**Table A5: Extended corpus**

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|  | **DOI** | **Title** |
| **1** |  10.1016/j.scriptamat.2021.114303 |  Enhancing reversible entropy change of all-d-metal Ni37.5Co12.5Mn35Ti15 alloy by multiple external fields |
| **2** |  10.1016/j.scriptamat.2021.114303 |  Enhancing reversible entropy change of all-d-metal Ni37.5Co12.5Mn35Ti15 alloy by multiple external fields |
| **3** |  10.1016/j.jallcom.2020.153845 |  Effect of FCC anti-ferromagnetic ordering on the stability of phases in Fe60-xMn30Cr10Cox high entropy alloys |
| **4** |  10.1016/j.jallcom.2020.153845 |  Effect of FCC anti-ferromagnetic ordering on the stability of phases in Fe60-xMn30Cr10Cox high entropy alloys |
| **5** |  10.1016/B978-0-12-803581-8.11773-4 |  Superconductivity in High-Entropy and Medium-Entropy Alloys From the Ti-Zr-Nb-Sn-Hf-Ta System |
| **6** |  10.1016/B978-0-12-803581-8.11773-4 |  Superconductivity in High-Entropy and Medium-Entropy Alloys From the Ti-Zr-Nb-Sn-Hf-Ta System |
| **7** |  10.1016/j.matchemphys.2021.125677 |  Thermal effects on stability of hierarchical microstructure in medium- and high-entropy alloys |
| **8** |  10.1016/B978-0-12-819726-4.00149-6 |  Introduction: High Entropy Alloys and Combinatorial Approaches |
| **9** |  10.1016/j.scriptamat.2021.114387 |  High-entropy alloys as anode materials of nickel - metal hydride batteries |
| **10** |  10.1016/j.msea.2021.141412 |  Synergistic damping effect mechanism of magneto-mechanical hysteresis and dislocations energy dissipation in FeMnCrCo high entropy alloys |
| **11** |  10.1016/j.jnoncrysol.2021.121023 |  Microstructures and properties of Fe1.25CoNi1.25CrxAl0.25 high-entropy alloys after cold-rolling and annealing |
| **12** |  10.1016/j.intermet.2020.106801 |  FeCoNiAlSi high entropy alloys with exceptional fundamental and application-oriented magnetism |
| **13** |  10.1016/j.matchemphys.2021.125395 |  Thermodynamic modelling to predict phase stability in BCC + B2 Al-Ti-Co-Ni-Fe-Cr high entropy alloys |
| **14** |  10.1016/j.msec.2020.111733 |  Tailoring biocompatible Ti-Zr-Nb-Hf-Si metallic glasses based on high-entropy alloys design approach |
| **15** |  10.1016/j.ijlmm.2021.09.002 |  In-situ reactive synthesis and characterization of a high entropy alloy coating by laser metal deposition |
| **16** |  10.1016/j.matpr.2020.10.720 |  Coatings based on high entropy alloys: An overview |
| **17** |  10.1016/j.actamat.2021.117527 |  Disentangling diffusion heterogeneity in high-entropy alloys |
| **18** |  10.1016/j.matlet.2021.130888 |  Nonlinear dynamic characteristics of High-entropy alloy-carbon fiber composite laminate subjected to stochastic excitation |
| **19** |  10.1016/j.jmrt.2021.12.045 |  Fabrication of Fe-based metallic glass reinforced FeCoNiCrMn high-entropy alloy through additive manufacturing: mechanical property enhancement and corrosion resistance improvement |
| **20** |  10.1016/j.msea.2021.142342 |  Preparation and properties of a bulk metallic glass and high-entropy alloy composite |
| **21** |  10.1016/j.scriptamat.2021.114464 |  Structural transformation of MoReRu medium-entropy alloy by carbon addition |
| **22** |  10.1016/j.actamat.2021.116931 |  Increased magnetocaloric response of FeMnNiGeSi high-entropy alloys |
| **23** |  10.1016/j.jmmm.2019.166379 |  Large magnetic entropy change and magnetostrain in a directionally solidified Ni45.7Co4.2Mn37.3Sb12.8 alloy |
| **24** |  10.1016/B978-0-12-819726-4.00025-9 |  High-Entropy Alloys: Bulk Metallic Glasses |
| **25** |  10.1016/j.scriptamat.2019.04.035 |  Outstanding role of the magnetic entropy in arrested austenite in an ordered Ni45Mn36.7In13.3Co5 metamagnetic shape memory alloy |
