

# motomichi koyama

## List of Publications by Year in descending order

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207  
papers

6,111  
citations

101496

36  
h-index

88593

70  
g-index

208  
all docs

208  
docs citations

208  
times ranked

2683  
citing authors

#	ARTICLE	IF	CITATIONS
1	Pre-straining alters hydrogen-assisted cracking site and local hydrogen diffusivity in a nitrogen-doped duplex steel. <i>Scripta Materialia</i> , 2022, 207, 114272.	2.6	9
2	Real-time Visualization of Hydrogen Distribution in Metals Using Polyaniline: An Ultrasensitive Hydrogenochromic Sensor. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	5
3	Synergistic effects of hydrogen and deformation temperature on mechanical properties of TRIP-aided bainitic ferrite steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 842, 143070.	2.6	6
4	Hydrogen-accelerated fatigue crack growth of equiatomic Fe-Cr-Ni-Mn-Co high-entropy alloy evaluated by compact tension testing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 848, 143394.	2.6	5
5	Transition mechanism of cycle- to time-dependent acceleration of fatigue crack-growth in 0.4%C Cr-Mo steel in a pressurized gaseous hydrogen environment. <i>International Journal of Fatigue</i> , 2022, 163, 107039.	2.8	14
6	Three-dimensional characterization of low-cycle fatigue crack morphology in TRIP-maraging steel: Crack closure, geometrical uncertainty and wear. <i>International Journal of Fatigue</i> , 2021, 143, 106032.	2.8	1
7	Hydrogen-assisted damage evolution in nitrogen-doped duplex stainless steel. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 2716-2728.	3.8	7
8	Novel ~75°C SEM cooling stage: application for martensitic transformation in steel. <i>Microscopy (Oxford, England)</i> , 2021, 70, 250-254.	0.7	1
9	Effects of Matrix Structure and Nitrogen Content on Fatigue Properties of Ultrahigh-Strength Low Alloy TRIP-Aided Steels. <i>ISIJ International</i> , 2021, 61, 591-598.	0.6	2
10	Fatigue Crack Growth at Different Frequencies and Temperatures in an Fe-based Metastable High-entropy Alloy. <i>ISIJ International</i> , 2021, 61, 641-647.	0.6	7
11	Stacking fault aggregation during cooling composing FCC-HCP martensitic transformation revealed by <i>in-situ</i> electron channeling contrast imaging in an Fe-high Mn alloy. <i>Science and Technology of Advanced Materials</i> , 2021, 22, 135-140.	2.8	5
12	Microstructure Refinement by Low-Temperature Ausforming in an Fe-Based Metastable High-Entropy Alloy. <i>Metals</i> , 2021, 11, 742.	1.0	2
13	Effect of austempering treatment on the microstructure and mechanical properties of 0.4C-1.5Si-1.5Mn TRIP-aided bainitic ferrite steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 819, 141479.	2.6	17
14	Strain rate sensitivity of hydrogen-assisted $\mu$ -martensitic transformation and associated hydrogen embrittlement in high-Mn steel. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 27221-27233.	3.8	13
15	Hierarchical Characteristics of Hydrogen-Assisted Crack Growth and Microstructural Strain Evolution in Tempered Martensitic Steels: Case of Quasi-cleavage Fracture. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 4703-4713.	1.1	11
16	Hydrogenation treatment under several gigapascals assists diffusionless transformation in a face-centered cubic steel. <i>Scientific Reports</i> , 2021, 11, 19384.	1.6	4
17	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. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 33028-33038.	3.8	16
18	Depressurization-induced diffusionless transformation in pure iron hydrogenated under several gigapascals. <i>Materials Letters: X</i> , 2021, 11, 100078.	0.3	1

