

Research articles

1. Expansion of an n -point function as a sum of commutators

J. Math. Phys. **11** (1970) 3253-3257 ([pdf](#))

2. Relations among invariants of circle actions on three-manifolds

Math. Annalen **195** (1972) 321-329 ([pdf](#))

3. The Pontrjagin class of an orbit space

Topology **11** (1972) 253-264 ([pdf](#))

4. Higher dimensional Dedekind sums

Math. Annalen **202** (1973) 149-172 ([pdf](#))

5. A Kronecker limit formula for real quadratic fields

Math. Annalen **213** (1975) 153-184 ([pdf](#))

6. Modular forms associated to real quadratic fields

Invent. Math. **30** (1975) 1-46 ([pdf](#))

7. Nombres de classes et fractions continues

Journées Arithmétiques de Bordeaux, Astérisque **24-25** (1975) 81-97 ([pdf](#))

8. On the values at negative integers of the zeta-function of a real quadratic field

L'Enseignement Mathématique **22** (1976) 55-95 ([pdf](#))

9. (with F. Hirzebruch) Classification of Hilbert modular surfaces

in *Complex Analysis and Algebraic Geometry*, Iwanami Shoten & Cambridge Univ. Press, Tokyo (1977) 43-77 ([pdf](#))

10. (with F. Hirzebruch) Intersection numbers of curves on Hilbert modular surfaces and modular forms of Nebentypus

Invent. Math. **36** (1976) 57-113 ([pdf](#))

11. Traces des opérateurs de Hecke

Séminaire Delange-Pisot-Poitou 1975-1976, Exposé No. 23, 12 pages ([pdf](#))

reprinted (in English translation) as: The Eichler-Selberg trace formula on $SL_2(\mathbb{Z})$,

Appendix to S. Lang, *Introduction to Modular Forms*, Grundlehren d. math. Wiss. **222**, Springer-Verlag, Berlin-Heidelberg-New York (1976) 44-54 ([pdf](#))

Correction in *Modular Forms of One Variable VI*, Lecture Notes in Math. **627**, Springer-Verlag, Berlin-Heidelberg-New York (1977) 171-173 ([pdf](#))

12. Een ongelijkheid tegengesteld aan die van Cauchy

Proc. Koninkl. Ned. Akad. v. Wetensch. (Indag. Math.) **80** (1977) 349-351 ([pdf](#))

13. Valeurs des fonctions zêta des corps quadratiques réels aux entiers négatifs

Journées Arithmétiques de Caen 1976, Astérisque **41-42** (1977) 135-151 ([pdf](#))

14. Modular forms whose Fourier coefficients involve zeta-functions of quadratic fields

in *Modular Functions of One Variable VI*, Lecture Notes in Math. **627**, Springer-Verlag, Berlin-Heidelberg-New York (1977) 105-169 ([pdf](#))

15. (with G. van der Geer) The Hilbert modular group for the field $\mathbb{Q}(\sqrt{-13})$

Invent. math. **42** (1977) 93-133 ([pdf](#))

16. (with S. Suter) Dilatationen von abelschen Gruppen

L'Enseignement Math. **24** (1978) 125-142 ([pdf](#))

17. (with H. Stark) A property of L -functions on the real line

J. Number Theory **12** (1980) 49-52 ([pdf](#))

18. (with A. Libgober and J. Wood) Congruences modulo powers of 2 for the signature of complete intersections

Quart. J. of Math. **31** (1980) 209-218 ([pdf](#))

19. (with W. Kohnen) Values of L -series of modular forms at the center of the critical strip

Invent. Math. **64** (1980) 175-198 ([pdf](#))

20. Sur la conjecture de Saito-Kurokawa (d'après H. Maass)

Séminaire de Théorie des Nombres, Paris 1979-1980 (Sém. Delange-Pisot-Poitou), Progr. in Math. **12**, Birkhäuser-Verlag, Boston-Basel-Stuttgart (1980) 372-394 ([pdf](#))

21. (with B. Gross) On the critical values of Hecke L -series

in *Fonctions abéliennes et nombres transcendants*, D. Bertrand and M. Waldschmidt (eds.), Mémoire de la Soc. Math. de France **2** (1980) 49-54 ([pdf](#))

22. Eisenstein series and the Riemann zeta function

in *Automorphic Forms, Representation Theory and Arithmetic*, Springer-Verlag, Berlin-Heidelberg-New York (1981) 275-301 ([pdf](#))

23. Eisenstein series and the Selberg trace formula. I

in *Automorphic Forms, Representation Theory and Arithmetic*, Springer-Verlag, Berlin-Heidelberg-New York (1981) 303-355 ([pdf](#))

24. (with G. Roland and N. Yui) A parametric family of quintic polynomials with Galois group D_5

J. Number Theory **15** (1982) 137-142 ([pdf](#))

25. The Rankin-Selberg method for automorphic functions which are not of rapid decay

J. Fac. Sci. Tokyo **28** (1982) 415-438 ([pdf](#))

26. (with M. Eichler) On the zeros of the Weierstrass \wp -function

Math. Annalen **258** (1982) 399-407 ([pdf](#))

