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Titolo	Advances in brazing : science, technology and applications / / edited by Dusan P. Sekulic
Pubbl/distr/stampa	Cambridge, UK ; ; Philadelphia, PA : , : Woodhead Publishing, , 2013
ISBN	0-85709-650-8
Descrizione fisica	1 online resource (625 p.)
Collana	Woodhead Publishing Series in Welding and Other Joining Technologies
Altri autori (Persone)	SekulicDusan P
Disciplina	671.5/6
Soggetti	Brazing - Technological innovations Welding - Technological innovations Electronic books.
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	part I. Fundamentals of brazing -- part II. Materials used in brazing -- part III. Applications of brazing and brazed materials.
Sommario/riassunto	Brazing processes offer enhanced control, adaptability and cost-efficiency in the joining of materials. Unsurprisingly, this has lead to great interest and investment in the area. Drawing on important research in the field, Advances in brazing provides a clear guide to the principles, materials, methods and key applications of brazing.Part one introduces the fundamentals of brazing, including molten metal wetting processes, strength and margins of safety of brazed joints, and modeling of associated physical phenomena. Part two goes on to consider specific materials, such as super alloy

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Autore	Liu Huimin <1961->
Titolo	Diamond chemical vapor deposition : nucleation and early growth stages / / by Huimin Liu and David S. Dandy
Pubbl/distr/stampa	Park Ridge, N.J., : Noyes Publications, c1995
ISBN	1-282-75509-9 9786612755095 1-282-01382-3 9786612013829 0-8155-1687-8
Descrizione fisica	1 online resource (207 p.)
Altri autori (Persone)	DandyDavid S
Disciplina	666/.88
Soggetti	Diamonds, Artificial Chemical vapor deposition
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 (p. 160-182) and index.
Nota di contenuto	Front Cover; Diamond Chemical Vapor Deposition: Nucleation and Early Growth Stages; Copyright Page; Contents; Chapter 1 General Introduction; Chapter 2 Atomic and Crystal Structures of Diamond; Chapter 3 Diamond CVD Techniques; 1.0 HOT-FILAMENT CVD; 2.0 PLASMA-ASSISTED CVD; 3.0 FLAME CVD; 4.0 GENERAL CHARACTERISTICS OF DIAMOND CVD PROCESSES; 5.0 SUMMARY; Chapter 4 Diamond Nucleation Mechanisms; 1.0 HOMOGENEOUS NUCLEATION-GAS-PHASE NUCLEATION; 2.0 HETEROGENEOUS NUCLEATION-SURFACE NUCLEATION; 3.0 SUMMARY; Chapter 5 Diamond Epitaxy, Oriented Growth, and Morphology Evolution; 1.0 EPITAXY 2.0 ORIENTED AND TEXTURED GROWTH3.0 MORPHOLOGY EVOLUTION; 4.0 SUMMARY; Chapter 6 Effects of Surface Conditions on Diamond Nucleation; 1.0 SUBSTRATE MATERIALS; 2.0 SURFACE PRETREATMENT METHODS AND NUCLEATION ENHANCEMENT MECHANISMS; 3.0 SUMMARY; Chapter 7 Effects of Deposition Conditions on Diamond Nucleation; 1.0 SUBSTRATE TEMPERATURE; 2.0 GAS-PHASE ACTIVATION; 3.0 GAS PRESSURE AND FLOW RATE; 4.0 GAS

COMPOSITION; 5.0 OXYGEN ADDITION; 6.0 SUMMARY; Chapter 8 Theoretical and Modeling Studies on Diamond Nucleation; 1.0 IDENTIFICATION OF NUCLEATION AND GROWTH MODE 2.0 THEORETICAL STUDIES ON NUCLEATION THERMODYNAMICS3.0 THEORETICAL MODELING OF NUCLEATION KINETICS; 4.0 CLUES OF STRUCTURE, CHEMISTRY, AND SIZE OF DIAMOND NUCLEI; 5.0 SUMMARY; References

Sommario/riassunto

This book presents an updated, systematic review of the latest developments in diamond CVD processes, with emphasis on the nucleation and early growth of diamond CVD. The objective is to familiarize the reader with the scientific and engineering aspects of diamond CVD, and to provide experiences researchers, scientists, and engineers in academia and industry with the latest developments in this growing field.