

List of Publications of Kenkichi Iwasawa

Papers

- [1] Ueber die Struktur der endlichen Gruppen, deren echte Untergruppen sämtlich nilpotent sind, Proc. Phys.-Math. Soc. Japan, **23** (1941), 1–4.
- [2] Über die Einfachheit der speziellen projektiven Gruppen, Proc. Imp. Acad. Japan, **17** (1941), 57–59.
- [3] Über die endlichen Gruppen und die Verbände ihrer Untergruppen, J. Fac. Sci. Tokyo Imp. Univ., Sect. I. **4** (1941), 171–199.
- [4] On almost periodic functions (Japanese), Isô Sûgaku, **4** (1942), 56–60.
- [5] On normed rings and a theorem of Segal I (Japanese), Zenkoku Sijyo Sûgaku Danwakai, **246** (1942), 1522–1555.
- [6] On the structure of infinite M -groups, Japanese J. Math., **18** (1943), 709–728.
- [7] On the structure of conditionally complete lattice-groups, Japanese J. Math., **18** (1943), 777–789.
- [8] Einige Sätze über freie Gruppen, Proc. Imp. Acad. Japan, **19** (1943), 272–274.
- [9] On one-parameter families of probability laws (Japanese), J. Phys.-Math. Soc. Japan, **17** (1943), 217–220.
- [10] On normed rings and a theorem of Segal II (Japanese), Zenkoku Sijyo Sûgaku Danwakai, **251** (1943), 167–186.
- [11] On group rings of topological groups, Proc. Imp. Acad. Japan, **20** (1944), 67–70.
- [12] Über nilpotente topologische Gruppen I, Proc. Japan Acad., **21** (1945), 124–137.
- [13] Der Bezoutsche Satz in zweifach projektiven Räumen, Proc. Japan Acad., **21** (1945), 213–222.
- [14] Zur Theorie der algebraischen Korrespondenzen I, Schnittpunktgruppen von Korrespondenzen, Proc. Japan Acad., **21** (1945), 204–212.
- [15] Zur Theorie der algebraischen Korrespondenzen II, Multiplikation der Korrespondenzen, Proc. Japan Acad., **21** (1945), 411–418.
- [16] On the representation of Lie algebras, Japanese J. Math., **19**

- (1948), 405–426.
- [17] On linearly ordered groups, *J. Math. Soc. Japan*, **1** (1948), 1–9.
- [18] Finite groups and compact groups (Japanese), *Sûgaku*, **1** (1948), 94–95.
- [19] Hilbert's fifth problem (Japanese), *Sûgaku*, **1** (1948), 161–171.
- [20] (with T. Tamagawa) Automorphisms of a function field (Japanese), *Sûgaku*, **1** (1948), 315–316.
- [21] On some types of topological groups, *Ann. of Math.*, (2) **50** (1949), 507–558.
- [22] Topological groups with invariant compact neighborhoods of the identity, *Ann. of Math.*, (2) **54** (1951), 345–348.
- [23] A note on L -functions, *Proc. Int. Congress of Math.* (Cambridge, Mass., 1950), Vol. 1, Amer. Math. Soc., 1952, p. 322.
- [24] Some properties of (L)-groups, *Proc. Int. Congress of Math.* (Cambridge, Mass., 1950), Vol. 2, Amer. Math. Soc., 1952, pp. 447–450.
- [25] (with T. Tamagawa) On the group of automorphisms of a function field, *J. Math. Soc. Japan*, **3** (1951), 137–147. Correction, *ibid.*, **4** (1952), 100–101, 203–204.
- [26] On the rings of valuation vectors, *Ann. of Math.*, (2) **57** (1953), 331–356.
- [27] On solvable extensions of algebraic number fields, *Ann. of Math.*, (2) **58** (1953), 548–572.
- [28] A note on Kummer extensions, *J. Math. Soc. Japan*, **5** (1953), 253–262.
- [29] On Galois groups of local fields, *Trans. Amer. Math. Soc.*, **80** (1955), 448–469.
- [30] Galois groups acting on the multiplicative groups of local fields, *Proc. Int. Sympos. on Algebraic Number Theory* (Tokyo & Nikko, 1955), Science Council of Japan, Tokyo, 1956, pp. 63–64.
- [31] A note on the group of units of an algebraic number field, *J. Math. Pure and Appl.*, (9) **35** (1956), 189–192.
- [32] A note on class numbers of algebraic number fields, *Abh. Math. Sem. Univ. Hamburg*, **20** (1956), 257–258.
- [33] On some invariants of cyclotomic fields, *Amer. J. Math.*, **80** (1958), 773–783. Erratum, *ibid.*, **81** (1959), 280.
- [34] Sheaves for algebraic number fields, *Ann. of Math.*, (2) **69** (1959), 408–413.
- [35] On Γ -extensions of algebraic number fields, *Bull. Amer. Math. Soc.*, **65** (1959), 183–226.
- [36] On some properties of Γ -finite modules, *Ann. of Math.*, (2) **70**

