Robert Chulist

List of Publications by Year
in descending order

113	2,002	236833	330025
papers	citations	25 h-index	37 g-index

114	114	114	1099
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Phase Transformations Induced by High-Pressure Torsion in Tiâ€“Nb-Based Alloys. Microscopy and Microanalysis, 2022, 28, 946-952.	0.2	3
2	Titania coating formation on hydrostatically extruded pure titanium by micro-arc oxidation method. Journal of Materials Science and Technology, 2022, 111, 224-235.	5.6	4
3	Low temperature deformation mechanisms of polycrystalline CoZr and Co39Ni11Zr50 B2-type intermetallic compounds. Acta Materialia, 2022, 223, 117489.	3.8	2
4	TiAl-based semi-finished material produced by reaction annealing of Ti/Al layered composite sheets. Materials Today Communications, 2022, 30, 103083.	0.9	1
5	Effect of impact loading and heat treatment on microstructure and properties of multi-layered AZ31/AA1050 plates fabricated by single-shot explosive welding. Materials and Design, 2022, 214, 110411.	3.3	28
6	Flow softening, twinning and dynamic evolution of second phase particles in a rolled Mgâ€“Y-Nd-Zr alloy under shear deformation mode. Journal of Materials Research and Technology, 2022, 18, 2368-2383.	2.6	6
7	Formation and Thermal Stability of the Ï‰-Phase in Tiâ€“Nb and Tiâ€“Mo Alloys Subjected to HPT. Materials, 2022, 15, 4136.	1.3	2
8	Effect of B addition on the superelasticity in FeNiCoAlTa single crystals. Materials and Design, 2021, 197, 109225.	3.3	5
9	The Î±â†’Ï‰ phase transformations and thermal stability of Ti Co alloy treated by high pressure torsion. Materials Characterization, 2021, 173, 110937.	1.9	10
10	Omega Phase Formation in Tiâ€“3wt.%Nb Alloy Induced by High-Pressure Torsion. Materials, 2021, 14, 2262.	1.3	6
11	Interfacial Reactions in the Bonding Zones of Explosively Welded Tantalum to Stainless Steel Sheets. Advanced Engineering Materials, 2021, 23, 2001521.	1.6	2
12	Microstructure and Magnetic Properties of Selected Laser Melted Ni-Mn-Ga and Ni-Mn-Ga-Fe Powders Derived from as Melt-Spun Ribbons Precursors. Metals, 2021, 11, 903.	1.0	10
13	Texture-Based Optimization of Crystal Plasticity Parameters: Application to Zinc and Its Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 3257-3273.	1.1	5
14	New Insights into the Intermartensitic Transformation and Over 11% Magnetic Fieldâ€Induced Strain in 14â€‰<scp>m</scp> Niâ€“Mnâ€“Ga Martensite. Advanced Engineering Materials, 2021, 23, 2100131.	1.6	9
15	Dynamic Recrystallization and Its Effect on Superior Plasticity of Cold-Rolled Bioabsorbable Zinc-Copper Alloys. Materials, 2021, 14, 3483.	1.3	8
16	Characterization of rapidly solidified Al-Mg-Sc alloys with Li addition. Materials Characterization, 2021, 178, 111290.	1.9	6
17	Evolution of microstructure and crystallographic texture of Ni-Mn-Ga melt-spun ribbons exhibiting 1.15% magnetic field-induced strain. Acta Materialia, 2021, 219, 117237.	3.8	18
18	Interfacial reactions and microstructure related properties of explosively welded tantalum and steel sheets with copper interlayer. Materials and Design, 2021, 208, 109873.	3.3	31

