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**High Fidelity Additive Manufacturing of Optically Transparent Glass Structures**

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Glass has been an integral part of human civilization with expressions across scales and disciplines: from the microscope to the telescope, from fiber optics to mobile interface, and from the petri dish to a building envelope. Such a diverse range of applications is enabled by the inherent material properties including mechanical strength, optical transparency and chemical inertness. Additive manufacturing provides opportunities for integrating the unique properties of glass to engineer novel structures that are functionary graded through precise spatiotemporal deposition of molten glass. This talk presents the Mediated Matter Group's latest development of a novel additive manufacturing platform, and related processes, for 3D Printing optically transparent glass for architectural scale applications.