motomichi koyama

List of Publications by Year
in descending order

207 papers	6,111 citations	101543 36 h-index	88630 70 g-index
208 all docs	208 docs citations	208 times ranked	2683 citing authors

#	Article	IF	Citations
1	An Overview of Dual-Phase Steels: Advances in Microstructure-Oriented Processing and Micromechanically Guided Design. Annual Review of Materials Research, 2015, 45, 391-431.	9.3	469
2	Hydrogen-assisted decohesion and localized plasticity in dual-phase steel. Acta Materialia, 2014, 70, 174-187.	7.9	366
3	Bone-like crack resistance in hierarchical metastable nanolaminate steels. Science, 2017, 355, 1055-1057.	12.6	297
4	Overview of hydrogen embrittlement in high-Mn steels. International Journal of Hydrogen Energy, 2017, 42, 12706-12723.	7.1	228
5	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
6	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
7	Alloy Design, Combinatorial Synthesis, and Microstructureâ€"Property Relations for Low-Density Fe-Mn-Al-C Austenitic Steels. Jom, 2014, 66, 1845-1856.	1.9	172
8	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
9	Hydrogen-induced cracking at grain and twin boundaries in an Feâ€"Mnâ€"C austenitic steel. Scripta Materialia, 2012, 66, 459-462.	5.2	168
10	Hydrogen embrittlement in a Feâ€"Mnâ€"C ternary twinning-induced plasticity steel. Corrosion Science, 2012, 54, 1-4.	6.6	134
11	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
12	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
13	Mechanism of reversible transformation-induced plasticity of Feâ€"Mnâ€"Si shape memory alloys. Scripta Materialia, 2008, 59, 826-829.	5.2	91
14	Hydrogen-assisted quasi-cleavage fracture in a single crystalline type 316 austenitic stainless steel. Corrosion Science, 2013, 75, 345-353.	6.6	85
15	Comparative study of hydrogen embrittlement in stable and metastable high-entropy alloys. Scripta Materialia, 2018, 150, 74-77.	5.2	84
16	Effect of strain rate on hydrogen embrittlement susceptibility of twinning-induced plasticity steel pre-charged with high-pressure hydrogen gas. International Journal of Hydrogen Energy, 2016, 41, 15362-15372.	7.1	79
17	Enhancing Hydrogen Embrittlement Resistance of Lath Martensite by Introducing Nano-Films of Interlath Austenite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 3797-3802.	2.2	77
18	Tensile deformation behavior of Feâ€"Mnâ€"C TWIP steel with ultrafine elongated grain structure. Materials Letters, 2012, 75, 169-171.	2.6	69

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19	TWIP Effect and Plastic Instability Condition in an Fe^|^ndash;Mn^|^ndash;C Austenitic Steel. ISIJ International, 2013, 53, 323-329.	1.4	67
20	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
21	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
22	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
23	First-Principles Study on Hydrogen Diffusivity in BCC, FCC, and HCP Iron. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 5015-5022.	2.2	63
24	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
25	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
26	Planar slip-driven fatigue crack initiation and propagation in an equiatomic CrMnFeCoNi high-entropy alloy. International Journal of Fatigue, 2020, 133, 105418.	5.7	55
27	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
28	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
29	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
30	Overview of Dynamic Strain Aging and Associated Phenomena in Feâ€“Mnâ€“C Austenitic Steels. ISIJ International, 2018, 58, 1383-1395.	1.4	47
31	Nanoindentation/atomic force microscopy analyses of Îµ-martensitic transformation and shape memory effect in Feâ€“28Mnâ€“6Siâ€“5Cr alloy. Scripta Materialia, 2011, 65, 942-945.	5.2	43
32	The effects of thermomechanical training treatment on the deformation characteristics of Feâ€“Mnâ€“Siâ€“Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 497, 353-357.	5.6	42
33	Si content dependence on shape memory and tensile properties in Feâ€“Mnâ€“Siâ€“C alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2882-2888.	5.6	40
34	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
35	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
36	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