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19	Notch shape dependence of fatigue crack extension in equiatomic CrMnFeCoNi high-entropy alloy. <i>International Journal of Fatigue</i> , 2021, 153, 106481.	2.8	7
20	Quantification and Characterization of Microdamage Resistance in Metals for Designing High-Strength Ductile Microstructures. <i>Accounts of Materials Research</i> , 2021, 2, 1167-1176.	5.9	7
21	Planar slip-driven fatigue crack initiation and propagation in an equiatomic CrMnFeCoNi high-entropy alloy. <i>International Journal of Fatigue</i> , 2020, 133, 105418.	2.8	55
22	Strain rate and hydrogen effects on crack growth from a notch in a Fe-high-Mn steel containing 1.1Åwt% solute carbon. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 1125-1139.	3.8	19
23	Plastic deformation sequence and strain gradient characteristics of hydrogen-induced delayed crack propagation in single-crystalline Feâ€“Si alloy. <i>Scripta Materialia</i> , 2020, 178, 99-103.	2.6	7
24	Quantitative Evaluation of Hydrogen Effects on Evolutions of Deformation-Induced Îµ-Martensite and Damage in a High-Mn Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 6184-6194.	1.1	14
25	Shallow crack effect on evaluation of residual tensile strength: Harmless and stable cracks in finite-sized structure made of ductile metals. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 109, 102734.	2.1	4
26	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. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 27920-27928.	3.8	17
27	Effects of Mn Content and Grain Size on Hydrogen Embrittlement Susceptibility of Face-Centered Cubic High-Entropy Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 5612-5616.	1.1	30
28	Application of an iridium complex for detecting hydrogen permeation through pure iron. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 25580-25586.	3.8	12
29	Distinguishing geometric and metallurgic hydrogen-embrittlement susceptibilities in pre-cracked structures made of interstitial-free steel under monotonic tension. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 108, 102574.	2.1	1
30	Hydrogen Enhances Shape Memory Effect of a Ferrous Face-Centered Cubic Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 4439-4441.	1.1	6
31	Effects of hydrogen content that alters damage evolution mechanisms in SUH 660 precipitation-strengthened Feâ€“Crâ€“Ni steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 791, 139750.	2.6	4
32	Origin of micrometer-scale dislocation motion during hydrogen desorption. <i>Science Advances</i> , 2020, 6, eaaz1187.	4.7	29
33	Hydrogen embrittlement resistance of pre-strained ultra-high-strength low alloy TRIP-aided steel. <i>International Journal of Fracture</i> , 2020, 224, 253-260.	1.1	18
34	Simplified stress field determination for an inclined crack and interaction between two cracks under tension. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 107, 102561.	2.1	8
35	Understanding the damage initiation mechanism of precipitation-strengthened Fe-Ni-Cr based austenitic steel. <i>Materials Today: Proceedings</i> , 2020, 26, 3081-3084.	0.9	0
36	Gaseous hydrogen embrittlement of a Ni-free austenitic stainless steel containing 1 mass% nitrogen: Effects of nitrogen-enhanced dislocation planarity. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 10209-10218.	3.8	30

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37	Fundamental criterion $K_{trans}$ for failure analysis of hydrogen-assisted cracks in notched specimens of pure Ni. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 107, 102556.	2.1	4
38	Fatigue crack propagation modes: plastic deformation mode and damage accumulation mode. <i>International Journal of Fracture</i> , 2020, 222, 111-122.	1.1	14
39	Equivalence between shallow notch and shallow crack in structural failure caused by plastic instability. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 108, 102577.	2.1	0
40	Growth Behavior of a Mechanically Long Fatigue Crack in an FeCrNiMnCo High Entropy Alloy: A Comparison with an Austenitic Stainless Steel. <i>ISIJ International</i> , 2020, 60, 175-181.	0.6	13
41	Multiple damage mechanisms facilitated by planar dislocation glide in a commercial-grade precipitation-strengthened Fe-Ni-Cr-based steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 782, 139250.	2.6	8
42	Influence of dynamic-strain aging due to excess Mg on fatigue crack growth rate scatter in Al6061-T6 alloy. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 108, 102617.	2.1	2
43	Data of dynamic microscale strain distributions of Ti-6Al-4V alloys in dwell fatigue tests. <i>Data in Brief</i> , 2019, 25, 104338.	0.5	3
44	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. <i>International Journal of Fatigue</i> , 2019, 128, 105200.	2.8	25
45	Dislocation motion at a fatigue crack tip in a high-nitrogen steel clarified through in situ electron channeling contrast imaging. <i>Materials Characterization</i> , 2019, 158, 109930.	1.9	16
46	A patient-specific numerical modeling of the spontaneous coronary artery dissection in relation to atherosclerosis. <i>Computer Methods and Programs in Biomedicine</i> , 2019, 182, 105060.	2.6	7
47	Mode I fatigue crack growth induced by strain-aging in precipitation-hardened aluminum alloys. <i>Theoretical and Applied Fracture Mechanics</i> , 2019, 104, 102340.	2.1	11
48	Transformation-assisted hydrogen desorption during deformation in steels: Examples of $\epsilon$ - and $\mu$ -Martensite. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 30472-30477.	3.8	23
49	Effect analysis of stress-intensity-factor-range decreasing rate for obtaining threshold stress-intensity-factor-range. <i>Theoretical and Applied Fracture Mechanics</i> , 2019, 104, 102377.	2.1	1
50	Detection of hydrogen effusion before, during, and after martensitic transformation: Example of multiphase transformation-induced plasticity steel. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 26028-26035.	3.8	12
51	EBSD and ECCI Based Assessments of Inhomogeneous Plastic Strain Evolution Coupled with Digital Image Correlation. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2019, 105, 222-230.	0.1	10
52	Fatigue Behavior in an Fe-N Binary Ferritic Steel: Similarity and Difference between Carbon and Nitrogen. <i>ISIJ International</i> , 2019, 59, 186-191.	0.6	3
53	Strain-rate sensitivity of hydrogen-assisted damage evolution and failure in dual-phase steel: From vacancy to micrometer-scale void growth. <i>Engineering Fracture Mechanics</i> , 2019, 216, 106513.	2.0	10
54	Grain refinement effect on hydrogen embrittlement resistance of an equiatomic CoCrFeMnNi high-entropy alloy. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 17163-17167.	3.8	51

