Zofia Adamowicz

1992 A sharp version of the bounded Matijasevich conjecture and the end-extension problem. *Journal of Symbolic Logic*, 57(2):597–616.

Leonard Adleman and Kenneth Manders

1976 Diophantine complexity. In 17^{th} *Annual Symposium on Foundations of Computer Science*, pages 81–88, Houston, Texas, 25–26 October. IEEE.

Andrew Adler

1969 Existential formulas in arithmetic. *Dissertation Abstracts*, 29B(8):2962–2963.

1969 Extensions of non-standard models of number theory. *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik*, 15(4):289–290.

1969 Some recursively unsolvable problems in analysis. *Proceedings of the American Mathematical Society*, 22(2):523–526.

1971 A. Adler. A reduction of homogeneous Diophantine problems. *The Journal of the London Mathematical Society (Second Series)*, 3(3):446–448.

S. V. Aĭvazyan

1983 O nekotorykh beskonechnykh tsepyakh mnogoobraziĭ grupp. *Doklady Akademiya Nauk Armyanskoĭ SSSR*, 26(5):198–200 (Russian).

1988 Ob odnoĭ probleme A. I. Mal′tseva. *Sibirskiĭ Matematicheskiĭ Zhurnal*, 29(6):3–11 (Russian).

1989 A problem of A. I. Mal'tsev. *Siberian Mathematical Journal*, 29(6):877–884.

Yvette Amice

1964 Interpolation p-adique. *Bulletin de la Société Mathématique de France*, 92(2):117–180 (French).

George E. Andrews

1986 EΥPHKA! $\mathrm{num} = \Delta + \Delta + \Delta$. *Journal of Number Theory*, 23(3):285–293.

David J. Anick

1985 Diophantine equations, Hilbert series, and undecidable spaces. *Annals of Mathematics, Second Series*, 122(1):87–112.

Jean-Pierre Azra

1971 Relations Diophantiennes et la solution négative du 10e problème de Hilbert. In *Séminaire Bourbaki—vol. 1970/71. Exposés 382–399*, volume 244 of *Lecture Notes in Mathematics*, pages 11–28. Springer-Verlag (French).

A. Baker

1968 Contributions to the theory of Diophantine equations I. On the representation of integers by binary forms. *Philosophical Transactions of the Royal Society of London. Series A*, 263(1139):173–191.

D. Barton and J. P. Fitch

1972 Applications of algebraic manipulation programs in physics. *Reports on Progress in Physics*, 35(3):235–314.

1972 A review of algebraic manipulative programs and their application. *Computer Journal*, 15(4):362–381.

Friedrich L. Bauer

1988 For all primes greater than 3, $\binom{2p-1}{p-1} \equiv 1 \pmod{p^3}$ holds. *The Mathematical Intelligencer*, 10(3):42.

Walter Baur

1974 Über rekursive strukturen. *Inventiones Mathematicae*, 23(2):89–95 (German).

Christoph Baxa

1993 A note on Diophantine representations. *The American Mathematical Monthly*, 100(2):138–143.

Lewis D. Baxter

1978 The undecidability of the third order dyadic unification problem. *Information and Control*, 38(2):170–178.

H. Beck

1975 Zur entscheidbarkeit der funktionalen äquivalenz. In H. Brakhage, editor, *Automata Theory and Formal Languages: 2nd GI Conference*, volume 33 of *Lecture Notes in Computer Science*, pages 127–133. Springer-Verlag, May (German).

J. L. Bell and M. Machover

1977 *A Course in Mathematical Logic*. North Holland, Amsterdam.

Lenore Blum, Mike Shub, and Steve Smale

1989 On a theory of computation and complexity over the real numbers; *NP* completeness, recursive functions and universal machines. *Bulletin of the American Mathematical Society (New Series)*, 21(1):1–46.

Manuel Blum

1967 A machine-independent theory of the complexity of recursive functions. *Journal of the ACM*, 14(2):322–336.

Alexander Bockmayr

1987 A note on a canonical theory with undecidable unification and matching problem. *Journal of Automated Reasoning*, 3(4):379–381.

L. A. Bokut′

1972 Nerazreshimost′ problemy ravenstva i podalgebry konechno opredelennykh algebr Li. *Izvestiya Akademii Nauk SSSR. Seriya Matematichekaya*, 36(6):1173–1219 (Russian).

1972 Unsolvability of the equality problem and subalgebras of finitely presented Lie algebras. *Mathematics of the USSR. Izvestiya*, 6(6):1153–1199.

Dorothy Bollman and Miguel Laplaza

1978 Some decision problems for polynomial mappings. *Theoretical Computer Science*, 6(3):317–325.

E. Börger

1989 *Computability, Complexity, Logic*. North-Holland, Amsterdam.

J. L. Britton

1979 Integer solutions of systems of quadratic equations. *Mathematical Proceedings of the Cambridge Philosophical Society*, 86(3):385–389.

Manfred Broy, Martin Wirsing, and Peter Pepper

1987 On the algebraic definition of programming languages. *ACM Transactions on Programming Languages and Systems*, 9(1):54–99.

Cristian Calude and Gheorghe Păun

1983 Independent instances for some undecidable problems. *RAIRO Informatique Théorique*, 17(1):49–54.

D. Cantone, V. Cutello, and A. Policrito

1990 Set-theoretic reductions of Hilbert's Tenth Problem. In E. Börger, H. Kleine Büning, and M. M. Richter, editors, *CSL '89: 3rd Workshop on Computer Science Logic*, volume 440 of *Lecture Notes in Computer Science*, pages 65–75. Springer-Verlag.

Hans Georg Carstens

1977 The theorem of Matijasevich is provable in Peano's arithmetic by finitely many axioms. *Logique et Analyse*, 20:116–121.

B. F. Caviness

1970 On canonical forms and simplification. *Journal of the ACM*, 17(2):385–396.

Patrick Cegielski

1990 La théorie de corps réel-clos inductifs est une extension conservative de l'Arithmétique de Peano. *Comptes Rendus de l'Académie des Sciences. Série I. Mathématique*, 310(5):239–242 (French).

Gregory J. Chaitin

1974 Information-theoretic limitations of formal systems. *Journal of the ACM*, 21(3):403–424.

1987 *Algorithmic Information Theory*, volume 1 of *Cambridge Tracts in Theoretical Computer Science*. Cambridge University Press, Cambridge.

Tat-hung Chan

1987 On two-way weak counter machines. *Mathematical Systems Theory*, 20(1):31–41.

S. Chowla

1965 *The Riemann Hypothesis and Hilbert's Tenth Problem*. Gordon and Breach, New York.

Gregory V. Chudnovsky

1970 G. V. Chudnovskiĭ. Diofantovy predikaty. *Uspekhi Matematicheskikh Nauk*, 25(4):185–186 (Russian).

1971 G. V. Chudnovskiĭ. Nekotorye arifmeticheskie problemy. Preprint IM-71-3, Akademiya Nauk Ukrainskoĭ SSR. Institut Matematiki, Kiev.

1984 *Contributions to the Theory of Transcendental Numbers*. Number 19 in Mathematical Surveys and Monographs. American Mathematical Society, Providence.

Alonzo Church

1936 An unsolvable problem of elementary number theory. *American Journal of Mathematics*, 58:345–363.

Lori A. Clarke and Debra J. Richardson

1985 Applications of symbolic evaluation. *Journal of Systems and Software*, 5(1):15–35.

Jacques Cohen

1990 Constraint logic programming languages. *Communications of the ACM*, 33(7):52–68.

J. H. Conway and A. J. Jones

1976 Trigonometric Diophantine equations (On vanishing sums of roots of unity). *Acta Arithmetica*, 30(3):229–240.

Wiktor Dańko

1980 A criterion of undecidability of algorithmic theories. In P. Dembiński, editor, *Mathematical Foundations of Computer Science 1980*, volume 88 of *Lecture Notes in Computer Science*, pages 205–218, Rydzyna, Poland. Springer-Verlag. A slightly expanded version of this paper (same title) appeared in Fundamenta Informatica (Danko [1981]).

1981 A criterion of undecidability of algorithmic theories. *Fundamenta Informaticae*, IV(3):605–628.

Martin Davis

1950 Arithmetical problems and recursively enumerable predicates (abstract). *Journal of Symbolic Logic*, 15(1):77–78.

1953 Arithmetical problems and recursively enumerable predicates. *Journal of Symbolic Logic*, 18(1):33–41.

1958 *Computability and Unsolvability.* McGraw Hill, New York. Reprint. Dover Publications, New York, 1982.