27. On the number of Markoff numbers below a given bound

Math. Comp. **39** (1982) 709-733 ([pdf](#))

28. On the decomposability of the Gini coefficient and other indices of inequality

J. Math. Econ. **12** (1983) 104-118 ([pdf](#))

29. (with W. Kohnen) Modular forms with rational periods

in *Modular Forms*, R.A. Rankin (ed.), Ellis Horwood, Chichester (1984) 197-249 ([pdf](#))

30. Asymptotics and congruence properties of the a_n

Appendix to M. Newman and D. Shanks, "On a sequence arising for series for π "

Math. Comp. **42** (1984) 212-216 ([pdf](#))

31. (with J. Buhler and B. Gross) On the conjecture of Birch and Swinnerton-Dyer for an elliptic curve of rank 3

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32. (with W. Neumann) A note on an invariant of Fintushel and Stern

in *Geometry and Topology (Proceedings, Univ. of Maryland 1983-1984)*, Lecture Notes in Math. **1167**, Springer-Verlag, Berlin-Heidelberg-New York (1985) 241-244 ([pdf](#))

33. Modular points, modular curves, modular surfaces and modular forms

in *Arbeitstagung Bonn 1984*, Lecture Notes **1111**, Springer-Verlag, Berlin-Heidelberg-New York (1985) 225-248 ([pdf](#))

34. Hyperbolic manifolds and special values of Dedekind zeta functions

Invent. Math. **83** (1986) 285-302 ([pdf](#))

35. (with B. Gross) Singular moduli

J. reine Angew. Math. **355** (1985) 191-220 ([pdf](#))

36. (with J. Lagarias and A. Odlyzko) On the capacity of disjointly shared networks

Computer Networks **10** (1985) 275-285 ([pdf](#))

37. Modular parametrizations of elliptic curves

Can. Math. Bull. **28** (1984) 372-384 ([pdf](#))

38. (with W. Neumann) Volumes of hyperbolic three-manifolds

Topology **24** (1985) 307-332 ([pdf](#))

39. Volume of R_3

Appendix to M. Jenkins and W. Neumann, "Rotation numbers of products of circle homeomorphisms"

Math. Ann. **271** (1985) 398-400 ([pdf](#))

40. (with B. Gross) Heegner points and derivative of L -series

Invent. Math. **85** (1986) 225-320 ([pdf](#))

41. (with J. Harer) The Euler characteristic of the moduli space of curves

Invent. Math. **85** (1986) 457-485 ([pdf](#))

42. (with H. Jacquet) Eisenstein series and the Selberg trace formula. II

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43. Large integral points on elliptic curves

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44. (with B. Gross and W. Kohnen) Heegner points and derivatives of L -series. II

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45. Note on the Landweber-Stong elliptic genus

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46. (with G. Kramarz) Numerical investigations related to the L -series of certain elliptic curves

J. Ind. Math. Soc. **52** (1987) 51-69 ([pdf](#))

47. (with N. Skoruppa) A trace formula for Jacobi forms

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48. (with N. Skoruppa) Jacobi forms and a certain space of modular forms

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49. On an approximate identity of Ramanujan

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50. Proof of the identity (28)

Appendix to H. Gillet and C. Soulé, "Analytic torsion and the arithmetic Todd genus"

Topology **30** (1991) 48-52 ([pdf](#))

51. The Bloch-Wigner-Ramakrishnan polylogarithm function

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52. The Birch-Swinnerton-Dyer conjecture from a naive point of view

in *Arithmetic Algebraic Geometry* (G. v.d. Geer, F. Oort, J. Steenbrink, eds.), Prog. in Math. **89**, Birkhäuser, Boston (1990) 377-389 ([pdf](#))

53. Polylogarithms, Dedekind zeta functions, and the algebraic K-theory of fields

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54. A one-sentence proof that every prime $p \equiv 1 \pmod{4}$ is a sum of two squares

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55. Periods of modular forms and Jacobi theta functions

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56. Hecke operators and periods of modular forms

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57. (with J. Alexander) The entropy of a certain infinitely convolved Bernoulli measure

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58. (with YJ. Choie) Rational period functions for $PSL(2, \mathbb{Z})$

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59. Some strange 3-adic identities (Solution to Problem 6625)

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60. (with S. Gupta) On the coefficients of the minimal polynomials of Gaussian periods

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61. Realizability of a model in infinite statistics

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62. Special values and functional equations of polylogarithms

in *The Structural Properties of Polylogarithms*, ed. L. Lewin, Mathematical Surveys and Monographs **37**, AMS, Providence (1991) 377-400 ([pdf](#))

63. (with H. Cohen and L. Lewin) A sixteenth-order polylogarithm ladder

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64. (with F. Rodriguez Villegas) Square roots of central values of Hecke L-series

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65. Algebraic numbers close to both 0 and 1

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66. Elementary aspects of the Verlinde formula and of the Harder-Narasimhan-Atiyah-Bott formula

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67. Modular forms and differential operators

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68. (with N. Yui) On the singular values of Weber modular functions

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69. (with J. Szmidt and J. Urbanowicz) Congruences among generalized Bernoulli numbers

Acta Arithmetica **71** (1995) 273-278 ([pdf](#))

70. (with R. Hall and J. Wilson) Reciprocity formulae for general Dedekind-Rademacher sums

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71. On the distribution of the number of cycles of elements in symmetric groups

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72. A converse to Cauchy's inequality

American Mathematical Monthly, **102** (1995) 919-920 ([pdf](#))

73. (with F. Rodriguez Villegas) Which primes are sums of two cubes?

