

### **AI-based surrogate model for the prediction of ship fuel consumption reflecting hydrometeorological conditions**

Zhang, Mingyang; Tsoulakos, Nikolaos; **Kujala, Pentti Jouko Sakari**; Hirdaris, Spyros Proceedings of the International Conference on Offshore Mechanics and Arctic Engineering - OMAE 2024 ; vol. 9 2024 / OMAE2024-121992, V009T13A016 ; 11 pages  
<https://doi.org/10.1115/OMAE2024-121992> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Comparative study on numerical hydroelastic analysis of impact-induced loads**

Yan, Dongni; **Hosseinzadeh, Saeed**; Lakshmyanarayanan, Puramharikrishnan; Mikkola, Tommi; Hirdaris, Spyros 23rd Numerical Towing Tank Symposium : 11th – 13th October 2021 Mülheim an der Ruhr, Germany 2021 / p. 150-155 : ill [https://www.uni-due.de/ISMT/ismt\\_nutts\\_2021.php](https://www.uni-due.de/ISMT/ismt_nutts_2021.php)

### **Comparison and evaluation of learning capabilities of deep learning methods for predicting ship motions**

Zhang, Mingyang; Liu, Con; **Kujala, Pentti Jouko Sakari**; Hirdaris, Spyros Proceedings of 15th International Marine Design Conference (IMDC-2024) 2024 / p. 1499-1510 <https://doi.org/10.59490/imdc.2024.838>

### **A Quasi-dynamic approach for the evaluation of structural response in ship collisions and groundings**

Kim, Sang-Jin; **Körgeaar, Mihkel**; Taimuri, Ghalib; Kujala, Pentti; Hirdaris, Spyros Proceedings of the Thirtieth (2020) International Ocean and Polar Engineering Conference Shanghai, China, October 11-16, 2020 2020 / p. 3174–3180 ["Quasi-dynamic approach" Conference proceeding at Scopus](#) [Article at Scopus](#)

### **A ship digital twin for safe and sustainable ship operations**

Hirdaris, Spyros; Zhang, M; Tsoulakos, Nikolaos; **Kujala, Pentti Jouko Sakari** State-of-the-Art Digital Twin Applications for Shipping Sector Decarbonization 2024 / p. 192–220 <https://doi.org/10.4018/978-1-6684-9848-4.ch009>

### **Slamming loads and responses on a non-prismatic stiffened aluminium wedge : Part II. Numerical simulations**

**Hosseinzadeh, Saeed; Tabri, Kristjan**; Topa, Ameen; Hirdaris, Spyros Ocean engineering 2023 / art. 114309, 20 p. : ill  
<https://doi.org/10.1016/j.oceaneng.2023.114309> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Slamming loads and responses on a non-prismatic stiffened aluminium wedge: Part I. Experimental study**

**Hosseinzadeh, Saeed; Tabri, Kristjan**; Hirdaris, Spyros; Sahk, Tarmo Ocean engineering 2023 / art. 114510, 19 p. : ill  
<https://doi.org/10.1016/j.oceaneng.2023.114510> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Systems driven intelligent decision support methods for ship collision and grounding prevention : Present status, possible solutions, and challenges**

Zhang, Mingyang; Taimuri, Ghalib; Zhang, Jinfen; Zhang, Di; Yan, Xinping; **Kujala, Pentti Jouko Sakari**; Hirdaris, Spyros Reliability engineering and system safety 2025 / art. 110489 <https://doi.org/10.1016/j.ress.2024.110489>

### **The influence of fluid structure interaction modelling on the dynamic response of ships subject to collision and grounding**

Kim, Sang Jin; **Körgeaar, Mihkel**; Ahmadi, Nima; Taimuri, Ghalib; Kujala, Pentti; Hirdaris, Spyros Marine structures 2021 / art. 102875, 17 p. : ill <https://doi.org/10.1016/j.marstruc.2020.102875> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)