Nguyen Q Chinh

List of Publications by Year
in descending order

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96 papers	2,895 citations	218592 26 h-index	182361 51 g-index
97 all docs	97 docs citations	97 times ranked	2029 citing authors

#	Article	IF	Citations
1	The effect of severe plastic deformation on precipitation in supersaturated Alâ€“Znâ€“Mg alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 460-461, 77-85.	2.6	185
2	Experimental Evidence for Grain-Boundary Sliding in Ultrafine-Grained Aluminum Processed by Severe Plastic Deformation. Advanced Materials, 2006, 18, 34-39.	11.1	169
3	Effect of Mg addition on microstructure and mechanical properties of aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 387-389, 55-59.	2.6	139
4	Microstructure of ultrafine-grained fcc metals produced by severe plastic deformation. Current Applied Physics, 2006, 6, 194-199.	1.1	132
5	A new constitutive relationship for the homogeneous deformation of metals over a wide range of strain. Acta Materialia, 2004, 52, 3555-3563.	3.8	129
6	Unusual super-ductility at room temperature in an ultrafine-grained aluminum alloy. Journal of Materials Science, 2010, 45, 4718-4724.	1.7	125
7	The effect of Cu on mechanical and precipitation properties of Alâ€“Znâ€“Mg alloys. Journal of Alloys and Compounds, 2004, 378, 52-60.	2.8	124
8	Orientation-dependent hardness and nanoindentation-induced deformation mechanisms of WC crystals. Acta Materialia, 2015, 83, 397-407.	3.8	107
9	Strain rate sensitivity studies in an ultrafine-grained Alâ€“30wt.% Zn alloy using micro- and nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 543, 117-120.	2.6	92
10	Grain Boundary Phenomena in an Ultrafineâ€Grained Alâ€“Zn Alloy with Improved Mechanical Behavior for Microâ€Devices. Advanced Engineering Materials, 2014, 16, 1000-1009.	1.6	92
11	Microstructure and strength of severely deformed fcc metals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 462, 86-90.	2.6	91
12	Correlation between microstructure and mechanical properties of severely deformed metals. Journal of Alloys and Compounds, 2009, 483, 271-274.	2.8	88
13	Characteristics of face-centered cubic metals processed by equal-channel angular pressing. Journal of Materials Science, 2007, 42, 1594-1605.	1.7	84
14	Principles of self-annealing in silver processed by equal-channel angular pressing: The significance of a very low stacking fault energy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 752-760.	2.6	80
15	Plastic instabilities and dislocation densities during plastic deformation in Alâ€“Mg alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 445-446, 186-192.	2.6	73
16	Developing a strategy for the processing of age-hardenable alloys by ECAP at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 516, 248-252.	2.6	71
17	Flow processes at low temperatures in ultrafine-grained aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 434, 326-334.	2.6	70
18	Deformation characteristics of WC micropillars. Journal of the European Ceramic Society, 2014, 34, 4099-4103.	2.8	61

