Advanced Structure & Process
for sustainable and resilient civil infrastructure
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Multifunctional Smart Sensors
- Fe-C film
- Silver film
- Novel fiber optic sensors

Innovative Structures & Optimization
- Assembly
- Disassembly
- Reconfigure
- Lego-inspired structures via robotic construction

Smart Structural Materials
- High-toughness concrete
- Self-healing of cracks

Monitoring and control for structures

For monitoring and control, novel fiber optic sensors can be used. These sensors can detect various parameters such as strain, stress, and temperature. The sensors are embedded in the structure, providing real-time monitoring data. This data can be used to control the structure's behavior and ensure its sustainability and resilience.