Applicable Algebra in Engineering, Communication and Computing (2022) 33:151–152
https://doi.org/10.1007/s00200-020-00445-9

CORRECTION

Correction to: Some classes of permutation polynomials of the form $b(x^q + ax + \delta)^{\frac{i(q^2-1)}{d}+1} + c(x^q + ax + \delta)^{\frac{j(q^2-1)}{d}+1} + L(x)$ over $\mathbb{F}_{q^2}$

Danyao Wu[1] · Pingzhi Yuan[2]

Published online: 30 July 2020
© Springer-Verlag GmbH Germany, part of Springer Nature 2020

Correction to: Applicable Algebra in Engineering, Communication and Computing
https://doi.org/10.1007/s00200-020-00441-z

In the original publication of the article, the mathematics symbol q was replaced with “s” by mistake while replacing the math mode to text mode. As a result, the first sentence in the following sections are affected and correct sentences should read as given below:

Abstract

Let q be a prime power and $\mathbb{F}_q$ be a finite field with q elements.

Introduction

Let $\mathbb{F}_q$ be the finite field with q elements, where q is a prime power, and let $\mathbb{F}_q[x]$ be the ring of polynomials of one variable over $\mathbb{F}_q$.

Lemma 2 (See [26]) *For a prime power* q, *assume that* $a \in \mathbb{F}_{q^2}$ *with* $a^{q+1} = 1$ *and* $g \in \mathbb{F}_{q^2}$ *is a primitive element of* $\mathbb{F}_{q^2}$.

The original article can be found online at https://doi.org/10.1007/s00200-020-00441-z.

✉ Danyao Wu
wudanyao111@163.com

Pingzhi Yuan
yuanpz@scnu.edu.cn

1 School of Computer Science and Technology, Dongguan University of Technology, Dongguan 523808, China

2 School of Mathematics, South China Normal University, Guangzhou 510631, China

Theorem 1 *For a prime power* q *and positive integers* d, i, j *with* $q \equiv 1 \pmod{d}$, *assume that* $b, c \in \mathbb{F}_q$ *and* $a, \delta \in \mathbb{F}_{q^2}$ *with* $a^{1+q} = 1$.

Theorem 2 *For a prime power* q *and positive integers* d, i, j *with* $q \equiv 1 \pmod{d}$, *assume that* $b, c \in \mathbb{F}_q$, $a \in \mathbb{F}_{q^2}$ *with* $a^{1+q} = 1$, *and* $g \in \mathbb{F}_{q^2}$ *is a primitive element of* $\mathbb{F}_{q^2}$.

Theorem 3 *For a prime power* q *and positive integers* d, i, j, s, k *with* $q \equiv -1 \pmod{d}$, $iq \equiv s \pmod{d}$ *and* $jq \equiv k \pmod{d}$, *assume that* $b, c \in \mathbb{F}_q$ *and* $a, \delta \in \mathbb{F}_{q^2}$ *satisfying* $a^{1+q} = 1$.

The original article has been updated accordingly.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.