Kaneaki Tsuzaki

List of Publications by Year
in descending order

173 papers	7,657 citations	50276 46 h-index	56724 83 g-index
176 all docs	176 docs citations	176 times ranked	3305 citing authors

#	Article	IF	Citations
1	Hydrogen-assisted decohesion and localized plasticity in dual-phase steel. Acta Materialia, 2014, 70, 174-187.	7.9	366
2	Effect of hydrogen on the fracture behavior of high strength steel during slow strain rate test. Corrosion Science, 2007, 49, 4081-4097.	6.6	336
3	Inverse Temperature Dependence of Toughness in an Ultrafine Grain-Structure Steel. Science, 2008, 320, 1057-1060.	12.6	330
4	Stressâ€"strain behavior of ferrite and bainite with nano-precipitation in low carbon steels. Acta Materialia, 2015, 83, 383-396.	7.9	297
5	Bone-like crack resistance in hierarchical metastable nanolaminate steels. Science, 2017, 355, 1055-1057.	12.6	297
6	Overview of hydrogen embrittlement in high-Mn steels. International Journal of Hydrogen Energy, 2017, 42, 12706-12723.	7.1	228
7	Effect of hydrogen and stress concentration on the notch tensile strength of AISI 4135 steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 398, 37-46.	5.6	226
8	Hydrogen-assisted failure in a twinning-induced plasticity steel studied under in situ hydrogen charging by electron channeling contrast imaging. Acta Materialia, 2013, 61, 4607-4618.	7.9	218
9	Work hardening associated with É›-martensitic transformation, deformation twinning and dynamic strain aging in Feâ€"17Mnâ€"0.6C and Feâ€"17Mnâ€"0.8C TWIP steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7310-7316.	5.6	185
10	Hydrogen embrittlement associated with strain localization in a precipitation-hardened Feâ€"Mnâ€"Alâ€"C light weight austenitic steel. International Journal of Hydrogen Energy, 2014, 39, 4634-4646.	7.1	170
11	Hydrogen-induced cracking at grain and twin boundaries in an Feâ€"Mnâ€"C austenitic steel. Scripta Materialia, 2012, 66, 459-462.	5.2	168
12	The Morphology of Microstructure Composed of Lath Martensites in Steels. Transactions of the Iron and Steel Institute of Japan, 1980, 20, 207-214.	0.2	161
13	Delamination Effect on Impact Properties of Ultrafine-Grained Low-Carbon Steel Processed by Warm Caliber Rolling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 341-355.	2.2	141
14	Hydrogen embrittlement in a Feâ€"Mnâ€"C ternary twinning-induced plasticity steel. Corrosion Science, 2012, 54, 1-4.	6.6	134
15	Hydrogen degradation of a boron-bearing steel with 1050 and 1300MPa strength levels. Scripta Materialia, 2005, 52, 403-408.	5.2	130
16	Determination of the critical hydrogen concentration for delayed fracture of high strength steel by constant load test and numerical calculation. Corrosion Science, 2006, 48, 2189-2202.	6.6	129
17	Designing Feâ€"Mnâ€"Si alloys with improved low-cycle fatigue lives. Scripta Materialia, 2015, 99, 49-52.	5.2	129
18	Recent progress in microstructural hydrogen mapping in steels: Quantification, kinetic analysis, and multi-scale characterisation. Materials Science and Technology, 2017, 33, 1481-1496.	1.6	125

#	Article	IF	Citations
19	Design Concept and Applications of Fe–Mn–Si-Based Alloys—from Shape-Memory to Seismic Response Control. Materials Transactions, 2016, 57, 283-293.	1.2	117
20	Evaluation of hydrogen entry into high strength steel under atmospheric corrosion. Corrosion Science, 2010, 52, 2758-2765.	6.6	115
21	Hydrogen Trapping in Quenched and Tempered 0.42C-0.30Ti Steel Containing Bimodally Dispersed TiC Particles. ISIJ International, 2003, 43, 539-547.	1.4	109
22	Effect of hydrogen content on the embrittlement in a Feâ€“Mnâ€“C twinning-induced plasticity steel. Corrosion Science, 2012, 59, 277-281.	6.6	103
23	Response of hydrogen trapping capability to microstructural change in tempered Feâ€“0.2C martensite. Scripta Materialia, 2005, 52, 467-472.	5.2	89
