Siddhartha Pathak

List of Publications by Year
in descending order

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38 papers	1,747 citations	304602 22 h-index	377752 34 g-index
39 all docs	39 docs citations	39 times ranked	1782 citing authors

#	Article	IF	Citations
1	Microstructural and micro-mechanical analysis of 14YWT nanostructured Ferritic alloy after varying thermo-mechanical processing paths into tubing. Materials Characterization, 2021, 171, 110744.	1.9	5
2	Lamellar Level Correlations Between Mechanical Behavior and Composition in Mouse Bone. Jom, 2021, 73, 3034-3045.	0.9	1
3	Extreme shear-deformation-induced modification of defect structures and hierarchical microstructure in an Alâ€“Si alloy. Communications Materials, 2020, 1, .	2.9	29
4	Enhancement of mechanical properties of vertically aligned carbon nanotube arrays due to N⁺ ion irradiation. Nanotechnology, 2020, 31, 285703.	1.3	3
5	Structure and properties of pseudomorphically transformed bcc Mg in Mg/Nb multilayered nanolaminates studied using synchrotron X-ray diffraction. Journal of Applied Physics, 2019, 126, 025302.	1.1	10
6	Spherical Nanoindentation Stress-Strain Analysis of Ion-Irradiated Tungsten. Minerals, Metals and Materials Series, 2019, , 617-635.	0.3	0
7	Quantifying the mechanical effects of He, W and HeÂ+ÂW ion irradiation on tungsten with spherical nanoindentation. Journal of Materials Science, 2018, 53, 5296-5316.	1.7	39
8	Time and frequency dependent mechanical properties of LaCoO3-based perovskites: Internal friction and negative creep. Journal of Applied Physics, 2018, 124, .	1.1	4
9	Room temperature deformation mechanisms of Mg/Nb nanolayered composites. Journal of Materials Research, 2018, 33, 1311-1332.	1.2	43
10	Spherical Nanoindentation Stress-Strain Analysis of Ion-Irradiated Tungsten. Minerals, Metals and Materials Series, 2018, , 617-635.	0.3	1
11	Strong, Ductile, and Thermally Stable bcc-Mg Nanolaminates. Scientific Reports, 2017, 7, 8264.	1.6	53
12	Probing nanoscale damage gradients in ion-irradiated metals using spherical nanoindentation. Scientific Reports, 2017, 7, 11918.	1.6	35
13	In situ frustum indentation of nanoporous copper thin films. International Journal of Plasticity, 2017, 98, 139-155.	4.1	15
14	Spherical nanoindentation of proton irradiated 304 stainless steel: A comparison of small scale mechanical test techniques for measuring irradiation hardening. Journal of Nuclear Materials, 2017, 493, 368-379.	1.3	40
15	Investigations of orientation and length scale effects on micromechanical responses in polycrystalline zirconium using spherical nanoindentation. Scripta Materialia, 2016, 113, 241-245.	2.6	22
16	Vertically Aligned Carbon Nanotubes, Collective Mechanical Behavior. , 2016, , 4325-4344.		0
17	Vertically Aligned Carbon Nanotubes, Collective Mechanical Behavior. , 2016, , 1-20.		1
18	Spherical nanoindentation stressâ€“strain curves. Materials Science and Engineering Reports, 2015, 91, 1-36.	14.8	255

#	Article	IF	Citations
19	Understanding pop-ins in spherical nanoindentation. Applied Physics Letters, 2014, 105, .	1.5	51
20	Effect of morphology on the strain recovery of vertically aligned carbon nanotube arrays: An in situ study. Carbon, 2013, 63, 303-316.	5.4	22
21	Local Relative Density Modulates Failure and Strength in Vertically Aligned Carbon Nanotubes. ACS Nano, 2013, 7, 8593-8604.	7.3	33
22	Compressive response of vertically aligned carbon nanotube films gleaned from in situ flat-punch indentations. Journal of Materials Research, 2013, 28, 984-997.	1.2	22
23	Higher Recovery and Better Energy Dissipation at Faster Strain Rates in Carbon Nanotube Bundles: An in-Situ Study. ACS Nano, 2012, 6, 2189-2197.	7.3	96
24	Assessment of lamellar level properties in mouse bone utilizing a novel spherical nanoindentation data analysis method. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 13, 102-117.	1.5	35
25	Viscosity. , 2012, , 2819-2819.		0
26	Studying grain boundary regions in polycrystalline materials using spherical nano-indentation and orientation imaging microscopy. Journal of Materials Science, 2012, 47, 815-823.	1.7	66
27	Measuring the dynamic mechanical response of hydrated mouse bone by nanoindentation. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 34-43.	1.5	62
28	Size effects in Al nanopillars: Single crystalline vs. bicrystalline. Acta Materialia, 2011, 59, 4416-4424.	3.8	162
29	Influence of lower current densities on the residual stress and structure of thick nickel electrodeposits. Surface and Coatings Technology, 2011, 205, 3651-3657.	2.2	43
30	Mechanical behavior and electrical conductivity of La1â^'xCaxCoO3 (x=0, 0.2, 0.4, 0.55) perovskites. Journal of Power Sources, 2010, 195, 3612-3620.	4.0	27
31	Viscoelasticity and high buckling stress of dense carbon nanotube brushes. Carbon, 2009, 47, 1969-1976.	5.4	109
32	On thermal and vibrational properties of LaGaO3 single crystals. Acta Materialia, 2009, 57, 2984-2992.	3.8	9
33	Measurement of the local mechanical properties in polycrystalline samples using spherical nanoindentation and orientation imaging microscopy. Acta Materialia, 2009, 57, 3020-3028.	3.8	71
34	Importance of surface preparation on the nano-indentation stress-strain curves measured in metals. Journal of Materials Research, 2009, 24, 1142-1155.	1.2	80
35	Thermal and mechanical properties of LaCoO3 and La0.8Ca0.2CoO3 perovskites. Journal of Power Sources, 2008, 182, 230-239.	4.0	40
36	Analyzing indentation stressâ€“strain response of LaGaO3 single crystals using spherical indenters. Journal of the European Ceramic Society, 2008, 28, 2213-2220.	2.8	35

#	Article	IF	Citations
37	Analyzing indentation behavior of LaGaO3 single crystals using sharp indenters. Journal of the European Ceramic Society, 2008, 28, 2039-2047.	2.8	15
38	Determination of the effective zero-point and the extraction of spherical nanoindentation stressâ€“strain curves. Acta Materialia, 2008, 56, 3523-3532.	3.8	213