Satoshi Emura

List of Publications by Year
in descending order

91 papers	1,974 citations	236925 25 h-index	276875 41 g-index
95 all docs	95 docs citations	95 times ranked	1021 citing authors

#	Article	IF	Citations
1	Mechanism of twinning-induced plasticity in Î²-type Tiâ€“15Mo alloy. Scripta Materialia, 2013, 69, 393-396.	5.2	171
2	Enhancement of uniform elongation in high strength Tiâ€“Mo based alloys by combination of deformation modes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 4569-4578.	5.6	96
3	B2 grain size refinement and its effect on room temperature tensile properties of a Tiâ€“22Alâ€“27Nb orthorhombic intermetallic alloy. Scripta Materialia, 2003, 48, 629-634.	5.2	93
4	Microstructure, tensile deformation mode and crevice corrosion resistance in Tiâ€“10Moâ€“xFe alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5499-5506.	5.6	68
5	Effects of Fe addition on tensile deformation mode and crevice corrosion resistance in Tiâ€“15Mo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 2693-2701.	5.6	65
6	Effect of Fe and Zr additions on Ï‰ phase formation in Î²-type Tiâ€“Mo alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 497, 74-78.	5.6	61
7	Improvement of room temperature ductility for Mo and Fe modified Ti2AlNb alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 355-362.	5.6	61
8	{332}ã€ˆ113ã€‰ Twinning system selection in a Î²-type Tiâ€“15Moâ€“5Zr polycrystalline alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 579, 164-169.	5.6	59
9	Enhanced mechanical properties of orthorhombic Ti2AlNb-based intermetallic alloy. Metals and Materials International, 2003, 9, 265-272.	3.4	55
10	Creep behavior and tensile properties of Mo- and Fe-added orthorhombic Tiâ€“22Alâ€“11Nbâ€“2Moâ€“1Fe alloy. Scripta Materialia, 2007, 57, 261-264.	5.2	53
11	Strain-rate effect on work-hardening behavior in Î²-type Ti-10Mo-1Fe alloy with TWIP effect. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 707, 701-707.	5.6	51
12	Mo segregation and distribution in Tiâ€“Mo alloy investigated using nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 718, 48-55.	5.6	50
13	Heterogeneous twin formation and its effect on tensile properties in Tiâ€“Mo based Î² titanium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 554, 53-60.	5.6	49
14	Mechanical twinning and dislocation slip multilayered deformation microstructures in Î²-type Tiâ€“Mo base alloy. Scripta Materialia, 2015, 102, 79-82.	5.2	47
15	Effect of oxygen content on deformation mode and corrosion behavior in Î²-type Ti-Mo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 534-541.	5.6	46
16	Accommodative {332}ã€ˆ113ã€‰ primary and secondary twinning in a slightly deformed Î²-type Ti-Mo titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 456-465.	5.6	46
17	Effect of oxygen addition on microstructures and mechanical properties of Ti-7.5Mo alloy. Journal of Alloys and Compounds, 2018, 737, 221-229.	5.5	45
18	Blended elemental P/M synthesis and property evaluation of Ti-1100 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 352, 85-92.	5.6	39

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19	Twinning behavior of orthorhombic-Î±â€•martensite in a Ti-7.5Mo alloy. Science and Technology of Advanced Materials, 2019, 20, 401-411.	6.1	39
20	The effect of lamellar morphology on tensile and high-cycle fatigue behavior of orthorhombic Ti-22Al-27Nb alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 2161-2170.	2.2	38
21	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
22	Improvement of strengthâ€“ductility tradeoff in Î² titanium alloy through pre-strain induced twins combined with brittle Ï‰ phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 646, 279-287.	5.6	34
23	Room-temperature tensile and high-cycle-fatigue strength of fine TiB particulate-reinforced Ti-22Al-27Nb composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 2971-2979.	2.2	33
24	Effects of Î± phase precipitation on crevice corrosion and tensile strength in Tiâ€“15Mo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1480-1488.	5.6	30
25	Relationship between fracture toughness and microstructure of Tiâ€“6Alâ€“2Snâ€“4Zrâ€“2Mo alloy reinforced with TiB particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 263, 319-325.	5.6	28
26	Microstructural evolution and its effect on the mechanical behavior of Ti-5Al-5Mo-5V-3Cr alloy during aging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 731, 239-248.	5.6	27
27	Enhancement of impact toughness of Î²-type Tiâ€“Mo alloy by {332}<113> twinning. Journal of Materials Science, 2019, 54, 11279-11291.	3.7	26
28	Study of {332}<113> twinning in a multilayered Ti-10Mo-xFe (x = 1â€“3) alloy by ECCI and EBSD. Science and Technology of Advanced Materials, 2016, 17, 220-228.	6.1	25
29	Improvement of ductility in Ti-5Al-5Mo-5V-3Cr alloy by network-like precipitation of blocky Î± phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 722, 129-135.	5.6	25
30	Transition of multi-deformation modes in Tiâ€“10Mo alloy with oxygen addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 88-96.	5.6	24
31	Coupling effect of deformation mode and temperature on tensile properties in TWIP type Tiâ€“Mo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 766, 138363.	5.6	24
32	First-principles study of electronic structures and stability of body-centered cubic Tiâ€“Mo alloys by special quasirandom structures. Science and Technology of Advanced Materials, 2014, 15, 035014.	6.1	23
33	Effect of High-Pressure Torsion Process on Precipitation Behavior of α Phase in β-Type Ti–15Mo Alloy. Materials Transactions, 2014, 55, 877-884.	1.2	22
34	Theoretical investigation of effect of alloying elements on phase stability in body-centered cubic Ti-X alloys (X=V, Cr, Fe, Co, Nb, and Mo). Journal of Alloys and Compounds, 2015, 634, 193-199.	5.5	22
35	Tensile properties of Tungsten-modified orthorhombic Ti-22Al-20Nb-2W alloy. Scripta Materialia, 2001, 44, 671-676.	5.2	21
36	Mechanical Properties of Particulate Reinforced Titanium-based Metal Matrix Composites Produced by the Blended Elemental P/M Route.. ISIJ International, 1992, 32, 909-916.	1.4	20

