



# HPU2 Journal of Sciences: Natural Sciences and Technology

Journal homepage: <https://sj.hpu2.edu.vn>



## CONTENTS

	<i>Page</i>
1. Tho-Hue Le, Thi-Tham Nguyen, Thi-Hong Trinh, Thanh-Nha Nguyen Hua, One-loop gauge boson contributions to decays $h \rightarrow e_a e_b$ in the general gauge $R_\xi$ .....	3
2. Xuan-Thanh Nguyen, Xuan-Phong Ong, Huy-Gioi Dong, Son-Thinh Pham, Hoang-Thien Pham Van, Truong-Xuan Le, Duc-Ha Chu, Trends in applying artificial intelligence in agricultural cultivation and some orientations for Vietnam.....	14
3. The-Lam Nguyen, Van-Duong Nguyen, Quang-Huy Tran, Non-uniform lagrange interpolation in B-mode ultrasound image reconstruction .....	27
4. Thuy-Linh Dinh, Thi-Hien Nguyen, Van-Thuan Nguyen, Thuy-Tien Do, Removal of Cr(VI) from aqueous solutions using $MnFe_2O_4$ -Coffee husk activated carbon composite .....	35
5. Ngoc-Anh Vu Thi, The-Hai Nguyen, Anh-Tien Nguyen, Van-Anh Nguyen, Complexation of polyhydroxy-nitroso dyes with $Co^{2+}$ , $Ni^{2+}$ , and $Cr^{3+}$ : characteristics, chemisorption behavior, and application in electroplating wastewater treatment .....	45
6. Thi-Tot Pham, The-Duyen Nguyen, Sustainable development of the global dyeing industry in the future .....	56
7. The-Lam Nguyen, Quang-Huy Tran, Constructing waveform of P, Q, R, S, and T waves in ECG signals for cardiovascular disease diagnosis .....	65
8. Ngoc-Kien Le, Van-Nghi Tran, Van-Hao Nguyen, Some applications of directional subdifferentials at infinity to vector optimization problems .....	76
9. Tu-Hoai Tran, Nhan-Trung Nguyen, Phu-Hoang Dang, Using coconut water for polyphenol extraction from <i>Artocarpus altilis</i> .....	87