Kyoung-Won Park

List of Publications by Year
in descending order

29	936	566801 15	500791 28
papers	citations	h-index	g-index

29	29	29	892
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Elastostatically induced structural disordering in amorphous alloys. Acta Materialia, 2008, 56, 5440-5450.	3.8	191
2	Atomic packing density and its influence on the properties of Cuâ€“Zr amorphous alloys. Scripta Materialia, 2007, 57, 805-808.	2.6	165
3	Origin of the plasticity in bulk amorphous alloys. Journal of Materials Research, 2007, 22, 3087-3097.	1.2	98
4	Role of free volume in strain softening of as-cast and annealed bulk metallic glass. Journal of Materials Research, 2009, 24, 1405-1416.	1.2	53
5	Nanoindentation analysis of time-dependent deformation in as-cast and annealed Cuâ€“Zr bulk metallic glass. Intermetallics, 2010, 18, 1898-1901.	1.8	50
6	Understanding photocatalytic overall water splitting on CoO nanoparticles: Effects of facets, surface stoichiometry, and the CoO/water interface. Journal of Catalysis, 2018, 365, 115-124.	3.1	39
7	Shear localization and the plasticity of bulk amorphous alloys. Scripta Materialia, 2010, 63, 231-234.	2.6	33
8	Correlation between plasticity and other materials properties of Cuâ€“Zr bulk metallic glasses: An atomistic simulation study. Acta Materialia, 2011, 59, 805-811.	3.8	31
9	Role of atomic-scale chemical heterogeneities in improving the plasticity of Cu-Zr-Ag bulk amorphous alloys. Acta Materialia, 2018, 157, 209-217.	3.8	31
10	Mechanism for spontaneous oxygen and hydrogen evolution reactions on CoO nanoparticles. Journal of Materials Chemistry A, 2019, 7, 6708-6719.	5.2	29
11	Optimal methodology for explicit solvation prediction of band edges of transition metal oxide photocatalysts. Communications Chemistry, 2019, 2, .	2.0	28
12	Effect of the Atomic Packing Density on the Structural Change Rate of Amorphous Alloys under Elastostatic Stress. Metals and Materials International, 2008, 14, 159-163.	1.8	20
13	Deformation behaviors under tension and compression: Atomic simulation of Cu65Zr35 metallic glass. Intermetallics, 2011, 19, 1168-1173.	1.8	19
14	Paradoxical phenomena between the homogeneous and inhomogeneous deformations of metallic glasses. Applied Physics Letters, 2009, 94, 021907.	1.5	18
15	A methodology of enhancing the plasticity of amorphous alloys: Elastostatic compression at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 499, 529-533.	2.6	18
16	Effect of hydrogenation on the mechanical property of amorphous Ni90Al10 membranes. International Journal of Hydrogen Energy, 2011, 36, 9324-9334.	3.8	16
17	Relationship between activation energy for hydrogen permeation and hydrogen permeation properties of amorphous Cu50Zr50 and Cu65Zr35 membranes. Intermetallics, 2011, 19, 1887-1890.	1.8	15
18	Plasticity of amorphous alloys assessed by their homogeneous flow rate. Scripta Materialia, 2009, 61, 363-366.	2.6	14

#	Article	IF	Citations
19	Plasticity improvement of amorphous alloy via skim cold rolling. Metals and Materials International, 2009, 15, 209-214.	1.8	13
20	Crystalline Ge quantum dots embedded in SiO₂matrix synthesized by plasma immersion ion implantation. Nanotechnology, 2011, 22, 285605.	1.3	12
21	Photocatalytic hydrogen evolution activity of Co/CoO hybrid structures: a first-principles study on the Co layer thickness effect. Journal of Materials Chemistry A, 2019, 7, 16176-16189.	5.2	10
22	Hydrogen-induced structural change in Ni90Al10 metallic glass. Journal of Alloys and Compounds, 2011, 509, S456-S459.	2.8	9
23	Strain localization in annealed Cu50Zr50 metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5319-5326.	2.6	8
24	Particle size versus grain size relation in the sprayformed Al-18Si composites. Metals and Materials International, 2009, 15, 609-613.	1.8	4
25	Deformation-induced charge redistribution in ceria thin film at room temperature. Acta Materialia, 2020, 191, 70-80.	3.8	4
26	Prediction of Ln3+<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:mo linebreak="goodbreak" linebreakstyle="after">â^'</mml:mo></mml:mrow></mml:math>4f energy levels in Î²-NaYF4:Ln3+ and understanding of absorption behaviors. Materials Chemistry and Physics, 2022, 275, 125317.	2.0	4
27	Electrochemically controlled defect chemistry: From oxygen excess to deficiency. Acta Materialia, 2021, 211, 116866.	3.8	3
28	Understanding the Plasticity of Amorphous Alloys Via the Interpretation of Structural Evolution Inside a Shear Band. Korean Journal of Materials Research, 2009, 19, 276-280.	0.1	1
29	Role of A phase Separating Element on the Plasticity of Amorphous Alloys : Experiment and Atomic Simulation Study. Korean Journal of Materials Research, 2009, 19, 79-84.	0.1	0