TABLE OF CONTENTS

01	Ninh Duc Ha Proactive research and mastery of advanced material technologies for defense and security: An overview.	5 - 7
	Chemistry, Biology & Environment	
02	Trieu Khuong, Ngo Minh Tien, Tran Van Cuong, Ha Quoc Bang Study on the composition, microstructure, and technological orientation for the fabrication of piezoelectric ceramics used in special transducers for underwater acoustics.	8 - 14
03	Tran Van Cuong, Ninh Duc Ha, Dang Quoc Khanh, Nguyen Van Canh, Le Thanh Bac, Nguyen Tai Truong, Trieu Khuong, Ngo Minh Tien The effect of temperature on phases, density and fracture toughness K_{1c} of SiAlON ceramics.	15 - 21
04	Nguyen Duy Anh, Tran Van Hien, Do Thi Thuy Fabrication of CeO ₂ based materials by microwave assisted combustion synthesis for treatment of exhaust gas from plastic waste pyrolysis.	22 - 28
05	Pham Van Khuong, Hoang The Vu, Do Duc Tri, Nguyen Manh Tuong Study on the influence of compositional and technological factors on the physicomechanical and combustion properties of Nitrocellulose–Cellulose– Trinitrotoluene materials.	29 - 35
06	Do Duc Tri, Pham Thanh Dat, Hoang The Vu, Nguyen Manh Tuong Influence of trans 1,4,5,8-tetranitrosotetraazadecalin on mechanical integrity and microstructure of composite modified double base propellant.	36 - 42
07	Nguyen Minh Tri, Le Hong Minh, To Phuong Linh, Le Ngoc Hoan, Nguyen Thi Ngoan, Nguyen Thi Truc Loan, Pham Nho Development of a rapid detection paper for cyanide ions in aqueous solutions using an organic reagent.	43 - 49
08	Vu Ngoc Toan, Le Ngoc Hoan, Nguyen Minh Tri, Tran Minh Anh, Le Minh Tri, Vo Thi Thanh, Nguyen Thi Truc Loan Isolation and structure determination of flavonoids from the rhizomes of boesenbergia pandurata Roxb.	50 - 55
09	Pham Hong Thach, Nguyen Thanh Tung, Mai Huy Hoang, Ta Thanh Binh, Ho Hoa Quan, Tran Van Khai Study on the effect of surface modification of aluminum powder used in epoxy coating systems for corrosion protection of steel substrates.	56 - 62
10	Vu Huu Khanh, Nguyen Hong Hanh, Nguyen Thi Huyen, Nguyen Hoang Tung Study on fabrication of nano copper by thermal plasma and their applications in thermal camouflage.	63 - 69

	11	Ly Quo	c Vuong.	Nguven	Manh	Tuong.	Doan	Minh	Kha
--	----	--------	----------	--------	------	--------	------	------	-----

70 - 75

Preparation of hydroxyl-terminated polybutadiene via oxidation-reduction method using alcohol catalysts.

12 Dinh Van Long, Doan Minh Cuong, Doan Tuan Anh, Dao The Nam, Mai 76 - 81 Van Phuoc, Pham Thi Phuong

Study on the influence of technological parameters on the formation of chemical nickel plating layer on fiberglass/polyamide composite.

13 Pham Quang Thuan, Nguyen Nhat Huy, Pham Tuan Anh, Trinh Dac Hoanh, 82 - 87 Nguyen Van Dong

Research on fabricating non-woven felt based on PA12 for insulation material applications.

14 Ly Manh Quan, Tran Dinh Thinh, Nguyen Van Khanh, Tran Quynh Chi, La 88 - 94 Duc Duong, Nguyen Minh Phuong

Enhanced photocatalytic performance of porous MoS₂ structures for methyl orange degradation in simulated sunlight.

15 Nguyen Thi Hoai Phuong, Nguyen Duy Hung, Nguyen Cong Tu, Ngo Minh 95 - 101 Tien, Tran Van Khanh

Freeze drying WO₃ nanostructures for photocatalyst degradation of rhodamine B dye from aqueous solution.

16 Chu Manh Nhuong, Mai Xuan Truong, Nguyen Thi Hien Lan, Tran Quoc 102 - 107 Toan, Luu Tuan Nghia

Advanced nanocomposite Bi₂WO₆@graphene oxide special material: Optical properties and photocatalytic activity for degradation of phenol red.