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55	Revisiting the effects of hydrogen on deformation-induced $\hat{\beta}$ - $\hat{\mu}$ martensitic transformation. <i>Materials Letters</i> , 2019, 249, 197-200.	1.3	22
56	1-second-resolved strain mapping in Ti-6Al-4V alloys during dwell fatigue in SEM by video sampling moiré. <i>Mechanics of Materials</i> , 2019, 133, 63-70.	1.7	9
57	Enhancement of hydrogen embrittlement resistance of Fe-Mn-C twinning-induced plasticity steel by partial recrystallization technique. <i>Materials Characterization</i> , 2019, 151, 221-226.	1.9	8
58	Overview of metastability and compositional complexity effects for hydrogen-resistant iron alloys: Inverse austenite stability effects. <i>Engineering Fracture Mechanics</i> , 2019, 214, 123-133.	2.0	33
59	Growth Behavior of a Mechanically Long Fatigue Crack in an FeCrNiMnCo High Entropy Alloy: A Comparison with an Austenitic Stainless Steel. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2019, 105, 215-221.	0.1	7
60	Influence of Stress Re-distribution on Hydrogen-induced Fatigue Crack Propagation. <i>ISIJ International</i> , 2019, 59, 1683-1690.	0.6	3
61	EBSD- and ECCI-based Assessments of Inhomogeneous Plastic Strain Evolution Coupled with Digital Image Correlation. <i>ISIJ International</i> , 2019, 59, 2334-2342.	0.6	14
62	Resistance to mechanically small fatigue crack growth in ultrafine grained interstitial-free steel fabricated by accumulative roll-bonding. <i>International Journal of Fatigue</i> , 2019, 118, 117-125.	2.8	13
63	Phase Stability Effects on Hydrogen Embrittlement Resistance in Martensite- $\epsilon$ -Reverted Austenite Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 29-34.	1.1	12
64	Lowering Strain Rate Simultaneously Enhances Carbon- and Hydrogen-Induced Mechanical Degradation in an Fe-33Mn-1.1C Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 1137-1141.	1.1	12
65	Fatigue Resistance of Laminated and Non-laminated TRIP-maraging Steels: Crack Roughness vs Tensile Strength. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 1142-1145.	1.1	8
66	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. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 426-435.	1.1	9
67	Microstructural mechanisms of fatigue crack non-propagation in TRIP-maraging steels. <i>International Journal of Fatigue</i> , 2018, 113, 126-136.	2.8	23
68	High-concentration carbon assists plasticity-driven hydrogen embrittlement in a Fe-high Mn steel with a relatively high stacking fault energy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 717, 78-84.	2.6	18
69	Interstitial Carbon Enhanced Corrosion Resistance of Fe-33Mn-xC Austenitic Steels: Inhibition of Anodic Dissolution. <i>Journal of the Electrochemical Society</i> , 2018, 165, C19-C26.	1.3	16
70	On the Utility of Crystal Plasticity Modeling to Uncover the Individual Roles of Microdeformation Mechanisms on the Work Hardening Response of Fe-23Mn-0.5C TWIP Steel in the Presence of Hydrogen. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2018, 140, .	0.8	4
71	Hydrogen-assisted failure in a bimodal twinning-induced plasticity steel: Delamination events and damage evolution. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 2492-2502.	3.8	15
72	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. <i>International Journal of Fatigue</i> , 2018, 110, 1-9.	2.8	12