24	Hydrogen-assisted quasi-cleavage fracture in a single crystalline type 316 austenitic stainless steel. Corrosion Science, 2013, 75, 345-353.	6.6	85
25	Comparative study of hydrogen embrittlement in stable and metastable high-entropy alloys. Scripta Materialia, 2018, 150, 74-77.	5.2	84
26	Nanoindentation-Induced Deformation Behavior in the Vicinity of Single Grain Boundary of Interstitial-Free Steel. Materials Transactions, 2005, 46, 2026-2029.	1.2	82
27	Hydrogen entry into Fe and high strength steels under simulated atmospheric corrosion. Electrochimica Acta, 2011, 56, 1799-1805.	5.2	77
28	Delamination Toughening of Ultrafine Grain Structure Steels Processed through Tempforming at Elevated Temperatures. ISIJ International, 2010, 50, 152-161.	1.4	75
29	Evaluation of susceptibility of high strength steels to delayed fracture by using cyclic corrosion test and slow strain rate test. Corrosion Science, 2010, 52, 1660-1667.	6.6	69
30	Tensile deformation behavior of Feâ€“Mnâ€“C TWIP steel with ultrafine elongated grain structure. Materials Letters, 2012, 75, 169-171.	2.6	69
31	High-resolution transmission electron microscopy study of crystallography and morphology of TiC precipitates in tempered steel. Philosophical Magazine, 2004, 84, 1735-1751.	1.6	68
32	TWIP Effect and Plastic Instability Condition in an Fe^|^ndash;Mn^|^ndash;C Austenitic Steel. ISIJ International, 2013, 53, 323-329.	1.4	67
33	Hydrogen Embrittlement Susceptibility of Fe-Mn Binary Alloys with High Mn Content: Effects of Stable and Metastable Îµ-Martensite, and Mn Concentration. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2656-2673.	2.2	67
34	In situ observations of silver-decoration evolution under hydrogen permeation: Effects of grain boundary misorientation on hydrogen flux in pure iron. Scripta Materialia, 2017, 129, 48-51.	5.2	66
35	Spatially and Kinetically Resolved Mapping of Hydrogen in a Twinning-Induced Plasticity Steel by Use of Scanning Kelvin Probe Force Microscopy. Journal of the Electrochemical Society, 2015, 162, C638-C647.	2.9	64
36	Hydrogen Embrittlement of a 1500-MPa Tensile Strength Level Steel with an Ultrafine Elongated Grain Structure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1670-1687.	2.2	61

#	Article	IF	Citations
37	Grain refinement effect on cryogenic tensile ductility in a Feâ€"Mnâ€"C twinning-induced plasticity steel. Materials & Design, 2013, 49, 234-241.	5.1	61
38	In situ microscopic observations of low-cycle fatigue-crack propagation in high-Mn austenitic alloys with deformation-induced Îµ-martensitic transformation. Acta Materialia, 2016, 112, 326-336.	7.9	61
39	Plasticity initiation and subsequent deformation behavior in the vicinity of single grain boundary investigated through nanoindentation technique. Journal of Materials Science, 2007, 42, 1728-1732.	3.7	58
40	Effects of severe plastic deformation on the corrosion behavior of aluminum alloys. Journal of Solid State Electrochemistry, 2009, 13, 277-282.	2.5	55
41	Effect of strain amplitude on the low-cycle fatigue behavior of a new Feâ€"15Mnâ€"10Crâ€"8Niâ€"4Si seismic damping alloy. International Journal of Fatigue, 2016, 88, 132-141.	5.7	54
42	Premature Fracture Mechanism in an Fe-Mn-C Austenitic Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4063-4074.	2.2	52
43	Hydrogen embrittlement property of a 1700-MPa-class ultrahigh-strength tempered martensitic steel. Science and Technology of Advanced Materials, 2010, 11, 025005.	6.1	51
44	Grain refinement effect on hydrogen embrittlement resistance of an equiatomic CoCrFeMnNi high-entropy alloy. International Journal of Hydrogen Energy, 2019, 44, 17163-17167.	7.1	51
45	Hydrogen-induced delayed fracture of a Feâ€"22Mnâ€"0.6C steel pre-strained at different strain rates. Scripta Materialia, 2012, 66, 947-950.	5.2	50
