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A quantum analog of generalized cluster algebras. (English) Zbl 1408.16008
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Summary: We define a quantum analog of a class of generalized cluster algebras which can be viewed as a generalization of quantum cluster algebras defined in [*A. Berenstein* and *A. Zelevinsky*, Adv. Math. 195, No. 2, 405–455 (2005; [Zbl 1124.20028](#))]. In the case of rank two, we extend some structural results from the classical theory of generalized cluster algebras obtained in [*L. Chekhov* and *M. Shapiro*, Int. Math. Res. Not. 2014, No. 10, 2746–2772 (2014; [Zbl 1301.30042](#))] and [*D. Rupel*, “Greedy bases in rank 2 generalized cluster algebras”, Preprint, [arXiv:1309.2567](#)] to the quantum case.

MSC:

- 16G20** Representations of quivers and partially ordered sets
- 17B67** Kac-Moody (super)algebras; extended affine Lie algebras; toroidal Lie algebras
- 17B35** Universal enveloping (super)algebras
- 18E30** Derived categories, triangulated categories (MSC2010)

Cited in **2** Documents

Keywords:

generalized cluster algebra; generalized quantum cluster algebra; Laurent phenomenon; standard monomial

Full Text: [DOI](#)

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