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73	Non-propagating fatigue cracks in austenitic steels with a micro-notch: Effects of dynamic strain aging, martensitic transformation, and microstructural hardness heterogeneity. <i>International Journal of Fatigue</i> , 2018, 113, 359-366.	2.8	12
74	Comparative study of hydrogen embrittlement in stable and metastable high-entropy alloys. <i>Scripta Materialia</i> , 2018, 150, 74-77.	2.6	84
75	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. <i>Experimental Mechanics</i> , 2018, 58, 381-386.	1.1	12
76	Visualization of dislocations through electron channeling contrast imaging at fatigue crack tip, interacting with pre-existing dislocations. <i>Materials Research Letters</i> , 2018, 6, 61-66.	4.1	19
77	Microstructural hardness heterogeneity triggers fatigue crack non-propagation in as-hot-rolled Fe-30Mn-3Si-3Al twinning-induced plasticity steel. <i>International Journal of Fatigue</i> , 2018, 108, 18-24.	2.8	12
78	Fatigue Behavior of Fe-Cr-Ni-based Metastable Austenitic Steels with an Identical Tensile Strength and Different Solute Carbon Contents. <i>ISIJ International</i> , 2018, 58, 1910-1919.	0.6	5
79	Fatigue Behavior of Fe-Cr-Ni-based Metastable Austenitic Steels with an Identical Tensile Strength and Different Solute Carbon Contents. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2018, 104, 88-97.	0.1	1
80	A new design concept for prevention of hydrogen-induced mechanical degradation: viewpoints of metastability and high entropy. <i>Procedia Structural Integrity</i> , 2018, 13, 292-297.	0.3	8
81	Crystallographic orientation-dependent growth mode of microstructurally fatigue small crack in a laminated Ti-6Al-4V alloy. <i>Procedia Structural Integrity</i> , 2018, 13, 694-699.	0.3	5
82	Localized Plasticity and Associated Cracking in Stable and Metastable High-Entropy Alloys Pre-Charged with Hydrogen. <i>Procedia Structural Integrity</i> , 2018, 13, 716-721.	0.3	12
83	Fatigue Crack Growth Behavior and Associated Microstructure in a Metastable High-Entropy Alloy. <i>Procedia Structural Integrity</i> , 2018, 13, 831-836.	0.3	15
84	Re-examination of fatigue crack propagation mechanism under cyclic Mode II loading. <i>Procedia Structural Integrity</i> , 2018, 13, 1026-1031.	0.3	4
85	Effect of Si on temperature dependence of non-propagation limit of small fatigue crack in a Fe-C alloy. <i>Procedia Structural Integrity</i> , 2018, 13, 1032-1036.	0.3	3
86	Small fatigue crack growth in a high entropy alloy. <i>Procedia Structural Integrity</i> , 2018, 13, 1065-1070.	0.3	11
87	Quantification method for parameters affecting multi-scale roughness-induced fatigue crack closure. <i>Procedia Structural Integrity</i> , 2018, 13, 1071-1075.	0.3	2
88	Proposal of fractographic analysis method coupled with EBSD and ECCI. <i>Procedia Structural Integrity</i> , 2018, 13, 1076-1081.	0.3	3
89	Analysis of fatigue crack configuration influence on fatigue life. <i>Procedia Structural Integrity</i> , 2018, 13, 1148-1153.	0.3	2
90	Strain Rate Sensitivity of Microstructural Damage Evolution in a Dual-Phase Steel Pre-Charged with Hydrogen. <i>Procedia Structural Integrity</i> , 2018, 13, 710-715.	0.3	4

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91	The influence of fracture surface contact in fatigue crack propagation of material having texture under Mode II loading. <i>Procedia Structural Integrity</i> , 2018, 13, 1088-1092.	0.3	0
92	Proposal and verification of novel fatigue crack propagation simulation method by finite element method.. <i>Procedia Structural Integrity</i> , 2018, 13, 1154-1158.	0.3	1
93	Influence of shear-affected-zone due to punching on tensile characteristics of steel plate. <i>Procedia Structural Integrity</i> , 2018, 13, 1047-1052.	0.3	0
94	Overview of Dynamic Strain Aging and Associated Phenomena in Fe-Mn-C Austenitic Steels. <i>ISIJ International</i> , 2018, 58, 1383-1395.	0.6	47
95	Split and Shift of $\mu$ -martensite Peak in an X-ray Diffraction Profile during Hydrogen Desorption: A Geometric Effect of Atomic Sequence. <i>ISIJ International</i> , 2018, 58, 1745-1747.	0.6	3
96	An unconventional hydrogen effect that suppresses thermal formation of the hcp phase in fcc steels. <i>Scientific Reports</i> , 2018, 8, 16136.	1.6	15
97	Overview of Dynamic Strain Aging and Associated Phenomena in Fe-Mn-C Austenitic Steels. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2018, 104, 187-200.	0.1	6
98	Optical Microscopy-Based Damage Quantification: an Example of Cryogenic Deformation of a Dual-Phase Steel. <i>ISIJ International</i> , 2018, 58, 179-185.	0.6	12
99	Optical full-field strain measurement method from wrapped sampling Moiré phase to minimize the influence of defects and its applications. <i>Optics and Lasers in Engineering</i> , 2018, 110, 155-162.	2.0	27
100	Effect of state of carbon on fatigue properties and dislocation structure of Fe-0.017mass%C alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 732, 212-219.	2.6	6
101	First-Principles Study on Hydrogen Diffusivity in BCC, FCC, and HCP Iron. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 5015-5022.	1.1	63
102	Influence of Stress Re-distribution on Hydrogen-induced Fatigue Crack Propagation. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2018, 104, 46-53.	0.1	0
103	Microstructural damage evolution and arrest in binary Fe-high-Mn alloys with different deformation temperatures. <i>International Journal of Fracture</i> , 2018, 213, 193-206.	1.1	9
104	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. <i>International Journal of Fracture</i> , 2018, 212, 237-248.	1.1	9
105	Effect of shear-affected zone on fatigue crack propagation mode. <i>International Journal of Fatigue</i> , 2018, 116, 36-47.	2.8	8
106	Surface orientation dependence of hydrogen flux in lenticular martensite of an Fe-Ni-C alloy clarified through in situ silver decoration technique. <i>Materials Letters</i> , 2018, 228, 273-276.	1.3	5
107	Roughness-induced stress shielding effect in fatigue crack propagation under Mode II loading. <i>International Journal of Fatigue</i> , 2018, 116, 245-256.	2.8	12
108	Underlying interstitial carbon concentration dependence of transgranular fatigue crack resistance in Fe-C ferritic steels: The kinetic effect viewpoint. <i>International Journal of Fatigue</i> , 2017, 98, 101-110.	2.8	23