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74. Cohomology of moduli spaces of stable rank two bundles over a curve

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75. (with M. Kaneko) A generalized Jacobi theta function and quasimodular forms

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76. (with P. Cohen and Y. Manin) Automorphic pseudodifferential operators

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77. (with R. Kaufmann and Yu. Manin) Higher Weil-Petersson volumes of moduli spaces of stable n -pointed curves

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78. (with F. Beukers) Lower bounds of heights of points on hypersurfaces

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79. (with J. Lewis) Period functions and the Selberg zeta function for the modular group

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80. (with M. Kaneko) Supersingular j -invariants, hypergeometric series, and Atkin's orthogonal polynomials

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81. (with L. Goettsche) Jacobi forms and the structure of Donaldson invariants for 4-manifolds with $b_+=1$

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82. A modified Bernoulli number

Nieuw Archief voor Wiskunde 16 (1998) 63-72 ([pdf](#))

83. A modular identity arising from mirror symmetry

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84. From quadratic functions to modular functions

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85. (with H. Cohen and F. Rodriguez Villegas) Convergence acceleration of alternating series

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86. (with R. Lawrence) Modular forms and quantum invariants of 3-manifolds

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87. Vassiliev invariants and a strange identity related to the Dedekind eta-function

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88. Traces of singular moduli

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89. (with H. Gangl) Classical and elliptic polylogarithms and special values of L -series

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90. (with J. Lewis) Period functions for Maass wave forms. I

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91. (with V. Fridkin and Y. Stroganov) Ground state of the quantum symmetric finite size XXZ spin chain with anisotropy parameter $\Delta=12$.

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92. Polynomials arising from the tautological ring

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93. (with F. Rodriguez Villegas and J. Voloch) Constructions of plane curves with many points

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94. A proof of the Kac-Wakimoto affine denominator formula for the strange series

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95. (with E. Wirsing) Multiplicative functions with $\Delta f(n) \rightarrow 0$

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96. (with T. Sasamoto) On the existence of a phase transition for an exclusion process on a ring

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97. (with V. Fridkin and Y. Stroganov) Finite size xxz spin chain with anisotropy parameter $\Delta=12$. Proceedings of the Baxter Revolution in Mathematical Physics (Canberra, 2000)

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98. (with Y. Ohno) Multiple zeta values of fixed weight, depth, and height

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99. (with P. Kleban) Crossing probabilities and modular forms

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100. Applications of the representation theory of finite groups

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101. (with K. Ihara and M. Kaneko) Derivation and double shuffle relations for multiple zeta values

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102. (with T. Dokchitser and R. de Jeu) Numerical verification of Beilinson's conjecture for K_2 of hyperelliptic curves

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104. The Mellin transform and other useful analytic techniques

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105. The dilogarithm function

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107. A proof of (2.40)

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108. Evaluation of $S(m,n)$

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109. (with K. Thas) Finite projective planes, Fermat curves and Gaussian periods

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110. (with L. Weng) Deligne products of line bundles over moduli spaces of curves.

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111. Exact and asymptotic formulas for v_n

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112. (with A. Zinger) Some properties of hypergeometric series associated with mirror symmetry

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113. Ramanujan's mock theta functions and their applications [d'après Zwegers and Bringmann-Ono],

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114. Elliptic modular forms and their applications

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115. Integral solutions of Apéry-like recurrence equations

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116. (with T. Dimofte, S. Gukov and J. Lenells) Exact results for perturbative Chern-Simons theory with complex gauge group

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117. On Harder's $\text{SL}(2,\mathbb{R})\text{-}\text{SL}(3,\mathbb{R})$ identity

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118. (with S. Wimmer-Zagier) Some questions and observations around the mathematics of Seki Takakazu

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121. (with Z.-W. Sun) On a curious property of Bell numbers

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122. Appendix. A Family of Combinatorial Identities.

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123. (with H. Cohen) Vanishing and non-vanishing theta values

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124. (with M. Vlasenko) Higher Kronecker limit formulas for real quadratic fields

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126. Appendix A: Asymptotics of the regular cube

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130. Lines on the Dwork quintic pencil and its higher degree analogues

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6. A simple proof of the prime number theorem [in Chinese]

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19. Periods of modular forms, traces of Hecke operators, and multiple zeta values

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