The Wedderburn principal theorem for generalized almost-Jordan algebras

Arenas, Manuel

We study commutative algebras A over fields of characteristic ?2, 3 which satisfy the identity $\{x(y(xx)) - x(x(xy))\} + \{y(x(xx)) - x(x(xy))\} = 0$. We do not assume power-associativity. We find the Peirce decomposition of these algebras. We prove the existence of a Wedderburn decomposition under some additional conditions. Copyright © Taylor & Francis Group, LLC.