Toshihiko Koseki

List of Publications by Year
in descending order

64	1,569	331670 21	315739 38
papers	citations	h-index	g-index

64	64	64	986
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fracture elongation of brittle/ductile multilayered steel composites with a strong interface. Scripta Materialia, 2008, 59, 1055-1058.	5.2	188
2	Cu Wettability and Diffusion Barrier Property of Ru Thin Film for Cu Metallization. Journal of the Electrochemical Society, 2005, 152, G594.	2.9	137
3	Transition in deformation behavior of martensitic steel during large deformation under uniaxial tensile loading. Scripta Materialia, 2009, 60, 221-224.	5.2	121
4	Development of Multilayer Steels for Improved Combinations of High Strength and High Ductility. Materials Transactions, 2014, 55, 227-237.	1.2	101
5	Orientation of austenite reverted from martensite in Fe-2Mn-1.5Si-0.3C alloy. Acta Materialia, 2018, 144, 601-612.	7.9	87
6	Abnormal Î± to Î³ Transformation Behavior of Steels with a Martensite and Bainite Microstructure at a Slow Reheating Rate. ISIJ International, 2009, 49, 1792-1800.	1.4	72
7	Decoupling the contributions of constituent layers to the strength and ductility of a multi-layered steel. Acta Materialia, 2016, 121, 164-172.	7.9	65
8	Equiaxed Solidification of Steel Nucleating on Titanium Nitride. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2001, 65, 644-651.	0.4	53
9	Solidification mechanism of austenitic stainless steels solidified with primary ferrite. Acta Materialia, 2017, 124, 430-436.	7.9	53
10	Experimental and numerical analysis of multilayered steel sheets upon bending. Journal of Materials Processing Technology, 2010, 210, 1926-1933.	6.3	44
11	Slip band formation at free surface of lath martensite in low carbon steel. Acta Materialia, 2019, 165, 129-141.	7.9	38
12	Solidification of undercooled Fe-Cr-Ni alloys: Part III. Phase selection in chill casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 2385-2395.	2.2	36
13	Interphase Strain Gradients in Multilayered Steel Composite from Microdiffraction. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 98-108.	2.2	34
14	Progress in Indentation Study of Materials via Both Experimental and Numerical Methods. Crystals, 2017, 7, 258.	2.2	30
15	Influence of impact parameters of zirconia droplets on splat formation and morphology in plasma spraying. Journal of Applied Physics, 2006, 100, 074903.	2.5	29
16	Study on Solidification and Subsequent Transformation of Cr-Ni Stainless Steel Weld Metals (Report) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Primary Ferrite.. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 1997, 15, 88-99.	0.5	26
17	Effect of External Heat Extraction on Dendritic Growth into Undercooled Melts.. ISIJ International, 1995, 35, 611-617.	1.4	25
18	Evolution of bonding interface during ultrasonic welding between steel and aluminium alloy. Science and Technology of Welding and Joining, 2019, 24, 83-91.	3.1	25

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19	Effect of Ru crystal orientation on the adhesion characteristics of Cu for ultra-large scale integration interconnects. Applied Surface Science, 2006, 252, 3938-3942.	6.1	24
20	Interfacial phenomena during ultrasonic welding of ultra-low-carbon steel and pure Ti. Scripta Materialia, 2020, 178, 218-222.	5.2	24
21	Solidification of Iron and Steel on Single-crystal Oxide. ISIJ International, 2007, 47, 847-852.	1.4	22
22	Reactive Transient Liquid Phase Bonding between AZ31 Magnesium Alloy and Low Carbon Steel. Materials Transactions, 2011, 52, 568-571.	1.2	20
23	Strain localization behavior in low-carbon martensitic steel during tensile deformation. Scripta Materialia, 2013, 69, 793-796.	5.2	19
24	Microstructure Development and Control in Steel Welds. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2004, 90, 61-72.	0.4	18
25	Crystallographic and Microstructural Studies of Lath Martensitic Steel During Tensile Deformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5029-5043.	2.2	18
26	Process design of Cu(Sn) alloy deposition for highly reliable ultra large-scale integration interconnects. Thin Solid Films, 2005, 491, 221-227.	1.8	17
27	Laminated Metal Composites by Infiltration. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3509-3520.	2.2	17
28	Ferrite transformation from oxideâ€“steel interface in HAZ-simulated Câ€“Mn steel. International Journal of Materials Research, 2008, 99, 347-351.	0.3	15
29	Ferrite Formation Behaviors from B1 Compounds in Steels. ISIJ International, 2011, 51, 2036-2041.	1.4	15
30	Transformation Behavior of Ferrite at Steel/B1 Compounds Interface. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2010, 96, 123-128.	0.4	14
31	Effects of Solute Carbon on the Work Hardening Behavior of Lath Martensite in Low-Carbon Steel. ISIJ International, 2017, 57, 181-188.	1.4	14
32	Development of a bonding interface between steel/steel and steel/Ni by ultrasonic welding. Science and Technology of Welding and Joining, 2018, 23, 687-692.	3.1	14
33	Effect of Stress on Variant Selection in Lath Martensite in Low-carbon Steel. ISIJ International, 2013, 53, 1453-1461.	1.4	13
34	Bonding Interface Formation between Mg Alloy and Steel by Liquid-phase Bonding using the Ag Interlayer. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 592-597.	2.2	12
35	Fracture Toughness Evaluation of Thin Fe–Al Intermetallic Compound Layer at Reactive Interface between Dissimilar Metals. Materials Transactions, 2013, 54, 994-1000.	1.2	12
36	In situ deformation analysis of Mg in multilayer Mg-steel structures. Materials and Design, 2017, 119, 326-337.	7.0	11

