B.F. Spencer, Jr.
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Brief Bio: Billie F. Spencer, Jr. received his Ph.D. in theoretical and applied mechanics from the University of Illinois at Urbana-Champaign in 1985. He worked on the faculty at the University of Notre Dame for 17 years before returning to the University of Illinois at Urbana-Champaign, where he currently holds the Nathan M. and Anne M. Newmark Endowed Chair in Civil Engineering and is the Director of the Newmark Structural Engineering Laboratory. His research has been primarily in the areas of smart structures, stochastic fatigue, stochastic mechanics, and natural hazard mitigation. He has directed more than $50M in funded research and published more than 500 technical papers/reports, including two books. He was the first to study and design magnetorheological (MR) fluid dampers for protection of structures against earthquakes and strong winds. He is the Director of the Multi-axial Full-scale Substructure Testing and Simulation (MUST-SIM) facility at Illinois. His most recent research on structural health monitoring systems and smart wireless sensors integrates advanced computing tools with smart sensors, to provide a functional platform with self-interrogation capabilities. He led the Jindo Bridge monitoring project in South Korea, which constitutes the world's largest deployment of wireless smart sensors to monitor civil infrastructure to date. He is a recipient of the ASCE Norman Medal and the ASCE Housner Medal. He is a Fellow of ASCE, a Foreign Member of the Polish Academy of Sciences, the North American Editor in Chief of Smart Structures and Systems, and the past president of the Asia-Pacific Network of Centers for Research in Smart Structures Technology.