1. Record Nr. UNINA9910765869403321

Titolo	Advances in Welding Metal Alloys, Dissimilar Metals and Additively Manufactured Parts / / edited by Giuseppe Casalino
Pubbl/distr/stampa	Basel : , : MDPI, , 2018 ©2018
ISBN	3-03897-373-4
Descrizione fisica	1 online resource (ix, 222 pages) : illustrations
Disciplina	671.5023
Soggetti	Welding Welding - Vocational guidance
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	About the Special Issue Editor vii -- Preface to "Advances in Welding Metal Alloys, Dissimilar Metals and Additively Manufactured Parts" ix -- Giuseppe Casalino Advances in Welding Metal Alloys, Dissimilar Metals and Additively Manufactured Parts Reprinted from: Metals 2017, 7, 32, doi:10.3390/met7020032 1 -- Jeong Yeol Park, Jae Myung Lee and Myung Hyun Kim An Investigation of the Mechanical Properties of a Weldment of 7% Nickel Alloy Steels Reprinted from: Metals 2016, 6, 285, doi:10.3390/met6110285 . 6 -- Francisco-Javier C´arcel-Carrasco, Miguel-Angel P ´erez-Puig, Manuel Pascual-Guillam ´on and Rafael Pascual-Mart´nez An Analysis of the Weldability of Ductile Cast Iron Using Inconel 625 for the Root Weld and Electrodes Coated in 97.6% Nickel for the Filler Welds Reprinted from: Metals 2016, 6, 283, doi:10.3390/met6110283 . 16 -- Ameth Fall, Mostafa Hashemi Fesharaki, Ali Reza Khodabandeh and Mohammad Jahazi Tool Wear Characteristics and Effect on Microstructure in Ti-6Al-4V Friction Stir Welded Joints Reprinted from: Metals 2016, 6, 275, doi:10.3390 /met6110275 . 30 -- Pasquale Russo Spena, Manuela De Maddis, Gianluca D'Antonio and Franco Lombardi Weldability and Monitoring of Resistance Spot Welding of Q&P and TRIP Steels Reprinted from: Metals 2016, 6, 270, doi:10.3390/met6110270 . 42 -- Tingfeng Song, Xiaosong Jiang, Zhenyi Shao, Defeng Mo, Degui Zhu and Minhao Zhu The Interfacial Microstructure and Mechanical Properties of Diffusion-