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19	Phase Transformation in 316L Austenitic Steel Induced by Fracture at Cryogenic Temperatures: Experiment and Modelling. Materials, 2021, 14, 127.	1.3	10
20	Texture-Governed Cell Response to Severely Deformed Titanium. ACS Biomaterials Science and Engineering, 2021, 7, 114-121.	2.6	5
21	Surface hardening of high- and medium-entropy alloys by mechanical attrition at room and cryogenic temperatures. Applied Physics Letters, 2021, 119, 201912.	1.5	5
22	The Effect of Interface Morphology on the Electro-Mechanical Properties of Ti/Cu Clad Composites Produced by Explosive Welding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 750-766.	1.1	34
23	An in situ and ex situ study of Ï‡ phase formation in a hypoeutectic Fe-based hardfacing alloy. Materials and Design, 2020, 188, 108438.	3.3	17
24	Highly mobile twin boundaries in seven-layer modulated Niâ€“Mnâ€“Gaâ€“Fe martensite. Scripta Materialia, 2020, 178, 62-66.	2.6	18
25	Hierarchical twin microstructure in modulated 10M Niâ€“Mn-Ga single crystals. An analysis including shuffling of atomic layers. International Journal of Plasticity, 2020, 126, 102628.	4.1	19
26	Microstructural characterization and mechanical properties of in situ cast nanocomposites Al/TiC type. Journal of Materials Research and Technology, 2020, 9, 12707-12715.	2.6	20
27	On the role of atomic shuffling in the 4O, 4M and 8M martensite structures in Ni-Mn-Sn single crystal. Scripta Materialia, 2020, 189, 106-111.	2.6	30
28	The effect of severe plastic deformation on the Mg properties after CEC deformation. Journal of Magnesium and Alloys, 2020, 8, 761-768.	5.5	39
29	Microstructure and properties of the interfacial region in explosively welded and post-annealed titanium-copper sheets. Materials Characterization, 2020, 167, 110520.	1.9	25
30	Gradient microstructure in the bonding zone of explosively welded sheets. Procedia Manufacturing, 2020, 50, 689-695.	1.9	0
31	Structural Properties of Interfacial Layers in Tantalum to Stainless Steel Clad with Copper Interlayer Produced by Explosive Welding. Metals, 2020, 10, 969.	1.0	14
32	Controlled Grain Refinement of Biodegradable Zn-Mg Alloy: The Effect of Magnesium Alloying and Multi-Pass Hydrostatic Extrusion Preceded by Hot Extrusion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 6784-6796.	1.1	45
33	Microstructure-strength relationship of ultrafine-grained titanium manufactured by unconventional severe plastic deformation process. Journal of Alloys and Compounds, 2020, 837, 155576.	2.8	30
34	High pressure torsion of Cuâ€“Ag and Cuâ€“Sn alloys: Limits for solubility and dissolution. Acta Materialia, 2020, 195, 184-198.	3.8	24
35	Towards a better understanding of the phase transformations in explosively welded copper to titanium sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 784, 139285.	2.6	25
36	Interfacial reactions and structural properties of explosively welded titanium/copper plates. IOP Conference Series: Materials Science and Engineering, 2020, 770, 012033.	0.3	2

