2019 Tsinghua International Doctoral Forum

IET Conference Publications 769

Beijing, China 22 – 24 November 2019

ISBN: 978-1-7138-2428-2

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2019) by the Institution of Engineering and Technology All rights reserved.

Printed with permission by Curran Associates, Inc. (2021)

For permission requests, please contact the Institution of Engineering and Technology at the address below.

Institution of Engineering and Technology P. O. Box 96 Stevenage, Hertfordshire U.K. SG1 2SD

Phone: 01-441-438-767-328-328 Fax: 01-441-438-767-328-375

www.theiet.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400

Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

TABLE OF CONTENTS

A MODIFIED ERA-BASED METHOD FOR MODE IDENTIFICATION OF LOW-	
FREQUENCY OSCILLATIONS IN POWER SYSTEM	1
Zhongting Shen, Renjie Ding, Yuwei Zhao	
POINT-FOCUSING SH GUIDED-WAVE EMAT FOR DEFECT DETECTION IN PLATE	7
Hongyu Sun, Shen Wang, Songling Huang, Wei Zhao	
OPTIMAL CAPACITY ALLOCATION OF ADVANCED ADIABATIC COMPRESSED AIR	
ENERGY STORAGE SYSTEMS CONSIDERING ENERGY ARBITRAGE	13
Zhiao Li, Laijun Chen, Dangwu Liu, Tianwen Zheng, Bo Gao, Shengwei Meil	
A NOVEL INDIVIDUAL VOLTAGE BALANCING SCHEME WITH REDUCED VOLTAGE	
SENSORS FOR MODULAR MULTILEVEL CASCADE CONVERTER-SINGLE STAR	
BRIDGE CELL (MMCC-SSBC) BASED STATCOM	20
Qian Xiao, Yu Jin, Chaoyu Dong, Pengfei Hu, Hongjie Jia, Yunfei Mu, Sanjay K. Chaudhary,	
Remus Teodorescu	
RESEARCH ON LOW/HIGH VOLTAGE RIDE THROUGH OF PV GRID-CONNECTED	
SYSTEM BASED ON CONTROL-HARDWARE-IN-THE-LOOP	28
Shuang Li, Gangquan Si, Kai Qu, Guoqing He	

Author Index