

# Hongchao Kou

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	$\beta^2$ to $\beta'$ transformation strain associated with the precipitation of $\beta'$ phase in a metastable $\beta^2$ titanium alloy. Journal of Materials Science, 2021, 56, 1685-1693.	1.7	15
2	The $\beta'$ phase transformation during the low temperature aging and low rate heating process of metastable $\beta^2$ titanium alloys. Materials Chemistry and Physics, 2020, 239, 122125.	2.0	16
3	Texture evolution and the recrystallization behavior in a near $\beta^2$ titanium alloy Ti-7333 during the hot-rolling process. Materials Characterization, 2020, 159, 109999.	1.9	27
4	A brief review of data-driven ICME for intelligently discovering advanced structural metal materials: Insight into atomic and electronic building blocks. Journal of Materials Research, 2020, 35, 872-889.	1.2	17
5	$\beta'$ -Assisted refinement of $\beta'$ phase and its effect on the tensile properties of a near $\beta^2$ titanium alloy. Journal of Materials Science and Technology, 2020, 44, 24-30.	5.6	33
6	When a defect is a pathway to improve stability: a case study of the L12 Co3TM superlattice intrinsic stacking fault. Journal of Materials Science, 2019, 54, 13609-13618.	1.7	16
7	Interstitial triggered grain boundary embrittlement of Al-X (X=H, N and O). Computational Materials Science, 2019, 163, 241-247.	1.4	8
8	Dependence of mechanical properties on the microstructure characteristics of a near $\beta^2$ titanium alloy Ti-7333. Journal of Materials Science and Technology, 2019, 35, 48-54.	5.6	41
9	Insight into solid-solution strengthened bulk and stacking faults properties in Ti alloys: a comprehensive first-principles study. Journal of Materials Science, 2018, 53, 7493-7505.	1.7	17
10	Precipitation behavior of $\beta'$ phase during aging treatment in a $\beta^2$ -quenched Ti-7333. Materials Characterization, 2018, 140, 275-280.	1.9	25
11	Kinetic Diffusion Couple for Mapping Microstructural and Mechanical Data on Ti-Al-Mo Titanium Alloys. Materials, 2018, 11, 1112.	1.3	6
12	In situ Observation of the Initial Stage of $\beta^3$ Lamella Formation in Ti48Al2Cr2Nb Alloy. Advanced Engineering Materials, 2017, 19, 1600670.	1.6	2
13	Composite structure of $\beta'$ phase in metastable $\beta^2$ Ti alloys induced by lattice strain during $\beta^2$ to $\beta'$ phase transformation. Acta Materialia, 2017, 132, 307-326.	3.8	80
14	The origin of striation in the metastable $\beta^2$ phase of titanium alloys observed by transmission electron microscopy. Journal of Applied Crystallography, 2017, 50, 795-804.	1.9	20
15	Characteristics of a hot-rolled near $\beta^2$ titanium alloy Ti-7333. Materials Characterization, 2017, 129, 135-142.	1.9	35
16	Microstructure and hydrogen storage properties of Mg-Ni-Ce alloys with a long-period stacking ordered phase. Journal of Power Sources, 2017, 338, 91-102.	4.0	62
17	Precipitation of $\beta'$ phase and its morphological evolution during continuous heating in a near $\beta^2$ titanium alloy Ti-7333. Materials Characterization, 2017, 132, 199-204.	1.9	32
18	Phase precipitation behavior during isothermal deformation in $\beta^2$ -quenched near beta titanium alloy Ti-7333. Journal of Alloys and Compounds, 2016, 671, 381-388.	2.8	31

