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Autore	Cooper Shaun
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Nota di contenuto	Preface -- 0. Sum to Product Identities -- 1. Elliptic Functions -- 2. Transformations -- 3. Theta Functions -- 4. Levels 1, 2, 3, and 4: Jacobi's Inversion Theorem and Ramanujan's Alternative Theories -- 5. Level 5: The Rogers-Ramanujan Continued Fraction -- 6. Level 6: Ramanujan's Cubic Continued Fraction -- 7. Level 7 -- 8. Level 8: The Ramanujan-Gollnitz-Gordon Continued Fraction -- 9. Level 9 -- 10. Level 10: Ramanujan's Function k -- 11. Levels 11 and 23 -- 12. Level 12 -- 13. Hypergeometric Modular Transformations -- 14. Ramanujan's Series for 1/pi -- References.
Sommario/riassunto	Theta functions were studied extensively by Ramanujan. This book provides a systematic development of Ramanujan’s results and extends them to a general theory. The author’s treatment of the subject is comprehensive, providing a detailed study of theta functions and modular forms for levels up to 12. Aimed at advanced undergraduates, graduate students, and researchers, the organization, user-friendly presentation, and rich source of examples, lends this book to serve as a useful reference, a pedagogical tool, and a stimulus for further research. Topics, especially those discussed in the second half of the book, have been the subject of much recent research; many of which are appearing in book form for the first time. Further results are

summarized in the numerous exercises at the end of each chapter.