Metal powder bed fusion additive manufacturing -- Chapter 13. Inspection of laser structured cams and conrods.
Sommario/riassunto	This second edition delves into surface topography, exploring its impact on the functionality of various components. Beginning with an introduction to surface topography in Chapter 1, the subsequent

chapters delve into the areal field parameters, feature parameters, filtering methods, and form removal techniques, leading into more specialized topics such as fractal-related multiscale geometric characterization and deep learning-based quantification of surface texture. With a focus on characterizing measurement data to glean functional insights, the book presents a comprehensive framework adopted by the international community. Through a diverse array of case studies spanning automotive applications, road surface engineering, additive manufacturing, and precision machining, readers are offered a holistic understanding of how areal techniques are pivotal in modern manufacturing industries. This edition builds upon the foundation laid by its predecessor, integrating evolving standards and additional case studies to provide an updated and comprehensive resource for modern surface engineering.