46	Overview of Dynamic Strain Aging and Associated Phenomena in Feâ€"Mnâ€"C Austenitic Steels. ISIJ International, 2018, 58, 1383-1395.	1.4	47
47	Microstructure Evolution in Ferritic Stainless Steels during Large Strain Deformation. Materials Transactions, 2004, 45, 2812-2821.	1.2	46
48	Hydrogen, as an alloying element, enables a greater strength-ductility balance in an Fe-Cr-Ni-based, stable austenitic stainless steel. Acta Materialia, 2020, 199, 181-192.	7.9	44
49	Studies of Evaluation of Hydrogen Embrittlement Property of High-Strength Steels with Consideration of the Effect of Atmospheric Corrosion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1290-1300.	2.2	43
50	Hydrogen trapping in carbon supersaturated Î±â€'iron and its decohesion effect in martensitic steel. Scripta Materialia, 2018, 149, 79-83.	5.2	40
51	Effect of solute atoms on fracture toughness in dilute magnesium alloys. Philosophical Magazine, 2013, 93, 4582-4592.	1.6	39
52	Hydrogen desorption and cracking associated with martensitic transformation in Fe-Cr-Ni-Based austenitic steels with different carbon contents. International Journal of Hydrogen Energy, 2017, 42, 26423-26435.	7.1	39
53	Positive and negative effects of hydrogen on tensile behavior in polycrystalline Feâ€"30Mnâ€"(6 âˆ'x)Siâ€"xAl austenitic alloys. Scripta Materialia, 2015, 105, 54-57.	5.2	38
54	Deformation microstructural evolution and strain hardening of differently oriented grains in twinning-induced plasticity Î² titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 659, 1-11.	5.6	38

#	Article	IF	Citations
55	Effects of martensitic transformability and dynamic strain age hardenability on plasticity in metastable austenitic steels containing carbon. Journal of Materials Science, 2017, 52, 7868-7882.	3.7	38
56	Two-dimensional MoirÃ© phase analysis for accurate strain distribution measurement and application in crack prediction. Optics Express, 2017, 25, 13465.	3.4	38
57	Ultrafine-Grain Structure Formation in an Al-Mg-Sc Alloy During Warm ECAP. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1087-1100.	2.2	37
58	Deformation Twinning Behavior of Twinning-induced Plasticity Steels with Different Carbon Concentrations â€“ Part 2: Proposal of Dynamic-strain-aging-assisted Deformation Twinning. ISIJ International, 2015, 55, 1754-1761.	1.4	37
59	Room-temperature blue brittleness of Fe-Mn-C austenitic steels. Scripta Materialia, 2017, 141, 20-23.	5.2	37
60	Hydrogen Embrittlement in Al-added Twinning-induced Plasticity Steels Evaluated by Tensile Tests during Hydrogen Charging. ISIJ International, 2012, 52, 2283-2287.	1.4	35
61	Evaluation of delayed fracture property of outdoor-exposed high strength AISI 4135 steels. Corrosion Science, 2010, 52, 3198-3204.	6.6	34
62	Martensitic transformation-induced hydrogen desorption characterized by utilizing cryogenic thermal desorption spectroscopy during cooling. Scripta Materialia, 2016, 122, 50-53.	5.2	34
63	Overview of metastability and compositional complexity effects for hydrogen-resistant iron alloys: Inverse austenite stability effects. Engineering Fracture Mechanics, 2019, 214, 123-133.	4.3	33
64	Quasi-cleavage Fracture along Annealing Twin Boundaries in a Feâ€“Mnâ€“C Austenitic Steel. ISIJ International, 2012, 52, 161-163.	1.4	31
65	Constant-load delayed fracture test of atmospherically corroded high strength steels. Applied Surface Science, 2011, 257, 8275-8281.	6.1	30
66	Effect of Dislocation Density on the Initiation of Plastic Deformation on Fe–C Steels. Materials Transactions, 2012, 53, 907-912.	1.2	30
67	On Strengthening of Austenitic Stainless Steel by Large Strain Cold Working. ISIJ International, 2016, 56, 1289-1296.	1.4	30