- (1959), 291–312.
- [37] On the theory of cyclotomic fields, *Ann. of Math.*, (2) **70** (1959), 530–561.
- [38] On local cyclotomic fields, *J. Math. Soc. Japan*, **12** (1960), 16–21.
- [39] A class number formula for cyclotomic fields, *Ann. of Math.*, (2) **76** (1962), 171–179.
- [40] On a certain analogy between algebraic number fields and function fields (Japanese), *Sûgaku*, **15** (1963), 65–67.
- [41] On some modules in the theory of cyclotomic fields, *J. Math. Soc. Japan*, **16** (1964), 42–82.
- [42] Some results in the theory of cyclotomic fields, *Proc. Sympos. Pure Math.*, Vol. VIII, Amer. Math. Soc., 1965, pp. 66–69.
- [43] (with C. C. Sims) Computation of invariants in the theory of cyclotomic fields, *J. Math. Soc. Japan*, **18** (1966), 86–96.
- [44] A note on ideal class groups, *Nagoya Math. J.*, **27** (1966), 239–247.
- [45] Some modules in local cyclotomic fields, *Les Tendances Géom. en Algèbre et Théorie des Nombres*, Éditions du Centre National de la Recherche Scientifique, Paris, 1966, pp. 87–96.
- [46] On explicit formulas for the norm residue symbol, *J. Math. Soc. Japan*, **20** (1968), 151–165.
- [47] Analogies between number fields and function fields, *Some Recent Advances in the Basic Sciences*, Proc. Annual Sci. Conf. (New York, 1965–1966), Vol. 2, Belfer Grad. School Sci., Yeshiva Univ., New York, 1969, pp. 203–208.
- [48] On p -adic L -functions, *Ann. of Math.*, (2) **89** (1969), 198–205.
- [49] On some infinite Abelian extensions of algebraic number fields, *Actes du Congrès Int. Math. (Nice, 1970)*, Tome 1, Gauthier-Villars, Paris, 1971, pp. 391–394.
- [50] Skew-symmetric forms for number fields, *Proc. Sympos. Pure Math.*, Vol. XX, Amer. Math. Soc., 1971, p. 86.
- [51] On the μ -invariants of cyclotomic fields, *Acta Arith.*, **21** (1972), 99–101.
- [52] On \mathbf{Z}_1 -extensions of algebraic number fields, *Ann. of Math.*, (2) **98** (1973), 246–326.
- [53] On the μ -invariants of \mathbf{Z}_1 -extensions, *Number theory, Algebraic Geometry and Commutative Algebra*, in honor of Yasuo Akizuki, Kinokuniya, Tokyo, 1973, pp. 1–11.
- [54] A note on Jacobi sums, *Convegno di Strutture in Corpi Algebrici* (Rome, 1973), *INDAM, Symposia Mathematica*, Vol. XV, Academic Press, London, 1975, pp. 447–459.

- [55] A note on cyclotomic fields, *Invent. Math.*, **36** (1976), 115–123.
- [56] Some remarks on Hecke characters, *Algebraic Number Theory* (Kyoto, 1976), Japan Soc. Promotion Sci., Tokyo, 1977, pp. 99–108.
- [57] On p -adic representations associated with \mathbf{Z}_p -extensions, *Automorphic Forms, Representation Theory and Arithmetic* (Bombay, 1979), Tata Inst. Fund. Res., Bombay, 1981, pp. 141–153.
- [58] Riemann-Hurwitz formula and p -adic Galois representations for number fields, *Tôhoku Math. J.*, (2) **33** (1981), 263–288.
- [59] On cohomology groups of \mathbf{Z}_p -extensions (Japanese, Notes by G. Fujisaki), *\mathbf{Z}_p -extensions and Related Topics* (Kyoto, 1981), *Kôkyûroku*, No. 440, Res. Inst. Math. Sci., Kyoto Univ., 1982, pp. 76–84.
- [60] On cohomology groups of units for \mathbf{Z}_p -extensions, *Amer. J. Math.*, **105** (1983), 189–200.
- [61] A simple remark on Leopoldt's conjecture (Japanese), Report of the Conference on Algebraic Number Theory (Kyoto, 1984), Res. Inst. Math. Sci., Kyoto Univ., 1984, pp. 45–54.
- [62] Some problems on cyclotomic fields (Japanese), *Algebraic Number Theory* (Kyoto, 1987), *Kôkyûroku*, No. 658, Res. Inst. Math. Sci., Kyoto Univ., 1988, pp. 43–55.

Books

- [63] *Daisu Kansu-ron [Theory of Algebraic Functions]* (Japanese), Iwanami Shoten, Tokyo, 1952, revised ed. 1973, 380 pp.
- [64] (with A. Borel, S. D. Chowla, C. S. Herz and J. P. Serre) *Seminar on Complex Multiplication*, Seminar held at the Institute for Advanced Study, Princeton, 1957–58. *Lecture Notes in Math.*, No. 21, Springer-Verlag, Berlin-Heidelberg-New York, 1966, 102 pp.
- [65] *Lectures on p -adic L -functions*, *Annals of Mathematics Studies*, No. 74. Princeton University Press, Princeton, N. J.; University of Tokyo Press, Tokyo, 1972, 106 pp.
- [66] *Kyokusyo Ruitai-ron [Local Class Field Theory]* (Japanese), Iwanami Shoten, Tokyo, 1980, 184 pp.
- [67] *Local Class Field Theory*, *Oxford Mathematical Monographs*, Oxford University Press, New York; Clarendon Press, Oxford, 1986, 155 pp.