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109	Bone-like crack resistance in hierarchical metastable nanolaminate steels. <i>Science</i> , 2017, 355, 1055-1057.	6.0	297
110	Impact of Mn–C couples on fatigue crack growth in austenitic steels: Is the attractive atomic interaction negative or positive?. <i>International Journal of Fatigue</i> , 2017, 99, 1-12.	2.8	21
111	Multiscale in situ deformation experiments: A sequential process from strain localization to failure in a laminated Ti-6Al-4V alloy. <i>Materials Characterization</i> , 2017, 128, 217-225.	1.9	14
112	Effects of martensitic transformability and dynamic strain age hardenability on plasticity in metastable austenitic steels containing carbon. <i>Journal of Materials Science</i> , 2017, 52, 7868-7882.	1.7	38
113	Material property controlling non-propagating fatigue crack length of mechanically and physically short-crack based on Dugdale-model analysis. <i>Theoretical and Applied Fracture Mechanics</i> , 2017, 90, 193-202.	2.1	8
114	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. <i>Engineering Failure Analysis</i> , 2017, 72, 34-47.	1.8	11
115	Recent progress in microstructural hydrogen mapping in steels: Quantification, kinetic analysis, and multi-scale characterisation. <i>Materials Science and Technology</i> , 2017, 33, 1481-1496.	0.8	125
116	Characteristics of hydrogen-assisted intergranular fatigue crack growth in interstitial-free steel: role of plastic strain localization. <i>International Journal of Fracture</i> , 2017, 206, 123-130.	1.1	19
117	Effects of lamella size and connectivity on fatigue crack resistance of TRIP-maraging steel. <i>International Journal of Fatigue</i> , 2017, 100, 176-186.	2.8	19
118	Overview of hydrogen embrittlement in high-Mn steels. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 12706-12723.	3.8	228
119	Hydrogen desorption and cracking associated with martensitic transformation in Fe-Cr-Ni-Based austenitic steels with different carbon contents. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 26423-26435.	3.8	39
120	Fatigue crack non-propagation assisted by nitrogen-enhanced dislocation planarity in austenitic stainless steels. <i>International Journal of Fatigue</i> , 2017, 104, 158-170.	2.8	13
121	Room-temperature blue brittleness of Fe-Mn-C austenitic steels. <i>Scripta Materialia</i> , 2017, 141, 20-23.	2.6	37
122	Reply to comments on the paper "In situ observations of silver-decoration evolution under hydrogen permeation: Effects of grain boundary misorientation on hydrogen flux in pure iron" by Gavriljuk and Teus. <i>Scripta Materialia</i> , 2017, 140, 91-92.	2.6	5
123	Threshold stress intensity factor range of a mechanically-long and microstructurally-short crack perpendicular to an interface with plastic mismatch. <i>Engineering Fracture Mechanics</i> , 2017, 182, 287-302.	2.0	11
124	Effects of $\mu$ -martensitic transformation on crack tip deformation, plastic damage accumulation, and slip plane cracking associated with low-cycle fatigue crack growth. <i>International Journal of Fatigue</i> , 2017, 103, 533-545.	2.8	27
125	Effect of the state of carbon on ductility in Fe-0.017mass%C ferritic steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 701, 120-128.	2.6	9
126	In situ observations of silver-decoration evolution under hydrogen permeation: Effects of grain boundary misorientation on hydrogen flux in pure iron. <i>Scripta Materialia</i> , 2017, 129, 48-51.	2.6	66