68	Effects of Mn Content and Grain Size on Hydrogen Embrittlement Susceptibility of Face-Centered Cubic High-Entropy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5612-5616.	2.2	30
69	Influence of Dislocation Separation on Dynamic Strain Aging in a Fe–Mn–C Austenitic Steel. Materials Transactions, 2012, 53, 546-552.	1.2	29
70	Microstructural Analyses of Modified-Ausformed Medium-Carbon Steel with High Resistance to Hydrogen Embrittlement by Atomic Force Microscopy. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2002, 66, 745-753.	0.4	28
71	Selective appearance of<i>Ïµ</i>-martensitic transformation and dynamic strain aging in Feâ€“Mnâ€“C austenitic steels. Philosophical Magazine, 2012, 92, 3051-3063.	1.6	28
72	Application of orthogonally arranged FIBâ€“SEM for precise microstructure analysis of materials. Journal of Alloys and Compounds, 2013, 577, S717-S721.	5.5	28

#	Article	IF	Citations
73	Tempforming in medium-carbon low-alloy steel. Journal of Alloys and Compounds, 2013, 577, S538-S542.	5.5	28
74	Enhancement of Upper Shelf Energy through Delamination Fracture in 0.05Âpct P Doped High-Strength Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 2453-2465.	2.2	27
75	Delamination toughening assisted by phosphorus in medium-carbon low-alloy steels with ultrafine elongated grain structures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 649, 135-145.	5.6	27
76	Effects of Îµ-martensitic transformation on crack tip deformation, plastic damage accumulation, and slip plane cracking associated with low-cycle fatigue crack growth. International Journal of Fatigue, 2017, 103, 533-545.	5.7	27
77	Comparative study on small fatigue crack propagation between Fe-30Mn-3Si-3Al and Fe-23Mn-0.5C twinning-induced plasticity steels: Aspects of non-propagation of small fatigue cracks. International Journal of Fatigue, 2017, 94, 1-5.	5.7	27
78	Importance of crack-propagation-induced Îµ-martensite in strain-controlled low-cycle fatigue of high-Mn austenitic steel. Philosophical Magazine Letters, 2015, 95, 303-311.	1.2	25
79	Combined Multi-scale Analyses on Strain/Damage/Microstructure in Steel: Example of Damage Evolution Associated with <i>Îµ</i>-martensitic Transformation. ISIJ International, 2016, 56, 2037-2046.	1.4	25
80	Hydrogen-assisted damage in austenite/martensite dual-phase steel. Philosophical Magazine Letters, 2016, 96, 9-18.	1.2	25
81	Effects of Static and Dynamic Strain Aging on Hydrogen Embrittlement in TWIP Steels Containing Al. ISIJ International, 2013, 53, 1268-1274.	1.4	24
82	Microstructure Evolution Associated with a Superior Low-Cycle Fatigue Resistance of the Fe-30Mn-4Si-2Al Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 5103-5113.	2.2	24
83	Low-and High-cycle Fatigue Properties of Ultrafine-grained Low Carbon Steels. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2003, 89, 726-733.	0.4	23
84	Revisiting the effects of hydrogen on deformation-induced Î³-Îµ martensitic transformation. Materials Letters, 2019, 249, 197-200.	2.6	22
85	Development of Fine-Grained Structure Caused by Friction Stir Welding Process of a ZK60A Magnesium Alloy. Materials Transactions, 2009, 50, 610-617.	1.2	19
86	Inverse grain size dependence of critical strain for serrated flow in a Feâ€"Mnâ€"C twinning-induced plasticity steel. Philosophical Magazine Letters, 2012, 92, 145-152.	1.2	19
87	Effects of Si on Tensile Properties Associated with Deformation-Induced ε-Martensitic Transformation in High Mn Austenitic Alloys. Materials Transactions, 2015, 56, 819-825.	1.2	19
88	Strain rate and hydrogen effects on crack growth from a notch in a Fe-high-Mn steel containing 1.1Âwt% solute carbon. International Journal of Hydrogen Energy, 2020, 45, 1125-1139.	7.1	19
89	Evaluation of Hydrogen Embrittlement Susceptibility of High Strength Steel by the Weibull Stress. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2001, 65, 1073-1081.	0.4	19
