

On nonhomogeneous elliptic equations with the Hardy-Leray potentials

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Abstract: In this paper, we present some suitable distributional identities of the solutions for nonhomogeneous elliptic equations involving the Hardy-Leray potentials and study qualitative properties of the solutions to the corresponding nonhomogeneous problems by the distributional identities. We address some applications on the nonexistence of some nonhomogeneous problems with the Hardy-Leray potentials and the nonexistence principle eigenvalue with some indefinite potentials.

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