

### **Adaptive industrial robots using machine vision**

**Kuts, Vladimir; Otto, Tauno; Tähemaa, Toivo; Bukhari, Khuldoon; Pataraia, Tengiz** ASME 2018 International Mechanical Engineering Congress and Exposition, Pittsburgh, Pennsylvania, USA, November 9–15, 2018 2018 / Paper No. IMECE2018-86720, pp. V002T02A093, 8 p. : ill <https://doi.org/10.1115/IMECE2018-86720>

### **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>

### **Application of Mindlin Theory to Describe the Scattering of Guided Waves From Notches in a Plate**

**Rasheed, Usman; Lints, Martin; Ratassepp, Madis** ASME 2022 49th Annual Review of Progress in Quantitative Nondestructive Evaluation (QNDE2022) 2022 <https://event.asme.org/Events/media/library/resources/qnde/QNDE-2022-Final-Program.pdf> <https://qnde.secure-platform.com/a/solicitations/178/sessiongallery/11537/application/98050>

### **Azimuthing propulsion in ice management**

Hänninen, Samuli; **Kujala, Pentti Jouko Sakari**; Määttänen, Pirjo; Heideman, Torsten; Korsström, Andrei; Viherlähto, Sampo; Koponen, Jorma Proceedings of the International Conference on Offshore Mechanics and Arctic Engineering - OMAE 2024 ; Vol. 6 2024 / art. OMAE2024-127102, V006T07A016 ; 10 pages <https://doi.org/10.1115/OMAE2024-127102>

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### **Collision consequence assessment of ROPAX vessels operating in the Baltic Sea**

**Tabri, Kristjan; Ehlers, Sören; Kõrgesaar, Mihkel; Stahlberg, Kaarle; Heinvee, Martin** Proceedings of the ASME 2012 31st International Conference on Ocean, Offshore and Arctic Engineering : OMAE2012 : July 1-6, 2012, Rio de Janeiro, Brazil 2012 / OMAE2012-83626, [9] p.: ill <https://asmedigitalcollection.asme.org/OMAE/proceedings/OMAE2012/44892/375/268786>

### **Deposition of fine solid particles in laminar flat-plate boundary layers [Electronic resource]**

**Hussainov, Medhat; Kartušinski, Aleksander; Michaelides, Efstatios; Rudi, Ülo; Štseglov, Igor; Tisler, Sergei** Proceedings of FEDSM2007 : 5th joint ASME/JSME Fluids Engineering Conference, San Diego, California, USA, July 30 - August 2, 2007 2007 / [7] p. [CD-ROM] <https://asmedigitalcollection.asme.org/FEDSM/proceedings-abstract/FEDSM2007/42886/911/327596?redirectedFrom=PDF>

### **Developing of an engineering scientific innovative lab and teaching methodology for smart manufacturing in the hi-engineering school**

**Kekšin, Vjačeslav; Sarkans, Martins; Kuts, Vladimir** ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE) ; vol. 2 2024 / IMECE2024-143105, V002T03A073 ; 8 pages <https://doi.org/10.1115/IMECE2024-143105>

### **Digital Twin : concept of hybrid programming for industrial robots - use case**

**Kuts, Vladimir; Sarkans, Martins; Otto, Tauno; Tähemaa, Toivo; Bondarenko, Yevhen** ASME 2019 International Mechanical Engineering Congress and Exposition : conference proceedings 2019 / Paper No: IMECE2019-10583, V02BT02A005; 8 pages <https://doi.org/10.1115/IMECE2019-10583>

### **Digital Twin : universal user interface for online management of the manufacturing system**

**Kuts, Vladimir; Bondarenko, Yevhen; Gavriljuk, Marietta; Partyshev, Andriy; Jegorov, Sergei; Pizzagalli, Simone Luca; Otto, Tauno** Proceedings of the ASME 2021 International Mechanical Engineering Congress and Exposition 2021 / paper no: IMECE2021-69092, 7 p <https://doi.org/10.1115/IMECE2021-69092>

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**Bondarenko, Yevhen; Pizzagalli, Simone Luca; Kuts, Vladimir; Petlenkov, Eduard; Otto, Tauno** ASME 2023 International Mechanical Engineering Congress and Exposition (IMECE2023) : proceedings. Vol. 3 2024 / art. IMECE2023-113240, V003T03A081 <https://doi.org/10.1115/IMECE2023-113240>

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**Alsaleh, Saleh Ragheb Saleh; Tepljakov, Aleksei; Tamre, Mart; Kuts, Vladimir; Petlenkov, Eduard** Proceedings of ASME 2022 International Mechanical Engineering Congress and Exposition (IMECE2022), 2B: Columbus, Ohio, USA, October 30 - November 3, 2022 2022 / art. IMECE2022-95411, V02BT02A025, 8 p <https://doi.org/10.1115/IMECE2022-95411>

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## Intelligent decision making approach for performance evaluation of a robot-based manufacturing cell

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## ISSC 2025 Committee III.1 - Compressive test of a transversely stiffened thin-plated structure with expected early nonlinear response prior to the ultimate capacity: preliminary comparison of the numerical results

Gaiotti, M.; Barsotti, B.; Brubak, L.; Chen, B. Q.; Darie, I.; Georgiadis, D.; Ishibashi, K.; **Kõrgesaar, Mihkel**; Lv, Y.; Nahshon, K.; Paredes, M.; Ringsberg, J. Proceedings of the International Conference on Offshore Mechanics and Arctic Engineering - OMAE 2024 ; Vol. 2: Structures, Safety, and Reliability 2024 / art. OMAE2024-126382, V002T02A087 ; 8 p. <https://doi.org/10.1115/OMAE2024-126382>

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**Jegorov, Sergei; Rassölkin, Anton; Rjabtšikov, Viktor; Mohamed, Mahmoud Ibrahim Hassanin; Kuts, Vladimir** Proceedings of ASME 2022 International Mechanical Engineering Congress and Exposition (IMECE2022), 2B: Columbus, Ohio, USA, October 30 - November 3, 2022 2022 / art. IMECE2022-97243, V02BT02A011, 6 p. <https://doi.org/10.1115/IMECE2022-97243>

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### **Virtual simulations environment development for autonomous vehicles interaction**

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