| **26** |  10.1016/j.scriptamat.2020.06.017 |  Functional properties and promising applications of high entropy alloys |
| **27** |  10.1016/j.jmst.2021.09.043 |  Enhanced strength-ductility of CoCrFeMnNi high-entropy alloy with inverse gradient-grained structure prepared by laser surface heat-treatment technique |
| **28** |  10.1016/j.jallcom.2021.162501 |  Microstructure and magnetic behaviors of FeCoNi (Al) alloys with incoherent nanoprecipitates prepared by high-pressure solidification |
| **29** |  10.1016/j.jallcom.2020.154053 |  Large magnetic entropy change and refrigeration capacity around room temperature in quinary Ni41Co9-xFexMn40Sn10 alloys (x= 2.0 and 2.5) |
| **30** |  10.1016/j.cap.2021.10.010 |  Investigation of shape memory characteristics and production of HfZrTiFeMnSi high entropy alloy by mechanical alloying method |
| **31** |  10.1016/j.tsf.2022.139083 |  Thin films made by reactive sputtering of high entropy alloy FeCoNiCuGe: Optical |
| **32** |  10.1016/j.jmst.2021.09.025 |  Multifunctional interstitial-carbon-doped FeCoNiCu high entropy alloys with excellent electromagnetic-wave absorption performance |
| **33** |  10.1016/j.jallcom.2021.163059 |  Electrical resistivity and short-range order in rapid-quenched CrMnFeCoNi high-entropy alloy |
| **34** |  10.1016/j.jallcom.2021.162293 |  High entropy alloys with hexagonal close-packed structure derived from thin film combinatorial approach |
| **35** |  10.1016/j.jallcom.2020.158115 |  Collective magnetism of a single-crystalline nanocomposite FeCoCrMnAl high-entropy alloy |
| **36** |  10.1016/j.intermet.2020.106898 |  Correlation between microstructure and soft magnetic parameters of Fe-Co-Ni-Al medium-entropy alloys with FCC phase and BCC phase |
| **37** |  10.1016/B978-0-12-819726-4.00130-7 |  High-Entropy Alloys: Overview |
| **38** |  10.1016/j.jallcom.2021.160944 |  Effects of vacancy on the thermodynamic properties of Co-Cr-Fe-Mn-Ni high-entropy alloys |
| **39** |  10.1016/j.matchar.2019.110028 |  Effect of grain boundary character distribution on soft magnetic property of face-centered cubic FeCoNiAl0.2 medium-entropy alloy |
| **40** |  10.1016/j.intermet.2021.107394 |  Pressure effects on electronic structure and electrical conductivity of TiZrHfNb high-entropy alloy |
| **41** |  10.1016/j.actamat.2021.117472 |  Towards stacking fault energy engineering in FCC high entropy alloys |
| **42** |  10.1016/j.jallcom.2020.157424 |  MnFeNiGeSi high-entropy alloy with large magnetocaloric effect |
| **43** |  10.1016/j.jallcom.2020.157848 |  Effects of boron on microstructure and properties of microwave sintered FeCoNi1.5CuY0.2 high-entropy alloy |
| **44** |  10.1016/B978-0-12-803581-8.12123-X |  High Entropy Alloys: Manufacturing Routes |
| **45** |  10.1016/j.actamat.2021.117582 |  Phase decomposition and strengthening in HfNbTaTiZr high entropy alloy from first-principles calculations |
| **46** |  10.1016/j.intermet.2019.106614 |  Enhanced Curie temperature and magnetic entropy change of Gd63Ni37 amorphous alloy by Co substitution |
| **47** |  10.1016/j.scriptamat.2019.06.019 |  Finite temperature magnetic properties of Cr x Co y Ni100-x-y medium entropy alloys from first principles |
| **48** |  10.1016/j.commatsci.2021.111165 |  Development of a plasticity-oriented interatomic potential for CrFeMnNi high entropy alloys |
| **49** |  10.1016/B978-0-12-803581-8.12040-5 |  High Entropy Alloys: Advanced Synchrotron X-Ray and Neutron Scattering Studies |
| **50** |  10.1016/j.est.2021.103405 |  High entropy alloys as electrode material for supercapacitors: A review |