1962 Applications of recursive function theory to number theory. In *Recursive Function Theory*, volume 5 of *Proceedings of Symposia in Pure Mathematics*, pages 135–138, Providence, Rhode Island. American Mathematical Society.

1963 Extensions and corollaries of recent work on Hilbert's Tenth Problem. *Illinois Journal of Mathematics*, 7(2):246–250.

1966 Diophantine equations and recursively enumerable sets. In E. R. Caianiello, editor, *Automata Theory*, pages 146–152. Academic Press, New York.

1968 One equation to rule them all. *Transactions of the New York Academy of Sciences. Series II*, 30(6):766–773.

1971 An explicit Diophantine definition of the exponential function. *Communications on Pure and Applied Mathematics*, 24(2):137–145.

1972 On the number of solutions of Diophantine equations. *Proceedings of the American Mathematical Society*, 35(2):552–554.

1973 Hilbert's Tenth Problem is unsolvable. *The American Mathematical Monthly*, 80(3):233–269. Reprinted with corrections in the Dover edition of Davis [1958].

1973 Speed-up theorems and Diophantine equations. In Randall Rustin, editor, *Courant Computer Science Symposium 7: Computational Complexity*, pages 87–95. Algorithmics Press, New York.

1977 Unsolvable problems. In Jon Barwise, editor, *Handbook of Mathematical Logic*, volume 90 of *Studies in Logic and the Foundations of Mathematics*, chapter C.2, pages 567–594. North Holland, Amsterdam.

1989 Teaching the incompleteness theorem. In R. Ferro, C. Bonotto, S. Valentini, and A. Zanardo, editors, *Logic Colloquium '88*, volume 127 of *Studies in Logic and the Foundations of Mathematics*, pages 385–392, Amsterdam. North-Holland.

Martin Davis, Yuri Matiyasevich, and Julia Robinson

1976 Martin Davis, Yuri Matijasevič, and Julia Robinson. Hilbert's Tenth Problem. Diophantine equations: positive aspects of a negative solution. In *Mathematical Developments Arising from Hilbert Problems*, volume 28 of *Proceedings of Symposia in Pure Mathematics*, pages 323–378, Providence, Rhode Island. American Mathematical Society.

Martin Davis and Hilary Putnam

1958 Reductions of Hilbert's Tenth Problem. *Journal of Symbolic Logic*, 23(2):183–187.

1959 A computational proof procedure; Axioms for number theory; Research on Hilbert's Tenth Problem. O.S.R. Report AFOSR TR59-124, U.S. Air Force, October.

1959 M. D. Davis and Hilary Putnam. On Hilbert's Tenth Problem. *Notices of the American Mathematical Society*, 6(5):544.

1963 Diophantine sets over polynomial rings. *Illinois Journal of Mathematics*, 7(2):251–256.

Martin Davis, Hilary Putnam, and Julia Robinson

1961 The decision problem for exponential Diophantine equations. *Annals of Mathematics, Second Series*, 74(3):425–436.

J. Denef

1975 Hilbert's Tenth Problem for quadratic rings. *Proceedings of the American Mathematical Society*, 48(1):214–220.

1978 The Diophantine problem for polynomial rings and fields of rational functions. *Transactions of the American Mathematical Society*, 242:391–399.

1978 Diophantine sets over $\mathbf{Z}[T]$. *Proceedings of the American Mathematical Society*, 69(1):148–150.

1980 Diophantine sets over algebraic integer rings. II. *Transactions of the American Mathematical Society*, 257(1):227–236.

J. Denef and L. Lipshitz

1978 Diophantine sets over some rings of algebraic integers. *The Journal of the London Mathematical Society (Second Series)*, 18(3):385–391.

1984 Power series solutions of algebraic differential equations. *Mathematische Annalen*, 267(2):213–238.

1989 Decision problems for differential equations. *Journal of Symbolic Logic*, 54(3):941–950.

Leonard Eugene Dickson

1939 *Modern Elementary Theory of Numbers*. The University of Chicago Press, Chicago.

Diophantus

1974 *Arifmetika i kniga o mnogougol′nykh chislakh*. Nauka, Moscow (Russian).

Michael L. Dowling

1990 Optimal code parallelization using unimodular transformations. *Parallel Computing*, 16(2–3):157–171.

V. G. Durnev

1974 Ob uravneniyakh na svobodnykh polugruppakh i gruppakh. *Matematicheskie Zametki*, 16(5):717–724 (Russian).

1975 On equations in free semigroups and groups. *Mathematical Notes*, 16(5–6):1024–1028.

V. G. Durnev and N. B. Korablëva

1988 Ob odnoĭ algoritmicheski nerazreshimoĭ zadache dlya sistem lineĭnykh diofantovykh uravneniĭ. In *Voprosy teorii grupp i gomologich. algebry.*, pages 93–96. Yaroslavskiĭ Gosudarstvennyĭ Universitet, Yaroslavl′ (Russian).

Verena H. Dyson, James P. Jones, and John C. Shepherdson

1982 Some Diophantine forms of Gödel's theorem. *Archiv für Mathematische Logik und Grundlagenforschung*, 22(1–2):51–60.

William M. Farmer

1991 A unification-theoretic method for investigating the k-provability problem. *Annals of Pure and Applied Logic*, 51(3):173–214.

Jens Erik Fenstad

1971 Hilberts 10. Problem. *Nordisk Matematisk Tidskrift*, 19(1–2):5–14 (Norwegian).

J. P. Fitch

1973 On algebraic simplification. *Computer Journal*, 16(1):23–27.

Ulf Friedrichsdorf

1976 Einige bemerkungen zur Peano-arithmetik. *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik*, 22(5):431–436 (German).

G. Gagliardi and S. Tulipani

1990 On algebraic specifications of computable algebras with the discriminator technique. *RAIRO Informatique Théorique et Applications*, 24(5):429–440.

Haim Gaifman

1975 A note on models and submodels of arithmetic. In *Conference in Mathematical Logic—London '70*, volume 255 of *Lecture Notes in Mathematics*, pages 128–144. Springer-Verlag.

Haim Gaifman and Constantine Dimitracopoulos

1982 Fragments of Peano's arithmetic and the MRDP theorem. In *Logic and Algorithmic*, Monographie N° 30 de L'Enseignement Mathématique, pages 187–206. Université de Genève.

Michael R. Garey and David S. Johnson

1979 *Computers and Intractability: A Guide to the Theory of NP-Completeness.* W. H. Freeman, San Francisco.

Dainis Geimanis

1990 On possibilities of one-way synchronized and alternating automata. In B. Rovan, editor, *Mathematical Foundations of Computer Science 1990*, volume 452 of *Lecture Notes in Computer Science*, pages 292–299. Springer-Verlag.

Giorgio Germano

1976 An arithmetical reconstruction of the liar's antinomy using addition and multiplication. *Notre Dame Journal of Formal Logic*, 17(3):457–461.

Kurt Gödel

1931 Über formal unentscheidbare sätze der Principia Mathematica und verwandter systeme i. *Monatshefte für Mathematik und Physik*, 38(1):173–198 (German).

1965 On formally undecidable propositions in *Principia Mathematica* and related systems I. In Martin Davis, editor, *The Undecidable*, pages 4–38. Raven Press, Hewlett, New York.

1967 On formally undecidable propositions in *Principia Mathematica* and related systems I. In Jean van Heijenoort, editor, *From Frege to Gödel: A Source Book in Mathematical Logic, 1879–1831*, pages 596–616. Harvard University Press, Cambridge, Massachusetts.

1986 Über formal unentscheidbare sätze der Principia Mathematica und verwandter systeme I (On formally undecidable propositions of *Principia Mathematica* and related systems I). In Solomon Feferman et al., editors, *Kurt Gödel. Collected Works*, volume I, pages 144–195. Oxford University Press.

Warren D. Goldfarb

1981 The undecidability of the second-order unification problem. *Theoretical Computer Science*, 13(2):225–230.

R. L. Goodstein

1975 Hilbert's Tenth Problem and the independence of recursive difference. *The Journal of the London Mathematical Society (Second Series)*, 10(2):175–176.

R. L. Goodstein and R. D. Lee

1966 A decidable class of equations in recursive arithmetic. *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik*, 12:235–239.