17 Truong Ngoc Tuan, Nguyen Thi Thu Hang, Bui Thi Bich Hao, Nguyen Thi 108 - 114 Hoai Phuong

Thermochemical activation of bagasse-derived carbon with HCl for methylen blue dye removal.

18 Dang Trung Dung, Nguyen Thi Hong Hanh, Dang Thuy Trang, La Duc 115 - 121 Duong

Plant-mediated synthesis of sustainable nZVIs anchored on loofah fiber for the degradation of rhodamine B dye.

19 Khuat Hoang Binh, Nguyen Van Huong, Pham Son Tung

122 - 128

Simultaneous determination of nitro group compounds and explosives combined by voltammetry combined with artificial neural network.

20 Pham Son Tung, Nguyen Van Huong, Vu Thi Vui, Nguyen Thi Dung, Pham 129 - 135 Thi Thuy, Nguyen Van Hoang

Study on the reuse of nanoscale zero-valent iron (nZVI) in a Sono-Photo-Fenton-like process for the treatment of TNT-contaminated wastewater.

21 Pham Viet Anh, Nguyen Cao Tuan, Nguyen Dinh Hung, Nguyen Quang Huy, Pham Thi Mai Phuong

Research on the application of UV/Peroxone technology for treating TNT-containing wastewater generated from bomb and explosives deployment processes.

22 Nguyen Thi Hoa, Le Minh Tri, Le Thi Bich Thuy, Ho Thi Huong, Tran Thi 144 - 150 Luong, Ton Son Bach

Selection of drought and salinity tolerant water spinach (*Ipomoea aquatica*) lines through somaclonal variation.

23 Le Duc Anh, Vu Van Dung, Tang Viet Anh, Luu Van Chinh, Truong Ngoc 151 - 157 Hung

Some compounds isolated from *Perilla frutescens* harvested in Hung Yen province.

24 Le Duy Khanh, Duong Thi Huong Giang, Nguyen Ha Trung, Pham Kien 158 - 164 Cuong

Application potential of the IPFOS-bacillus synbiotic product in military health protection.

25 Dinh Thu Hanh, Tran Van Son, Dinh Ngoc Tan, Pham Hoang Giang, 165 - 171 Nguyen Thi Tam Thu

Application of salt-tolerant bacteria to treat wastewater from agar powder production.

26 Nguyen Hoang Duc, Le Anh Kien, Hoang Thi Kim Dung, Tran Phuong 172 - 178 Chien

Synthesis of gel beads based on pectin extracted from dragon fruit stems and investigation of the effect of gel properties on the adsorption capacity of methyl orange.

27 Tran Van Cuong, Dinh Tran Kim Nguyen, Nguyen Nhi Tru, Pham Thanh 179 - 185

Study on the effect of halloysite nanotubes on the adhesion and corrosion protection of epoxy coatings on carbon steel.

28 Doan Quy Hieu, Guzenkov Sergey Aleksandrovich, Do Dinh Trung

Thermal insulation performance and service life prediction of some commercial solar heat-reflective coatings under natural weathering exposure.

29 Mai Van Phuoc, Vu Minh Thanh

193 - 199

186 - 192

Fabrication of lead-plated copper negative grid for high-capacity lead-acid battery

30 Dao The Nam, Ninh Duc Ha, Doan Tuan Anh, Doan Minh Cuong, Nguyen 200 - 206 Thi Huong, Vu Thi Thao, Vu Minh Thanh

Material composition study and computational evaluation toward the fabrication of tubular positive electrodes for high-capacity lead-acid batteries.

31 Nguyen Thi Hai Yen, Pham Minh Tuan, Pham Xuan Thao, Vu Quang Hung 207 - 213 Highly electrochemical stability of PEO-based polymer electrolytes for lithiumion batteries.

32 Pham Trung Kien, Nguyen Tran Hung, La Duc Duong

214 - 220

Enhancing electrochemical properties for aluminum-based anode materials for LIBs with PVP-derived carbon protective coating.

33 Nguyen Thi Giang, Nguyen Hoang Tung, Lai Van Duy, Nguyen Thanh 221 - 227 Tung, La Duc Duong

Development of TiO₂@porphyrin nanocomposites as photoelectrochemical materials for water splitting in hydrogen production.

34 Vo Hoang Phuong, Nguyen Van Dong, Nguyen Trong Nghia, Le Viet Binh, 228 - 234 Chu Nguyen Mai Phuong

Evaluation of corrosion inhibition efficiency of Inkort 8MZ.VN applied in diesel generator cooling system operating in marine environment.