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37	Two-dimensional MoirÃ© phase analysis for accurate strain distribution measurement and application in crack prediction. Optics Express, 2017, 25, 13465.	3.4	38
38	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
39	Factors affecting hydrogen-assisted cracking in a commercial tempered martensitic steel: Mn segregation, MnS, and the stress state around abnormal cracks. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 640, 72-81.	5.6	37
40	Room-temperature blue brittleness of Fe-Mn-C austenitic steels. Scripta Materialia, 2017, 141, 20-23.	5.2	37
41	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
42	Martensitic transformation-induced hydrogen desorption characterized by utilizing cryogenic thermal desorption spectroscopy during cooling. Scripta Materialia, 2016, 122, 50-53.	5.2	34
43	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
44	Quasi-cleavage Fracture along Annealing Twin Boundaries in a Feâ€“Mnâ€“C Austenitic Steel. ISIJ International, 2012, 52, 161-163.	1.4	31
45	Strain mapping with high spatial resolution across a wide observation range by digital image correlation on plastic replicas. Materials Characterization, 2014, 98, 140-146.	4.4	30
46	Potential resistance to transgranular fatigue crack growth of Feâ€“C alloy with a supersaturated carbon clarified through FIB micro-notching technique. International Journal of Fatigue, 2016, 87, 1-5.	5.7	30
47	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
48	Gaseous hydrogen embrittlement of a Ni-free austenitic stainless steel containing 1 mass% nitrogen: Effects of nitrogen-enhanced dislocation planarity. International Journal of Hydrogen Energy, 2020, 45, 10209-10218.	7.1	30
49	Influence of Dislocation Separation on Dynamic Strain Aging in a Fe–Mn–C Austenitic Steel. Materials Transactions, 2012, 53, 546-552.	1.2	29
50	Origin of micrometer-scale dislocation motion during hydrogen desorption. Science Advances, 2020, 6, eaaz1187.	10.3	29
51	Selective appearance of<i>Îµ</i>-martensitic transformation and dynamic strain aging in Feâ€“Mnâ€“C austenitic steels. Philosophical Magazine, 2012, 92, 3051-3063.	1.6	28
52	Influence of Al on Shape Memory Effect and Twinning Induced Plasticity of Fe-Mn-Si-Al System Alloy. Materials Transactions, 2007, 48, 2729-2734.	1.2	27
53	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
54	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

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55	Optical full-field strain measurement method from wrapped sampling MoirÃ© phase to minimize the influence of defects and its applications. Optics and Lasers in Engineering, 2018, 110, 155-162.	3.8	27
56	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
57	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
58	Hydrogen-assisted damage in austenite/martensite dual-phase steel. Philosophical Magazine Letters, 2016, 96, 9-18.	1.2	25
59	Crystallographic selection rule for the propagation mode of microstructurally small fatigue crack in a laminated Ti-6Al-4V alloy: Roles of basal and pyramidal slips. International Journal of Fatigue, 2019, 128, 105200.	5.7	25
60	Effects of Static and Dynamic Strain Aging on Hydrogen Embrittlement in TWIP Steels Containing Al. ISIJ International, 2013, 53, 1268-1274.	1.4	24
61	Effects of hydrogen-altered yielding and workÂhardening on plastic-zone evolution: AÂfinite-element analysis. International Journal of Hydrogen Energy, 2015, 40, 9825-9837.	7.1	23
62	Underlying interstitial carbon concentration dependence of transgranular fatigue crack resistance in Fe-C ferritic steels: The kinetic effect viewpoint. International Journal of Fatigue, 2017, 98, 101-110.	5.7	23
63	Microstructural mechanisms of fatigue crack non-propagation in TRIP-maraging steels. International Journal of Fatigue, 2018, 113, 126-136.	5.7	23
64	Transformation-assisted hydrogen desorption during deformation in steels: Examples of Î±â€²- and Îµ-Martensite. International Journal of Hydrogen Energy, 2019, 44, 30472-30477.	7.1	23
65	Revisiting the effects of hydrogen on deformation-induced Î³-Îµ martensitic transformation. Materials Letters, 2019, 249, 197-200.	2.6	22
66	Impact of Mnâ€"C couples on fatigue crack growth in austenitic steels: Is the attractive atomic interaction negative or positive?. International Journal of Fatigue, 2017, 99, 1-12.	5.7	21
67	Interfacial hydrogen localization in austenite/martensite dualâ€phase steel visualized through optimized silver decoration and scanning Kelvin probe force microscopy. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 306-310.	1.5	20
68	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
69	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
70	Intergranular Fatigue Crack Initiation and Its Associated Small Fatigue Crack Propagation in Water-quenched Feâ€"C Fully Ferritic Steel. ISIJ International, 2015, 55, 2463-2468.	1.4	19
71	Characteristics of hydrogen-assisted intergranular fatigue crack growth in interstitial-free steel: role of plastic strain localization. International Journal of Fracture, 2017, 206, 123-130.	2.2	19
72	Effects of lamella size and connectivity on fatigue crack resistance of TRIP-maraging steel. International Journal of Fatigue, 2017, 100, 176-186.	5.7	19

