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Socle equivalences of weighted surface algebras.  (English)  Zbl 07428833
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Summary: We describe the structure and properties of the finite-dimensional symmetric algebras over an algebraically closed field $K$ which are socle equivalent to the general weighted surface algebras of triangulated surfaces, investigated in [11]. In particular, we prove that all these algebras are tame periodic algebras of period 4. The main results of this paper form an essential step towards a classification of all symmetric tame periodic algebras of period 4.

MSC:
16D50 Injective modules, self-injective associative rings
16E30 Homological functors on modules (Tor, Ext, etc.) in associative algebras
16G20 Representations of quivers and partially ordered sets
16G60 Representation type (finite, tame, wild, etc.) of associative algebras

Keywords:
syzygy; periodic algebra; symmetric algebra; tame algebra; surface algebra; socle equivalence

Full Text: DOI

References:


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