He, Zhenhua; Gu, Feng


Summary: This paper studies some problems of an iterative sequence approximating common fixed points for a family of strictly pseudocontractive mappings in the terms of Browder-Petryshyn by introducing a new iterative process. Under appropriate conditions, it is proved that the iterative sequence converges strongly to a common fixed point. Some recent results are improved and generalized.

MSC:

47J25 Iterative procedures involving nonlinear operators
47H09 Contraction-type mappings, nonexpansive mappings, A-proper mappings, etc.
47H10 Fixed-point theorems

Keywords:

strictly pseudocontractive mapping; common fixed point; strong convergence