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127	Generalized evaluation method for determining transition crack length for microstructurally small to microstructurally large fatigue crack growth: Experimental definition, facilitation, and validation. <i>International Journal of Fatigue</i> , 2017, 95, 38-44.	2.8	14
128	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. <i>International Journal of Fatigue</i> , 2017, 94, 1-5.	2.8	27
129	Interfacial hydrogen localization in austenite/martensite dual-phase steel visualized through optimized silver decoration and scanning Kelvin probe force microscopy. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2017, 68, 306-310.	0.8	20
130	Two-dimensional Moiré phase analysis for accurate strain distribution measurement and application in crack prediction. <i>Optics Express</i> , 2017, 25, 13465.	1.7	38
131	Intrinsic Factors that Trigger the Coaxing Effect in Binary Fe-C Ferritic Alloys with a Focus on Strain Aging. <i>ISIJ International</i> , 2017, 57, 358-364.	0.6	10
132	Intrinsic Factors That Trigger the Coaxing Effect in Binary Fe-C Ferritic Alloys with a Focus on Strain Aging. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2017, 103, 660-666.	0.1	3
133	Characteristic Fatigue Crack Growth Behavior of Low Carbon Steel under Low-pressure Hydrogen Gas Atmosphere in an Ultra-low Frequency. <i>ISIJ International</i> , 2016, 56, 855-860.	0.6	8
134	Suppression Mechanism of Strain-age-hardening in Carbon Steel Associated with Hydrogen Uptake. <i>ISIJ International</i> , 2016, 56, 1656-1661.	0.6	6
135	Combined Multi-scale Analyses on Strain/Damage/Microstructure in Steel: Example of Damage Evolution Associated with $\mu$ -martensitic Transformation. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2016, 102, 227-236.	0.1	6
136	Notch Sensitivity of the Fatigue Limit in High-Strength Steel. <i>ISIJ International</i> , 2016, 56, 1480-1486.	0.6	8
137	Combined Multi-scale Analyses on Strain/Damage/Microstructure in Steel: Example of Damage Evolution Associated with $\mu$ -martensitic Transformation. <i>ISIJ International</i> , 2016, 56, 2037-2046.	0.6	25
138	Effect of strain rate on hydrogen embrittlement susceptibility of twinning-induced plasticity steel pre-charged with high-pressure hydrogen gas. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 15362-15372.	3.8	79
139	Martensitic transformation-induced hydrogen desorption characterized by utilizing cryogenic thermal desorption spectroscopy during cooling. <i>Scripta Materialia</i> , 2016, 122, 50-53.	2.6	34
140	In situ microscopic observations of low-cycle fatigue-crack propagation in high-Mn austenitic alloys with deformation-induced $\mu$ -martensitic transformation. <i>Acta Materialia</i> , 2016, 112, 326-336.	3.8	61
141	Hexagonal close-packed Martensite-related Fatigue Crack Growth under the Influence of Hydrogen: Example of Fe-15Mn-10Cr-8Ni-4Si Austenitic Alloy. <i>Scripta Materialia</i> , 2016, 113, 6-9.	2.6	17
142	Elucidation of the effects of cementite morphology on damage formation during monotonic and cyclic tension in binary low carbon steels using in situ characterization. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 667, 358-367.	2.6	13
143	Hydrogen Embrittlement Susceptibility of Fe-Mn Binary Alloys with High Mn Content: Effects of Stable and Metastable $\mu$ -Martensite, and Mn Concentration. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 2656-2673.	1.1	67
144	Potential resistance to transgranular fatigue crack growth of Fe-C alloy with a supersaturated carbon clarified through FIB micro-notching technique. <i>International Journal of Fatigue</i> , 2016, 87, 1-5.	2.8	30

#	ARTICLE	IF	CITATIONS
145	Hydrogen-assisted damage in austenite/martensite dual-phase steel. Philosophical Magazine Letters, 2016, 96, 9-18.	0.5	25
146	Intergranular Fatigue Crack Initiation and its Associated Small Fatigue Crack Propagation in Water-quenched Fe-C Fully Ferritic Steel. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2016, 102, 268-273.	0.1	6
147	Importance of crack-propagation-induced $\hat{\mu}$ -martensite in strain-controlled low-cycle fatigue of high-Mn austenitic steel. Philosophical Magazine Letters, 2015, 95, 303-311.	0.5	25
148	Effects of Si on Tensile Properties Associated with Deformation-Induced $\epsilon$ -Martensitic Transformation in High Mn Austenitic Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 657-663.	0.2	3
149	Effects of Si on Tensile Properties Associated with Deformation-Induced $\epsilon$ -Martensitic Transformation in High Mn Austenitic Alloys. Materials Transactions, 2015, 56, 819-825.	0.4	19
150	Characteristic Fatigue Crack Growth Behavior of Low Carbon Steel Under Low-pressure Hydrogen Gas Atmosphere in an Ultra-low Frequency. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2015, 101, 605-610.	0.1	0
151	Notch Sensitivity in Fatigue Limit of High Strength Steel. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2015, 101, 552-558.	0.1	1
152	Deformation Twinning Behavior of Twinning-induced Plasticity Steels with Different Carbon Concentrations – Part 2: Proposal of Dynamic-strain-aging-assisted Deformation Twinning. ISIJ International, 2015, 55, 1754-1761.	0.6	37
153	Detection of Charged Hydrogen in Ferritic Steel through Cryogenic Secondary Ion Mass Spectrometry. ISIJ International, 2015, 55, 335-337.	0.6	13
154	$\hat{\mu}$ Reverse Transformation-induced Hydrogen Desorption and Mn Effect on Hydrogen Uptake in Fe-Mn Binary Alloys. ISIJ International, 2015, 55, 2269-2271.	0.6	12
155	Intergranular Fatigue Crack Initiation and Its Associated Small Fatigue Crack Propagation in Water-quenched Fe-C Fully Ferritic Steel. ISIJ International, 2015, 55, 2463-2468.	0.6	19
156	Positive and negative effects of hydrogen on tensile behavior in polycrystalline Fe-30Mn-(6-x)Si-xAl austenitic alloys. Scripta Materialia, 2015, 105, 54-57.	2.6	38
157	Effects of cementite morphology on short-fatigue-crack propagation in binary Fe-C steel. Philosophical Magazine Letters, 2015, 95, 384-391.	0.5	18
158	Effects of hydrogen-altered yielding and work-hardening on plastic-zone evolution: A finite-element analysis. International Journal of Hydrogen Energy, 2015, 40, 9825-9837.	3.8	23
159	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.	2.6	37
160	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.	0.5	15
161	An Overview of Dual-Phase Steels: Advances in Microstructure-Oriented Processing and Micromechanically Guided Design. Annual Review of Materials Research, 2015, 45, 391-431.	4.3	469
162	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.	1.3	64

