

Existence and multiplicity solutions for critical Choquard-Kirchhoff type equations with variable exponents

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Abstract

In this paper we establish existence and multiplicity solutions for a class of Choquard-Kirchhoff type equations with variable exponents and critical reaction. Because of the critical reaction, we can use the concentration-compactness principle to deal with the lack of compactness. The results are also based on the combination of the mountain pass theorem and the Hardy-Littlewood-Sobolev inequality for variable exponents. And we discuss the results in non-degenerate and degenerate cases.

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