

2nd International Conference on Power Electronics and Advanced Control (PEAC 2022)

Journal of Physics: Conference Series Volume 2434

Guilin, China
18-20 November 2022

ISBN: 978-1-7138-6775-3
ISSN: 1742-6588

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.

This work is licensed under a Creative Commons Attribution 3.0 International Licence.
Licence details: <http://creativecommons.org/licenses/by/3.0/>.

No changes have been made to the content of these proceedings. There may be changes to pagination and minor adjustments for aesthetics.

Printed with permission by Curran Associates, Inc. (2026)

For permission requests, please contact the Institute of Physics
at the address below.

Institute of Physics
Dirac House, Temple Back
Bristol BS1 6BE UK

Phone: 44 1 17 929 7481
Fax: 44 1 17 920 0979

techtracking@iop.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

Preface

Peer Review Statement

A Transparent Tunable Broadband Microwave Absorber Based on Multi-Layer Structure by
Patterned Graphene 1
Limin Ma, Zhenghua Wang, Xiaoyu Han

Robust Planning Method for Photovoltaic Microgrid Energy Storage Considering Source-Load
Flexibility Resources 6
Xianghai Xu, Jiayi Shang, Zhiyuan Chen, Zhipeng Zhang

Design and Research of the Intelligent Water Temperature Monitoring System 12
Zhuolin Wang

Harmonic Voltage Amplitude Calculation and Fundamental Amplitude Correction Based on
Synchronized SVPWM of Two-Level VSI Under Low Switching Frequency..... 20
Yueqiang Hu, Fengguang Jiang

On-Line Monitoring of Instantaneous Over-Voltage Intelligent Monitoring of EMUs 26
Zhongjiang Sun, Suyue Liu, Zhiming Yang, Shuangfeng Xu

Rational Design of Future Potential Electric Aircraft..... 36
Mingze Xi

Adaptive Neural Control for Chaotic Permanent Magnet Synchronous Motor with Asymmetric
Input Saturation 41
Hongshan Liu, Huibo Liu, Yanwei Zhao

Author Index