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19	Microstructure and yield strength of severely deformed silver. Scripta Materialia, 2008, 58, 775-778.	2.6	51
20	Mathematical description of indentation creep and its application for the determination of strain rate sensitivity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 611, 333-336.	2.6	46
21	Characterization of plastic instability steps occurring in depth-sensing indentation tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 324, 219-224.	2.6	41
22	Microstructural characteristics of pure gold processed by equal-channel angular pressing. Scripta Materialia, 2007, 56, 947-950.	2.6	35
23	Developing Processing Routes for the Equal-Channel Angular Pressing of Age-Hardenable Aluminum Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 802-809.	1.1	34
24	Plastic behavior of fcc metals over a wide range of strain: Macroscopic and microscopic descriptions and their relationship. Acta Materialia, 2011, 59, 2385-2391.	3.8	34
25	Observations of unique plastic behavior in micro-pillars of an ultrafine-grained alloy. MRS Communications, 2012, 2, 75-78.	0.8	32
26	Plastic behavior of face-centered-cubic metals over a wide range of strain. Acta Materialia, 2010, 58, 5015-5021.	3.8	28
27	Influence of Zn content on the microstructure and mechanical performance of ultrafine-grained Alâ€“Zn alloys processed by high-pressure torsion. Materials Letters, 2017, 186, 334-337.	1.3	28
28	Plasticity in ZrB2 micropillars induced by anomalous slip activation. Journal of the European Ceramic Society, 2016, 36, 389-394.	2.8	27
29	Using the stressâ€“strain relationships to propose regions of low and high temperature plastic deformation in aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 234-238.	2.6	25
30	Twinning and dislocation activity in silver processed by severe plastic deformation. Journal of Materials Science, 2009, 44, 1656-1660.	1.7	24
31	The effect of impurity level on ultrafine-grained microstructures and their stability in low stacking fault energy silver. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 8694-8699.	2.6	23
32	Effects of the sp element additions on the microstructure and mechanical properties of NiCoFeCr based high entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 669, 14-19.	2.6	23
33	Characterization of stressâ€“strain relationships in Al over a wide range of testing temperatures. International Journal of Plasticity, 2014, 54, 178-192.	4.1	21
34	Ultralow-temperature superplasticity and its novel mechanism in ultrafine-grained Al alloys. Materials Research Letters, 2021, 9, 475-482.	4.1	21
35	Stability of the ultrafine-grained microstructure in silver processed by ECAP and HPT. Journal of Materials Science, 2013, 48, 4637-4645.	1.7	18
36	Self-annealing in a two-phase Pb-Sn alloy after processing by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 666, 350-359.	2.6	18

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37	The Effect of Grain Boundary Sliding and Strain Rate Sensitivity on the Ductility of Ultrafine-Grained Materials. Materials Science Forum, 0, 667-669, 677-682.	0.3	17
38	Microstructure of low stacking fault energy silver processed by different routes of severe plastic deformation. Journal of Alloys and Compounds, 2012, 536, S190-S193.	2.8	17
39	Grain Boundary Sliding as a Significant Mechanism of Low Temperature Plastic Deformation in ECAP Aluminum. Materials Science Forum, 2006, 503-504, 1001-1006.	0.3	16
40	Delayed microstructural recovery in silver processed by equal-channel angular pressing. Journal of Materials Science, 2008, 43, 5672-5676.	1.7	16
41	High temperature thermal stability of ultrafine-grained silver processed by equal-channel angular pressing. Journal of Materials Science, 2013, 48, 1675-1684.	1.7	16
42	Microstructures and transition from brittle to ductile behavior of NiFeCrMoW High Entropy Alloys. Materials Letters, 2017, 195, 14-17.	1.3	15
43	Stability of Ultrafine-Grained Microstructure in Fcc Metals Processed by Severe Plastic Deformation. Key Engineering Materials, 0, 465, 195-198.	0.4	14
44	The influence of artificial aging on the microstructure and hardness of an Alâ€“Znâ€“Mgâ€“Zr alloy processed by equal-channel angular pressing. Journal of Materials Science, 2019, 54, 10918-10928.	1.7	14
45	Evolution of microstructure and hardness during artificial aging of an ultrafine-grained Al-Zn-Mg-Zr alloy processed by high pressure torsion. Journal of Materials Science, 2020, 55, 16791-16805.	1.7	14
46	Evaluation of the true activation enthalpy of superplastic flow including a threshold stress. Journal of Materials Science, 1994, 29, 2341-2344.	1.7	13
47	Microstructural Characterization of the Crystallization Sequence of a Severe Plastically Deformed Al-Ce-Ni-Co Amorphous Alloy. Materials Science Forum, 2006, 519-521, 1329-1334.	0.3	13
48	Superplasticity of aluminium alloys grain-refined by zirconium. Journal of Materials Science, 1987, 22, 137-143.	1.7	12
49	Threshold stress in dispersionally strengthened superplastic Al alloys. Journal of Materials Science, 1990, 25, 4767-4771.	1.7	12
50	Superplasticity of AlMgSi alloys. Journal of Materials Science, 1992, 27, 6141-6145.	1.7	12
51	Thermal stability and mechanical properties of the TiCuZrPd glasses with 10, 14 and 20at.% Pd. Journal of Alloys and Compounds, 2014, 615, S108-S112.	2.8	12
52	Deformation and Fracture of Î²â€Silicon Nitride Micropillars. Journal of the American Ceramic Society, 2015, 98, 374-377.	1.9	12
53	Mechanical properties and superplasticity of AlZnMg alloys with copper and zirconium additions. Physica Status Solidi A, 1995, 149, 583-599.	1.7	11
54	Precipitation and Mechanical Properties of Supersaturated Al-Zn-Mg Alloys Processed by Severe Plastic Deformation. Materials Science Forum, 2006, 519-521, 835-840.	0.3	11

