

Special Issue

Oxidative Stress in Aquaculture Organisms: Impact of Environmental Stressors and Nutritional Factors

Message from the Guest Editors

Intensive aquaculture production presents numerous challenges and stress factors such as temperature fluctuations, hypoxia/reoxygenation, toxins, and infectious diseases. These factors generate reactive oxygen species that cause oxidative stress, adversely affecting organism survival, growth, and product shelf life (e.g., lipid peroxidation of fillets). Many bioactive compounds can induce antioxidant effects, provide chemoprotection against various stress factors, and modulate metabolic responses. This opens significant opportunities for developing nutritional strategies that urgently need further exploration. This Special Issue aims to promote the understanding and use of supplementation strategies for bioactive compounds with antioxidant properties, offering broad protection against stress factors and improving the zootechnical responses of cultured organisms. Manuscripts that address molecular, biochemical, physiological, and zootechnical variables from a multidisciplinary perspective are welcome. Additionally, those employing nanotechnology to create antioxidant supplements or develop drugs against various diseases are highly encouraged.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Animals is an on-line open access journal that was first published in 2011. *Animals* adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. *Animals* is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 2.7 (2024, ranks 15/86 (Q1) in 'Agriculture, Dairy & Animal Science'; 21/170 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.2.

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