

On graded 2-nil-good rings

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Recently, in [M. S. Abdolyousefi, N. Ashrafi, H. Chen, On 2-nil-good rings, J. Algebra Appl. DOI: 10.1142/S0219498818501104], 2-nil-good rings are introduced as rings in which every element can be written as a sum of two units and a nilpotent. We study group graded rings in which every homogeneous element can be written as a sum of two homogeneous units and a homogeneous nilpotent. We name such rings *graded 2-nil-good rings*. After establishing basic properties of such rings, we focus on their extensions. In particular, we discuss (graded) 2-nil-good property for (graded) group rings and also deal with the question of how the graded 2-nil-good property of a group graded ring depends on the 2-nil-good property of the component which corresponds to the neutral element of the grading group.

References

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