

ISSN 2095-2651
CODEN SYPIET



Q K 2 1 2 5 4 7 9

Journal of Mathematical Research with Applications

数学研究及应用

2021 Vol.41 4

Journal of Mathematical Research with Applications

Vol.41 No.4 (Sum No.189)

Contents

July 2021

Research Papers

Three-way granular approximations based on bisimulations

..... Zhilian GUO, Hailong YANG, Lijuan ZHANG (331)

Minimum k -path vertex cover in Cartesian product graphs

..... Huiling YIN, Binbin HAO, Xiaoyan SU, Jingrong CHEN (340)

b -generalized derivations on prime rings Shuliang HUANG (349)

Harmonic univalent functions related with generalized (p, q) -post quantum calculus operators

..... Shuhai LI, Li-na MA, Xiaomeng NIU (355)

Spatial dynamics of competing model in a periodic unstirred chemostat with delay

..... Wujun PU, Ya WANG (368)

The existence and non-existence of positive steady state solutions for a cross-diffusion predator-prey

model with Holling type II functional response Shuping CAO, Li-na ZHANG (383)

Essential Norm of Toeplitz Operators on Dirichlet-type space ... Jianjun CHEN, Jiesheng XIAO (393)

Oscillation property for the eigenfunctions of discrete clamped beam equation and its applications

..... Yanqiong LU, Rui WANG (401)

On some generalized countably compact spaces II Erguang YANG (416)

Design of triharmonic triangular Bézier surfaces Yan WU, Chungang ZHU (425)



Journal of Mathematical Research with Applications

Formerly Journal of Mathematical Research and Exposition
Bimonthly Founded in 1981

Supervised by

The Ministry of Education of the People's Republic of China

Sponsored by

Dalian University of Technology &

China Society for Industrial and Applied Mathematics

Editors-in-Chief

Lei GUO & Renhong WANG

Edited & Published by

The Editorial Office of Journal of

Mathematical Research with Applications

Address: No.2 Linggong Road, Ganjingzi District

Dalian 116024, P. R. China

Printed by

Dalian University of Technology Printing Co., Ltd.

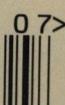
Distributed

In China by Local Post Offices;

Overseas by China National Publications

Import & Export (Group) Corporation

ISSN 2095-2651



07>

9 772095 265121

万方数据

ISSN 2095-2651

CN 21-1579 / O1

PO Subscription Code 8-92

Price 20.00 RMB