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37	Origins of superparamagnetism in self-accommodated and trained Ni50Mn37.5Sn12.5 single crystal. Journal of Magnetism and Magnetic Materials, 2020, 514, 167190.	1.0	8
38	Studies on the Two-Step Aging Process of Fe-Based Shape Memory Single Crystals. Materials, 2020, 13, 1724.	1.3	7
39	The effect of heat treatment on the precipitation hardening in FeNiCoAlTa single crystals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 784, 139327.	2.6	12
40	Suppression of Î³ phase and its effect on mechanical behavior of melt-spun and annealed Niâ€“Mnâ€“Ga high-temperature shape memory alloys. Materials Today Communications, 2020, 24, 101165.	0.9	0
41	Microstructure and catalytic activity for selective hydrogenation of phenylacetylene of intermetallic Ni70Ga30, Ni70In30, and Ni70Sn30 melt-spun alloys. Intermetallics, 2020, 122, 106797.	1.8	8
42	Thermal stability and microhardness of metastable Ï‰-phase in the Ti-3.3Âat.% Co alloy subjected to high pressure torsion. Journal of Alloys and Compounds, 2020, 834, 155132.	2.8	7
43	Fe-Co-B Soft Magnetic Ribbons: Crystallization Process, Microstructure and Coercivity. Materials, 2020, 13, 1639.	1.3	1
44	Interfacial Phenomena between Liquid Ga-Based Alloys and Ni Substrate. Journal of Electronic Materials, 2019, 48, 5941-5947.	1.0	7
45	Temperature dependence of twinning stress in Ni49.5Mn38.4Sn12.2 single crystal. Journal of Applied Physics, 2019, 126, 145107.	1.1	2
46	Twin-induced stability and mechanical properties of pure magnesium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 749, 89-95.	2.6	15
47	Non-conventional twins in five-layer modulated Ni-Mn-Ga martensite. Scripta Materialia, 2019, 162, 497-502.	2.6	11
48	Microstructure evolution and magnetic properties in Mn-rich Ni-(Co, Cu, Fe)-Mn-Sn Heusler base shape memory alloys. Materials Chemistry and Physics, 2019, 235, 121720.	2.0	4
49	A special single variant zone in directionally solidified Ni-Mn-Ga alloy. Scripta Materialia, 2019, 167, 105-109.	2.6	1
50	2019, 171, 107703.	3.3	37
51	Structural and Mechanical Properties of Tiâ€“Co Alloys Treated by High Pressure Torsion. Materials, 2019, 12, 426.	1.3	22
52	Microstructural response on nickel addition in rapidly solidified âˆ¼Fe-25Cr-xNi-5Mo-0.8C [xâ€¯=â€¯0, 6, 11, 15, 21â€¯wt. %] hardfacing alloys. Journal of Alloys and Compounds, 2019, 787, 186-195.	2.8	4
53	Dissolution of Ag Precipitates in the Cuâ€“8wt.%Ag Alloy Deformed by High Pressure Torsion. Materials, 2019, 12, 447.	1.3	15
54	Orthogonal shear process in Ni-Mn-Sn single crystal. International Journal of Plasticity, 2019, 114, 63-71.	4.1	14

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55	Effect of heat treatment on the precipitation hardening in FeNiCoAlTaB shape memory alloys. International Journal of Materials Research, 2019, 110, 70-74.	0.1	4
56	Multiphase Microstructure and Extended Martensitic Phase Transformation in Directionally Solidified and Heat Treated Ni44Co6Mn39Sn11 Metamagnetic Shape Memory Alloy. Minerals, Metals and Materials Series, 2018, , 263-267.	0.3	1
57	Superelastic behavior of a metamagnetic Niâ€“Mnâ€“Sn single crystal. Journal of Materials Science, 2018, 53, 10383-10395.	1.7	14
58	Wetting of Sn-Zn-Ga and Sn-Zn-Na Alloys on Al and Ni Substrate. Journal of Electronic Materials, 2018, 47, 49-60.	1.0	14
59	Texture and microstructure of HPT-processed Fe-based shape memory alloys. IOP Conference Series: Materials Science and Engineering, 2018, 375, 012006.	0.3	5
60	Synergistic effect of Mg addition and hydrostatic extrusion on microstructure and texture of biodegradable low-alloyed zinc. IOP Conference Series: Materials Science and Engineering, 2018, 375, 012008.	0.3	7
61	Martensite stabilisation in single crystalline Ni-Mn-Ga and Ni-Mn-Sn magnetic shape memory alloys. Materials Letters, 2018, 230, 266-269.	1.3	13
62	Residual stresses distribution, correlated with bending tests, within explosively welded Ti gr. 2/A1050 bimetals. Materials Characterization, 2018, 144, 461-468.	1.9	12
63	Microstructure and phase constitution in the bonding zone of explosively welded tantalum and stainless steel sheets. Materials and Design, 2018, 153, 177-189.	3.3	57
64	The intermetallics growth at the interface of explosively welded A1050/Ti gr. 2/A1050 clads in relation to the explosive material. Archives of Civil and Mechanical Engineering, 2018, 18, 1679-1685.	1.9	8
65	Branched needle microstructure in Ni-Mn-Ga 10M martensite: EBSD study. Acta Materialia, 2017, 128, 113-119.	3.8	14
66	Growth kinetics of TiAl 3 phase in annealed Al/Ti/Al explosively welded clads. Materials Letters, 2017, 198, 160-163.	1.3	40
67	Self-accommodated and pre-strained martensitic microstructure in single-crystalline, metamagnetic Niâ€“Mnâ€“Sn Heusler alloy. Journal of Materials Science, 2017, 52, 5600-5610.	1.7	16
68	Texture transformations near the bonding zones of the three-layer Al/Ti/Al explosively welded clads. Materials Characterization, 2017, 129, 242-246.	1.9	33
69	Microstructure and kinetics of intermetallic phase growth of three-layered A1050/AZ31/A1050 clads prepared by explosive welding combined with subsequent annealing. Materials and Design, 2017, 130, 120-130.	3.3	65
70	Microstructural and Phase Composition Differences Across the Interfaces in Al/Ti/Al Explosively Welded Clads. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 4154-4165.	1.1	21
71	The Effect of a Multiphase Microstructure on the Inverse Magnetocaloric Effect in Niâ€“Mnâ€“Crâ€“Sn Metamagnetic Heusler Alloys. Magnetochemistry, 2017, 3, 24.	1.0	8
72	Magnetostructural transition and magnetocaloric effect in highly textured Ni-Mn-Sn alloy. Journal of Applied Physics, 2016, 119, .	1.1	22

