1. Record Nr. UNINA9910404079603321

Autore	Friedrich Bernd
Titolo	Sustainable Utilization of Metals: Processing, Recovery and Recycling
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2020
ISBN	3-03928-886-5
Descrizione fisica	1 electronic resource (388 p.)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The high demand for advanced metallic materials raises the need for an extensive recycling of metals and such a sustainable use of raw materials. ""Sustainable Utilization of Metals - Processing, Recovery and Recycling"" comprises the latest scientific achievements in efficient production of metals and such addresses sustainable resource use as part of the circular economy strategy. This policy drives the present contributions, aiming on the recirculation of EoL-streams such as Waste Electric and Electronic Equipment (WEEE), multi-metal alloys or composite materials back into metal production. This needs a holistic approach, resulting in the maximal avoidance of waste. Considering both aspects, circular economy and material design, recovery and use of minor metals play an essential role, since their importance for technological applications often goes along with a lack of supply on the world market. Additionally, their ignoble character and low concentration in recycling materials cause an insufficient recycling rate of these metals, awarding them the status of “critical metals”. In order to minimize losses and energy consumption, this issue explores concepts for the optimization concerning the interface between mechanical and thermal pre-treatment and metallurgical processes. Such new approaches in material design, structural engineering and substitution are provided in the chapters.

2. Record Nr. UNINA9910557363803321

Autore	Loskutov Igor G
Titolo	Advances in Cereal Crops Breeding
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021
Descrizione fisica	1 electronic resource (196 p.)
Soggetti	Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This Special Issue on ‘Advances in Cereal Crops Breeding’ comprises 10 papers covering a wide range of subjects, including the expression-level investigation of genes in terms of salinity stress adaptations and their relationships with proteomics in rice, the use of genetic analysis to assess the general combining ability (GCA) and specific combining ability (SCA) in promising hybrids of maize, the use of DNA markers based on PCR in rice, the identification of quantitative trait loci (QTLs) in wheat and simple sequence repeats (SSR) in rice, the use of single-nucleotide polymorphisms (SNP) in a genome-wide association study (GWAS) in cereals, and Nanopore direct RNA sequencing of related with LTR RNA retrotransposon in triticale prior to the genomic selection of heterotic maize hybrids.