90	High-concentration carbon assists plasticity-driven hydrogen embrittlement in a Fe-high Mn steel with a relatively high stacking fault energy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 717, 78-84.	5.6	18

#	Article	IF	Citations
91	Evaluation of Grain Boundary Effect on Strength of Fe–C Low Alloy Martensitic Steels by Nanoindentation Technique. Materials Transactions, 2005, 46, 1301-1305.	1.2	17
92	Hexagonal close-packed Martensite-related Fatigue Crack Growth under the Influence of Hydrogen: Example of Feâ€“15Mnâ€“10Crâ€“8Niâ€“4Si Austenitic Alloy. Scripta Materialia, 2016, 113, 6-9.	5.2	17
93	Enhanced uniform elongation by pre-straining with deformation twinning in high-strength Î²-titanium alloys with an isothermal Ï‰-phase. Philosophical Magazine Letters, 2012, 92, 726-732.	1.2	16
94	Crack propagation behaviour in magnesium binary alloys. Philosophical Magazine, 2014, 94, 3317-3330.	1.6	15
95	First-principles Calculation of Effects of Carbon on Tetragonality and Magnetic Moment in Feâ€“C System. ISIJ International, 2015, 55, 2483-2491.	1.4	15
96	An unconventional hydrogen effect that suppresses thermal formation of the hcp phase in fcc steels. Scientific Reports, 2018, 8, 16136.	3.3	15
97	Microstructural Analyses of Grain Boundary Carbides of Tempered Martensite in Medium-Carbon Steel by Atomic Force Microscopy. Materials Transactions, 2002, 43, 1758-1766.	1.2	14
98	Evaluation of matrix strength in ultra-fine grained pure Al by nanoindentation. Journal of Materials Research, 2009, 24, 2917-2923.	2.6	14
99	Multiscale in situ deformation experiments: A sequential process from strain localization to failure in a laminated Ti-6Al-4V alloy. Materials Characterization, 2017, 128, 217-225.	4.4	14
100	EBSD- and ECCI-based Assessments of Inhomogeneous Plastic Strain Evolution Coupled with Digital Image Correlation. ISIJ International, 2019, 59, 2334-2342.	1.4	14
101	Influence of Processing Regimes on Fine-Grained Microstructure Development in an Al–Mg–Sc Alloy by Hot Equal-Channel Angular Pressing. Materials Transactions, 2012, 53, 56-62.	1.2	13
102	Randomization of Ferrite/austenite Orientation Relationship and Resultant Hardness Increment by Nitrogen Addition in Vanadium-microalloyed Low Carbon Steels Strengthened by Interphase Precipitation. ISIJ International, 2018, 58, 542-550.	1.4	13
103	Growth Behavior of a Mechanically Long Fatigue Crack in an FeCrNiMnCo High Entropy Alloy: A Comparison with an Austenitic Stainless Steel. ISIJ International, 2020, 60, 175-181.	1.4	13
104	Effect of deformation temperature on tensile properties in a pre-cooled Feâ€“Mnâ€“C austenitic steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 331-336.	5.6	12
105	<i>Îµ</i>â†’<i>Î³</i> Reverse Transformation-induced Hydrogen Desorption and Mn Effect on Hydrogen Uptake in Feâ€“Mn Binary Alloys. ISIJ International, 2015, 55, 2269-2271.	1.4	12
106	Effect of deformation twin on toughness in magnesium binary alloys. Philosophical Magazine, 2015, 95, 2513-2526.	1.6	12
107	Non-propagating fatigue cracks in austenitic steels with a micro-notch: Effects of dynamic strain aging, martensitic transformation, and microstructural hardness heterogeneity. International Journal of Fatigue, 2018, 113, 359-366.	5.7	12
108	Localized Plasticity and Associated Cracking in Stable and Metastable High-Entropy Alloys Pre-Charged with Hydrogen. Procedia Structural Integrity, 2018, 13, 716-721.	0.8	12

#	Article	IF	Citations
109	Optical Microscopy-Based Damage Quantification: an Example of Cryogenic Deformation of a Dual-Phase Steel. ISIJ International, 2018, 58, 179-185.	1.4	12