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37	Effect of surface roughness on bonding interface formation of steel and Ni by ultrasonic welding. Science and Technology of Welding and Joining, 2020, 25, 157-163.	3.1	11
38	Influence of Al and Ni interlayers on interfacial strength evolution during ultrasonic welding of ultra-low-carbon steel and pure Ti. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 798, 140073.	5.6	11
39	Effect of initial texture and microstructure of Mg on mechanical properties of Mg â€“ Stainless steel laminated metal composites. Materials Characterization, 2017, 127, 171-178.	4.4	9
40	Effect of Steel Compositions on Wettability between Steel Melt and Oxide Plates. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2006, 92, 411-416.	0.4	8
41	Evolution of Bonding Interface during Ultrasonic Welding between Ni and Steels with Various Microstructure. ISIJ International, 2020, 60, 330-336.	1.4	8
42	Formation Mechanism of Different Ferrite Morphologies and Effect of Ferrite Morphology on Cryogenic Impact Toughness and Pitting Corrosion Resistance in Austenitic Stainless Steel Weld Metals.. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2001, 19, 100-113.	0.5	6
43	Multilayer Mg-Stainless Steel Sheets, Microstructure, and Mechanical Properties. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 2483-2495.	2.2	6
44	Effects of compressive strain on the evolution of interfacial strength of steel/nickel solid-state bonding at low temperature. Science and Technology of Welding and Joining, 2018, 23, 344-350.	3.1	6
45	Mechanical Properties of 1.5wt.% TiB2-added Hypoeutectic Al-Mg- Si Alloys Processed by Equal Channel Angular Pressing. Procedia Chemistry, 2016, 19, 106-112.	0.7	5
46	Three-dimensional quantification of texture heterogeneity in single-crystal aluminium subjected to equal channel angular pressing. Philosophical Magazine, 2017, 97, 799-819.	1.6	5
47	Effect of Cobalt and Boron on Long-term Creep Rupture Strength of 12Cr Cast Steels. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2010, 96, 620-628.	0.4	4
48	Phase Evolution During the Liquid-Phase Bonding of Zirconium and Austenitic Stainless Steel with Zinc Insertion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 2366-2377.	2.2	4
49	Establishment and Problem of the Observing System for Boron in Steels by Alpha-particle Track Etching Method Using Pneumatic Tube of JRR-3 and JRR-4. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2007, 93, 634-641.	0.4	4
50	Numerical Analysis of Effects of Compressive Strain on the Evolution of Interfacial Strength of Steel/Nickel Solid-State Bonding. Materials Transactions, 2018, 59, 568-574.	1.2	3
51	Investigation of work hardening behavior in multilayered steels architected by twinning induced plasticity steel and martensitic steel during uniaxial tension. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 811, 140996.	5.6	3
52	Effect of Chromium, Aluminum and Nickel on Microstructure and Reverse-S Type Creep Rupture Strength of High Cr Ferritic Heat Resistant Steels. ISIJ International, 2012, 52, 902-909.	1.4	3
53	Simulation of Solidification Morphology Using Monte Carlo and Finite Difference Hybrid Modeling Incorporated with Computational Thermodynamics. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2003, 67, 506-513.	0.4	2
54	Effect of Chromium, Aluminum and Nickel on Microstructure and Reverse-S type Creep Rupture Strength of High Cr Ferritic Heat Resisting Steels. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2010, 96, 665-672.	0.4	2

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55	Crystallographic Analysis of Transformation Behavior of Acicular Ferrite from B1-type Compounds in Steels. ISIJ International, 2017, 57, 1246-1251.	1.4	2
56	Study of deformation behaviors of martensitic steel quenched at ultralow temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 785, 139399.	5.6	2
57	Effects of Solute Carbon on the Work Hardening Behavior of Lath Martensite in Low-Carbon Steel. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 488-496.	0.4	2
58	Mechanical Behavior of Nanocrystalline Cu Alloy Thin Film on Elastomer Substrates Under Constant Uniaxial Tensile Strain. Materials Research Society Symposia Proceedings, 2006, 976, 1.	0.1	0
59	Effect of Carbon, Nitrogen and Nickel on Long-term Creep Rupture Strength of 10 Cr Steels Containing Boron. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2011, 97, 295-304.	0.4	0
60	Steel-Magnesium Laminated Composites by Infiltration. Materials Research Society Symposia Proceedings, 2012, 1373, 143.	0.1	0
61	Multilayer Mgâ€“Stainless Steel Sheets, Twinning and Texture Evolution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 3514-3522.	2.2	0
62	International Activities. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2013, 82, 367-367.	0.1	0
63	International Activities. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2014, 83, 368-368.	0.1	0
64	International Activities. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2016, 85, 457-457.	0.1	0