Bonded Joints of 316L Stainless Steel and the 4J29 Kovar Alloy Using Nickel as an Interlayer Reprinted from: Metals 2016, 6, 263, doi: 10.3390/met6110263 . 57 -- Kapil Gangwar, M. Ramulu, Andrew Cantrell and Daniel G. Sanders Microstructure and Mechanical Properties of Friction Stir Welded Dissimilar Titanium Alloys: TIMET-54M and ATI-425 Reprinted from: Metals 2016, 6, 252, doi:10.3390 /met6100252 . 69 -- Yufeng Sun, Nobuhiro Tsuji and Hidetoshi Fujii Microstructure and Mechanical Properties of Dissimilar Friction Stir Welding between Ultrafine Grained 1050 and 6061-T6 Aluminum Alloys Reprinted from: Metals 2016, 6, 249, doi:10.3390/met6100249 . 83 -- Celalettin Yuce, Mumin Tutar, Fatih Karpat and Nurettin Yavuz The Optimization of Process Parameters and Microstructural Characterization of Fiber Laser Welded Dissimilar HSLA and MART Steel Joints Reprinted from: Metals 2016, 6, 245, doi:10.3390/met6100245 . 95 -- Hui-Jun Yi, Yong-Jun Lee and Kwang-O Lee TIG Dressing Effects on Weld Pores and Pore Cracking of Titanium Weldments Reprinted from: Metals 2016, 6, 243, doi:10.3390/met6100243 . 112 -- Hafiz Waqar Ahmad, Jeong Ho Hwang, Ju Hwa Lee and Dong Ho Bae An Assessment of the Mechanical Properties and Microstructural Analysis of Dissimilar Material Welded Joint between Alloy 617 and 12Cr Steel Reprinted from: Metals 2016, 6, 242, doi:10.3390/met6100242 . 124 -- Dongsheng Chai, Dongdong Wu, Guangyi Ma, Siyu Zhou, Zhuji Jin and Dongjiang Wu The Effects of Pulse Parameters on Weld Geometry and Microstructure of a Pulsed Laser Welding Ni-Base Alloy Thin Sheet with Filler Wire Reprinted from: Metals 2016, 6, 237, doi:10.3390 /met6100237 . 135 -- Baohua Chang, Dong Du, Chenhui Yi, Bin Xing and Yihong Li Influences of Laser Spot Welding on Magnetic Property of a Sintered NdFeB Magnet Reprinted from: Metals 2016, 6, 202, doi: 10.3390/met6090202 . 149 -- Rocku Oh, Duck Young Kim and Darek Ceglarek The Effects of Laser Welding Direction on Joint Quality for Non-Uniform Part-to-Part Gaps Reprinted from: Metals 2016, 6, 184, doi:10.3390/met6080184 . 158 -- Minjung Kang, Youngnam Ahn and Cheolhee Kim Gas Metal Arc Welding Using Novel CaO-Added Mg Alloy Filler Wire Reprinted from: Metals 2016, 6, 155, doi:10.3390 /met6070155 . 173 -- Yunxia Chen, Xulei Wu, Xiaojing Wang and Hai Huang Effects of Reflow Time on the Interfacial Microstructure and Shear Behavior of the SAC/FeNi-Cu Joint Reprinted from: Metals 2016, 6, 109, doi:10.3390/met6050109 . 181 -- Yingping Ji, Sujun Wu and Dalong Zhao Microstructure and Mechanical Properties of Friction Welding Joints with Dissimilar Titanium Alloys Reprinted from: Metals 2016, 6, 108, doi:10.3390/met6050108 . 188 -- Rando Tungga Dewa, Seon Jin Kim, Woo Gon Kim and Eung Seon Kim Low Cycle Fatigue Behaviors of Alloy 617 (INCONEL 617) Weldments for High Temperature Applications Reprinted from: Metals 2016, 6, 100, doi:10.3390 /met6050100 . 199.

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".

2. Record Nr. UNINA9910786500803321

Autore	Rosenbloom Paul S
Titolo	On computing : the fourth great scientific domain / / Paul S. Rosenbloom
Pubbl/distr/stampa	Cambridge, Mass., : MIT Press, ©2013
ISBN	0-262-30436-8 1-283-74157-1 0-262-30528-3
Descrizione fisica	1 online resource (333 p.)
Disciplina	004
Soggetti	Computer science - Philosophy Computer science - Research Computer science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	5 Relational Macrostructures and Analyses5.1 Mixed Worlds; 5.2 Pursuing Science; 5.3 Research Institutes; 5.4 Academic Computing; 6 Computing as a Great Scientific Domain; 6.1 Great Scientific Domains; 6.2 Computing; 6.3 Best Inventions of the Year; 7 Conclusion; Notes; Index
Sommario/riassunto	Computing isn't simply about hardware or software, or calculation or applications. Computing, writes Paul Rosenbloom, is an exciting and diverse, yet remarkably coherent, scientific enterprise that is highly multidisciplinary yet maintains a unique core of its own. In On Computing, Rosenbloom proposes that computing is a great scientific domain on a par with the physical, life, and social sciences.

Rosenbloom introduces a relational approach for understanding computing, conceptualizing it in terms of forms of interaction and implementation, to reveal the hidden structures and connections among its disciplines. He argues for the continuing vitality of computing, surveying the leading edge in computing's combination with other domains, from biocomputing and brain-computer interfaces to crowdsourcing and virtual humans to robots and the intermingling of the real and the virtual. He explores forms of higher order coherence, or macrostructures, over complex computing topics and organizations, such as computing's role in the pursuit of science and the structure of academic computing. Finally, he examines the very notion of a great scientific domain in philosophical terms, honing his argument that computing should be considered the fourth great scientific domain. Rosenbloom's proposal may prove to be controversial, but the intent is to initiate a long overdue conversation about the nature and future of a field in search of its soul. Rosenbloom, a key architect of the founding of University of Southern California's Institute for Creative Technologies and former Deputy Director of USC's Information Sciences Institute, offers a broader perspective on what computing is and what it can become.