110	Detection of hydrogen effusion before, during, and after martensitic transformation: Example of multiphase transformation-induced plasticity steel. International Journal of Hydrogen Energy, 2019, 44, 26028-26035.	7.1	12
111	Lowering Strain Rate Simultaneously Enhances Carbon- and Hydrogen-Induced Mechanical Degradation in an Fe-33Mn-1.1C Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1137-1141.	2.2	12
112	Effect of Nano-Sized Oxides on Annealing Behaviour of Ultrafine Grained Steels. Materials Transactions, 2004, 45, 2252-2258.	1.2	11
113	Observations of Prior Austenite Grain Boundaries and Carbides in the Same Area of Tempered Martensite in Medium-Carbon Steel by Atomic Force Microscopy. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2001, 65, 734-741.	0.4	10
114	EBSD and ECCI Based Assessments of Inhomogeneous Plastic Strain Evolution Coupled with Digital Image Correlation. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2019, 105, 222-230.	0.4	10
115	In-Situ Electron Channeling Contrast Imaging under Tensile Loading: Residual Stress, Dislocation Motion, and Slip Line Formation. Scientific Reports, 2020, 10, 2622.	3.3	10
116	Factors Affecting Static Strain Aging under Stress at Room Temperature in a Feâ€"Mnâ€"C Twinning-induced Plasticity Steel. ISIJ International, 2013, 53, 1089-1096.	1.4	9
117	Microstructural damage evolution and arrest in binary Feâ€"high-Mn alloys with different deformation temperatures. International Journal of Fracture, 2018, 213, 193-206.	2.2	9
118	Determination Method of Weibull Shape Parameter for Evaluation of the Hydrogen Embrittlement Susceptibility of High Strength Steel. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2001, 65, 1082-1090.	0.4	8
119	A New Approach for Interpretation of Strengthening Mechanism of Martensitic Steel through Characterization of Local Deformation Behavior. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2006, 92, 295-310.	0.4	8
120	Recrystallization Mechanisms in Severely Deformed Dual-Phase Stainless Steel. Materials Science Forum, 0, 638-642, 1905-1910.	0.3	8
121	Deformation Twinning Behavior of Twinning-Induced Plasticity Steels with Different Carbon Concentrations. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2014, 100, 1246-1252.	0.4	8
122	Hydrogen Entry in Crevice Region: Evaluation by Hydrogen Permeation Technique. ISIJ International, 2006, 46, 1081-1085.	1.4	8
123	Deformation Twinning Behavior of Twinning-induced Plasticity Steels with Different Carbon Concentrations â€" Part 1: Atomic Force Microscopy and Electron Backscatter Diffraction Measurements. ISIJ International, 2015, 55, 1747-1753.	1.4	8
124	Microstructure effect on nanohardness distribution for medium-carbon martensitic steel. Science in China Series D: Earth Sciences, 2006, 49, 10-19.	0.9	7
125	Effect of Initial Microstructure on Impact Toughness of 1200ÂMPa-Class High Strength Steel with Ultrafine Elongated Grain Structure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 647-653.	2.2	7
126	Effect of Hydrogen on the Substructure of Lenticular Martensite in Fe-31Ni Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 4027-4036.	2.2	7

#	Article	IF	Citations
127	Growth Behavior of a Mechanically Long Fatigue Crack in an FeCrNiMnCo High Entropy Alloy: A Comparison with an Austenitic Stainless Steel. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2019, 105, 215-221.	0.4	7
128	Fatigue Crack Growth at Different Frequencies and Temperatures in an Fe-based Metastable High-entropy Alloy. ISIJ International, 2021, 61, 641-647.	1.4	7
129	Evolution of Quasi-Brittle Hydrogen-Assisted Damages in a Dual-Phase Steel. Materials Transactions, 2019, 60, 2368-2377.	1.2	7
130	Microstructure characteristic and its effect on mechanical and shape memory properties in a Feâ€"17Mnâ€"8Siâ€"0.3C alloy. Journal of Alloys and Compounds, 2013, 573, 15-19.	5.5	6
