

3 examples of visionary innovation

Contact lenses for color blindness

Researchers at Tel Aviv University have developed a contact lens to reduce color blindness. The researchers applied metasurfaces to contact lenses, enabling them to manipulate light and improve color perception. The researchers created a technique to apply metasurfaces to curved surfaces, and envision that this technology could correct other varieties of color blindness and even other types of vision disorders.¹

3D artificial eyes

A research team led by researchers at the Hong Kong University of Science and Technology have developed the world's first 3D artificial eye. The eye replicates the structure of the human eye, and has a retina built from nanowire light sensors connected to liquid metal nerve fibers. In the future, the retina could be directly connected to the nerves of visually-impaired patients.²

Molecular age detection

Researchers at Boston University School of Medicine have found that a specialized eye scanner can be used to accurately assess the biological age of humans. The scanner measures spectroscopic signals from proteins in the eye lens to determine aging at the molecular level. Researchers envision that this technology could revolutionize precision medical care by measuring and tracking biological aging in individuals.³