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73	Visualization of dislocations through electron channeling contrast imaging at fatigue crack tip, interacting with pre-existing dislocations. Materials Research Letters, 2018, 6, 61-66.	8.7	19
74	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
75	Effects of cementite morphology on short-fatigue-crack propagation in binary Feâ€“C steel. Philosophical Magazine Letters, 2015, 95, 384-391.	1.2	18
76	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
77	Hydrogen embrittlement resistance of pre-strained ultra-high-strength low alloy TRIP-aided steel. International Journal of Fracture, 2020, 224, 253-260.	2.2	18
78	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
79	Pre-strain effects on critical stress and hydrogen content for hydrogen-induced quasi-cleavage fracture in a TRIP-aided bainitic ferrite steel: Martensitic transformation, matrix damage, and strain aging. International Journal of Hydrogen Energy, 2020, 45, 27920-27928.	7.1	17
80	Effect of austempering treatment on the microstructure and mechanical properties of 0.4Câ€“1.5Si-1.5Mn TRIP-aided bainitic ferrite steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 819, 141479.	5.6	17
81	Work hardening and uniform elongation of an ultrafine-grained Feâ€“33Mn binary alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 530, 659-663.	5.6	16
82	Interstitial Carbon Enhanced Corrosion Resistance of Fe-33Mn-xC Austenitic Steels: Inhibition of Anodic Dissolution. Journal of the Electrochemical Society, 2018, 165, C19-C26.	2.9	16
83	Dislocation motion at a fatigue crack tip in a high-nitrogen steel clarified through in situ electron channeling contrast imaging. Materials Characterization, 2019, 158, 109930.	4.4	16
84	Hydrogen embrittlement and associated surface crack growth in fine-grained equiatomic CoCrFeMnNi high-entropy alloys with different annealing temperatures evaluated by tensile testing under in situ hydrogen charging. International Journal of Hydrogen Energy, 2021, 46, 33028-33038.	7.1	16
85	Tensile properties of precracked tempered martensitic steel specimens tested at ultralow strain rates in high-pressure hydrogen atmosphere. Philosophical Magazine Letters, 2015, 95, 260-268.	1.2	15
86	Hydrogen-assisted failure in a bimodal twinning-induced plasticity steel: Delamination events and damage evolution. International Journal of Hydrogen Energy, 2018, 43, 2492-2502.	7.1	15
87	Fatigue Crack Growth Behavior and Associated Microstructure in a Metastable High-Entropy Alloy. Procedia Structural Integrity, 2018, 13, 831-836.	0.8	15
88	An unconventional hydrogen effect that suppresses thermal formation of the hcp phase in fcc steels. Scientific Reports, 2018, 8, 16136.	3.3	15
89	AFM Observation of Microstructural Changes in Fe-Mn-Si-Al Shape Memory Alloy. Materials Transactions, 2008, 49, 812-816.	1.2	14
90	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

