

Against the flow : a Braitenberg controller for a fish robot

Salumäe, Taavi; Rano, Inaki; Akanyeti, Otari; Kruusmaa, Maarja 2012 IEEE International Conference on Robotics and Automation : ICRA : Saint Paul, Minnesota, USA, May 14-18, 2012 / p. 4210-4215 : ill <https://ieeexplore.ieee.org/document/6225023>

The ARROWS project : robotic technologies for underwater archaeology

Allotta, Benedetto; Costanzi, Riccardo; Ridolfi, Alessandro; Salvetti, Ovidio; Reggiannini, Marco; **Kruusmaa, Maarja; Salumäe, Taavi; Lane, David M. Mike; Frost, Gordon; Tsiogkas, Nikolaos; Cocco, Michele** IOP conference series : materials science and engineering 2018 / art. 012088 <https://doi.org/10.1088/1757-899X/364/1/012088> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

A bio-inspired compliant robotic fish : design and experiments

EL Daou, Hadi; Salumäe, Taavi; Toming, Gert; Kruusmaa, Maarja 2012 IEEE International Conference on Robotics and Automation : ICRA : Saint Paul, Minnesota, USA, May 14-18, 2012 / p. 5340-5345 : ill https://www.researchgate.net/publication/254041437_A_bio-inspired_compliant_robotic_fish_Design_and_experiments

A bio-mimetic design and control of a fish-like robot using compliant structures

EL Daou, Hadi; Salumäe, Taavi; Ristolainen, Asko; Toming, Gert; Listak, Madis; Kruusmaa, Maarja The 15th International Conference on Advanced Robotics : Tallinn, Estonia, June 20-23, 2011 / p. 563-568 : ill

Biomimetic mechanical design for soft-bodied underwater vehicles

Fiazza, C.; **Salumäe, Taavi; Listak, Madis; Kulikovskis, Guntis; Templeton, R.; Akanyeti, Otari; McGill, W.; Fiorini, Paolo; Kruusmaa, Maarja** IEEE OCEANS : Sydney, 24-27 May 2010 / [7] p.: ill

Depth control of the biomimetic U-CAT turtle-like AUV with experiments in real operating conditions

Chemori, Ahmed; **Kuusmik, Keijo; Salumäe, Taavi; Kruusmaa, Maarja** 2016 IEEE International Conference on Robotics and Automation : Stockholm, Sweden, May 16th-21st 2016 / p. 4750-4755 : ill <https://doi.org/10.1109/ICRA.2016.7487677> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Design principle of a biomimetic underwater robot U-CAT

Salumäe, Taavi; Raag, Rasmus; Rebane, Jaan; Ernits, Andres; Toming, Gert; Ratas, Mart; Kruusmaa, Maarja OCEANS'14 MTS/IEEE St. John's : St. Johns, Newfoundland, Canada, 14-19 September 2014 / [5] p. : ill

FILOSE for svenning : a flow sensing bioinspired robot

EL Daou, Hadi; Ježov, Jaas; Jung, David S.; Kruusmaa, Maarja; Listak, Madis; Salumäe, Taavi; Toming, Gert IEEE robotics and automation magazine 2014 / p. 51-62 : ill <https://doi.org/10.1109/MRA.2014.2322287> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A flexible fin with bio-inspired stiffness profile and geometry

Salumäe, Taavi; Kruusmaa, Maarja Journal of bionic engineering 2011 / p. 418-428 <https://www.sciencedirect.com/science/article/pii/S1672652911600474>

Flow aided path following of an underwater robot

Jung, David S.; Pott, Peter P.; Salumäe, Taavi; Kruusmaa, Maarja 2013 IEEE International Conference on Robotics and Automation (ICRA) : Karlsruhe, Germany, May 6-10, 2013 / p. 4602-4607 : ill <https://doi.org/10.1109/ICRA.2013.6631231> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Flow-relative control of an underwater robot

