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Sommario/riassunto	<p>The thirty-plus years of progress in the field of structural health monitoring (SHM) have left a paramount impact on our everyday lives. Be it for the monitoring of fixed- and rotary-wing aircrafts, for the preservation of the cultural and architectural heritage, or for the predictive maintenance of long-span bridges or wind farms, SHM has shaped the framework of many engineering fields. Given the current state of quantitative and principled methodologies, it is nowadays possible to rapidly and consistently evaluate the structural safety of industrial machines, modern concrete buildings, historical masonry complexes, etc., to test their capability and to serve their intended purpose. However, old unsolved problematics as well as new challenges exist. Furthermore, unprecedented conditions, such as stricter safety requirements and ageing civil infrastructure, pose new challenges for confrontation. Therefore, this Special Issue gathers the main contributions of academics and practitioners in civil, aerospace, and mechanical engineering to provide a common ground for structural health monitoring in dealing with old and new aspects of this ever-growing research field.</p>