**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 |