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Sommario/riassunto

Welding technology has been taken for granted as a mature and established technology for too long. However, many new welding technologies have been included among the alternatives to joining materials. They come both from the areas of fusion and solid-state welding. Moreover, a recent approach has offered one more alternative. This is hybrid welding, which couples two or more welding sources in a cooperative or synergic welding mode. Welding engineers and scientists have the task to understand which is the best technology for a specific application. This task requires deep knowledge and great intelligence to tackle the challenge of producing light and smart structures and products. In this book, a glimpse of recent developments in metal alloy welding is presented. Laser, friction, and arc welding are the main protagonists of the papers that are included. Processes,

materials, and tools are described and studied along with investigation procedures and numerical simulations. This book will make you aware of most of the subjects discussed in the scientific community and new potentialities of welding as a leading technology in manufacturing. I hope you enjoy reading this Special Issue, "Advances in Welding Metal Alloys, Dissimilar Metals and Additively Manufactured Parts".