131	Toughening by the addition of phosphorus to a high-strength steel with ultrafine elongated grain structure. Philosophical Magazine Letters, 2013, 93, 109-115.	1.2	6
132	Deformation Twinning Behavior of Twinning-Induced Plasticity Steels with Different Carbon Concentrations. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2014, 100, 1253-1260.	0.4	6
133	Combined Multi-scale Analyses on Strain/Damage/Microstructure in Steel: Example of Damage Evolution Associated with Îµ-martensitic Transformation. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2016, 102, 227-236.	0.4	6
134	Overview of Dynamic Strain Aging and Associated Phenomena in Fe-Mn-C Austenitic Steels. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2018, 104, 187-200.	0.4	6
135	Hydrogen Enhances Shape Memory Effect of a Ferrous Face-Centered Cubic Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 4439-4441.	2.2	6
136	Chemical composition dependence of the strength and ductility enhancement by solute hydrogen in Feâ€"Crâ€"Ni-based austenitic alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 836, 142681.	5.6	6
137	Evaluation of Grain Boundary Effect on the Strength of Fe-C Martensitic Steels through Nanoindentation Technique. Materials Science Forum, 2005, 475-479, 4113-4116.	0.3	5
138	Dynamic Recrystallization Mechanisms Operating under Different Processing Conditions. Materials Science Forum, 0, 706-709, 2704-2709.	0.3	5
139	Machinability Improvement and Its Mechanism in SUS304 Austenitic Stainless Steel by Precipitated Hexagonal Boron Nitride. ISIJ International, 2013, 53, 1841-1849.	1.4	5
140	Fatigue Behavior of Fe-Cr-Ni-based Metastable Austenitic Steels with an Identical Tensile Strength and Different Solute Carbon Contents. ISIJ International, 2018, 58, 1910-1919.	1.4	5
141	Surface orientation dependence of hydrogen flux in lenticular martensite of an Fe-Ni-C alloy clarified through in situ silver decoration technique. Materials Letters, 2018, 228, 273-276.	2.6	5
142	Preface to the Special Issue on â€œAdvanced Structural Steelsâ€• ISIJ International, 2002, 42, 1325-1325.	1.4	5
143	Effects of Static and Dynamic Strain Aging on Hydrogen Embrittlement in TWIP Steels Containing Al. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2014, 100, 1132-1139.	0.4	5
144	Hydrogen-accelerated fatigue crack growth of equiatomic Feâ€"Crâ€"Niâ€"Mnâ€"Co high-entropy alloy evaluated by compact tension testing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 848, 143394.	5.6	5

#	Article	IF	Citations
145	Light Pre-deformation induced misorientation of grain boundary bcc-precipitates from the Kurdjumov-Sacks relationship in a Niâ˘Cr alloy. Metals and Materials International, 2005, 11, 341-349.	3.4	4
146	Strain Rate Sensitivity of Microstructural Damage Evolution in a Dual-Phase Steel Pre-Charged with Hydrogen. Procedia Structural Integrity, 2018, 13, 710-715.	0.8	4
147	Indentation-Induced Deformation Behavior in Martensitic Steel Observed through In Situ Nanoindentation in a Transmission Electron Microscopy. Materials Science Forum, 2006, 503-504, 239-244.	0.3	3
148	Effects of Si on Tensile Properties Associated with Deformation-Induced ε-Martensitic Transformation in High Mn Austenitic Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 657-663.	0.4	3
149	Fatigue Behavior in an Feâ€"N Binary Ferritic Steel: Similarity and Difference between Carbon and Nitrogen. ISIJ International, 2019, 59, 186-191.	1.4	3
150	Submicrocrystalline Structures and Tensile Behaviour of Stainless Steels Subjected to Large Strain Deformation and Subsequent Annealing. Advanced Materials Research, 2011, 409, 607-612.	0.3	2
151	Low-Cycle Fatigue Behavior and Microstructural Evolution of the Feâ€“30Mnâ€“4Siâ€“2Al Alloy. Materials Science Forum, 0, 783-786, 944-949.	0.3	2