I. L. Gorskiĭ and A. M. Yakubovich

1985 Voprosy organizatsii dialoga v sisteme imitatsionnogo modelirovaniya. *Programmirovanie*, no. 5:77–82 (Russian).

1986 I. L. Gorskii and A. M. Yakubovich. Organization of the conversational mode in a simulation system. *Programming and Computer Software*, 11(5):310–314.

D. Guaspari

1979 Partially conservative extensions of arithmetic. *Transactions of the American Mathematical Society*, 254:47–68.

Eitan M. Gurari

1985 Decidable problems for powerful programs. *Journal of the ACM*, 32(2):466–483.

Eitan M. Gurari and Oscar H. Ibarra

1979 An NP-complete number-theoretic problem. *Journal of the ACM*, 26(3):567–581.

1982 Two-way counter machines and Diophantine equations. *Journal of the ACM*, 29(3):863–873.

Michel Hack

1976 The equality problem for vector addition systems is undecidable. *Theoretical Computer Science*, 2(1):77–95.

Petr Hájek and Tomáš Havránek

1978 *Mechanizing Hypothesis Formation: Mathematical Foundations for a General Theory*. Springer-Verlag, Berlin.

David Harel, Amir Pnueli, and Jonathan Stavi

1983 Propositional dynamic logic of nonregular programs. *Journal of Computer and System Sciences*, 26(2):222–243.

G. Hasenjaeger

1984 Universal Turing machines (UTM) and Jones-Matiyasevich-masking. In *Logic and Machines: Decision Problems and Complexity (Münster, 1983)*, volume 171 of *Lecture Notes in Computer Science*, pages 248–253, Berlin. Springer-Verlag.

William S. Hatcher and Bernard R. Hodgson

1981 Complexity bounds on proofs. *Journal of Symbolic Logic*, 46(2):255–258.

Ivan Havel

1973 O desátém Hilbertově problému. *Pokroky Matematiky, Fyziky a Astronomie*, 18(4):185–192 (Czech).

Thomas L. Heath

1910 *Diophantus of Alexandria: A Study in the History of Greek Algebra.* Cambridge University Press, Cambridge, second edition. Reprint. Dover Publications, New York, 1964.

Jan Heering

1986 Partial evaluation and ω-completeness of algebraic specifications. *Theoretical Computer Science*, 43(2–3):149–167.

Hans Hermes

1972 Die unlösbarkeit des zehnten Hilbertschen problems. *L'Enseignement Mathématique (2)*, 18(1):47–56 (German).

1978 Die unlösbarkeit des zehnten Hilbertschen problems. *Mathematische und Naturwissenschaftliche Unterricht*, 31(5):260–263 (German).

Oskar Herrman

1971 A non-trivial solution of the Diophantine equation $9(x^2+7y^2)^2-7(u^2+7v^2)^2=2$. In A. O. L. Atkin and B. J. Birch, editors, *Computers in Number Theory*, pages 207–212. Academic Press, London.

D. Hilbert

1900 Mathematische probleme. vortrag, gehalten auf dem internationalen mathematiker""-kongreß zu paris 1900. *Nachrichten von der Königliche Gesellschaft der Wissenschaften zu Göttingen*, pages 253–297 (German).

1902 Mathematical problems. Lecture delivered before the International Congress of Mathematicians at Paris in 1900. *Bulletin of the American Mathematical Society*, 8:437–479.

1976 Mathematical problems. Lecture delivered before the International Congress of Mathematicians at Paris in 1900. In *Mathematical Developments Arising from Hilbert Problems*, volume 28 of *Proceedings of Symposia in Pure Mathematics*, pages 1–34. American Mathematical Society, Providence, Rhode Island.

David Hilbert

1935 Mathematische probleme. vortrag, gehalten auf dem internationalen mathematiker""-kongreß zu paris 1900. In *Gesammelte Abhandlungen*, pages 290–329. Verlag von Julius Springer, Berlin (German).

Ken Hirose

1968 A conjecture on Hilbert's 10th Problem. *Commentarii Mathematici Universitatis Sancti Pauli*, 17(1):31–34.

1973 On Hilbert's Tenth Problem (negative solution). *Sûgaku*, 25(1):1–9 (Japanese).

Ken Hirose and Shigeaki Iida

1973 A proof of negative answer to Hilbert's 10th Problem. *Proceedings of the Japan Academy*, 49(1):10–12.

Joram Hirschfeld

1975 J. Hirschfeld. Models of arithmetic and recursive functions. *Israel Journal of Mathematics*, 20(2):111–126.

Joram Hirschfeld and William Wheeler

1975 *Forcing, Arithmetic, Division Rings*, volume 454 of *Lecture Notes in Mathematics*. Springer-Verlag.

Bernard R. Hodgson and Clement F. Kent

1983 A normal form for arithmetical representation of $\mathcal{NP}$-sets. *Journal of Computer and System Sciences*, 27(3):378–388.

V. E. Hoggatt, Jr. and Marjorie Bicknell-Johnson

1978 Divisibility by Fibonacci and Lucas squares. *The Fibonacci Quarterly*, 15(1):3–8.

Rodney R. Howell, Louis E. Rosier, Dung T. Huynh, and Hsu-Chun Yen

1986 Some complexity bounds for problems concerning finite and 2-dimensional vector addition systems with states. *Theoretical Computer Science*, 46(2–3):107–140.

Verena Huber-Dyson

1984 HNN-constructing finite groups. In A. C. Kim and B. H. Neumann, editors, *Groups—Korea 1983. Proceedings*, volume 1098 of *Lecture Notes in Mathematics*, pages 58–62. Springer-Verlag.

Gérard Huet and Derek C. Oppen

1980 Equations and rewrite rules: A survey. In Ronald V. Book, editor, *Formal Language Theory: Perspectives and Open Problems*, pages 349–405. Academic Press, New York.

Oscar H. Ibarra

1982 2DST mappings on languages and related problems. *Theoretical Computer Science*, 19(2):219–227.

Oscar H. Ibarra and Brian S. Leininger

1980 The complexity of the equivalence problem for straight-line programs. In *Conference Proceedings of the Twelfth Annual ACM Symposium on Theory of Computing*, pages 273–280, Los Angeles, California, 28-20 April.

1982 Straight-line programs with one input variable. *SIAM Journal on Computing*, 11(1):1–14.

1983 On the simplification and equivalence problems for straight-line programs. *Journal of the ACM*, 30(3):641–656.

R. G. Jeroslow

1973 There cannot be any algorithm for integer programming with quadratic constraits. *Operations Research*, 21(1):221–224.

James P. Jones

1974 Recursive undecidability—an exposition. *The American Mathematical Monthly*, 81(7):724–738.

1975 Diophantine representation of the Fibonacci numbers. *The Fibonacci Quarterly*, 13(1):84–88.

1978 Three universal representations of recursively enumerable sets. *Journal of Symbolic Logic*, 43(2):335–351.

1979 Diophantine representation of Mersenne and Fermat primes. *Acta Arithmetica*, 35(3):209–221.

1980 Undecidable Diophantine equations. *Bulletin of the American Mathematical Society (New Series)*, 3(2):859–862.

1981 Classification of quantifier prefixes over Diophantine equations. *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik*, 27(5):403–410.

1982 J. P. Jones. Some undecidable determined games. *International Journal of Game Theory*, 11(2):63–70.

1982 Universal Diophantine equation. *Journal of Symbolic Logic*, 47(3):549–571.

1991 Dzh. P. Dzhons. Vychislitel′naya slozhnost′ vyigryvayushchikh strategiĭ v polinomial′nykh igrakh dvukh lits. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 192:69–73 (Russian).

James P. Jones, H. Levitz, and A. J. Wilkie

1986 J. P. Jones, H. Levitz, and A. J. Wilkie. Classification of quantifier prefixes over exponential Diophantine equations. *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik*, 32(5):399–406.

James P. Jones and Yu. V. Matiyasevich

1982 J. P. Jones and Ju V. Matijasevič. Exponential Diophantine representation of recursively enumerable sets. In J. Stern, editor, *Proceedings of the Herbrand Symposium: Logic Colloquium '81*, volume 107 of *Studies in Logic and the Foundations of Mathematics*, pages 159–177, Amsterdam. North Holland.

1982 J. P. Jones and Ju. V. Matijasevič. A new representation for the symmetric binomial coefficient and its applications. *Les Annales des Sciences Mathématiques du Québec*, 6(1):81–97.

