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Hai Q Dinh* (hdinh@kent.edu), Department of Mathematical Sciences, Kent State University, Trumbull, 4314 Mahoning Avenue, Warren, OH 44483. *Repeated-root constacyclic codes of prime power length over polynomial residue rings.*

We classify constacyclic codes of prime power length over a class of polynomial residue rings. The structures of all such constacyclic codes are obtained. The Hamming distance of a class of these codes are completely determined. (Received August 26, 2008)