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Nota di contenuto	Frontmatter -- PREFACE / Iwasawa, Kenkichi -- CONTENTS -- §1. DIRICHLET'S L-FUNCTIONS -- §2. GENERALIZED BERNOULLI NUMBERS -- §3. p-ADIC L-FUNCTIONS -- §4. p-ADIC LOGARITHMS AND p-ADIC REGULATORS -- §5. CALCULATION OF $L_p(1; \chi)$ -- §6. AN ALTERNATE METHOD -- §7. SOME APPLICATIONS -- APPENDIX -- BIBLIOGRAPHY
Sommario/riassunto	An especially timely work, the book is an introduction to the theory of p-adic L-functions originated by Kubota and Leopoldt in 1964 as p-adic analogues of the classical L-functions of Dirichlet. Professor Iwasawa reviews the classical results on Dirichlet's L-functions and sketches a proof for some of them. Next he defines generalized Bernoulli numbers and discusses some of their fundamental properties. Continuing, he defines p-adic L-functions, proves their existence and uniqueness, and treats p-adic logarithms and p-adic regulators. He proves a formula of Leopoldt for the values of p-adic L-functions at $s=1$ . The formula was announced in 1964, but a proof has never before been published. Finally, he discusses some applications, especially the strong relationship with cyclotomic fields.