1983 J. P. Jones and Yu. V. Matijasevich. Direct translation of register machines into exponential Diophantine equations. In L. Priese, editor, *Report on the 1st GTI-workshop*, number 13, pages 117–130, Reihe Theoretische Informatik, Universität-Gesamthochschule Paderborn.

1984 J. P. Jones and Y. V. Matijasevič. Register machine proof of the theorem on exponential Diophantine representation of enumerable sets. *Journal of Symbolic Logic*, 49(3):818–829.

1991 J. P. Jones and Y. V. Matijasevič. Proof of recursive unsolvability of Hilbert's Tenth Problem. *The American Mathematical Monthly*, 98(8):689–709.

James P. Jones, Daihachiro Sato, Hideo Wada, and Douglas Wiens

1976 Diophantine representation of the set of prime numbers. *The American Mathematical Monthly*, 83(6):449–464.

Deborah Joseph

1983 Polynomial time computations in models of ET. *Journal of Computer and System Sciences*, 26(3):311–338.

Deborah Joseph and Paul Young

1981 A survey of some recent results on computational complexity in weak theories of arithmetic. In J. Gruska and M. Chytil, editors, *Mathematical Foundations of Computer Science 1981*, volume 118 of *Lecture Notes in Computer Science*, pages 46–60. Springer-Verlag.

Irving Kaplansky

1977 Hilbert's problems. Lecture notes, Department of Mathematics, University of Chicago.

Juhani Karhumäki

1977 The decidability of the equivalence problem for polynomially bounded D0L sequences. *RAIRO Informatique Théorique*, 11(1):17–28.

Tadao Kasami and Nobuki Tokura

1971 Equivalence problem of programs without loops. *Systems-Computers-Controls*, 2(4):83–84.

Richard Kaye

1987 R. Kaye. Parameter free induction in arithmetic. *Seminarbericht. Humbold-Universiät. Berlin. Section Mathematik (DDR)*, pages 70–81.

1990 Diophantine induction. *Annals of Pure and Applied Logic*, 46(1):1–40.

1991 *Models of Peano Arithmetic*. Clarendon Press, Oxford.

Richard Kaye, J. Paris, and C. Dimitracopoulos

1988 R. Kaye, J. Paris, and C. Dimitracopoulos. On parameter free induction schemas. *Journal of Symbolic Logic*, 53(4):1082–1097.

Clement F. Kent and Bernard R. Hodgson

1982 An arithmetical characterization of NP. *Theoretical Computer Science*, 21(3):255–267.

O. G. Kharlampovich

1989 Konechno opredelennye razreshimye gruppy i algebry Li s nerazreshimoĭ problemoĭ ravenstva. *Matematicheskie Zametki*, 46(3):80–92 (Russian).

1989 Problema ravenstva dlya razreshimykh algebr Li i grupp. *Matematicheskiĭ Sbornik*, 180(8):1033–1066 (Russian).

1990 Finitely presented solvable groups and Lie algebras with unsolvable equality problem. *Mathematical Notes*, 46(3):731–739.

1990 The word problem for solvable Lie algebras and groups. *Mathematics of the USSR. Sbornik*, 67(2):489–525.

K. H. Kim and F. W. Roush

1989 Problems equivalent to rational Diophantine solvability. *Journal of Algebra*, 124(2):493–505.

Péter Kiss

1979 Diophantine representation of generalized Fibonacci numbers. *Elemente der Mathematik*, 34(6):129–132.

Yu. G. Kleĭman

1979 Ju. G. Kleĭman. Identities and some algorithmic problems in groups. *Soviet Mathematics. Doklady*, 20(1):115–119.

1979 Tozhdestva i nekotorye algoritmicheskie problemy v gruppakh. *Doklady Akademii Nauk SSSR*, 244(4):814–818 (Russian).

A. N. Kolmogorov and V. A. Uspenskiĭ

1958 K opredeleniyu algoritma. *Uspekhi Matematicheskikh Nauk*, 13(4):3–28 (Russian).

1963 On the definition of an algorithm. *American Mathematical Society Translations. Series 2*, 29:217–245.

Moshe Koppel

1979 Some decidable Diophantine problems: positive solution to a problem of Davis, Matijasevič and Robinson. *Proceedings of the American Mathematical Society*, 77(3):319–323.

N. K. Kosovskiĭ

1967 Dostatochnye usloviya nepolnoty dlya formalizatsiĭ chasteĭ arifmetiki. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 4:44–57 (Russian).

1969 Sufficient conditions of incompleteness for the formalization of parts of arithmetic. *Seminars in Mathematics, V. A. Steklov Mathematical Institute*, 4:15–20.

1971 O Diofantovykh predstavleniyakh posledovatel′nosti resheniĭ uravneniya Pellya. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 20:49–59 (Russian).

1973 Diophantine representation of the sequence of solutions of the Pell equation. *Journal of Soviet Mathematics*, 1(1):28–35.

1974 O reshenii sistem, sostoyashchikh odnovremenno iz uravneniĭ b slovakh i neravenstv v dlinakh v slovakh. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 40:24–29 (Russian).

1977 Solutions of systems consisting of word equations and inequalities in lengths of words. *Journal of Soviet Mathematics*, 8(3):262–265.

G. Kreisel

1958 Mathematical significance of consistency proofs. *Journal of Symbolic Logic*, 23(2):155–182.

1962 A3061: Davis, Martin; Putnam, Hilary; Robinson, Julia. The decision problem for exponential Diophantine equations. *Mathematical Reviews*, 24A(6A):573.

V. Yu. Kryauchyukas

1979 Diofantovo predstavlenie sovershennykh chisel. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 88:78–89 (Russian).

1982 Diophantine representation of perfect numbers. *Journal of Soviet Mathematics*, 20(4):2307–2313.

G. A. Kucherov

1988 A new quasi-reducibility testing algorithm and its application to proofs by induction. In J. Grabowski, P. Lescanne, and W. Wechler, editors, *Algebraic and Logic Programming*, volume 343 of *Lecture Notes in Computer Science*, pages 204–213. Springer-Verlag.

E. E. Kummer

1852 Über die ergänzungssätze zu den allgemeinen reciprocitätsgesetzen. *Journal für die Reine und Angewandte Mathematik*, 44:93–146 (German).

Ernst Eduard Kummer

1975 Über die ergänzungssätze zu den allgemeinen reciprocitätsgesetzen. In André Weil, editor, *Collected Papers*, volume 1, pages 485–538. Springer-Verlag, Berlin (German).

J. L. Lagrange

1772 Démonstration d'un théorème d'arithmétique. *Nouveaux Mémoires de l'Académie royale des Sciences et Belles-Lettres de Berlin, année 1770*, pages 123–133 (French).

Joachim Lambek

1961 How to program an infinite abacus. *Canadian Mathematical Bulletin*, 4:295–302.

Janusz Laski

1986 An algorithm for the derivation of codefinitions in computer programs. *Information Processing Letters*, 23(2):85–90.

H. W. Lenstra, Jr.

1982 Primality testing. In H. W. Lenstra, Jr. and R. Tijdeman, editors, *Computational Methods in Number Theory. Part 1*, number 154 in Mathematical Centre Tracts, pages 55–77. Mathematisch Centrum, Amsterdam.

Hilbert Levitz

1985 Decidability of some problem pertaining to base 2 exponential Diophantine equations. *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik*, 31(2):109–115.

John S. Lew and Arnold L. Rosenberg

1975 Polynomial mappings from $N \times N$ into N. Technical Report RC-5761, IBM. A revised and expanded version of this paper appeared in the *Journal of Number Theory* (Lew and Rosenberg [1978a, 1978b]).

1978 Polynomial indexing of integer lattice-points. I. General concepts and quadratic polynomials. *Journal of Number Theory*, 10(2):192–214.

1978 Polynomial indexing of integer lattice-points. II. Nonexistence results for higher-degree polynomials. *Journal of Number Theory*, 10(2):215–243.

L. Lipshitz

1977 Leonard Lipshitz. Undecidable existential problems for addition and divisibility in algebraic number rings. II. *Proceedings of the American Mathematical Society*, 64(1):122–128.

1978 The Diophantine problem for addition and divisibility. *Transactions of the American Mathematical Society*, 235:271–283.

1978 Undecidable existential problems for addition and divisibility in algebraic number rings. *Transactions of the American Mathematical Society*, 241:121–128.