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73	Grain refinement of intermetallic compounds in the Cuâ€“Sn system under high pressure torsion. Materials Letters, 2016, 179, 12-15.	1.3	20
74	Martensitic transition, structure and magnetic anisotropy ofÂmartensite in Ni-Mn-Sn single crystal. Acta Materialia, 2016, 118, 213-220.	3.8	35
75	Asymmetric distribution of martensitic variants in non-modulated NiMnGa single crystals. Journal of Materials Science, 2016, 51, 10943-10948.	1.7	7
76	Microstructure Changes and Phase Growth Occurring at the Interface of the Al/Ti Explosively Welded and Annealed Joints. Journal of Materials Engineering and Performance, 2016, 25, 3211-3217.	1.2	43
77	Orientation relationship between austenite and non-modulated martensite in Niâ€“Mnâ€“Ga single crystals. Acta Materialia, 2016, 103, 836-843.	3.8	29
78	Phase transformations in a Cu Cr alloy induced by high pressure torsion. Materials Characterization, 2016, 114, 151-156.	1.9	18
79	Structural properties of Ti/Al clads manufactured by explosive welding and annealing. Materials and Design, 2016, 91, 80-89.	3.3	158
80	Large magnetic field-induced work output in a NiMnGa seven-layered modulated martensite. Applied Physics Letters, 2015, 107, .	1.5	49
81	Influence of hydrostatic pressure on texture evolution in HPT deformed NiAl. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012026.	0.3	1
82	Structural behavior and magnetic properties of a Niâ€“Mnâ€“Ga single crystal across the martensite/austenite two-phase region. Acta Materialia, 2015, 89, 32-40.	3.8	11
83	Detwinning of a non-modulated Niâ€“Mnâ€“Ga martensite: From self-accommodated microstructure to single crystal. Acta Materialia, 2015, 85, 67-73.	3.8	37
84	Over 7% magnetic field-induced strain in a Ni-Mn-Ga five-layered martensite. Applied Physics Letters, 2014, 105, .	1.5	82
85	Self-accommodation in polycrystalline 10M Niâ€“Mnâ€“Ga martensite. Journal of Materials Science, 2014, 49, 3951-3955.	1.7	10
86	Effect of initial plastic strain on mechanical training of non-modulated Niâ€“Mnâ€“Ga martensite structure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 611, 313-319.	2.6	12
87	High-temperature magnetic shape memory actuation in a Niâ€“Mnâ€“Ga single crystal. Scripta Materialia, 2014, 83, 29-32.	2.6	43
88	Influence of deformation temperature on texture evolution in HPT deformed NiAl. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012154.	0.3	3
89	Structural modification and twinning stress reduction in a high-temperature Ni-Mn-Ga magnetic shape memory alloy. Applied Physics Letters, 2013, 103, .	1.5	23
90	Characterization of mobile type I and type II twin boundaries in 10M modulated Niâ€“Mnâ€“Ga martensite by electron backscatter diffraction. Acta Materialia, 2013, 61, 1913-1920.	3.8	64

