

CONTENTS

1. Study on Structure and Reducibility of Iron Ore Sinter Containing Basic Oxygen Furnace Slag 1

Cao Son Nguyen, Trung Duc Tran, Anh Hoa Bui*
Hanoi University of Science and Technology, Ha Noi, Vietnam

2. Nanomaterial SnS₂-Based Sensor for VOC Gas Detection at Room Temperature 9

*To Thi Nguyet¹, Dang Thanh Binh³, Chu Manh Hung^{1,2},
Jian Zhen Ou⁴, Nguyen Duc Hoa^{1,2*}*
*¹International Training Institute for Materials Science (ITIMS),
Hanoi University of Science and Technology, Ha Noi, Vietnam;
²School of Materials Science and Engineering,
Hanoi University of Science and Technology, Ha Noi, Vietnam;
³Center for High Technology Research and Development,
Vietnam Academy of Science and Technology, Ha Noi, Vietnam
⁴School of Engineering, RMIT University, Melbourne, Victoria, Australia*

3. Synthesis of Cobalt Ferrite Nanocomposite Coated with Aluminum Oxide and Application in Protein Removal Process in Natural Rubber 17

*Vu Thi Thuy^{1,2}, Le Thi Thu Trang², Dao Ngoc Thi¹, Nguyen Nhat Trang¹,
Le Thi Hong Nhung¹, Nguyen Thai Huy¹, Phan Trung Nghia^{1*}*
*¹School of Chemistry and Life Sciences,
Hanoi University of Science and Technology, Ha Noi, Vietnam
²Rubber Science and Technology Center,
Hanoi University of Science and Technology, Ha Noi, Vietnam*

4. Non-enzymatic Glucose Sensor Based on Ni(OH)₂/NF Materials Using Different Pulse Voltammetry Technique 24

*Do Trinh Xuan Minh¹, Dinh Hieu Trung^{1,2}, Tran Vu Diem Ngoc³, Chu Van Tuan⁴,
Nguyen Hai Ha⁴, Tran Tri Quang⁴, Chu Thi Xuan^{2,3*}, Dang Thi Thanh Le^{2,3},
Luc Nhu Quynh⁵, Nguyen Duc Hoa^{2,3}*
*¹School of Engineering Physics,
Hanoi University of Science and Technology, Ha Noi, Vietnam.
²International Training Institute for Materials Science (ITIMS),
Hanoi University of Science and Technology, Ha Noi, Vietnam.
³School of Materials Science and Engineering,
Hanoi University of Science and Technology, Ha Noi, Vietnam
⁴Hung Yen University of Technology and Education, Hung Yen, Vietnam
⁵Academy of Cryptography Techniques, Ha Noi, Vietnam*

5. An IoT-Based Smart Electronic Nose System for Non-Destructive Meat Freshness Monitoring 31

Thanh Huong Nguyen, Minh Hoang Le*
*School of Electrical and Electronic Engineering,
Hanoi University of Science and Technology, Ha Noi, Vietnam*

6. Rice Leaf Diseases Detection Using YOLOv8 40

*Trinh Cong Dong, Mac Tuan Anh, Giap Van Khanh,
Nguyen Thanh Huong, Bui Dang Thanh**
Hanoi University of Science and Technology, Ha Noi, Vietnam

7. Research and Manufacture of Hydraulic Butt Fusion Welding Machine for Different Plastic Material Pipes 48

*Nguyen Tien Duong**

Hanoi University of Science and Technology, Ha Noi, Vietnam

8. Numerical Study of Unsteady Flow Separation on Small Scale Wings Using Vortex Identification Methods 58

Viet Anh Duong¹, Viet Dung Duong^{2}*

¹University of Science and Technology of Hanoi,

Vietnam Academy of Science and Technology, Ha Noi, Vietnam

²School of Aerospace Engineering, VNU University of Engineering and Technology,

Ha Noi, Viet Nam