Title: Absolutely indecomposable representations of a twisted group algebra of a finite $p$-group over a field of characteristic $p$

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Let $G$ be a non-cyclic finite $p$-group and $K$ an infinite field of characteristic $p$. For every 2-cocycle $\lambda \in Z^2(G, K^*)$ such that the twisted group algebra $K^\lambda G$ is not uniserial, we find the integers $m \geq 1$ for which $K^\lambda G$ has infinitely many absolutely indecomposable representations of dimension $m$. The main results of the paper imply a solution of the second Brauer–Thrall conjecture for the twisted group algebras $K^\lambda G$, under some assumption on $G$ and $K$.

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