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By: Tan, B (Tan, Bing) [1]; Xu, SS (Xu, Shanshan) [2]; Li, SX (Li, Songxiao) [1]

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[JOURNAL OF NONLINEAR AND CONVEX ANALYSIS](#)

Volume: 21 Issue: 4 Page: 871-884 Special Issue: SI

Published: 2020

Indexed: 2020-07-14

Document Type: Article; Proceedings Paper

#### Conference

Meeting: [International Workshop on Nonlinear and Variational Analysis \(IWNVA\)](#)

Location: Tianjin Polytechn Univ, Tianjin, PEOPLES R CHINA

Date: JUL 15-17, 2019

#### Abstract

In this paper, we propose two inertial shrinking algorithms to approximate a solution of hierarchical variational inequality problems with nonexpansive mappings in Hilbert spaces. We prove strong convergence theorems under some mild conditions. Finally, we present some numerical examples to compare our algorithms with some existing algorithms, which illustrate the advantage of our proposed algorithms.

#### Keywords

Author Keywords: [Hierarchical variational inequality problem](#); [shrinking projection](#); [inertial Mann algorithm](#); [nonexpansive mapping](#); [strong convergence](#)

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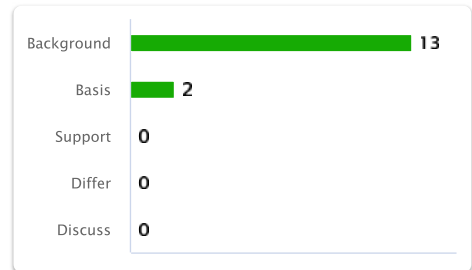
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eISSN: 1880-5221

**Current Publisher:** YOKOHAMA PUBL, 101, 6-27 SATSUKIGAOKA AOBA-KU, YOKOHAMA 227-0053, JAPAN

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