

KCI 통합검색

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검색어를 입력해 주세요

우수등재

SYSTEMATIC APPROXIMATION OF THREE DIMENSIONAL FRACTIONAL PARTIAL DIFFERENTIAL EQUATIONS

Journal of the Korean Society for Industrial and Applied Mathematics

약어 : J. KSIAM

2019, vol.23, no.3, pp. 253-266 (14 pages)

DOI : 10.12941/jksiam.2019.23.253

발행기관 : 한국산업응용수학회

연구분야 : 자연과학

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초록 ▲

In this article, a systematic solution based on the sequence of expansion method is planned to solve the time-fractional diffusion equation, time-fractional telegraphic equation and time-fractional wave equation in three dimensions using a current and valid approximate method, namely the ADM, VIM, and the NIM subject to the estimate initial condition. By using these three methods it is likely to find the exact solutions or a nearby approximate solution of fractional partial differential equations. The exactness, efficiency, and convergence of the method are demonstrated through the three numerical examples.

키워드 ▲

Fractional partial differential, Adomian decomposition method (ADM), Variation iteration method (VIM), New iterative method (NIM).

인용현황

KCI에서 이 논문을 인용한 논문의 수는 **1건**입니다. ▼

참고문헌(18) ▼

* 2023년 이후 발행 논문의 참고문헌은 현재 구축 중입니다.