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55	Microstructure and properties of cold consolidated amorphous ribbons from (NiCu)ZrTiAlSi alloys. Journal of Alloys and Compounds, 2009, 483, 74-77.	2.8	11
56	Precipitation and Work Hardening in High Strength AlZnMg(Cu,Zr) Alloys. Materials Science Forum, 1996, 217-222, 1293-1298.	0.3	10
57	Superplasticity and High Strength in Alâ€“Znâ€“Mgâ€“Zr Alloy with Ultrafine Grains. Advanced Engineering Materials, 2020, 22, 1900555.	1.6	10
58	Kinematic and dynamic characterization of plastic instabilities occurring in nano- and microindentation tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 409, 100-107.	2.6	9
59	Texture evolution during room temperature ageing of silver processed by equal-channel angular pressing. Scripta Materialia, 2011, 64, 1007-1010.	2.6	9
60	Possible self-organized criticality in the Portevin-Le Chatelier effect during decomposition of solid solution alloys. MRS Communications, 2012, 2, 1-4.	0.8	9
61	Characterizing Microstructural and Mechanical Properties of Alâ€“Zn Alloys Processed by Highâ€Pressure Torsion. Advanced Engineering Materials, 2020, 22, 1900672.	1.6	9
62	Solute concentration dependence of strength and plastic instabilities in Al-Mg alloys. Journal of Materials Research, 2005, 20, 331-337.	1.2	8
63	Investigation of the High Temperature Plasticity of Materials by Indentation Measurements. Key Engineering Materials, 1995, 97-98, 159-168.	0.4	7
64	Influence of Guinier-Preston Zone Formation on Plastic Instabilities in Depth Sensing Indentation Tests. Materials Science Forum, 2000, 331-337, 1007-1012.	0.3	7
65	Portevinâ€“Le ChÃ¢telier type plastic instabilities in depth sensing macro-indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 325, 255-260.	2.6	7
66	Microstructure and Mechanical Behavior of Severely Deformed F.C.C. Metals. Materials Science Forum, 2008, 567-568, 181-184.	0.3	7
67	Extended Applications of the Depth-Sensing Indentation Method. Micromachines, 2020, 11, 1023.	1.4	7
68	Effect of Mg Additions on the Work Hardening Behavior of Aluminum over a Wide Range of Strain. Materials Science Forum, 2002, 396-402, 1007-1012.	0.3	6
69	Monitoring of Self-Annealing in Ultrafine-Grained Silver Using Nanoindentation. Nanoscience and Nanotechnology Letters, 2010, 2, 294-297.	0.4	6
70	Evolution of the phase structure after different heat treatments in NiCoFeCrGa high entropy alloy. Journal of Alloys and Compounds, 2018, 743, 234-239.	2.8	6
71	A possible stabilizing effect of work hardening on the tensile performance of superplastic materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 448-454.	2.6	6
72	The effect of cooling rate on the microstructure and mechanical properties of NiCoFeCrGa high-entropy alloy. Journal of Materials Science, 2019, 54, 5074-5082.	1.7	6