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91	Generalized evaluation method for determining transition crack length for microstructurally small to microstructurally large fatigue crack growth: Experimental definition, facilitation, and validation. International Journal of Fatigue, 2017, 95, 38-44.	5.7	14
92	EBSD- and ECCI-based Assessments of Inhomogeneous Plastic Strain Evolution Coupled with Digital Image Correlation. ISIJ International, 2019, 59, 2334-2342.	1.4	14
93	Quantitative Evaluation of Hydrogen Effects on Evolutions of Deformation-Induced Îµ-Martensite and Damage in a High-Mn Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 6184-6194.	2.2	14
94	Fatigue crack propagation modes: plastic deformation mode and damage accumulation mode. International Journal of Fracture, 2020, 222, 111-122.	2.2	14
95	Transition mechanism of cycle- to time-dependent acceleration of fatigue crack-growth in 0.4Â%C Cr-Mo steel in a pressurized gaseous hydrogen environment. International Journal of Fatigue, 2022, 163, 107039.	5.7	14
96	Detection of Charged Hydrogen in Ferritic Steel through Cryogenic Secondary Ion Mass Spectrometry. ISIJ International, 2015, 55, 335-337.	1.4	13
97	Elucidation of the effects of cementite morphology on damage formation during monotonic and cyclic tension in binary low carbon steels using in situ characterization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 667, 358-367.	5.6	13
98	Fatigue crack non-propagation assisted by nitrogen-enhanced dislocation planarity in austenitic stainless steels. International Journal of Fatigue, 2017, 104, 158-170.	5.7	13
99	Resistance to mechanically small fatigue crack growth in ultrafine grained interstitial-free steel fabricated by accumulative roll-bonding. International Journal of Fatigue, 2019, 118, 117-125.	5.7	13
100	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
101	Strain rate sensitivity of hydrogen-assisted Îµ-martensitic transformation and associated hydrogen embrittlement in high-Mn steel. International Journal of Hydrogen Energy, 2021, 46, 27221-27233.	7.1	13
102	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
103	<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
104	Temperature dependence of transgranular fatigue crack resistance in interstitial-free steel and Fe-C steels with supersaturated carbon: Effects of dynamic strain aging and dynamic precipitation. International Journal of Fatigue, 2018, 110, 1-9.	5.7	12
105	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
106	Micrographic Digital Image Correlation Coupled with Microlithography: Case Study of Strain Localization and Subsequent Cracking at an FIB Notch Tip in a Laminated Ti-6Al-4V Alloy. Experimental Mechanics, 2018, 58, 381-386.	2.0	12
107	Microstructural hardness heterogeneity triggers fatigue crack non-propagation in as-hot-rolled Fe-30Mn-3Si-3Al twinning-induced plasticity steel. International Journal of Fatigue, 2018, 108, 18-24.	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

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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	Phase Stability Effects on Hydrogen Embrittlement Resistance in Martensiteâ€"Reverted Austenite Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 29-34.	2.2	12
112	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
113	Application of an iridium complex for detecting hydrogen permeation through pure iron. International Journal of Hydrogen Energy, 2020, 45, 25580-25586.	7.1	12
114	Roughness-induced stress shielding effect in fatigue crack propagation under Mode II loading. International Journal of Fatigue, 2018, 116, 245-256.	5.7	12
115	Mechanical-probabilistic evaluation of size effect of fatigue life using data obtained from single smooth specimen: An example using Fe-30Mn-4Si-2Al seismic damper alloy. Engineering Failure Analysis, 2017, 72, 34-47.	4.0	11
116	Threshold stress intensity factor range of a mechanically-long and microstructually-short crack perpendicular to an interface with plastic mismatch. Engineering Fracture Mechanics, 2017, 182, 287-302.	4.3	11
117	Small fatigue crack growth in a high entropy alloy. Procedia Structural Integrity, 2018, 13, 1065-1070.	0.8	11
118	Mode I fatigue crack growth induced by strain-aging in precipitation-hardened aluminum alloys. Theoretical and Applied Fracture Mechanics, 2019, 104, 102340.	4.7	11
119	Hierarchical Characteristics of Hydrogen-Assisted Crack Growth and Microstructural Strain Evolution in Tempered Martensitic Steels: Case of Quasi-cleavage Fracture. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 4703-4713.	2.2	11
120	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
121	Strain-rate sensitivity of hydrogen-assisted damage evolution and failure in dual-phase steel: From vacancy to micrometer-scale void growth. Engineering Fracture Mechanics, 2019, 216, 106513.	4.3	10
122	Intrinsic Factors that Trigger the Coaxing Effect in Binary Feâ€"C Ferritic Alloys with a Focus on Strain Aging. ISIJ International, 2017, 57, 358-364.	1.4	10
123	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
124	Effect of the state of carbon on ductility in Fe-0.017mass%C ferritic steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 701, 120-128.	5.6	9
125	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
126	Ductile-to-brittle transition in tensile failure due to shear-affected zone with a stress-concentration source: a comparative study on punched-plate tensile-failure characteristics of precipitation-hardened and dual-phase steels. International Journal of Fracture, 2018, 212, 237-248.	2.2	9

