

Differential pressure sensor speedometer for autonomous underwater vehicle velocity estimation

Meurer, Christian; Francisco Fuentes-Perez, Juan; Palomeras, Narcis; **Carreras, Marc; Kruusmaa, Maarja** IEEE Journal of Oceanic Engineering 2020 / p. 946 - 978 <https://doi.org/10.1109/JOE.2019.2907822> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Differential pressure sensors for underwater speedometry in variable velocity and acceleration conditions

Fuentes-Perez, Juan Francisco; Meurer, Christian; Tuhtan, Jeffrey Andrew; Kruusmaa, Maarja IEEE Journal of Oceanic Engineering 2018 / p. 418-426 : ill <https://doi.org/10.1109/JOE.2017.2767786> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Event-based control for differentially flat systems: application to autonomous underwater vehicle

Kaldmäe, Arvo; Kotta, Ülle; Meurer, Christian; Simha, Ashutosh IFAC-PapersOnLine 2019 / p. 180-185 <https://doi.org/10.1016/j.ifacol.2019.11.775> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Nonlinear orientation controller for a compliant robotic fish based on asymmetric actuation

Meurer, Christian; Simha, Ashutosh; Kotta, Ülle; Kruusmaa, Maarja 2019 International Conference on Robotics and Automation : ICRA 2019, Palais des Congres de Montreal, Canada, 20-24 May, 2019 2019 / Art. 8793892 ; p. 4688-4694 <https://doi.org/10.1109/ICRA.2019.8793892> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

State estimation and control for small low-cost autonomous underwater vehicles = Meetodid olekute hindamiseks ja juhtimiseks soodsa hinnaga autonoomsetele allveerobotitele

Meurer, Christian 2021 https://www.eester.ee/record=b5435482*est <https://digikogu.taltech.ee/et/Item/717111f2-51e3-4176-b0b8-b369064b26a2> <https://doi.org/10.23658/taltech.27/2021>

2D estimation of velocity relative to water and tidal currents based on differential pressure for autonomous underwater vehicles

Meurer, Christian; Fuentes-Perez, Juan Francisco; Schwarzwaldner, Kordula; Ludvigsen, Martin; Sorensen, Asgeir Johan; **Kruusmaa, Maarja** IEEE robotics and automation letters 2020 / p. 3444-3451 <https://doi.org/10.1109/LRA.2020.2976318> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)