| **51** |  10.1016/j.scriptamat.2019.03.023 |  Investigating effect of ordering on magnetic-elastic property of FeNiCoCr medium-entropy alloy |
| **52** |  10.1016/j.mtla.2021.101308 |  Compositionally graded AlxCoCrFeNi high-entropy alloy manufactured by laser powder bed fusion |
| **53** |  10.1016/j.scriptamat.2021.114000 |  Unveiling the thermodynamic driving forces for high entropy alloys formation through big data ab initio analysis |
| **54** |  10.1016/j.apsusc.2020.147471 |  Surface segregation in Cr-Mn-Fe-Co-Ni high entropy alloys |
| **55** |  10.1016/j.jallcom.2019.03.210 |  Gd25RE25Co25Al25 (RE\:202f=\:202fTb |
| **56** |  10.1016/j.jallcom.2021.163331 |  Thermodynamics-based design strategy for optimizing strength and ductility of Cr-Ni-Mn-Fe medium-entropy alloys |
| **57** |  10.1016/j.jallcom.2020.156491 |  FeCoNiCuAl high entropy alloys microwave absorbing materials: Exploring the effects of different Cu contents and annealing temperatures on electromagnetic properties |
| **58** |  10.1016/B978-0-12-819726-4.00054-5 |  Mechanical Behavior of High-Entropy Alloys Focusing on Tensors: An in situ Neutron Diffraction Investigation From Room to Elevated Temperature |
| **59** |  10.1016/j.jallcom.2021.163233 |  Electrodeposited nanocrystalline medium-entropy alloys - An effective strategy of producing stronger and more stable nanomaterials |
| **60** |  10.1016/j.matlet.2021.131542 |  On the structural |
| **61** |  10.1016/j.scriptamat.2019.04.013 |  The incredible excess entropy in high entropy alloys |
| **62** |  10.1016/j.ijlmm.2021.04.002 |  Investigating the elastic modulus and hardness properties of a high entropy alloy coating using nanoindentation |
| **63** |  10.1016/j.matdes.2021.110177 |  Machine learning assisted modelling and design of solid solution hardened high entropy alloys |
| **64** |  10.1016/j.jallcom.2021.162398 |  Studies on the design and properties of FeCrVTix medium-entropy alloys for potential nuclear applications |
| **65** |  10.1016/j.jallcom.2019.06.069 |  Enhanced magnetic entropy change and refrigeration capacity of La(Fe |
| **66** |  10.1016/j.corsci.2021.110073 |  Effect of hydrogen charging time on hydrogen embrittlement of CoCrFeMnNi high-entropy alloy |
| **67** |  10.1016/j.jmmm.2020.167579 |  Spin-glass magnetism of the non-equiatomic CoCrFeMnNi high-entropy alloy |
| **68** |  10.1016/j.matchemphys.2020.123440 |  Microstructures and corrosion resistance properties of as-cast and homogenized AlFeNiCuCr high entropy alloy |
| **69** |  10.1016/j.actamat.2021.117571 |  Metalloid substitution elevates simultaneously the strength and ductility of face-centered-cubic high-entropy alloys |
| **70** |  10.1016/j.jallcom.2021.163554 |  Thermal physical properties of high entropy alloy Al0.3CoCrFeNi at elevated temperatures |
| **71** |  10.1016/j.physb.2020.412014 |  Large magnetic entropy change and adiabatic temperature rise of Fe85B12La3 amorphous alloy |
| **72** |  10.1016/j.matdes.2021.110071 |  First-principles calculation of lattice distortions in four single phase high entropy alloys with experimental validation |
| **73** |  10.1016/j.jallcom.2021.162030 |  Refractory TaTiNb |
| **74** |  10.1016/j.jallcom.2021.162131 |  Superconducting interstitial MoReRuC x medium-entropy alloys with a hexagonal structure |
| **75** |  10.1016/j.mtcomm.2021.102774 |  The magnetic and the magnetocaloric properties of the binary alloy ferromagnetic and ferrimagnetic single nanoparticle |
| **76** |  10.1016/j.jallcom.2021.161924 |  Investigation of hardness |