152	Effect of Additional Boron Amount on Surface Roughness after Lathe Turning in h-BN Dispersed Type 304 Stainless Steels. ISIJ International, 2016, 56, 1031-1037.	1.4	2
153	Evolution of Quasi-Brittle Hydrogen-Assisted Damages in a Dual-Phase Steel. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2019, 83, 221-230.	0.4	2
154	Fatigue Behavior in an Fe-N Binary Ferritic Steel: Similarity and Difference between Carbon and Nitrogen. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 413-419.	0.4	2
155	Role of Delamination Fracture for Enhanced Impact Toughness in 0.05 %P Doped High Strength Steel with Ultrafine Elongated Grain Structure. Advanced Materials Research, 0, 409, 231-236.	0.3	1
156	Fatigue Behavior of Fe-Cr-Ni-based Metastable Austenitic Steels with an Identical Tensile Strength and Different Solute Carbon Contents. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2018, 104, 88-97.	0.4	1
157	Recent Studies on the Nature and State of Carbon Atoms in Iron. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 331-341.	0.4	1
158	Three-dimensional characterization of low-cycle fatigue crack morphology in TRIP-maraging steel: Crack closure, geometrical uncertainty and wear. International Journal of Fatigue, 2021, 143, 106032.	5.7	1
159	Slip System Partitioning as a Possible Mechanism for Ultrafine Grain Formation in Feâ€“3%Si Bicrystals. ISIJ International, 2008, 48, 1102-1106.	1.4	0
160	Hydrogen Embrittlement in Al-Added Twinning-Induced Plasticity Steels Evaluated by Tensile Tests during Hydrogen Charging. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2014, 100, 662-667.	0.4	0
161	Fatigue Crack Propagation Resistance in Metastable Laminated Microstructures. Materia Japan, 2019, 58, 206-213.	0.1	0
162	Potential Effects of Short-Range Order on Hydrogen Embrittlement of Stable Austenitic Steelsâ€"A Review. Advanced Structured Materials, 2021, , 1-18.	0.5	0

#	Article	IF	Citations
163	{111} Trace Analysis in ECC Images â€•toward <i>In-Situ</i> Observation of Deformation Behavior in FCC Bulk Specimens. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2021, 85, 17-22.	0.4	0
164	Preface to the Special Issue on "Advances in Physical Metallurgy and Processing of Steels". ISIJ International, 2001, 41, 519-519.	1.4	0
165	Relationship between Precipitation of Nano-Sized TiC and Hydrogen Absorption Property in a Ti-Bearing High-trength Steel. Materia Japan, 2003, 42, 884-884.	0.1	0
166	OS06W0420 Nanoindentation technique as a probe for characteristic deformation size. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2003, 2003.2, _OS06W0420-_OS06W0420.	0.0	0
167	157 Improvement in Impact Toughness of a 1800 MPa-Class Low-Alloy Steel through the Use of Delamination. The Proceedings of the Computational Mechanics Conference, 2008, 2008.21, 700-701.	0.0	0
168	1104 Impact Properties of Low-Carbon Steel with Ultrafme Elongated Grain Structure. The Proceedings of the Computational Mechanics Conference, 2010, 2010.23, 125-126.	0.0	0
169	Roles of Îµ-martensite on Resistance to Crack Growth:. The Proceedings of Mechanical Engineering Congress Japan, 2016, 2016, G0300103.	0.0	0
170	Small fatigue crack growth resistance of TRIP-maraging steel. The Proceedings of Conference of Kyushu Branch, 2018, 2018.71, C44.	0.0	0
171	Characteristics of plastic deformation associated with hydrogen-induced delayed crack propagation in a sheet of single-crystal Fe-Si alloy. The Proceedings of the Materials and Mechanics Conference, 2019, 2019, OS0111.	0.0	0
172	Small crack behavior of extruded Mg-Gd-Y-Zr alloy under high cycle fatigue. The Proceedings of Conference of Kyushu Branch, 2018, 2018.71, C45.	0.0	0
173	Strain rate and temperature effects on hydrogen embrittlement of stable and metastable high-entropy alloys. , 2022, 25, 5-14.		0