#	ARTICLE	IF	CITATIONS
163	Enhancing Hydrogen Embrittlement Resistance of Lath Martensite by Introducing Nano-Films of Interlath Austenite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 3797-3802.	1.1	77
164	Deformation Twinning Behavior of Twinning-induced Plasticity Steels with Different Carbon Concentrations – Part 1: Atomic Force Microscopy and Electron Backscatter Diffraction Measurements. <i>ISIJ International</i> , 2015, 55, 1747-1753.	0.6	8
165	Suppression Mechanism of Strain-age Hardening in Carbon Steel Associated with Hydrogen Uptake. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2015, 101, 546-551.	0.1	1
166	Hydrogen Embrittlement in Al-Added Twinning-Induced Plasticity Steels Evaluated by Tensile Tests during Hydrogen Charging. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2014, 100, 662-667.	0.1	0
167	Factors Affecting Static Strain Aging Under Stress at Room Temperature in a Fe-Mn-C Twinning-Induced Plasticity Steel. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2014, 100, 1123-1131.	0.1	2
168	Deformation Twinning Behavior of Twinning-Induced Plasticity Steels with Different Carbon Concentrations. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2014, 100, 1253-1260.	0.1	6
169	Deformation Twinning Behavior of Twinning-Induced Plasticity Steels with Different Carbon Concentrations. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2014, 100, 1246-1252.	0.1	8
170	Alloy Design, Combinatorial Synthesis, and Microstructure–Property Relations for Low-Density Fe-Mn-Al-C Austenitic Steels. <i>Jom</i> , 2014, 66, 1845-1856.	0.9	172
171	Tensile Testing with Cyclic Strain Holding to Analyze Dynamic Recrystallization of Pure Lead. <i>Advances in Materials Science and Engineering</i> , 2014, 2014, 1-8.	1.0	2
172	Hydrogen-assisted decohesion and localized plasticity in dual-phase steel. <i>Acta Materialia</i> , 2014, 70, 174-187.	3.8	366
173	Strain mapping with high spatial resolution across a wide observation range by digital image correlation on plastic replicas. <i>Materials Characterization</i> , 2014, 98, 140-146.	1.9	30
174	Hydrogen embrittlement associated with strain localization in a precipitation-hardened Fe–Mn–Al–C light weight austenitic steel. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 4634-4646.	3.8	170
175	Effects of Static and Dynamic Strain Aging on Hydrogen Embrittlement in TWIP Steels Containing Al. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2014, 100, 1132-1139.	0.1	5
176	Hydrogen-assisted quasi-cleavage fracture in a single crystalline type 316 austenitic stainless steel. <i>Corrosion Science</i> , 2013, 75, 345-353.	3.0	85
177	Grain refinement effect on cryogenic tensile ductility in a Fe–Mn–C twinning-induced plasticity steel. <i>Materials &amp; Design</i> , 2013, 49, 234-241.	5.1	61
178	Microstructure characteristic and its effect on mechanical and shape memory properties in a Fe–17Mn–8Si–0.3C alloy. <i>Journal of Alloys and Compounds</i> , 2013, 573, 15-19.	2.8	6
179	Hydrogen-assisted failure in a twinning-induced plasticity steel studied under in situ hydrogen charging by electron channeling contrast imaging. <i>Acta Materialia</i> , 2013, 61, 4607-4618.	3.8	218
180	TWIP Effect and Plastic Instability Condition in an Fe–Mn–C Austenitic Steel. <i>ISIJ International</i> , 2013, 53, 323-329.	0.6	67