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19	Microstructure and mechanical property correlation and property optimization of a near $\beta$ titanium alloy Ti-7333. <i>Journal of Alloys and Compounds</i> , 2016, 682, 517-524.	2.8	66
20	Non-isothermal synergetic catalytic effect of TiF <sub>3</sub> and Nb <sub>2</sub> O <sub>5</sub> on dehydrogenation high-energy ball milled MgH <sub>2</sub> . <i>Materials Chemistry and Physics</i> , 2016, 183, 65-75.	2.0	21
21	Microstructure and electrochemical hydrogenation/dehydrogenation performance of melt-spun La-doped Mg <sub>2</sub> Ni alloys. <i>Materials Characterization</i> , 2015, 106, 163-174.	1.9	29
22	Interdiffusion in FCC Co-Al-Ti Ternary Alloys. <i>Journal of Phase Equilibria and Diffusion</i> , 2015, 36, 127-135.	0.5	10
23	Microstructure Characterization and Mechanical Properties of In Situ Synthesized Ti <sub>2</sub> AlN <sub>2</sub> Ti <sub>48</sub> Al <sub>2</sub> Cr <sub>2</sub> Nb Composites. <i>Advanced Engineering Materials</i> , 2014, 16, 507-510.	1.6	17
24	Hydrogen desorption performance of high-energy ball milled Mg <sub>2</sub> Ni <sub>4</sub> catalyzed by multi-walled carbon nanotubes coupling with TiF <sub>3</sub> . <i>International Journal of Hydrogen Energy</i> , 2014, 39, 19672-19681.	3.8	51
25	Diffusion Research in BCC Ti-Al-Mo Ternary Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 1647-1652.	1.1	44
26	Precipitation of nanosized DO <sub>22</sub> superlattice with high thermal stability in an Ni-Cr-W superalloy. <i>Scripta Materialia</i> , 2014, 76, 49-52.	2.6	18
27	Effect of strain rate on impact response and $\beta$ transformation of quenched Zr-Nb alloys. <i>Materials Characterization</i> , 2013, 84, 10-15.	1.9	5
28	Hydrogenation behavior of high-energy ball milled amorphous Mg <sub>2</sub> Ni catalyzed by multi-walled carbon nanotubes. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 16168-16176.	3.8	21
29	Evolution of the secondary $\beta$ phase morphologies during isothermal heat treatment in Ti-7333 alloy. <i>Journal of Alloys and Compounds</i> , 2013, 577, 516-522.	2.8	53
30	On the amorphization behavior and hydrogenation performance of high-energy ball-milled Mg <sub>2</sub> Ni alloys. <i>Materials Characterization</i> , 2013, 80, 21-27.	1.9	24
31	A phase-field approach to athermal $\beta$ transformation. <i>Computational Materials Science</i> , 2012, 53, 187-193.	1.4	21
32	Modeling of Incommensurate $\beta$ Structure in the Zr-Nb Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 2581-2586.	1.1	2
33	Macrosegregation Behavior of Ti-10V-2Fe-3Al Alloy During Vacuum Consumable Arc Remelting Process. <i>Journal of Materials Engineering and Performance</i> , 2011, 20, 65-70.	1.2	6
34	Finite element simulation on the deep drawing of titanium thin-walled surface part. <i>Rare Metals</i> , 2010, 29, 108-113.	3.6	6
35	Microstructure Changes in Zr-Based Metallic Glass Induced by Ion Milling. <i>Rare Metal Materials and Engineering</i> , 2010, 39, 1693-1696.	0.8	4
36	Deposition of Fe-based metallic glass coatings by Air Plasma Spraying process. <i>International Journal of Surface Science and Engineering</i> , 2010, 4, 288.	0.4	1

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37	Microstructure, phase and microhardness distribution of laser-deposited Ni-based amorphous coating. International Journal of Surface Science and Engineering, 2010, 4, 296.	0.4	10
38	Fabrication and Microstructure Characteristic of YBCO Bulk by Directional Top-Seeded Power Melting Process. Rare Metal Materials and Engineering, 2008, 37, 1893-1897.	0.8	0
39	Effects of Ta addition on the microstructure and mechanical properties of Ti <sub>40</sub> Zr <sub>25</sub> Ni <sub>8</sub> Cu <sub>9</sub> Be <sub>18</sub> amorphous alloy. International Journal of Minerals, Metallurgy, and Materials, 2007, 14, 31-35.	0.2	3