Salumäe, Taavi; Kruusmaa, Maarja Proceedings of the Royal Society. A, Mathematical, physical & engineering sciences 2013 / art. 20120671 <https://doi.org/10.1098/rspa.2012.0671> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Flow-sensitive robotic fish : from concept to experiments = Voolutundlik robotkala : ideest katsetusteni

Salumäe, Taavi 2015 https://www.ester.ee/record=b4446456*est

Fluid dynamics experiments with a passive robot in regular turbulence

Toming, Gert; Salumäe, Taavi; Ristolainen, Asko; Visentin, Francesco; Akanyeti, Otari; Kruusmaa, Maarja Proceedings of the 2012 IEEE International Conference on Robotics and Biomimetics : December 11-14, 2012, Guangzhou, China 2012 / p. 532-537 : ill https://www.researchgate.net/publication/261276529_Fluid_dynamics_experiments_with_a_passive_robot_in_regular_turbulence

Modelling of a biologically inspired robotic fish driven by compliant parts

EL Daou, Hadi; Salumäe, Taavi; Chambers, Lily D.; McGill, William M.; Kruusmaa, Maarja Bioinspiration & biomimetics 2014 / p. 1-11 : ill <https://doi.org/10.1088/1748-3182/9/1/016010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Motion control architecture of a 4-fin U-CAT AUV using DOF prioritization

Salumäe, Taavi; Chemori, Ahmed; Kruusmaa, Maarja IROS 2016 : 2016 IEEE/RSJ International Conference on Intelligent Robots

and Systems : October 9-14, 2016, Daejeon Convention Center, Daejeon, Korea 2016 / p. 1321-1327 : ill
<https://doi.org/10.1109/IROS.2016.7759218> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Motion control of a hovering biomimetic four-fin underwater robot

Salumäe, Taavi; Chemori, Ahmed; **Kruusmaa, Maarja** IEEE Journal of Oceanic Engineering 2019 / p. 54 - 71
<https://doi.org/10.1109/JOE.2017.2774318> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Myometry-driven compliant-body design for underwater propulsion

Akanyeti, Otar; **Listak, Madis**; **Ernits, Andres**; Fiazza, Maria-Camilla; **Toming, Gert**; Kulikovskis, Guntis; **Raag, Rasmus**; **Salumäe, Taavi**; Fiorini, Paolo; **Kruusmaa, Maarja** IEEE International Conference on Robotics and Automation : ICRA 2010 : Anchorage, Alaska, USA, 3-7 May 2010 2010 / p. 84-89 <https://ieeexplore.ieee.org/document/5509431>

Swimming speed control and on-board flow sensing of an artificial trout

Kruusmaa, Maarja; **Toming, Gert**; **Salumäe, Taavi**; **Ježov, Jaas**; **Ernits, Andres** 2011 IEEE International Conference on Robotics and Automation : ICRA : May 9-13, 2011, Shanghai, China 2011 / p. 1791-1796 : ill
https://www.researchgate.net/publication/224252443_Swimming_speed_control_and_on-board_flow_sensing_of_an_artificial_trout

The ARROWS project : adapting and developing robotics technologies for underwater archaeology

Allotta, Benedetto; Costanzi, Riccardo; **Kruusmaa, Maarja**; **Salumäe, Taavi** IFAC-PapersOnLine 2015 / p. 194-199 : ill
<https://doi.org/10.1016/j.ifacol.2015.06.032> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

U-CAT for underwater archaeology : turtle-inspired robot operates in tethered and autonomous modes

Kruusmaa, Maarja; **Salumäe, Taavi** Sea technology 2016 / p. 37-40 : ill [https://www.proquest.com/docview/1784047942?](https://www.proquest.com/docview/1784047942?sourcetype=Trade%20Journals)
[sourcetype=Trade%20Journals](#) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Underwater confined space mapping by resource-constrained autonomous vehicle

Preston, Victoria; **Salumäe, Taavi**; **Kruusmaa, Maarja** Journal of field robotics 2018 / p. 1122-1148 : ill
<https://doi.org/10.1002/rob.21806> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)