#	ARTICLE	IF	CITATIONS
181	Factors Affecting Static Strain Aging under Stress at Room Temperature in a Fe-Mn-C Twinning-induced Plasticity Steel. ISIJ International, 2013, 53, 1089-1096.	0.6	9
182	Effects of Static and Dynamic Strain Aging on Hydrogen Embrittlement in TWIP Steels Containing Al. ISIJ International, 2013, 53, 1268-1274.	0.6	24
183	Inverse grain size dependence of critical strain for serrated flow in a Fe-Mn-C twinning-induced plasticity steel. Philosophical Magazine Letters, 2012, 92, 145-152.	0.5	19
184	Hydrogen Embrittlement in Al-added Twinning-induced Plasticity Steels Evaluated by Tensile Tests during Hydrogen Charging. ISIJ International, 2012, 52, 2283-2287.	0.6	35
185	Influence of Dislocation Separation on Dynamic Strain Aging in a Fe-Mn-C Austenitic Steel. Materials Transactions, 2012, 53, 546-552.	0.4	29
186	Selective appearance of $\mu$ -martensitic transformation and dynamic strain aging in Fe-Mn-C austenitic steels. Philosophical Magazine, 2012, 92, 3051-3063.	0.7	28
187	Hydrogen embrittlement in a Fe-Mn-C ternary twinning-induced plasticity steel. Corrosion Science, 2012, 54, 1-4.	3.0	134
188	Effect of hydrogen content on the embrittlement in a Fe-Mn-C twinning-induced plasticity steel. Corrosion Science, 2012, 59, 277-281.	3.0	103
189	Effect of deformation temperature on tensile properties in a pre-cooled Fe-Mn-C austenitic steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 331-336.	2.6	12
190	Premature Fracture Mechanism in an Fe-Mn-C Austenitic Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4063-4074.	1.1	52
191	Quasi-cleavage Fracture along Annealing Twin Boundaries in a Fe-Mn-C Austenitic Steel. ISIJ International, 2012, 52, 161-163.	0.6	31
192	Tensile deformation behavior of Fe-Mn-C TWIP steel with ultrafine elongated grain structure. Materials Letters, 2012, 75, 169-171.	1.3	69
193	Hydrogen-induced cracking at grain and twin boundaries in an Fe-Mn-C austenitic steel. Scripta Materialia, 2012, 66, 459-462.	2.6	168
194	Hydrogen-induced delayed fracture of a Fe-22Mn-0.6C steel pre-strained at different strain rates. Scripta Materialia, 2012, 66, 947-950.	2.6	50
195	Work hardening and uniform elongation of an ultrafine-grained Fe-33Mn binary alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 530, 659-663.	2.6	16
196	Nanoindentation/atomic force microscopy analyses of $\mu$ -martensitic transformation and shape memory effect in Fe-28Mn-6Si-5Cr alloy. Scripta Materialia, 2011, 65, 942-945.	2.6	43
197	Si content dependence on shape memory and tensile properties in Fe-Mn-Si-C alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2882-2888.	2.6	40
198	Work hardening associated with $\epsilon$ -martensitic transformation, deformation twinning and dynamic strain aging in Fe-17Mn-0.6C and Fe-17Mn-0.8C TWIP steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7310-7316.	2.6	185

#	ARTICLE	IF	CITATIONS
199	Continuous Transition of Deformation Modes in Fe-30Mn-5Si-1Al Alloy. <i>Materials Transactions</i> , 2010, 51, 1194-1199.	0.4	8
200	Continuous Transition of Deformation Mode in Fe-30Mn-5Si-1Al Alloy. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2009, 73, 174-179.	0.2	4
201	The effects of thermomechanical training treatment on the deformation characteristics of Fe-Mn-Si-Al alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 497, 353-357.	2.6	42
202	Mechanism of reversible transformation-induced plasticity of Fe-Mn-Si shape memory alloys. <i>Scripta Materialia</i> , 2008, 59, 826-829.	2.6	91
203	AFM Observation of Microstructural Changes in Fe-Mn-Si-Al Shape Memory Alloy. <i>Materials Transactions</i> , 2008, 49, 812-816.	0.4	14
204	Atomic Force Microscopic Observation of Microstructural Changes in Fe-Mn-Si-Al Shape Memory Alloy. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2007, 71, 672-677.	0.2	4
205	Influence of Al on Shape Memory Effect and Twinning Induced Plasticity of Fe-Mn-Si-Al System Alloy. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2007, 71, 502-507.	0.2	6
206	Influence of Al on Shape Memory Effect and Twinning Induced Plasticity of Fe-Mn-Si-Al System Alloy. <i>Materials Transactions</i> , 2007, 48, 2729-2734.	0.4	27
207	Investigation on Mode I Propagation Behavior of Fatigue Crack in Precipitation-Hardened Aluminum Alloy with Different Mg Content. <i>Materials Science Forum</i> , 0, 889, 143-147.	0.3	2