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127	1-second-resolved strain mapping in Ti-6Al-4V alloys during dwell fatigue in SEM by video sampling moirÃ©. Mechanics of Materials, 2019, 133, 63-70.	3.2	9
128	ECCI Characterization of Dislocation Structures at a Non-propagating Fatigue Crack Tip: Toward Understanding the Effects of Mn-C and Cr-N Couples on Crack Growth Resistance. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 426-435.	2.2	9
129	Pre-straining alters hydrogen-assisted cracking site and local hydrogen diffusivity in a nitrogen-doped duplex steel. Scripta Materialia, 2022, 207, 114272.	5.2	9
130	Continuous Transition of Deformation Modes in Fe-30Mn-5Si-1Al Alloy. Materials Transactions, 2010, 51, 1194-1199.	1.2	8
131	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
132	Characteristic Fatigue Crack Growth Behavior of Low Carbon Steel under Low-pressure Hydrogen Gas Atmosphere in an Ultra-low Frequency. ISIJ International, 2016, 56, 855-860.	1.4	8
133	Notch Sensitivity of the Fatigue Limit in High-Strength Steel. ISIJ International, 2016, 56, 1480-1486.	1.4	8
134	Material property controlling non-propagating fatigue crack length of mechanically and physically short-crack based on Dugdale-model analysis. Theoretical and Applied Fracture Mechanics, 2017, 90, 193-202.	4.7	8
135	A new design concept for prevention of hydrogen-induced mechanical degradation: viewpoints of metastability and high entropy. Procedia Structural Integrity, 2018, 13, 292-297.	0.8	8
136	Effect of shear-affected zone on fatigue crack propagation mode. International Journal of Fatigue, 2018, 116, 36-47.	5.7	8
137	Enhancement of hydrogen embrittlement resistance of Fe-Mn-C twinning-induced plasticity steel by partial recrystallization technique. Materials Characterization, 2019, 151, 221-226.	4.4	8
138	Fatigue Resistance of Laminated and Non-laminated TRIP-maraging Steels: Crack Roughness vs Tensile Strength. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1142-1145.	2.2	8
139	Simplified stress field determination for an inclined crack and interaction between two cracks under tension. Theoretical and Applied Fracture Mechanics, 2020, 107, 102561.	4.7	8
140	Multiple damage mechanisms facilitated by planar dislocation glide in a commercial-grade precipitation-strengthened Feâ€“Niâ€“Cr-based steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 782, 139250.	5.6	8
141	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
142	A patient-specific numerical modeling of the spontaneous coronary artery dissection in relation to atherosclerosis. Computer Methods and Programs in Biomedicine, 2019, 182, 105060.	4.7	7
143	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
144	Plastic deformation sequence and strain gradient characteristics of hydrogen-induced delayed crack propagation in single-crystalline Feâ€“Si alloy. Scripta Materialia, 2020, 178, 99-103.	5.2	7

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145	Hydrogen-assisted damage evolution in nitrogen-doped duplex stainless steel. International Journal of Hydrogen Energy, 2021, 46, 2716-2728.	7.1	7
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147	Notch shape dependence of fatigue crack extension in equiatomic CrMnFeCoNi high-entropy alloy. International Journal of Fatigue, 2021, 153, 106481.	5.7	7
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