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	Nota di contenuto	Introduction to Teichmuller theory, old and new, II / Athanase Papadopoulos -- The Weil-Petersson metric geometry / Scott A. Wolpert -- Infinite dimensional Teichmuller spaces / Alastair Fletcher, Vladimir Markovic -- A construction of holomorphic families of Riemann surfaces over the punctured disk with given monodromy / Yoichi Imayoshi -- The uniformization problem / Robert Silhol -- Riemann surfaces, ribbon graphs and combinatorial classes / Gabriele Mondello -- Canonical 2-forms on the moduli space of Riemann surfaces / Nariya Kawazumi -- Quasi-homomorphisms on mapping class groups / Koji Fujiwara -- Lefschetz fibrations on 4-manifolds / Mustafa Korkmaz, Andras I. Stipsicz -- Introduction to measurable rigidity of mapping class groups / Yoshikata Kida -- Affine groups of flat surfaces / Martin Moller -- Braid groups and Artin groups / Luis Paris -- Complex projective structures / David Dumas -- Circle packing and Teichmuller space / Sadayoshi Kojima -- (2+1) Einstein spacetimes of finite type / Riccardo Benedetti, Francesco Bonsante -- Trace coordinates on Fricke spaces of some simple hyperbolic surfaces / William M. Goldman -- Spin networks and SL(2,)-character varieties / Sean Lawton, Elisha Peterson -- Grothendieck's reconstruction principle and 2-dimensional topology and geometry / Feng Luo -- Dessins

d'enfants and origami curves / Frank Herrlich, Gabriela Schmithusen --
The Teichmuller theory of the solenoid / Dragomir Saric.

Sommario/riassunto	This multi-volume set deals with Teichmuller theory in the broadest sense, namely, as the study of moduli space of geometric structures on surfaces, with methods inspired or adapted from those of classical Teichmuller theory. The aim is to give a complete panorama of this generalized Teichmuller theory and of its applications in various fields of mathematics. The volumes consist of chapters, each of which is dedicated to a specific topic. The present volume has 19 chapters and is divided into four parts: The metric and the analytic theory (uniformization, Weil-Petersson geometry, holomorphic families of Riemann surfaces, infinite-dimensional Teichmuller spaces, cohomology of moduli space, and the intersection theory of moduli space). The group theory (quasi-homomorphisms of mapping class groups, measurable rigidity of mapping class groups, applications to Lefschetz fibrations, affine groups of flat surfaces, braid groups, and Artin groups). Representation spaces and geometric structures (trace coordinates, invariant theory, complex projective structures, circle packings, and moduli spaces of Lorentz manifolds homeomorphic to the product of a surface with the real line). The Grothendieck-Teichmuller theory (dessins d'enfants, Grothendieck's reconstruction principle, and the Teichmuller theory of the soleniod). This handbook is an essential reference for graduate students and researchers interested in Teichmuller theory and its ramifications, in particular for mathematicians working in topology, geometry, algebraic geometry, dynamical systems and complex analysis. The authors are leading experts in the field.