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Design -- Chapter 12: Twist Fold Modules for Combinatorial Design of Petaloid Smocking in Clothing -- Chapter 13: Generating Strings from Crease Patterns for Facilitating the Folding of Petaloid Smockingv -- Chapter 14: Visualizing Petaloid Smocking based on Rotation of Decorations and Pleat Length -- Chapter 15: Folding all 4 × 4 Rotationally-Symmetric Diagonal-Grid 2-Color Patterns -- Chapter 16: From A4 paper to Tangram Puzzles: The Math Behind the Paper Folding -- Chapter 17: A variational approach to the paper bag problem for flanged origami packages folded from dihedrons of convex -- polygons Chapter 18: Rotational origami of polyhedral type and reduction of flanges -- Chapter 19: Folding curves over pleats -- Chapter 20: Topological Transformation of the Miura Ori Crease Pattern Pillow Box Design -- Chapter 21: An Origami-Inspired Mascot Design for China's National Stadium -- Chapter 22: The multifaceted dialogue initiated by the origami-based artistic process.

Sommario/riassunto

These four volumes of proceedings contain 126 papers contributed to the 8th International Meeting on Origami Science, Mathematics and Education (8OSME), held on 16-18 July 2024 at Swinburne University of Technology in Melbourne, Australia. The papers represent current work in different disciplines of origami and they are grouped into four subject themes, Volume 1 - Engineering I, Volume 2 - Engineering II, Volume 3 - Mathematics, Computation, History and Mental Health, and Volume 4 - Design and Education. We witness increasing interests in origami from researchers, practitioners and artists. Of a special note is the rapidly growing research in origami engineering, a distinctive field with fundamental concepts and applications related to space, mechanical, material, medical and structural engineering etc. Participants of 8OSME should find great passion and opportunity of collaborations across disciplines of origami. We hope these four volumes will inspire not just currently active researchers and artists, but also the next generation of origami scientists, mathematicians, engineers, designers, historians, and teachers.