

Engineering

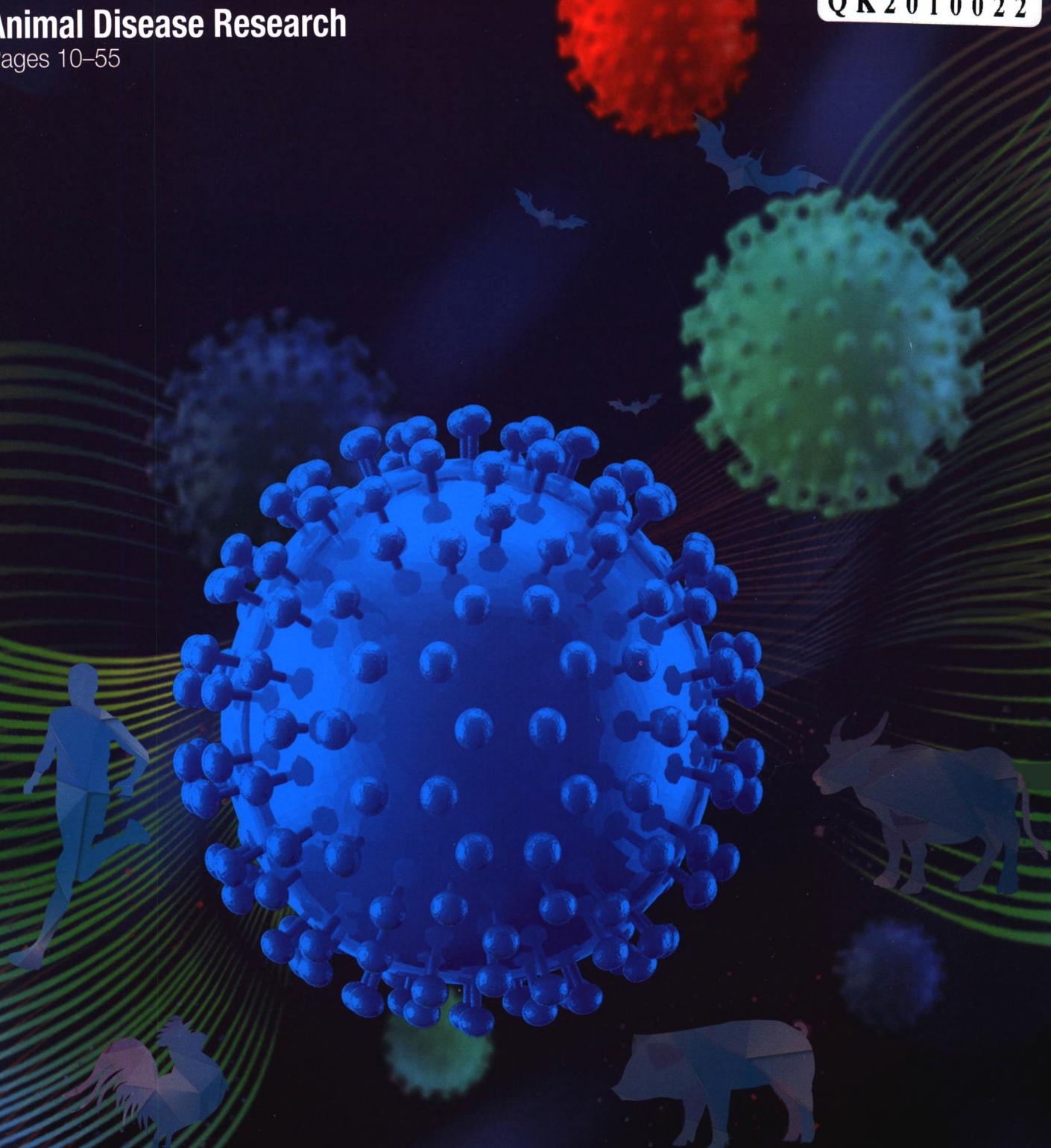
January 2020

Animal Disease Research

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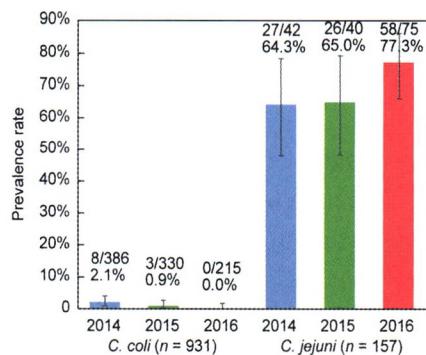
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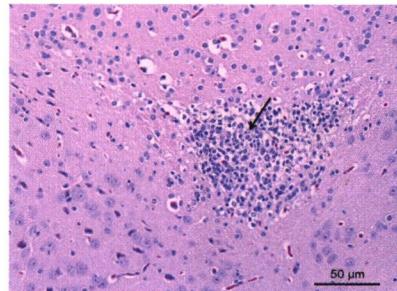
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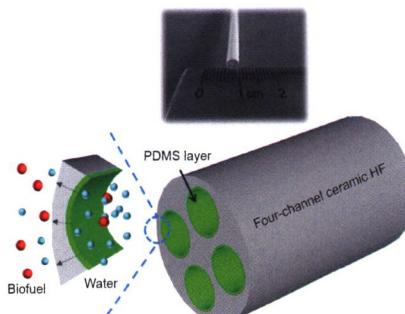
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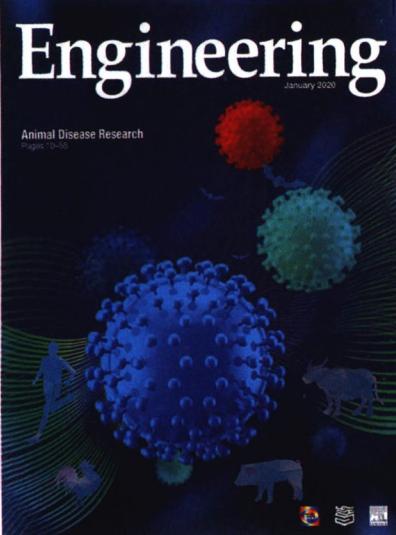
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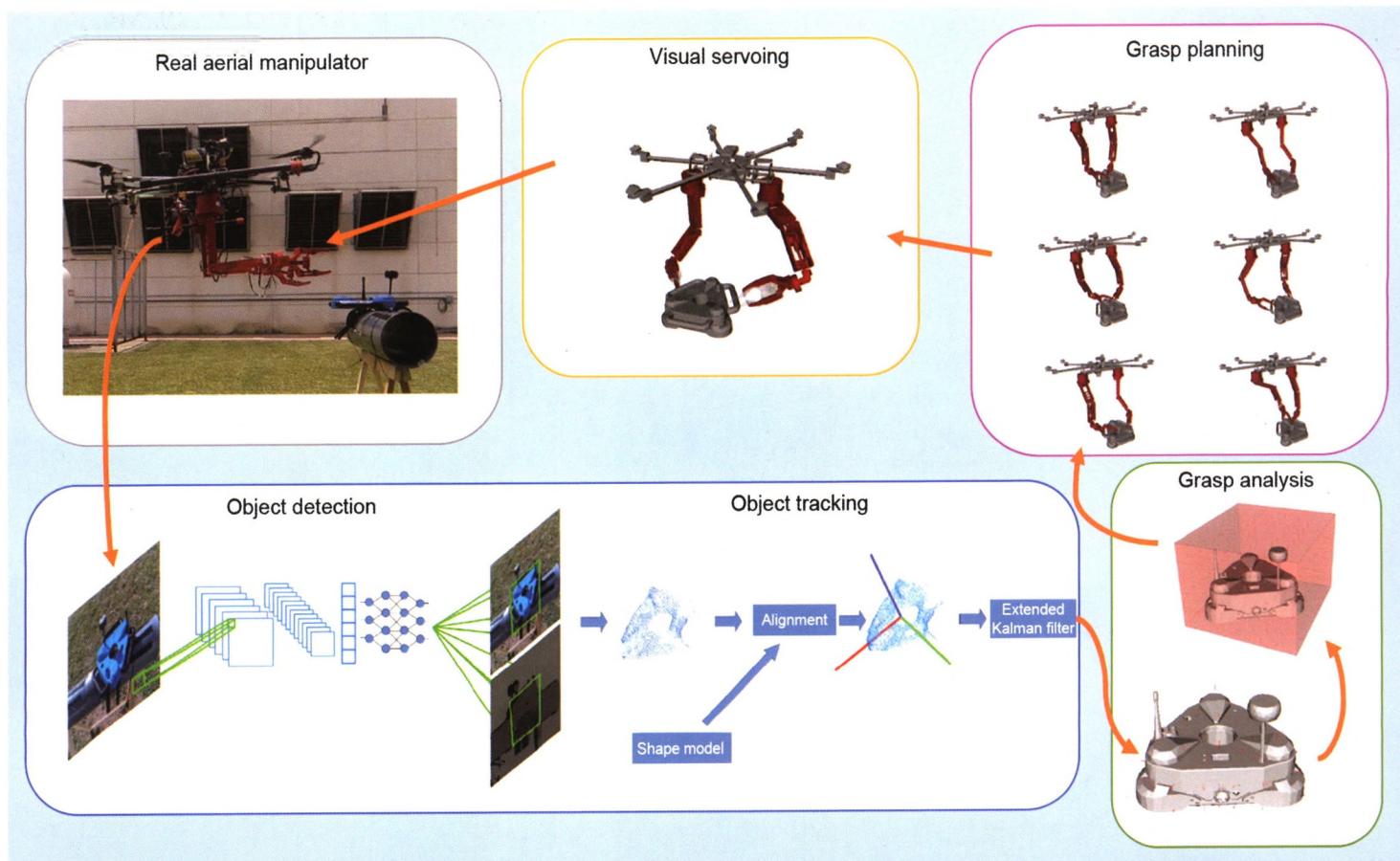


ON THE COVER

As demonstrated by the recent outbreaks of African swine fever in pigs and the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in humans, pathogens originating from animals not only affect animal health and productivity and the safety of animal products, but also present great threats to human health. Since we live within the same ecosystems, human welfare is tightly interconnected with that of other animals. Therefore, from this perspective, research to fully characterize the epidemiology, transmission, and pathogenesis of animal and zoonotic diseases is extremely significant. Innovations in effective prevention and treatment strategies are equally important and urgent, as are novel public health practices and biosafety measures against such diseases.

Engineering Science and Technology

Create a Better Future



Aerial manipulators are revolutionizing the world of inspection and maintenance. This image presents a robot with two arms to grasp and manipulate in the air using computer vision. The presented approach detects the target object to be manipulated and keeps track of it, then using the geometry of the object, it computes the best feasible manner to grasp it and guide the manipulators to do it while flying.

Engineering is intended to provide a high-level platform where academic achievements of great importance in engineering science and technology can be disseminated and shared.