

- Elmessery W.M., Abdallah S.E., Oraith A.A.T., Espinosa V., Abuhussein M.F.A., Szűcs P., Eid M.H., El-Shinawy D.M., Aljumayi H., Mahmoud S.F., and Elwakeel A.E., 2025, A deep deterministic policy gradient approach for optimizing feeding rates and water quality management in recirculating aquaculture systems, *Aquaculture International*, 33(4): 253.
<https://doi.org/10.1007/s10499-025-01914-z>
- Flores-Iwasaki M., Guadalupe G.A., Pachas-Caycho M., Chapa-Gonza S., Mori-Zabarburú R.C., and Guerrero-Abad J., 2025, Internet of Things (IoT) sensors for water quality monitoring in aquaculture systems: A systematic review and bibliometric analysis, *AgriEngineering*, 7(3): 78.
<https://doi.org/10.3390/agriengineering7030078>
- Grandez-Yopla D.E., Pachas-Caycho M., Cristobal J., Chapa-Gonza S., Mori-Zabarburú R.C., and Guadalupe G.A., 2025, Recirculating aquaculture systems (RAS) for cultivating *Oncorhynchus mykiss* and the potential for IoT integration: A systematic review and bibliometric analysis, *Sustainability*, 17(15): 6729.
<https://doi.org/10.3390/su17156729>
- Gupta S., Makridis P., Henry I., Velle-George M., Ribicic D., Bhatnagar A., Skalska-Tuomi K., Daneshvar E., Ciani E., Persson D., and Netzer R., 2024, Recent developments in recirculating aquaculture systems: A review, *Aquaculture Research*, 2024(1): 6096671.
<https://doi.org/10.1155/are/6096671>
- Holan A.B., Good C., and Powell M., 2020, Health management in recirculating aquaculture systems (RAS), In *Aquaculture Health Management: Fish Health and Veterinary Medicine*, 2020: 281-318.
<https://doi.org/10.1016/B978-0-12-813359-0.00009-9>
- Huang Y.P. and Khabusi S.P., 2025, Artificial intelligence of things (AIoT) advances in aquaculture: A review, *Processes*, 13(1): 73.
<https://doi.org/10.3390/pr13010073>
- Islam S.I., Ahammad F., and Mohammed H.H., 2024, Cutting-edge technologies for detecting and controlling fish diseases: Current status, outlook, and challenges, *Journal of the World Aquaculture Society*, 55(2): e13051.
<https://doi.org/10.1111/jwas.13051>
- Jongjaraunsuk R., Taparhudee W., and Suwannasing P., 2024, Comparison of water quality prediction for red tilapia aquaculture in an outdoor recirculation system using deep learning and a hybrid model, *Water*, 16(6): 907.
<https://doi.org/10.3390/w16060907>
- Kamali S., Ward V., and Ricardez-Sandoval L., 2022, Dynamic modeling of recirculating aquaculture systems: Effect of management strategies and water quality parameters on fish performance, *Aquacultural Engineering*, 99: 102294.
<https://doi.org/10.1016/j.aquaeng.2022.102294>
- Kari A.Z., 2025, Nutritional immunomodulation in aquaculture: Functional nutrients, stress resilience, and sustainable health strategies, *Aquaculture International*, 33(6): 441.
<https://doi.org/10.1007/s10499-025-02122-5>
- Li D., Zou M., and Jiang L., 2022, Dissolved oxygen control strategies for water treatment: A review, *Water Science and Technology*, 86(6): 1444-1466.
<https://doi.org/10.2166/wst.2022.281>
- Libao F.J.D., Villaverde O.S.M., De Luna N.A.P.U., Comedia V.J.G., Luna M.O., Atienza A.M.C., and Espeña G.D., 2024, Automated control and IoT-based water quality monitoring system for a *Molobicus tilapia* recirculating aquaculture system (RAS), 2024 IEEE Conference on Technologies for Sustainability (SusTech), 2024: 410-415.
<https://doi.org/10.1109/SusTech60925.2024.10553538>
- Lindholm-Lehto P., Pulkkinen J., Kiuru T., Koskela J., and Vielma J., 2020, Water quality in recirculating aquaculture system using woodchip denitrification and slow sand filtration, *Environmental Science and Pollution Research*, 27(14): 17314-17328.
<https://doi.org/10.1007/s11356-020-08196-3>
- Malandrakis E., 2025, Design and implementation of a cost-effective IoT-based monitoring and alerting system for recirculating aquaculture systems (RAS), *Sensors*, 25(21): 6692.
<https://doi.org/10.3390/s25216692>
- Matkarimov I., Hwsein R.R., Matyakubov M., Bhaskaran B., Eshbekova D., and Vij P., 2025, Intelligent IoT-enabled data analytics and monitoring framework for smart freshwater recirculating aquaculture systems, *International Journal of Aquatic Research and Environmental Studies*, 2025: 22-29.
<https://doi.org/10.70102/ijares/v5s1/5-s1-03>
- Mota V., Striberny A., Verstege G.C., Difford G., and Lazado C., 2022, Evaluation of a recirculating aquaculture system research facility designed to address current knowledge needs in Atlantic salmon production, *Frontiers in Animal Science*, 3: 876504.
<https://doi.org/10.3389/fanim.2022.876504>
- Ng T.H., Sobana M., Chew X.Z., Madhavan T.N.D., Chow J.W., Low A., Seedorf H., and Gomes B.G., 2024, Dissecting the heat stress altering immune responses and skin microbiota in fish in a recirculating aquaculture system in Singapore, *bioRxiv*, 2024: 2024.01.02.573918.
<https://doi.org/10.1101/2024.01.02.573918>
- Pepe-Victoriano R., Pepe-Vargas P., Pérez-Aravena A., Aravena-Ambrosetti H., Huanacuni J.I., Méndez-Abarca F., Olivares-Cantillano G., Acosta-Angulo O., and Espinoza-Ramos L., 2025, Evaluation of water quality in the production of rainbow trout (*Oncorhynchus mykiss*) in a recirculating aquaculture system (RAS) in the Precordilleran Region of Northern Chile, *Water*, 17(11): 1685.
<https://doi.org/10.3390/w17111685>