1979 Diophantine correct models of arithmetic. *Proceedings of the American Mathematical Society*, 73(1):107–108.

M. Livesey, J. Siekmann, P. Szabó, and E. Unvericht

1979 Unification problems for combinations of associativity, commutativity, distributivity and idempotence axioms. In William H. Joyner, Jr., editor, *Proceedings of the Fourth Workshop on Automated Deduction*, pages 175–184, Austin, Texas, 1–3 February.

Roger C. Lyndon and Paul E. Schupp

1977 *Combinatorial Group Theory.* Springer-Verlag, Berlin.

A. Macintyre and H. Simmons

1973 Gödel's diagonalization technique and related properties of theories. *Colloquium Mathematicum*, 28(2):165–180.

A. I. Mal′tsev

1968 O nekotorykh pogranichnykh voprosakh algebry i logiki. In *Trudy Mezhdunarodnogo Kongressa Matematikov (Moskva, 1966)*, pages 217–231. Mir (Russian).

Miroslav Maňas

1971 Nekonvexní úlohy matematického programování. *Ekonomicko-Matematický Obzor*, 7(4):390–405 (Czech).

Kenneth L. Manders

1980 Computational complexity of decision problems in elementary number theory. In L. Pacholski, J. Wierzejewski, and A. J. Wilkie, editors, *Model Theory of Algebra and Arithmetic*, volume 834 of *Lecture Notes in Mathematics*, pages 211–227. Springer-Verlag.

Kenneth L. Manders and Leonard Adleman

1978 *NP*-complete decision problems for binary quadratics. *Journal of Computer and System Sciences*, 16(2):168–184.

Larry Michael Manevitz

1976 Internal end-extensions of Peano arithmetic and a problem of Gaifman. *The Journal of the London Mathematical Society (Second Series)*, 13(1):80–82.

1976 Robinson forcing is not absolute. *Israel Journal of Mathematics*, 25(3–4):211–232.

Yu. I. Manin

1973 Desyataya problema Gil′berta. *Sovremennye problemy matematiki*, 1:5–37. Akademiya Nauk SSSR. Vsesoyuznyĭ Institut Nauchnoĭ i Tekhnicheskoĭ Informatsii, Moscow (Russian).

1975 Hilbert's Tenth Problem. *Journal of Soviet Mathematics*, 3(2):161–184.

1977 *A Course in Mathematical Logic*. Springer-Verlag, New York.

Yu. I. Manin and A. A. Panchishkin

1990 Vvedenie v teoriyu chisel. *Sovremennye problemy matematiki, Fundamental'ny napravlenia*, 49:5–348. Itogi nauki i tekhniki (Russian).

M. Margenstern

1981 Le théorèm de Matiyassévitch et résultats connexes. In C. Berline, K. McAloon, and J.-P. Ressayre, editors, *Model Theory and Arithmetic*, volume 890 of *Lecture Notes in Mathematics*, pages 198–241. Springer-Verlag (French).

Per Martin-Löf

1970 *Notes on Constructive Mathematics.* Almqvist and Wiksell, Stockholm.

V. I. Mart′yanov

1977 Universal′nye rasshirennye teorii tselykh chisel. *Algebra i Logika*, 16(5):588–602 (Russian).

1978 Extended universal theories of the integers. *Algebra and Logic*, 16(5):395–405.

S. Yu. Maslov

1967 Ponyatie strogoĭ predstavimosti v obshcheĭ teorii ischisleniĭ. *Trudy Matematicheskogo Instituta im. V. A. Steklova AN SSSR*, 93:3–42 (Russian).

1970 The concept of strict representability in the general theory of calculi. *Proceedings of Steklov Institute of Mathematics*, 93:1–50.

Atilla Máté

1990 Nondeterministic polynomial-time computations and models of arithmetic. *Journal of the ACM*, 37(1):175–193.

Yu. V. Matiyasevich

1993 *Desyataya Problema Gilb′erta.* Nauka, Moscow (Russian).

Yu. V. Matiyasevich

1968 Arifmeticheskie predstavleniya stepeneĭ. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 8:159–165 (Russian).

1968 Dve reduktsii 10-ĭ problemy Gil′berta. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 8:145–158 (Russian).

1968 Svyaz′ sistem uravneniĭ v slovakh i dlinakh s 10-ĭ problemoĭ Gil′berta. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 8:132–144 (Russian).

1970 Arithmetic representations of powers. *Seminars in Mathematics, V. A. Steklov Mathematical Institute*, 8:75–78.

1970 The connection between Hilbert's Tenth Problem and systems of equations between words and lengths. *Seminars in Mathematics, V. A. Steklov Mathematical Institute*, 8:61–67.

1970 Diofantovost′ perechislimykh mnozhestv. *Doklady Akademii Nauk SSSR*, 191(2):279–282 (Russian).

1970 Ju. V. Matijasevič. Enumerable sets are Diophantine. *Soviet Mathematics. Doklady*, 11(2):354–358.

1970 Two reductions of Hilbert's Tenth Problem. *Seminars in Mathematics, V. A. Steklov Mathematical Institute*, 8:68–74.

1971 Diofantovo predstavlenie mnozhestva prostykh chisel. *Doklady Akademii Nauk SSSR*, 196(4):770–773 (Russian).

1971 Diofantovo predstavlenie perechislimykh predikatov. *Izvestiya Akademii Nauk SSSR. Seriya Matematichekaya*, 35(1):3–30 (Russian).

1971 Yu. V. Matijasevič. Diophantine representation of recursively enumerable predicates. In J. E. Fenstad, editor, *Proceedings of the Second Scandinavian Logic Symposium*, volume 63 of *Studies in Logic and the Foundations of Mathematics*, pages 171–177, Amsterdam. North-Holland.

1971 Yu. V. Matijasevič. Diophantine representation of recursively enumerable predicates. In *Actes du Congrès International des Mathématiciens (Nice 1970)*, volume 1, pages 235–238, Paris. Gauthier-Villars.

1971 Ju. V. Matijasevič. Diophantine representation of the set of prime numbers. *Soviet Mathematics. Doklady*, 12(1):249–254.

1971 Ju. V. Matijasevič. Diophantine representations of enumerable predicates. *Mathematics of the USSR. Izvestiya*, 15(1):1–28.

1972 Arifmeticheskie predstavleniya perechislimykh mnozhestv s nebol′shim chislom kvantorov. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 32:77–84 (Russian).

1972 Diofantovy mnozhestva. *Uspekhi Matematicheskikh Nauk*, 27(5):185–222 (Russian).

1972 Diophantine sets. *Russian Mathematical Surveys*, 27(5):124–164.

1973 Yu. V. Matijasevič. On recursive unsolvability of Hilbert's Tenth Problem. In Patrick Suppes et al., editors, *Logic, Methodology and Philosophy of Science IV*, volume 74 of *Studies in Logic and the Foundations of Mathematics*, pages 89–110, Amsterdam. North-Holland.

1974 Sushchestvovanie neèffektiviziruemykh otsenok v teorii èksponentsial′no diofantovykh uravneniĭ. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 40:77–93 (Russian).

1976 Arithmetical representations of enumerable sets with a small number of quantifiers. *Journal of Soviet Mathematics*, 6(4):410–416.

1976 Novoe dokazatel′stvo teoremy ob èksponentsial′no diofantovom predstavlenii perechislimykh predikatov. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 60:75–92 (Russian).

1977 Existence of noneffectivizable estimates in the theory of exponential Diophantine equations. *Journal of Soviet Mathematics*, 8(3):299–311.

1977 Odin klass kriteriev prostoty, formuliruemykh v terminakh delimosti binomial′nykh coeffitsientov. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 67:167–183 (Russian).

1977 Prostye chisla perechislyayutsya polinomom ot 10 peremennykh. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 68:62–82 (Russian).

1977 Yu. V. Matijasevič. Some purely mathematical results inspired by mathematical logic. In Robert E. Butts and Jaakko Hintikka, editors, *Logic, Foundations of Mathematics, and Computability Theory*, volume 1 of *Proceedings of the Fifth International Congress of Logic, Methodology and Philosophy of Science*, pages 121–127, London, Ontario, Canada. D. Reidel Publishing Company, Dordrecht, Holland.

