

Day 2	<A3>	Marine Safety and Security				<B3>	Maritime Intelligent Transportation System				<C3>	Vessel Traffic Management			
	A3-1	10:00-10:20	Revealing success factors of safe ship operations of experienced captains to assess functional requirements of Maritime Autonomous Surface Ships using FRAM	Shota IINO, Hideki NOMOTO, Takayuki HIROSE, Yasutaka MICHUURA, Koji MURAI, Akihiko HORI, Junji FUKUTO	JIN	B3-1	10:00-10:20	Research on VDR data analysis for realization of data-based autonomous remote control	Hong-jin Kim, Soomin Park, Deuk-Jin Park, Jeong-Bin Yim	KINPR	C3-1	10:00-10:20	Discussion on the changes of ship VHF reporting system at VTS area	DONG Zhaoxi, TANG Mengyu	CIN
	A3-2	10:20-10:40	Ship Detection from Sentinel-1 Imagery through Thresholding and Clustering Method	Ho-Kun JEON, Hong Yeon CHO	KINPR	B3-2	10:20-10:40	Simulation analysis of leakage, diffusion and explosion of ships carrying dangerous goods while waiting for lock and mooring	ZHANG Jiayi, QI Le, LIU Jingxian	CIN	C3-2	10:20-10:40	A Study on Identification of Ship Type by B-Scope Radar Image using AI	Yasuyuki HIDAKA, Hideaki NAKAMURA, Tatsuto YAMADA, Naoki MUTA, Ryotarou OHNO and Shinji MIZUI	JIN
	A3-3	10:40-11:00	Brief talk thoughts on the determination of navigation mark technology in offshore wind power plant	WANG Zhengpeng	CIN	B3-3	10:40-11:00	Basic Research on the Establishment of a Standardization Roadmap of Maritime Autonomous Surface Ship (MASS)	Joo-young Jeon, Jeong-Bin Yim	KINPR	C3-3	10:40-11:00	Research on collision avoidance route planning based on A-star algorithm	Wenbin BAI and Hitoi TAMARU	JIN
	A3-4	11:00-11:20	Robust AI algorithm: a key technology to optimize ship intelligent collision avoidance system	LI Lin, SUN Dawei, MENG Xiangming	CIN	B3-4	11:00-11:20				C3-4	11:00-11:20	A Bayesian Network-Based Approach to Port State Control Ship Detention Risk Assessment	YU Dingheng, WU Bing, CHEN Pei	CIN
	<A4>	Marine Safety and Security				<B4>	Modern Marine Engineering Management				<C4>	Other Related Topics			
	A4-1	11:40-12:00	Analysis of Situation Awareness of Remote Ship Operator Using Simulator	Sonoko KAWASHIMA, Hiroko ITOH, Yasumi KAWAMURA and Hiroki OTSUKA	JIN	B4-1	11:40-12:00	Numerical simulation of the effect of target distance variables on vertical scour of submerged water jets	CHEN Hao, TENG Xianbin, ZHU Faxin, ZHANG Zhibin, ZHANG Xiao	CIN	C4-1	11:40-12:00	A framework for improving the Marine Spatial Data System in the Republic of Korea	Jin-Kyung Kim, Sang-II Lee	KINPR
	A4-2	12:00-12:20	Introduction of Korea autonomous surface ship project and ship network security equipment development	Yunja YOO, Kyoung-Kuk YOON, David KWAK, Myongcheol LIM, Sangwon PARK	KINPR	B4-2	12:00-12:20	Reflections on the application of electronic fence in navigation aid	LIN Wei, CHEN Ankun, ZHANG Yiming	CIN	C4-2	12:00-12:20	A Tracking Study on “Empower Women in the Maritime Community”from International Perspective	XU Yiran	CIN
	A4-3	12:20-12:40	Study on rescue of liquid hazardous chemicals ship	MIN Zhen	CIN	B4-3	12:20-12:40	Analysis and research on data transmission interference of telemetry monitoring equipment of navigation beacon under electromagnetic noise source environment	LIU Fengyuan, XU Jiazheng, GU Tiliang	CIN	C4-3	12:20-12:40	Interpreting the Mute Shipping Languages: the Decorations on Ancient Vessels in China and the U. K.	LI Fang, REN Tianxiangxiu, SHANG Xin	CIN
	A4-4	12:40-13:00	Application analysis of integrated beacon light	GUO Hao	CIN	B4-4	12:40-13:00	Study on quantitative risk assessment and inspection of offshore pressure vessels	Ran Zhou, Xiaolei Zhang, Xiangfeng Li, Xinyu Liu, Qingguo Song	CIN	C4-4	12:40-13:00	Design and performance analysis of a discontinuous spiral baffle heat exchanger	PAN Jin, KANG Shuangqi	CIN