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73	Effect of Microstructure on the Hot Deformation Characteristics of Aluminium Alloys. Materials Science Forum, 1996, 217-222, 1175-1180.	0.3	5
74	Effect of Indentation Size on Plastic Deformation Processes in an Ultrafine-Grained Al-3% Mg Alloy. Materials Science Forum, 2002, 396-402, 1073-1078.	0.3	5
75	Inhomogeneous softening during annealing of ultrafine-grained silver processed by HPT. Journal of Materials Science, 2013, 48, 7384-7391.	1.7	5
76	Up-hill diffusion of solute atoms towards slipped grain boundaries: A possible reason of decomposition due to severe plastic deformation. Scripta Materialia, 2020, 188, 285-289.	2.6	5
77	Stress-strain curves of superplastic alloys. Journal of Materials Science, 1987, 22, 3679-3684.	1.7	4
78	Effect of Pre-Aging on the Microstructure and Strength of Supersaturated AlZnMg Alloys Processed by ECAP. Materials Science Forum, 0, 584-586, 501-506.	0.3	4
79	Properties of Ni-based amorphous ribbons consolidated by high pressure torsion. Journal of Physics: Conference Series, 2008, 98, 062035.	0.3	4
80	The Influence of Impurity Content on Thermal Stability of Low Stacking Fault Energy Silver Processed by Severe Plastic Deformation. Materials Science Forum, 2012, 729, 222-227.	0.3	4
81	Correlation between strain-rate sensitivity and viscous properties derived from dynamic nanoindentation of ultrafine-grained Alâ^'Zn alloys. MRS Communications, 2019, 9, 310-314.	0.8	4
82	Effect of cobalt on the crystallization of Ni50Zr50 amorphous alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 133, 475-478.	2.6	3
83	Hot deformation mechanisms in commercial purity aluminium. Physica Status Solidi A, 1995, 148, 135-141.	1.7	3
84	Processing Age-Hardenable Alloys by Equal-Channel Angular Pressing at Room Temperature: Strategies and Advantages. Materials Science Forum, 0, 633-634, 527-534.	0.3	3
85	High strength of ultrafine-grained Alâ€“Mg films and the relevance of the modified Hallâ€“Petch-type relationship. MRS Communications, 2019, 9, 1111-1114.	0.8	3
86	Precipitation Microstructure of Ultrafine-Grained Al-Zn-Mg Alloys Processed by Severe Plastic Deformation. Materials Science Forum, 2007, 537-538, 169-176.	0.3	2
87	Unique microstructural and mechanical properties of Al-Zn alloys processed by high-pressure torsion. IOP Conference Series: Materials Science and Engineering, 2019, 613, 012028.	0.3	2
88	A Sequence of Phase Transformations and Phases in NiCoFeCrGa High Entropy Alloy. Materials, 2021, 14, 1076.	1.3	2
89	Low temperature super ductility and threshold stress of an ultrafine-grained Alâ€“Znâ€“Mgâ€“Zr alloy processed by equal-channel angular pressing. Journal of Materials Science, 2021, 56, 19244-19252.	1.7	2
90	Stability of microstructure in silver processed by severe plastic deformation. International Journal of Materials Research, 2009, 100, 884-887.	0.1	2

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91	The Stabilizing Effect of Strain Hardening during Superplastic Deformation. Materials Science Forum, 1996, 217-222, 1455-1460.	0.3	1
92	Work Hardening in Metals: Microscopic and Macroscopic Behavior through a Wide Range of Strain. Materials Science Forum, 2003, 426-432, 453-458.	0.3	1
93	The Nature of the Stress-Strain Relationship in Aluminum and Copper over a Wide Range of Strain. , 2005, , 87-94.		1
94	Unique Features of Ultrafine-Grained Microstructures in Materials Having Low Stacking Fault Energy. Materials Science Forum, 2010, 659, 171-176.	0.3	1
95	Threshold stress during high temperature creep of a commercial purity aluminium. Scripta Metallurgica Et Materialia, 1995, 32, 2105-2109.	1.0	0
96	Deformation-softening in ultrafine-grained materials. IOP Conference Series: Materials Science and Engineering, 2020, 903, 012041.	0.3	0