1979 Algorifmicheskaya nerazreshimost′ èksponentsial′no diofantovykh uravneniĭ s tremya neizvestnymi. *Issledovaniya po teorii algorifmov i matematicheskoĭ logike*, 3:69–78. Akademiya Nauk SSSR, Moscow (Russian).

1980 A new proof of the theorem on exponential Diophantine representation of enumerable sets. *Journal of Soviet Mathematics*, 14(5):1475–1486.

1981 A class of primality criteria formulated in terms of the divisibility of binomial coefficients. *Journal of Soviet Mathematics*, 16(1):874–885.

1981 Yu. V. Matijasevič. Primes are nonnegative values of a polynomial in 10 variables. *Journal of Soviet Mathematics*, 15(1):33–44.

1983/84 Algorithmic unsolvability of exponential Diophantine equations in three unknowns. *Selecta Mathematica Sovietica*, 3(3):223–232.

1984 Ob issledovaniyakh po nekotorym algorifmicheskim problemam algebry i teorii chisel. *Trudy Matematicheskogo Instituta im. V. A. Steklova AN SSSR*, 168:218–235 (Russian).

1986 On investigations on some algorithmic problems in algebra and number theory. *Proceedings of Steklov Institute of Mathematics*, 168(3):227–252.

1988 Diofantova slozhnost′. *Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta im. V. A. Steklova AN SSSR (LOMI)*, 174:122–131 (Russian).

1991 Diophantine complexity. *Journal of Soviet Mathematics*, 55(2):1603–1610.

1992 Yuri Matijasevich. My collaboration with Julia Robinson. *The Mathematical Intelligencer*, 14(4):38–45.

1993 *Hilbert's Tenth Problem.* MIT Press, Cambridge, Massachusetts.

Yu. V. Matiyasevich and Julia Robinson

1974 Yuriĭ Matiyasevich and Dzhuliya Robinson. Dva universal′nykh trëkhkvantornykh predstavleniya perechislimykh mnozhestv. In B. A. Kušner and N. M. Nagornyĭ, editors, *Teoriya algorifmov i matematicheskaya logika*, pages 112–123. Vychislitel′nyĭ Tsentr, Akademiya Nauk SSSR, Moscow (Russian).

1975 Yuri Matijasevič and Julia Robinson. Reduction of an arbitrary Diophantine equation to one in 13 unknowns. *Acta Arithmetica*, 27:521–553.

Ernst W. Mayr and Albert R. Meyer

1981 The complexity of the finite containment problem for Petri nets. *Journal of the ACM*, 28(3):561–576.

Kenneth McAloon

1978 Completeness theorems, incompleteness theorems and models of arithmetic. *Transactions of the American Mathematical Society*, 239(5):253–277.

A. D. McGettrick

1977 Teaching mathematics by computer. *Computer Journal*, 20(3):263–268.

Z. A. Melzak

1960 A note on Hilbert's Tenth Problem. *Canadian Mathematical Bulletin*, 3(2):153–156.

1961 An informal arithmetical approach to computability and computation. *Canadian Mathematical Bulletin*, 4:279–293.

Friedhelm Meyer auf der Heide

1989 On genuinely time bounded computations. In B. Monien and R. Cori, editors, *STACS 89*, volume 349 of *Lecture Notes in Computer Science*, pages 1–16.

Žarko Mijajlović, Zoran Marković, and Kosta Došen

1986 *Hilbertovi problemi i logika*. Number 48 in Matematička Biblioteka. Zavod za Udžbenike i Nastavna Sredstva, Belgrade (Croatian).

Charles F. Miller III

1973 Some connections between Hilbert's 10th Problem and the theory of groups. In W. W. Boone, F. B. Cannonito, and R. C. Lyndon, editors, *Word Problems: Decision Problems and the Burnside Problem in Group Theory*, volume 71 of *Studies in Logic and the Foundations of Mathematics*, pages 483–506. North-Holland, Amsterdam.

Marvin L. Minsky

1961 Recursive unsolvability of Post's problem of "tag" and other topics in the theory of Turing machines. *Annals of Mathematics, Second Series*, 74(3):437–455.

1967 *Computation: Finite and Infinite Machines*. Prentice-Hall, Englewood Cliffs, New Jersey.

G. E. Mints

1975 Teoriya dokazatel′stv (arifmetika i analiz). In R. V. Gamkrelidze, editor, *Algebra. Topologiya. Geometriya*, volume 13, pages 5–49. Akademiya Nauk SSSR. Vsesoyuznyĭ Institut Nauchnoĭ i Tekhnicheskoĭ Informatsii, Moscow (Russian).

1977 Theory of proofs (arithmetic and analysis). *Journal of Soviet Mathematics*, 7(4):501–531.

J. Mlček

1976 Twin prime problem in an arithmetic without induction. *Commentationes Mathematicae Universitatis Carolinae*, 17(3):543–555.

Joel Moses

1971 Algebraic simplification: A guide for the perplexed. *Communications of the ACM*, 14(8):527–537.

Nobuyoshi Motohashi

1984 A normal form theorem for first order formulas and its application to Gaifman's splitting theorem. *Journal of Symbolic Logic*, 49(4):1262–1267.

Albert A. Mullin

1974 Research problem 7. *Canadian Mathematical Bulletin*, 17(1):149.

A. G. Myasnikov and V. N. Remeslennikov

1986 Elementary group equivalence with the integral length function. *Illinois Journal of Mathematics*, 30(2):335–354.

J. Myhill

1953 Three contributions to recursive function theory. In *Actes du XIième Congrès International de Philosophie*, volume XIV, pages 50–59, Brussels.

A. Nerode

1963 A decision method for p-adic integral zeros of Diophantine equations. *Bulletin of the American Mathematical Society*, 69:513–517.

Jakob Nielsen

1924 Die gruppe der dreidimensionalen gittertransformationen. *Danske Videnskabernes Selskab Mathematisk-fysiske Meddelelser*, 5(12):1–29 (German).

Leszek Pacholski and Wiesław Szwast

1991 Asymptotic probabilities of existential second-order Gödel sentences. *Journal of Symbolic Logic*, 56(2):427–438.

Peter Pappas

1985 A Diophantine problem for Laurent polynomial rings. *Proceedings of the American Mathematical Society*, 93(4):713–718.

Jeff B. Paris and Constantine Dimitracopoulos

1982 Truth definitions for Δ_0 formulae. In *Logic and Algorithmic*, Monographie N° 30 de L'Enseignement Mathématique, pages 317–329. Université de Genève.

Yu. G. Penzin

1973 Razreshimost′ teorii tselykh chisel so slozheniem, poryadkom i umnozheniem na proizvol′noe chislo. *Matematicheskie Zametki*, 13(5):667–675 (Russian).

1973 Solvability of the theory of integers with addition, order, and multiplication by an arbitrary number. *Mathematical Notes*, 13(5):401–405.

1978 Nerazreshimye teorii kol′tsa nepreryvnykh funktsiĭ. *Algoritmicheskie voprosy algebraicheskikh sistem*, pages 142–147. Irkutsk (Russian).

1979 Problema bliznetsov v formal′noĭ arifmetike. *Matematicheskie Zametki*, 26(4):505–511 (Russian).

1979 Twins problem in formal arithmetic. *Mathematical Notes*, 26(3–4):743–746.

Thanases Pheidas

1987 An undecidability result for power series rings of positive characteristic. *Proceedings of the American Mathematical Society*, 99(2):364–366.

1987 An undecidability result for power series rings of positive characteristic. II. *Proceedings of the American Mathematical Society*, 100(3):526–530.

1988 Hilbert's Tenth Problem for a class of rings of algebraic integers. *Proceedings of the American Mathematical Society*, 104(2):611–620.

1991 Hilbert's Tenth Problem for fields of rational functions over finite fields. *Inventiones Mathematicae*, 103(1):1–8.

Emil L. Post

1936 Finite combinatory processes—formulation 1. *Journal of Symbolic Logic*, 1(3):103–105.

1944 Recursively enumerable sets of positive integers and their decision problems. *Bulletin of the American Mathematical Society*, 50:284–316.

Hilary Putnam

1960 An unsolvable problem in number theory. *Journal of Symbolic Logic*, 25(3):220–232.

Michael O. Rabin

1957 Effective computability of winning strategies. In M. Dresher, A. W. Tucker, and P. Wolff, editors, *Contributions to the Theory of Games. Volume III*, number 39 in Annals of Mathematics Studies, pages 147–157. Princeton University Press, Princeton, New Jersey.

