

1. Record Nr.	UNINA9910683390303321
Titolo	Development of Laser Welding and Surface Treatment of Metals // Aleksander Lisiecki, editor
Pubbl/distr/stampa	Basel : , : MDPI - Multidisciplinary Digital Publishing Institute, , 2023
ISBN	3-0365-6700-3
Descrizione fisica	1 online resource (420 pages)
Disciplina	671.52
Soggetti	Laser welding Epidemiology Diseases - Reporting
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Constant striving to reduce pollutant emissions, greenhouse gases and energy consumption, i.e., sustainable development, forces the development of new and improved materials, technologies and manufacturing processes. One of the areas of sustainable development of the global economy is also the development of laser devices and the spreading of laser technology applications. The book deals with important issues related to the development of science and technology in the field of application the laser beam for joining, surface treatment, coatings. However, the thematic scope is not limited only to mentioned issues. The scope of the book covers issues related to advances in computational modelling of heat sources in laser and arc processes, unique techniques of underwater welding or unique techniques of forced cooling the weld metal under solidification during arc welding or hybrid process of laser deposition under cryogenic conditions, microstructural and mechanical characterisation of coatings and joints produced by different welding technologies. The above book contains valuable information, both theoretical and practical research results in the field of advanced technologies of joining, surface treatment and coatings, quality control and assessment, as well as management of the technological processes. Therefore, I deeply believe that the book will</p>

be a valuable and helpful for young scientists, engineers, and students in the field of welding and surface engineering, materials science, and manufacturing engineering.
