

Publication List

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Refereed journal papers

1. W-algebras at the critical level, to appear in *Contemp. Math.*
2. (with Fyodor Malikov) A chiral Borel-Weil-Bott theorem, to appear in *Adv. Math.*
3. A remark on the C_2 -cofiniteness condition on vertex algebras, *Math. Z.* (online first).
4. (with Peter Fiebig) On the restricted Verma modules at the critical level, to appear in *Trans. Amer. Math. Soc.*
5. (with D. Chebotarov and F. Malikov) Algebras of twisted chiral differential operators and affine localization of \mathfrak{g} -modules, *Selecta mathematica, new series*, vol.17, no. 1, 1-46, 2011.
6. Representation theory of W-algebras, II, *Adv. Stud. Pure Math.* 61(2011), 51–90.
7. Representation Theory of W-Algebras, *Invent. Math.*, Vol. 169 (2007), no. 2, 219–320.
8. A New Proof of the Kac-Kazhdan Conjecture, *Int. Math. Res. Not.* 2006. Art. ID 27091, 5 pages.
9. Representation Theory of Superconformal Algebras and the Kac-Roan-Wakimoto Conjecture, *Duke Math. J.*, Vol. 130 (2005), No. 3, 435-478.
10. Vanishing of cohomology associated to quantized Drinfeld-Sokolov reduction, *Int. Math. Res. Not.* 2004, no. 15, 730–767.
11. Drinfeld functor and finite-dimensional representations of Yangian, *Comm. Math. Phys.* 205 (1999), no. 1, 1–18.
12. (with Takeshi. Suzuki) Duality between $sl_n(C)$ and the degenerate affine Hecke algebra, *J. Algebra* 209 (1998), no. 1, 288–304.

13. (with T. Suzuki and A. Tsuchiya) Degenerate double affine Hecke algebra and conformal field theory. Topological field theory, primitive forms and related topics (Kyoto, 1996), 1–34, *Progr. Math.*, 160, Birkhauser, 1998.
14. (with T. Nakanishi, K. Oshima and A. Tsuchiya) Spectral decomposition of path space in solvable lattice model. *Comm. Math. Phys.* 181 (1996), no. 1, 157–182.

Under review papers and preprints

1. Rationality of W-algebras, I: Bershadsky-Polyakov vertex algebras, arXiv:1005.0185 [math.QA].
2. Associated varieties of modules over Kac-Moody algebras and C_2 -cofiniteness of W-algebras, arXiv:1004.1554[math.QA].
3. (with P. Fiebig) The linkage principle for restricted critical level representations of affine Kac-Moody algebras, arXiv:0909.4214 [math.RT].
4. Characters of representations of affine Kac-Moody Lie algebras at the critical level, arXiv:0706.1817v2 [math.QA].