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91	Modulation reorientation in 10M Niâ€“Mnâ€“Ga martensite. Scripta Materialia, 2013, 68, 671-674.	2.6	26
92	Sn and Nb modified ultrafine Ti-based bulk alloys with high-strength and enhanced ductility. Applied Physics Letters, 2013, 102, .	1.5	18
93	Diffraction study of bending-induced polysynthetic twins in 10M modulated Ni-Mn-Ga martensite. Journal of Applied Physics, 2012, 112, .	1.1	25
94	Cyclic fibre texture in hot extruded Ni₅₀Mn₂₉Ga₂₁. International Journal of Materials Research, 2012, 103, 575-579.	0.1	23
95	Processing Routes Toward Textured Polycrystals in Ferromagnetic Shape Memory Alloys. Advanced Engineering Materials, 2012, 14, 636-652.	1.6	19
96	Texture development in a nanocrystalline Pdâ€“Au alloy studied by synchrotron radiation. Scripta Materialia, 2012, 66, 131-134.	2.6	13
97	Twin boundaries in trained 10M Niâ€™Mnâ€™Ga single crystals. Scripta Materialia, 2012, 67, 364-367.	2.6	20
98	Stage B workâ€hardening of magnesium single crystals. Crystal Research and Technology, 2011, 46, 439-442.	0.6	7
99	Deformation twinning in polycrystalline NiMnGa alloys. Journal of Physics: Conference Series, 2010, 240, 012024.	0.3	4
100	Crystallographic characterization of catastrophic shear in submicron nickel at low temperatures. Journal of Physics: Conference Series, 2010, 240, 012150.	0.3	3
101	Information on deformation mechanisms in nanocrystalline Pdâ€“10% Au inferred from texture analysis. Journal of Materials Science, 2010, 45, 4571-4577.	1.7	13
102	Direction of modulation during twin boundary motion. Scripta Materialia, 2010, 62, 235-237.	2.6	7
103	Microstructure and texture in Ni50Mn29Ga21 deformed by high-pressure torsion. Scripta Materialia, 2010, 62, 650-653.	2.6	30
104	Change in microstructure during training of a Ni50Mn29Ga21 bicrystal. Scripta Materialia, 2010, 63, 548-551.	2.6	48
105	Equal-Channel Angular Pressing of NiAl. Materials Science Forum, 2010, 667-669, 39-44.	0.3	1
106	Influence of Dynamic Recrystallisation on Texture Formation in ECAP deformed Nickel. Materials Science Forum, 2007, 558-559, 575-580.	0.3	12
107	Twinning Behaviour of Textured Polycrystalline Ni-Mn-Ga Alloy after Hot Extrusion. Materials Science Forum, 0, 635, 195-199.	0.3	10
108	Texture Heterogeneity in ECAP Deformed Copper. Solid State Phenomena, 0, 160, 47-54.	0.3	11

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109	Influence of Additives on Texture Development of Submicro- and Nanocrystalline Nickel. Materials Science Forum, 0, 702-703, 928-931.	0.3	3
110	Texture Evolution of HPT-Processed Ni₅₀Mn₂₉Ga₂₁. Materials Science Forum, 0, 702-703, 169-172.	0.3	5
111	Grain Refinement of AZ61 Alloy after ECAP Processing. Materials Science Forum, 0, 891, 372-376.	0.3	3
112	Suppression and Recovery of Martensitic Transformation and Magnetism in Mechanically and Thermally Treated Magnetic Shapeâ€Memory Niâ^'Mnâ^'Ga Meltâ€Spun Ribbons. Advanced Engineering Materials, 0, , 2100075.	1.6	4
113	Microstructure Development in the Bonding Zone of Explosively Welded Ti and Cu Sheets. Materials Science Forum, 0, 1016, 1114-1120.	0.3	4