

Principal Publications of Yuri G. Zarhin

1. Néron pairing and quasicharacters. *Izv. AN SSSR ser. matem.* **36:3** (1972), 497–509; *Math. USSR Izv.* **6** (1972), 491 - 503.
2. Height in families of Abelian varieties (with Yu. I. Manin). *Mat. Sbornik* 89(131):2(10) (1972), 171–181; *Math. USSR Sbornik* **18** (1972), 169-179.
3. A finiteness theorem for isogenies of Abelian varieties over function fields of finite characteristic, *Funktsional Anal. i Prilozh.* **8** (1974), No. 4., 31–34; *Functional Anal. Appl.* **8** (1974), 301 - 303.
4. Noncommutative cohomology and Mumford groups, *Mat. Zametki* **15** (1974), 415–419; *Mathematical Notes* **15** (1974). 241–244.
5. Isogenies of Abelian varieties over fields of finite characteristic. *Mat. Sbornik* **95** (137):3(11) (1974), 461–470; *Math. USSR Sbornik* **24** (1974), 451–461.
6. A remark on endomorphisms of Abelian varieties over function fields of finite characteristic. *Izv. AN SSSR ser. matem.* **38:3** (1974), 471–474; *Math. USSR Izv.* **8** (1974), 477–480.
7. Endomorphisms of Abelian varieties over fields of finite characteristic. *Izv AN SSSR ser. matem.* **39:2** (1975), 272–277; *Math. USSR Izv.* **9** (1975), 255–260.
8. Abelian varieties in characteristic P . *Mat. Zametki* **19** (1976), 393–400; *Mathematical Notes* **19** (1976), 240–244.
9. Endomorphisms of Abelian varieties and points of finite order in characteristic P , *Mat. Zametki* **21** (1977), 737–744; *Mathematical Notes* **21** (1978), 415–419.
10. Torsion of Abelian varieties over fields in finite characteristic, *Mat. Zametki* **22** (1977), 1–11; *Mathematical Notes* **22** (1978), 493–498.
11. Abelian varieties, ℓ -adic representations and Lie algebras. Rank independence on ℓ , *Invent. Math.* **55** (1979), 165–176.
12. Abelian varieties, ℓ -adic representations and $SL(2)$. *Izv. Akad.Nauk SSSR Ser. matem.* **43** (1979), 294–308; *Math. USSR Izv.* **14** (1980), 275–288.
13. Region of multiplicity of stationary states in the oxidation of carbon monoxide over platinum (with V. I. Bykov and G. S. Yablonski), *Theoreticheskaya i Eksperimentalnaya Khimiya* **16** (1980), 487–491; *Theoretical and Experimental Chemistry* **16** (1981), 375–379.
14. On equations defining moduli of Abelian varieties with endomorphisms in a totally real field, *Trudy Moskov. Mat. Obsch.* **42** (1981), 3–49; English translation in *Trans. Moscow Math. Soc.* (1982), Issue 2, 1 - 46.
15. Homomorphisms of Abelian varieties and points of finite order over fields of finite characteristic (in Russian), pp. 146-147. In: *Problems in Group Theory and Homological Algebra* (A. L. Onishchik, editor), Yaroslavl Gos. Univ., Yaroslavl, 1981; MR0709632 (84m:14051).

16. Representations of semisimple Lie algebras arising from the cohomology of algebraic varieties, *Funktsional Anal. i Prilozh.* **15** (1981), No. 4, 77 - 78; *Functional Anal. Appl.* **15:4** (1982), 295–297.
17. The Brauer group of an Abelian variety over a finite field, *Izv. Akad. Nauk SSSR Ser. matem.* **46** (1982), 211–243; *Math. USSR Izv.* **20** (1983), 203–234.
18. Hodge groups of K3 surfaces, *J. Reine Angew. Math.* **341** (1983), 193 - 220.
19. Weights of simple Lie algebras in the cohomology of algebraic varieties, *Izv. Akad. Nauk SSSR Ser. matem.* **48** (1984), 264–304; *Math. USSR Izv.* **24** (1985), 245–281.
20. A finiteness theorem for unpolarized Abelian varieties over number fields with prescribed places of bad reduction, *Invent. Math.* **79** (1985), 309 - 321.
21. Representations of the Lie algebra $\mathfrak{sl}(2)$ in ℓ -adic cohomology, *Funktsional Anal. i Prilozh.* **19** (1985), No. 3., 65–66; *Functional Anal. Appl.* **19:3** (1986), 217–218.
22. Linear semisimple Lie algebras containing an operator with small number of eigenvalues, *Arch. Math. (Basel)* **46** (1986), 522–532.
23. Endomorphisms and torsion of Abelian varieties, *Duke Math. J.* **54** (1987), 131–145.
24. Torsion of Abelian varieties over $GL(2)$ -extensions of number fields, *Math. Ann.* **284** (1989), 631–646.
25. Finiteness problems in Diophantine geometry (with A. N. Parshin). *Amer. Math. Soc. Transl. (2)* **143** (1989), 35–102; arXiv:0912.4325.
26. p -adic heights on Abelian varieties. In: *Séminaire Théorie des Nombres, Paris, 1987 - 88*, (Catherine Goldstein, editor) *Progress in Mathematics* **81**, Birkhäuser, 1990, 317–341.
27. Local heights and Abelian integrals. In: *Problèmes Diophantiens* (D. Bertrand, M. Waldschmidt, editors), 1988 - 1989, *Publ. Univ. Paris VI*, 1990.
28. Linear simple Lie algebras and ranks of operators. In: *Grothendieck Festschrift, vol. 3*, *Progress in Math.* **88**, Birkhäuser, 1991, 481–495.
29. Finiteness theorems for dimensions of irreducible λ -adic representations. In: *Arithmetic Algebraic Geometry, Texel'89* (G. van der Geer, F. Oort, J. Steenbrink, eds.), *Progress in Math.* **89**, Birkhäuser, 1991, 431–444.
30. Spectra of operators in finite-dimensional representations of simple Lie groups and Lie algebras. In: *International Conference "Automorphic functions and Their Applications"*, Khabarovsk 27 June - 4 July 1988 (N.Kuznetsov, V. Bykovski, editors), pp. 107–125; *Institute for Applied Mathematics of the USSR Academy of Science, Khabarovsk*, 1990; MR1096971 (92b:22012).
31. Abelian Varieties and Lie algebras. In: *Mathematics and Modelling* (Yu. G. Zarhin, A. D. Bazykin, editors), pp. 57–99; *Research Computing Center of the USSR Academy of Sciences, Pushchino*, 1990; *Selecta Math. formerly Soviet.* **13** (1994), 55–95; MR1089437 (92d:14037).
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35. Torsion and endomorphisms of Abelian varieties over infinite extensions of number fields. *Izv. AN SSSR ser. matem.* **55**:3 (1991), 658–669; *Math. USSR Izvestija* **38** (1992), 647–657.
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45. Hodge and Tate classes on simple abelian fourfolds (with B. Moonen). *Duke Math. J.* **77** (1995), 553–581.
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47. Endomorphism algebras of complex tori (with F. Oort). *Math. Ann.* **303** (1995), 11–29.
48. Variations on a theme of Minkowski and Serre (with A. Silverberg), *J. Pure and Applied Algebra* **111**(1996), 285–302.
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