Constance Reid

1970 *Hilbert*. Springer-Verlag, New York.

1986 The autobiography of Julia Robinson. *The College Mathematics Journal*, 17(1):3–21.

John H. Reif and Harry R. Lewis

1986 Efficient symbolic analysis of programs. *Journal of Computer and System Sciences*, 32(3):280–314.

V. N. Remeslennikov

1979 Ob odnoĭ algoritmicheskoĭ zadache dlya nil′potentnykh grupp i kolets. *Sibirskiĭ Matematicheskiĭ Zhurnal*, 20(5):1077–1081 (Russian).

1980 An algorithmic problem for nilpotent groups and rings. *Siberian Mathematical Journal*, 20(5):761–764.

N. N. Repin

1983 Uravneniya s odnoĭ neizvestnoĭ v nil′potentnykh gruppakh. *Matematicheskie Zametki*, 34(2):201–206 (Russian).

1984 Equations with one unknown in nilpotent groups. *Mathematical Notes*, 34(1–2):582–585.

Daniel Richardson

1968 Some undecidable problems involving elementary functions of a real variable. *Journal of Symbolic Logic*, 33(4):514–520.

Abraham Robinson

1973 Nonstandard arithmetic and generic arithmetic. In Patrick Suppes et al., editors, *Logic, Methodology and Philosophy of Science IV*, volume 74 of *Studies in Logic and the Foundations of Mathematics*, pages 137–154, Amsterdam. North-Holland.

Julia Robinson

1952 Existential definability in arithmetic. *Transactions of the American Mathematical Society*, 72(3):437–449.

1960 J. B. Robinson. The undecidability of exponential Diophantine equations. *Notices of the American Mathematical Society*, 7(1):75.

1962 The undecidability of exponential Diophantine equations. In Ernest Nagel, Patrick Suppes, and Alfred Tarski, editors, *Logic, Methodology and Philosophy of Science: Proceedings of the 1960 International Congress*, pages 12–13, Stanford. Stanford University Press.

1969 Diophantine decision problems. In W. J. LeVeque, editor, *Studies in Number Theory*, volume 6 of *Studies in Mathematics*, pages 76–116. Mathematical Association of America.

1969 Unsolvable Diophantine problems. *Proceedings of the American Mathematical Society*, 22(2):534–538.

1971 Hilbert's Tenth Problem. In *1969 Number Theory Institute*, volume 20 of *Proceedings of Symposia in Pure Mathematics*, pages 191–194, Providence, Rhode Island. American Mathematical Society.

1973 Solving Diophantine equations. In Patrick Suppes et al., editors, *Logic, Methodology and Philosophy of Science IV*, volume 74 of *Studies in Logic and the Foundations of Mathematics*, pages 63–67, Amsterdam. North-Holland.

Raphael M. Robinson

1951 Arithmetical definitions in the ring of integers. *Proceedings of the American Mathematical Society*, 2(2):279–284.

1956 Arithmetical representation of recursively enumerable sets. *Journal of Symbolic Logic*, 21(2):162–186.

1972 Some representations of Diophantine sets. *Journal of Symbolic Logic*, 37(3):572–578.

J. M. Robson

1990 Strong time bounds: Non-computable bounds and a hierarchy theorem. *Theoretical Computer Science*, 73(3):313–317.

V. A. Roman′kov

1977 O nerazreshimosti problemy èndomorfnoĭ svodimosti v svobodnykh nil′potentnykh gruppakh i v svobodnykh kol′tsakh. *Algebra i Logika*, 16(4):457–471 (Russian).

1978 Unsolvability of the endomorphic reducibility problem in free nilpotent groups and in free rings. *Algebra and Logic*, 16(4):310–320.

1979 Ob universal′noĭ teorii nil′potentnykh grupp. *Matematicheskie Zametki*, 25(4):487–495 (Russian).

1979 Universal theory of nilpotent groups. *Mathematical Notes*, 25(3–4):253–258.

Louis E. Rosier

1986 A note on Presburger arithmetic with array segments, permutation and equality. *Information Processing Letters*, 22(1):33–35.

B. V. Rozenblat

1985 Diofantovy teorii svobodnykh inversnykh polugrupp. *Sibirskiĭ Matematicheskiĭ Zhurnal*, 26(6):101–107 (Russian).

1986 Diophantine theories of free inverse semigroups. *Siberian Mathematical Journal*, 26(6):860–865.

Robert S. Rumely

1986 Arithmetic over the ring of all algebraic integers. *Journal für die Reine und Angewandte Mathematik*, 368(5):127–133.

Keijo Ruohonen

1972 Hilbertin kymmenes probleema. *Arkhimedes*, no. 1–2:71–100 (Finnish).

1980 Hilberts tionde problem. *Nordisk Matematisk Tidskrift*, 28(4):145–154 (Swedish).

Arto Salomaa

1985 *Computation and Automata*, volume 25 of *Encyclopedia of Mathematics and Its Applications*. Cambridge University Press, Cambridge.

M. V. Sapir

1989 Minimal′noe mnogoobrazie assotsiativnykh algebr s nerazreshimoĭ problemoĭ ravenstva. *Matematicheskiĭ Sbornik*, 180(12):1691–1708 (Russian).

1991 A minimal variety of associative algebras with unsolvable word problem. *Mathematics of the USSR. Sbornik*, 68(2):567–584.

M. V. Sapir and O. G. Kharlampovich

1989 Equality problem in varieties of associative algebras and Lie algebras. *Soviet Mathematics (Iz. VUZ)*, 33(6):77–86.

1989 Problema ravenstva v mnogoobraziyakh assotsiativnykh algebr i algebr Li. *Izvestiya Vysshikh Uchebnykh Zavedeniĭ Matematika*, 6(325):76–84 (Russian).

Bruno Scarpellini

1963 Zwei unentscheidbare probleme der analysis. *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik*, 9(4):265–289 (German).

Lowell Schoenfeld

1976 Sharper bounds for the Chebyshev functions $\theta(x)$ and $\psi(x)$. II. *Mathematics of Computation*, 30(134):337–360. Corrigendum: Ibid., 30(136):900.

Wolfgang Schönfeld

1979 An undecidablility result for relation algebras. *Journal of Symbolic Logic*, 44(1):111–115.

Daniel Shanks

1972 Five number-theoretic algorithms. In R. S. D. Thomas and H. C. Williams, editors, *Proceedings of the Second Manitoba Conference on Numerical Mathematics*, volume VII of *Congressus Numerantium*, pages 51–70, University of Manitoba, Winnipeg, Manitoba, 5–7 October. Utilitas Mathematica Publishing. Winnipeg, Manitoba.

Harold N. Shapiro and Alexandra Shlapentokh

1989 Diophantine relationship between algebraic number fields. *Communications on Pure and Applied Mathematics*, 42(8):1113–1122.

J. C. Shepherdson and H. E. Sturgis

1963 Computability of recursive functions. *Journal of the ACM*, 10(2):217–255.

D. V. Shiryaev

1989 Nerazreshimost′ nekotorykh algoritmicheskikh problem dlya nevetvyashchikhsya program. *Kibernetika*, no. 1:63–66 (Russian).

Alexandra Shlapentokh

1989 Extensions of Hilbert's Tenth Problem to some algebraic number fields. *Communications on Pure and Applied Mathematics*, 42(7):939–962.

1990 Diophantine definitions for some polynomial rings. *Communications on Pure and Applied Mathematics*, 43(8):1055–1066.

Carl Ludwig Siegel

1972 Zur theorie der quadratischen formen. *Nachrichten der Akademie der Wissenschaften in Göttingen. II. Mathematisch-Physikalische Klasse*, no. 3:21–46 (German).

J. Siekmann and P. Szabó

1989 The undecidability of the D_A-unification problem. *Journal of Symbolic Logic*, 54(2):402–414.

Michael F. Singer

1978 The model theory of ordered differential fields. *Journal of Symbolic Logic*, 43(1):82–91.

David Singmaster

1974 Notes on binomial coefficients. I—A generalization of Lucas' congruence. *The Journal of the London Mathematical Society (Second Series)*, 8(3):545–548.

1974 Notes on binomial coefficients. I, II, III. *The Journal of the London Mathematical Society (Second Series)*, 8(3):545–548, 549–554, 555–560.

1974 Notes on binomial coefficients. II—The least n such that p^e divides an r-nomial coefficient of rank n. *The Journal of the London Mathematical Society (Second Series)*, 8(3):549–554.

