Correction to: Preliminary design of the control needed to achieve underwater vehicle trajectories

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In the original Online publication the references were not in alphabetical order. The correct arrangement of references in alphabetical order is provided in this correction.

References

1. ABS Guide for Vessel Maneuverability, American Bureau of Shipping ABS Plaza 16855 Northchase Drive Houston, TX 77060 USA, March 2006 (Updated February 2017).
2. Antonelli G (2007) On the use of adaptive/integral actions for six-degrees-of-freedom control of autonomous underwater vehicles. *IEEE J Oceanic Eng* 32(2):300–312
3. Bechlioulis CP, Karras GC, Heshmati-Alamdari S, Kyriakopoulos KJ (2017) Trajectory tracking with prescribed performance for underactuated underwater vehicles under model uncertainties and external disturbances. *IEEE Trans Control Syst Technol* 25(2):429–440
4. Chen Y, Zhang R, Zhao X, Gao J (2016) Tracking control of underwater vehicle subject to uncertainties using fuzzy inverse desired trajectory compensation technique. *J Mar Sci Technol* 21:624–650
5. Chin CS, Lum SH (2011) Rapid modeling and control systems prototyping of a marine robotic vehicle with model uncertainties using xPC Target system. *Ocean Eng* 38:2128–2141
6. Do KD, Pan J (2009) Control of ships and underwater vehicles. Springer, London
7. Donaire A, Romero JG, Perez T (2017) Trajectory tracking passivity-based control for marine vehicles subject to disturbances. *J Franklin Inst* 354:2167–2182
8. Evans J, Nahon M (2004) Dynamics modeling and performance evaluation of an autonomous underwater vehicle. *Ocean Eng* 31:1835–1858
9. Fischer N, Hughes D, Walters P, Schwartz EM, Dixon WE (2014) Nonlinear RISE-based control of an autonomous underwater vehicle. *IEEE Trans Rob* 30(4):845–852
10. Fossen TI (1994) Guidance and control of ocean vehicles. Wiley, Chichester
11. Gao J, An X, Proctor A, Bradley C (2017) Sliding mode adaptive neural network control for hybrid visual servoing of underwater vehicles. *Ocean Eng* 142:666–675
12. Garcia-Valdovinos LG, Salgado-Jimenez T, Bandala-Sanchez M, Nava-Balanzar L, Hernandez-Alvarado R, Cruz-Ledesma JA (2014) Modelling, design and robust control of a remotely operated underwater vehicle. *Int J Adv Rob Syst* 11(1):1–16
13. Hassanein O, Anavatti SG, Shim H, Ray R (2016) Model-based adaptive control system for autonomous underwater vehicles. *Ocean Eng* 127:58–69
14. Herman P (2009) Decoupled PD set-point controller for underwater vehicles. *Ocean Eng* 36:529–534
15. Herman P (2010) Modified set-point controller for underwater vehicles. *Math Comput Simul* 80:2317–2328
16. Joe H, Kim M, Yu SCH (2014) Second-order sliding-mode controller for autonomous underwater vehicle in the presence of unknown disturbances. *Nonlinear Dyn* 78:183–196
17. Li S, Wang X, Zhang L (2015) Finite-time output feedback tracking control for autonomous underwater vehicles. *IEEE J Oceanic Eng* 40(3):727–751
18. Liu S, Wang D, Poh E (2008) Non-linear output feedback tracking control for AUVs in shallow wave disturbance condition. *Int J Control* 81(11):1806–1823
19. Martin SC, Whitcomb LL (2018) Nonlinear model-based tracking control of underwater vehicles with three degree-of-freedom fully coupled dynamical plant models: theory and experimental evaluation. *IEEE Trans Control Syst Technol* 26(2):404–414
20. Miskovic N, Vukic Z, Bibuli M, Bruzzone G, Caccia M (2011) Fast in-field identification of unmanned marine vehicles. *J Field Robotics* 28(1):101–120
21. Munoz-Vazquez A-J, Ramirez-Rodriguez H, Parra-Vega V, Sanchez-Orta A (2017) Fractional sliding mode control of underwater ROVs subject to non-differentiable disturbances. *Int J Control Autom Syst* 15(3):1314–1321
22. Qiao L, Zhang W (2016) Double-loop chattering-free adaptive integral sliding mode control for under water vehicles. In: *Proceedings MTS/IEEE OCEANS Conference Shanghai, China, 10–13 April 2016*, pp1–6
23. Qiao L, Zhang W (2019) Double-loop integral terminal sliding mode tracking control for UUVs with adaptive dynamic

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- compensation of uncertainties and disturbances. *IEEE J Oceanic Eng* 44(1):29–53
24. Slotine J-J, Li W (1991) *Applied nonlinear control*. Prentice Hall, New Jersey
 25. Soylu S, Buckham BJ, Podhorodeski RP (2008) A chattering-free sliding-mode controller for underwater vehicles with fault-tolerant infinity-norm thrust allocation. *Ocean Eng* 35:1647–1659
 26. Soylu S, Proctor AA, Podhorodeski RP, Bradley C, Buckham BJ (2016) Precise trajectory control for an inspection class ROV. *Ocean Eng* 111:508–523
 27. Su Y, Zhao J, Cao J, Zhang G (2013) Dynamics modeling and simulation of autonomous underwater vehicles with appendages. *J Mar Sci Appl* 12:45–51
 28. Sun B, Zhu D, Ding F, Yang SX (2013) A novel tracking control approach for unmanned underwater vehicles based on bio-inspired neurodynamics. *J Mar Sci Technol* 18:63–74
 29. Wang Ch, Zhang F, Schaefer D (2015) Dynamic modeling of an autonomous underwater vehicle. *J Mar Sci Technol* 20:199–212
 30. Yan Z, Wang M, Xu J (2019) Robust adaptive sliding mode control of underactuated autonomous underwater vehicles with uncertain dynamics. *Ocean Eng* 173:802–809

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