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Impulse-Based Manufacturing Technologies

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Message from the Guest Editor

In impulse-based manufacturing technologies, the energy required for forming, joining, or cutting components acts on the workpiece in a very short time and suddenly accelerates workpiece areas to very high velocities. The correspondingly high strain rates and inertia effects affect the behavior of many materials, resulting in technological benefits such as improved formability, reduced localizing and springback, extended possibilities to produce highquality multi-material joints, and burr-free cutting. This Special Issue of JMMP will present current research findings which focus on exploiting the full potential of these processes by providing deep understanding of the technology and the material behavior and detailed knowledge about sophisticated process and equipment design. The range of considered processes covers electromagnetic forming, electrohydraulic forming, explosive forming, adiabatic cutting, forming by vaporizing foil actuators, and other impulse-based manufacturing technologies.

For further information about the special issue, please visit mdpi.com/si/50604.









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Message from the Editor-in-Chief

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