

1. Über einige arithmetische Identitäten	1
2. Über die Mock-Thetafunktionen siebenter Ordnung	22
3. Über die Fourierkoeffizienten elliptischer Modulformen negativer Dimension	35
4. Bemerkungen über eine Dirichletsche Reihe, die mit der Theorie der Modulformen nahe verbunden ist	38
5. Beweis eines Darstellungssatzes aus der Theorie der ganzen Modulformen	42
6. Über ganzwertige ganze transzendente Funktionen	54
7. Über einen Satz von A. Gelfond	62
8. Über ganzwertige ganze transzendente Funktionen II	74
9. On the zeros of Riemann's zeta-function	85
10. On the zeros of Riemann's zeta-function on the critical line	142
11. On the zeros of the zeta-function of Riemann	156
12. On the normal density of primes in small intervals, and the difference between consecutive primes	160
13. On the remainder in the formula for $N(T)$, the number of zeros of $\zeta(s)$ in the strip $0 < t < T$	179
14. Bemerkninger om et multipelt integral	204
15. Contributions to the theory of the Riemann zeta-function	214
16. Contributions to the theory of Dirichlet's L -functions	281
17. The zeta-function and the Riemann hypothesis	341
18. En brevveksling om et polynom som er i slekt med Riemanns zetafunksjon (with Viggo Brun, Ernst Jacobsthal, Carl Ludwig Siegel)	356
19. On an elementary method in the theory of primes	363
20. On Epstein's zeta-function (I) (with S. Chowla)	367
21. An elementary proof of Dirichlet's theorem about primes in an arithmetic progression	371
22. An elementary proof of the prime-number theorem	379
23. On elementary methods in prime-number theory and their limitations	388
24. An elementary proof of the prime-number theorem for arithmetic progressions	398
25. The general sieve-method and its place in prime-number theory	411
26. Note on a paper by L. G. Sathe	418
27. Harmonic analysis and discontinuous groups in weakly symmetric Riemannian spaces with applications to Dirichlet series	423
28. Automorphic functions and integral operators	464

Table of contents

29. Some problems concerning discontinuous groups of isometries in higher dimensional symmetric spaces	469
30. A new type of zeta functions connected with quadratic forms	473
31. On discontinuous groups in higher-dimensional symmetric spaces . .	475
32. Discontinuous groups and harmonic analysis	493
33. On the estimation of Fourier coefficients of modular forms	506
34. On Epstein's zeta-function (with S. Chowla)	521
35. Recent developments in the theory of discontinuous groups of motions of symmetric spaces	546
36. Sieve methods	568
37. Remarks on sieves	609
38. Remarks on multiplicative functions	616
39. Harmonic analysis	626
40. Sifting problems, sifting density and sieves	675
41. Reflections around the Ramanujan centenary	695
Bibliography	707
Acknowledgements	711