John S Carpenter

List of Publications by Year
in descending order

25 papers	1,241 citations	758635 12 h-index	713013 21 g-index
29 all docs	29 docs citations	29 times ranked	1092 citing authors

#	Article	IF	Citations
1	The Impact of Rolling at Temperature on Conductivity and Texture in Nanolamellar Cu/Nb Bimetallic Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2022, 53, 2208-2213.	1.1	7
2	Shear strain gradient in Cu/Nb nanolaminates: Strain accommodation and chemical mixing. Acta Materialia, 2022, 234, 117986.	3.8	12
3	Evolution of microstructures and properties leading to layer instabilities during accumulative roll bonding of Fe Cu, Fe Ag, and Fe Al. Materials and Design, 2021, 212, 110204.	3.3	12
4	Processing of Dilute Mgâ€“Znâ€“Mnâ€“Ca Alloy/Nb Multilayers by Accumulative Roll Bonding. Advanced Engineering Materials, 2020, 22, 1900673.	1.6	11
5	Probing Material Morphology and Deformation as a Response to in situ Loading using X-ray Tomography. Microscopy and Microanalysis, 2019, 25, 374-375.	0.2	0
6	Maintaining nano-lamellar microstructure in friction stir welding (FSW) of accumulative roll bonded (ARB) Cu-Nb nano-lamellar composites (NLC). Journal of Materials Science and Technology, 2018, 34, 92-101.	5.6	16
7	Interfaceâ€Driven Plasticity: The Presence of an Interface Affected Zone in Metallic Lamellar Composites. Advanced Engineering Materials, 2015, 17, 109-114.	1.6	13
8	An indentation-based method to determine constituent strengths within nanolayered composites. Acta Materialia, 2015, 92, 255-264.	3.8	14
9	Recrystallization and Grain Growth in Accumulative Roll-Bonded Metal Composites. Jom, 2015, 67, 2810-2819.	0.9	9
10	Layer Stability and Material Properties of Friction-Stir Welded Cuâ€“Nb Nanolamellar Composite Plates. Materials Research Letters, 2014, 2, 227-232.	4.1	2
11	An interface facet driven Rayleigh instability in high-aspect-ratio bimetallic nanolayered composites. Applied Physics Letters, 2014, 105, .	1.5	25
12	The Influence of Rolling Schedule on the Dynamic Properties of Accumulatively Roll Bonded Nano-Layered Cu-Nb. Key Engineering Materials, 2014, 622-623, 1031-1040.	0.4	2
13	Mechanical Properties of Nanostructured Metals. , 2014, , 495-553.		6
14	Processing Parameter Influence on Texture and Microstructural Evolution in Cu-Nb Multilayer Composites Fabricated via Accumulative Roll Bonding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2192-2208.	1.1	67
15	The critical role of grain orientation and applied stress in nanoscale twinning. Nature Communications, 2014, 5, 3806.	5.8	62
16	Deformation behavior of the cobalt-based superalloy Haynes 25: Experimental characterization and crystal plasticity modeling. Acta Materialia, 2014, 63, 162-168.	3.8	86
17	Engineering Interface Structures and Thermal Stabilities via SPD Processing in Bulk Nanostructured Metals. Scientific Reports, 2014, 4, 4226.	1.6	65
18	Perspective on the Use of Coherent Diffraction Imaging as a Tool for High Resolution Materials Characterization. Jom, 2013, 65, 1181-1182.	0.9	0

#	Article	IF	Citations
19	Interface-driven microstructure development and ultra high strength of bulk nanostructured Cu-Nb multilayers fabricated by severe plastic deformation. Journal of Materials Research, 2013, 28, 1799-1812.	1.2	142
20	Design of Radiation Tolerant Materials Via Interface Engineering. Advanced Materials, 2013, 25, 6975-6979.	11.1	307
21	High-strength and thermally stable bulk nanolayered composites due to twin-induced interfaces. Nature Communications, 2013, 4, 1696.	5.8	298
22	X-Ray Diffraction Studies of Forward and Reverse Plastic Flow in Nanoscale Layers During Thermal Cycling. Materials Research Letters, 2013, 1, 233-243.	4.1	11
23	Brief Introduction to Neutron Scattering and Global Neutron User Facilities. Jom, 2012, 64, 104-111.	0.9	19
24	Perspective on Neutron Diffraction as a Tool for Characterizing Minerals, Metals, and Materials. Jom, 2012, 64, 102-103.	0.9	0
25	Achieving maximum hardness in semi-coherent multilayer thin films with unequal layer thickness. Acta Materialia, 2012, 60, 2625-2636.	3.8	53