| **77** |  10.1016/j.jeurceramsoc.2021.05.011 |  Reactive wetting of high-entropy (La0.2Nd0.2Sm0.2Eu0.2Gd0.2)2Zr2O7 ceramic by molten 71Ag-27Cu-2Ti alloy at 1073-1273 K |
| **78** |  10.1016/j.jallcom.2021.161676 |  Effects of electromagnetic pulse treatment on spinodal decomposed microstructure |
| **79** |  10.1016/j.jallcom.2021.163349 |  The annealing induced formation of epsilon martensite in CoCrNi medium-entropy alloy after severe plastic deformation |
| **80** |  10.1016/j.cap.2019.09.019 |  Magnetocaloric properties in a FeNiGaMnSi high entropy alloy |
| **81** |  10.1016/j.cej.2021.132410 |  High entropy alloy/C nanoparticles derived from polymetallic MOF as promising electrocatalysts for alkaline oxygen evolution reaction |
| **82** |  10.1016/j.compositesb.2019.107524 |  High-entropy alloy@air@Ni-NiO core-shell microspheres for electromagnetic absorption applications |
| **83** |  10.1016/j.jmst.2020.11.044 |  Recent advances on environmental corrosion behavior and mechanism of high-entropy alloys |
| **84** |  10.1016/j.jallcom.2021.161822 |  Influence of plastic deformation on the corrosion behavior of CrCoFeMnNi high entropy alloy |
| **85** |  10.1016/j.jmst.2020.10.071 |  Mn x Cr0.3Fe0.5Co0.2Ni0.5Al0.3 high entropy alloys for magnetocaloric refrigeration near room temperature |
| **86** |  10.1016/j.msea.2022.142617 |  Heterogeneous precipitation strengthened non-equiatomic NiCoFeAlTi medium entropy alloy with excellent mechanical properties |
| **87** |  10.1016/B978-0-12-819726-4.00106-X |  Sintering of High Entropy Alloys: Processing and Properties |
| **88** |  10.1016/B978-0-12-803581-8.11774-6 |  High-Entropy Alloys: Balancing Strength and Ductility at Room Temperature |
| **89** |  10.1016/j.jallcom.2021.159745 |  Understanding phase equilibria in high-entropy alloys: I. Chemical potentials in concentrated solid solutions - Atomic-scale investigation of AlCrFeMnMo |
| **90** |  10.1016/j.msea.2021.140959 |  Effect of niobium addition upon microstructure and tensile properties of CrMnFeCoNix high entropy alloys |
| **91** |  10.1016/j.scriptamat.2021.113724 |  Strengthening FeCrNiCu high entropy alloys via combining V additions with in-situ TiC particles |
| **92** |  10.1016/j.scriptamat.2021.113957 |  Effect of alloying elements on the hydrogen diffusion and trapping in high entropy alloys |
| **93** |  10.1016/j.ssc.2021.114593 |  Magnetic transition and magnetocaloric effect of R5(Si |
| **94** |  10.1016/j.matchar.2021.111091 |  Effect of Al additions on the microstructures and tensile properties of AlxCoCr3Fe5Ni high entropy alloys |
| **95** |  10.1016/j.mtla.2019.100293 |  Significant reduction in intrinsic coercivity of high-entropy alloy FeCoNiAl0.375Si0.375 comprised of supersaturated f.c.c. phase |
| **96** |  10.1016/j.jallcom.2021.162722 |  Thermodynamic modeling of the Al-Co-Cr-Fe-Ni high entropy alloys supported by key experiments |
| **97** |  10.1016/j.actamat.2020.09.070 |  First principles study of the effect of hydrogen in austenitic stainless steels and high entropy alloys |
| **98** |  10.1016/j.matlet.2020.128653 |  A novel Fe-Co-Ni-Si high entropy alloy with high yield strength |
| **99** |  10.1016/j.jmmm.2021.168932 |  Critical behavior of the second-order magnetic transition in LaFe11.7-xCoxSi1.3C0.15 alloys |
| **100** |  10.1016/j.jallcom.2021.161222 |  Microstructure |
| **101** |  10.1016/j.jallcom.2021.159233 |  Synthesis of new high-entropy alloy-type Nb3 (Al |
| **102** |  10.1016/j.jmapro.2021.06.041 |  A review on laser cladding of high-entropy alloys |
| **103** |  10.1016/j.apsusc.2021.150462 |  Weak enthalpy-interaction-element-modulated NbMoTaW high-entropy alloy thin films |