1974 Notes on binomial coefficients. III—Any integer divides almost all binomial coefficients. *The Journal of the London Mathematical Society (Second Series)*, 8(3):555–560.

Th. Skolem

1934 Über die nicht-charakterisierbarkeit der zahlenreihe mittels endlich oder abzählbar unendlich vieler aussagen mit ausschliesslich zahlenvariablen. *Fundamenta Mathematicae*, 23:150–161 (German).

Craig Smoryński

1977 C. Smorynski. A note on the number of zeros of polynomials and exponential polynomials. *Journal of Symbolic Logic*, 42(1):99–106.

1987 C. Smoryński. Diophantine encoding. Preprint 455, University of Utrecht, Department of Mathematics, February. Included in Smoryński [1991].

1991 *Logical number theory I: An Introduction.* Springer-Verlag, Berlin.

R. Statman

1981 On the existence of closed terms in the typed λ-calculus. II: Transformations of unification problems. *Theoretical Computer Science*, 15(3):329–338.

È. D. Stotskiĭ

1971 Formal′nye grammatiki i ogranicheniya na vyvod. *Problemy Peredachi Informatsii*, 7(1):87–101.

1971 Upravlenie vyvodom v formal′nykh grammatikakh. *Problemy Peredachi Informatsii*, 7(3):87–102.

1973 Beskontekstnye grammatiki s ogranichennoĭ primenimost′yu pravil vyvoda. In S. K. Shaumyan, editor, *Matematicheskaya lingvistika*, pages 114–129. Vsesoyuznyĭ Institut Nauchnoĭ i Tekhnicheskoĭ Informatsii, Moscow (Russian).

Bernd Sturmfels

1987 On the decidability of Diophantine problems in combinatorial geometry. *Bulletin of the American Mathematical Society (New Series)*, 17(1):121–124.

Zhi-Wei Sun

1992 A new relation-combining theorem and its applications. *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik*, 38(3):209–212.

Héctor J. Sussman

1971 *Hilbert's Tenth Problem*, volume 9 of *Revista Colombiana de Matemáticas, Monografías Matemáticas*. Sociedad Colombiana de Matemáticas, Bogotá.

Shuichi Takahashi

1974 *Méthodes Logiques en Géométrie Diophantienne*. Université de Montréal, Montreal (French).

S. P. Tarasov and L. G. Khachiyan

1980 S. P. Tarasov and L. G. Hačijan. Bounds of solutions and algorithmic complexity of systems of convex Diophantine inequalities. *Soviet Mathematics. Doklady*, 22(3):700–704.

1980 Granitsy resheniĭ i algoritmicheskoĭ slozhnosti sistem vypuklykh diofantovykh neravenstv. *Doklady Akademii Nauk SSSR*, 255(2):296–300 (Russian).

Alfred Tarski

1951 *A Decision Method for Elementary Algebra and Geometry*. University of California Press, Berkeley and Los Angeles.

Véronique Terrier

1990 Décidabilité de la théorie existentielle de N structuré par l'ordre naturel, la divisibilité, les prédicats puissances et les fonctions puissances. *Comptes Rendus de l'Académie des Sciences. Série I. Mathématique*, 311(12):749–752 (French).

Axel Thue

1909 über annäherungswerte algebraischer zahlen. *Journal für die Reine und Angewandte Mathematik*, 135:284–305 (German).

Erik Tiden and Stefan Arnborg

1987 Unification problems with one-sided distributivity. *Journal of Symbolic Computation*, 3(1–2):183–202.

Shih-Ping Tung

1988 Definability on formulas with single quantifier. *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik*, 34(2):105–108.

Paavo Turakainen

1978 A note on noncontext-free rational stochastic languages. *Information and Control*, 39(2):225–226.

1981 On some bounded semiAFLs and AFLs. *Information Sciences*, 23(1):31–48.

A. M. Turing

1936 On computable numbers, with an application to the Entscheidungsproblem. *Proceedings of the London Mathematical Society. Second Series*, 42:230–265.

1937 On computable numbers, with an application to the Entscheidungsproblem. A correction. *Proceedings of the London Mathematical Society. Second Series*, 43:544–546.

1939 Systems of logic based on ordinals. *Proceedings of the London Mathematical Society. Second Series*, 45:161–228.

V. A. Uspenskiĭ and A. L. Semënov

1987 *Teoriya algoritmov: osnovnye otkrytiya i prilozheniya.* Nauka, Moscow (Russian).

M. K. Valiev

1975 On polynomial reducibility of word problem under embedding of recursively presented groups in finitely presented groups. In J. Bečvář, editor, *Mathematical Foundations of Computer Science 1975*, volume 32 of *Lecture Notes in Computer Science*, pages 432–438. Springer-Verlag, September.

P. van Emde Boas

1983 Dominos are forever. In L. Priese, editor, *Report on the 1st GTI-workshop*, number 13, pages 75–95, Reihe Theoretische Informatik, Universität-Gesamthochschule Paderborn.

Yu. M. Vazhenin

1987 Algoritmicheskie problemy i ierarkhii yazykov pervogo poryadka. *Algebra i Logika*, 26(4):419–434 (Russian).

1988 Algorithmic problems and hierarchies of first-order languages. *Algebra and Logic*, 26(4):241–252.

1988 Critical theories. *Siberian Mathematical Journal*, 29(1):17–23.

1988 Kriticheskie teorii. *Sibirskiĭ Matematicheskiĭ Zhurnal*, 29(1):23–31 (Russian).

1989 Kriticheskie teorii nekotorykh klassov neassotsiativnykh kolets. *Algebra i Logika*, 28(4):393–401 (Russian).

1990 Critical theories of certain nonassociative rings. *Algebra and Logic*, 28(4):255–261.

Ramarathnam Venkatesan and Sivaramakrishnan Rajagopalan

1992 Average case intractability of matrix and Diophantine problems. In *Proceedings of the Twenty-Fourth Annual ACM Symposium on the Theory of Computing*, pages 632–642, Victoria, British Columbia, Canada, 4–6 May.

A. K. Vinogradov and N. K. Kosovskiĭ

1975 Ierarkhiya diofantovykh predstavleniĭ primitivno rekursivnykh predikatov. *Vychislitel'naya tekhnika i voprosy kibernetiki*, no. 12:99–107. Lenigradskiĭ Gosudarstvennyĭ Universitet, Leningrad (Russian).

H. Wada

1975 Polynomial representations of prime numbers. *Sûgaku*, 27(2):160–161 (Japanese).

Paul S. Wang

1974 The undecidability of the existence of zeros of real elementary functions. *Journal of the ACM*, 21(4):586–589.

A. J. Wilkie

1980 Applications of complexity theory to Σ_0-definability problems in arithmetic. In L. Pacholski, J. Wierzejewski, and A. J. Wilkie, editors, *Model Theory of Algebra and Arithmetic*, volume 834 of *Lecture Notes in Mathematics*, pages 363–369. Springer-Verlag.

Alex Wilkie

1975 On models of arithmetic—answers to two problems raised by H. Gaifman. *Journal of Symbolic Logic*, 40(1):41–47.

George Wilmers

1985 Bounded existential induction. *Journal of Symbolic Logic*, 50(1):72–90.

J. Wolstenholme

1862 On certain properties of prime numbers. *Quarterly Journal of Pure and Applied Mathematics*, 5:35–39.

S. Yukna

1982 Arifmeticheskie predstavleniya klassov mashinnoĭ slozhnosti. *Matematicheskaya logika i eë primeneniya*, no. 2:92–107. Institut Matematiki i Kibernetiki Akademii Nauk Litovskoĭ SSR, Vil′nyus (Russian).

1983 Ob arifmetizatsii vychisleniĭ. *Matematicheskaya logika i eë primeneniya*, no. 3:117–125. Institut Matematiki i Kibernetiki Akademii Nauk Litovskoĭ SSR, Vil′nyus (Russian).

D. A. Zakharov

1970 Rekursivnye funktsii. Publications of the Department of Algebra and Mathematical Logic of the Novosibirsk State University 10, Novosibirsk. Gosudarstvennyĭ universitet., Novosibirsk.

1986 Diofantovost′ rekursivno perechislimykh mnozhestv i predikatov (Russian). Appendix in A. I. Mal′tsev, 1986. *Algoritmy i rekursivnye funktsii*. Nauka, Moscow, second edition.