1. Record Nr. UNINA9910674040703321

Autore	Joshi Shrikant
Titolo	Advances in Thermal Spray Technology
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020
Descrizione fisica	1 online resource (188 p.)
Soggetti	History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Thermal spray technology has been widely adopted industrially to combat diverse forms of surface degradation caused by wear, corrosion, oxidation, high thermal load, etc. Nonetheless, improvements in coating quality are incessantly sought to further enhance durability and/or performance of components operating in increasingly aggressive environments. This has led to technology advancements on various fronts, spanning feedstock materials, process variants, torch designs, coating architectures, etc. These have also been complemented by developments in closely allied areas to accommodate novel substrate materials, explore post-treatments, investigate coating behaviour under varied harsh conditions and harness benefits of artificial intelligence/neural networking. All of the above, along with efforts to improve diagnostic tools and create reliable control systems, have been driven by the desire to achieve robust shop-floor thermal spray capabilities to consolidate existing applications and spur new ones. This book is a compilation of twelve exciting contributions made for the Special Issue on "Advances in Thermal Spray Technology", and showcases some of the above developments that are currently attracting interest in the field.

2. Record Nr. UNINA9910346859303321

Autore	Moreno Abel
Titolo	Protein Crystallization under the Presence of an Electric Field / Abel Moreno
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2019 Basel, Switzerland : , : MDPI, , 2019
ISBN	9783038975205 3038975206
Descrizione fisica	1 electronic resource (90 p.)
Soggetti	History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This book entitled "Protein Crystallization under the Presence of an Electric Field" covers recent trends and original contributions on the use of electric fields (internal and external) for applications for nucleation control and the effect on the kinetics of crystallization processes. This book also includes basic strategies for growing crystals of biological macromolecules for characterization via X-ray and neutron diffraction as well as using modern X-ray-free electron-lasers. There are six main topics covered on this book, including recent insights into the crystallization process from nucleation and growth peculiarities, when using different kinds of electric fields; the effect of external electric fields on the kinetics of the dislocation-free growth of model proteins; the use of very strong external electric fields for the crystallization of a model protein glucose isomerase; and the use of alternant electric fields using different kinds of pulses and their combination with strong magnetic fields. There are also contributions related to applications in developing electron-transfer devices as well as graphene-based platforms for electrocrystallization and in situ X-ray diffraction characterization.