

Advancement in Bridge Infrastructure

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Abstract: Bridge construction is one of the cores of traffic infrastructure construction. To better develop relevant bridge science, this paper introduces the main research progress in China and abroad in 2020 from 16 aspects. The content consists of four major categories in 16 aspects. The first part is about the bridge structure, including concrete bridge and high-performance materials, steel bridges, composite girders. The second part is about the bridge disaster prevention and mitigation, including bridge seismic resistance, wind resistance of bridge, train-bridge coupling vibration research, bridge hydrodynamics, the durability of the concrete bridges, fatigue of steel bridge, temperature field and temperature effect of bridge; The third part is about the bridge analyses, including numerical simulation of bridge structure, box girder and cable-stayed bridge analysis theories. The last part is concerning the bridge emerging technologies, including bridge informatization and intelligent bridge, the technology in bridge structure test, bridge assessment and reinforcement, prefabricated concrete bridge structure.

Keywords: Bridge construction.