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37	Reinforcing effect of in situ grown TiB fibers on Ti-22Al-11Nb-4Mo alloy. Scripta Materialia, 2000, 43, 573-578.	5.2	19
38	Superconductivity in 122 antimonide SrPt₂Sb₂. Superconductor Science and Technology, 2013, 26, 075001.	3.5	19
39	The role of TiB particulate reinforcement in Ti2AlNb based composite under high cycle fatigue. Scripta Materialia, 2003, 49, 897-902.	5.2	18
40	Blended elemental P/M synthesis of Ti-6Al-1.7Fe-0.1Si alloy with improved high cycle fatigue strength. Scripta Materialia, 1998, 39, 1185-1190.	5.2	16
41	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
42	Evaluation of matrix strength in ultra-fine grained pure Al by nanoindentation. Journal of Materials Research, 2009, 24, 2917-2923.	2.6	14
43	Strength evaluation of <i>Î±</i> and <i>Î²</i> phases by nanoindentation in Tiâ€“15Mo alloys with Fe and Al addition. Materials Science and Technology, 2012, 28, 342-347.	1.6	14
44	Optimization of Strength, Ductility and Corrosion Resistance in Ti-Mo Base Alloys by Controlling Mo Equivalency and Bond Order. Materials Transactions, 2011, 52, 1611-1616.	1.2	13
45	Formation of equiaxed Î± phase in Ti-5Al-5Mo-5V-3Cr alloy deformed by high-pressure torsion. Journal of Alloys and Compounds, 2018, 738, 283-291.	5.5	13
46	Effect of macrozones on fatigue crack initiation and propagation mechanisms in a forged ti-6Al-4V alloy under fully-reversed condition. Materialia, 2022, 22, 101401.	2.7	11
47	Effect of Swirly Segregation of Mo on Omega Phase Precipitation Behavior and Tensile Property of Ti-12Mo Alloy. Key Engineering Materials, 0, 551, 180-185.	0.4	10
48	Very High-Cycle Fatigue and High-Cycle Fatigue of Minor Boron-Modified Tiâ€“6Alâ€“4V Alloy. Materials Transactions, 2019, 60, 2213-2222.	1.2	10
49	The Role of Crystallographic Texture and Basal Plane Slip on Microstructurally Short Fatigue Crack Initiation and Propagation in Forged Billet and Rolled Bar Ti-6Al-4V Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 3821-3838.	2.2	10
50	Improvement of creep resistance in TiB particle reinforced Ti2AlNb composite particularly above 700 Â°C. Materials Letters, 2004, 58, 3187-3191.	2.6	9
51	Effects of magnetic fields on martensitic transformation and serration of austenitic Feî—¸Ni and Feî—¸Crî—¸Ni steels at 4 K. Fusion Engineering and Design, 1993, 20, 445-450.	1.9	8
52	Tensile and High Cycle Fatigue Properties of a Minor Boron-Modified Ti–22Al–11Nb–2Mo–1Fe Alloy. Materials Transactions, 2012, 53, 1138-1147.	1.2	8
53	Introduction of Mille-Feuille-Like Î±/Î² Layered Structure into Tiâ€“Mo Alloy. Materials Transactions, 2020, 61, 856-861.	1.2	8
54	Transformation-induced plasticity via Î³ â†’ Îµ â†’ Î±â€™ and Î³ â†’ Îµ â†’ Î³ martensitic transformations in Feâ€“15Mnâ€“10Crâ€“8Niâ€“4Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142583.	5.6	8

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55	Machinability Improvement and Its Mechanism in SUS304 Austenitic Stainless Steel by h-BN Addition. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2012, 98, 358-367.	0.4	7
56	Relationship between microstructures, facet morphologies at the high-cycle fatigue (HCF) crack initiation site, and HCF strength in Ti-6242S. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 727, 43-50.	5.6	7
57	Quantitative analysis of {332}â€ˆ113â€‰ twinning in a Ti-15Mo alloy by <i>in situ</i> scanning electron microscopy. Science and Technology of Advanced Materials, 2018, 19, 474-483.	6.1	7
58	MA Synthesis of TiC-Reinforced Titanium Composites and Particle Size Dependence of Tensile Properties.. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 1999, 46, 484-488.	0.2	6
59	Property Enhancement of Orthorhombic Ti₂AlNb-Based Intermetallic Alloys. Materials Science Forum, 2003, 426-432, 1715-1720.	0.3	6
60	Effect of Pre-cold Rolling-Induced Twins and Subsequent Precipitated Ï‰-Phase on Mechanical Properties in a Î²-Type Tiâ€"Mo Alloy. Acta Metallurgica Sinica (English Letters), 2018, 31, 604-614.	2.9	6
61	Crystallography and deformation behavior of Î± phase precipitate at twin/matrix interface in a cold rolled metastable Ti-12Mo alloy. Journal of Alloys and Compounds, 2022, 892, 162234.	5.5	6
62	Modulated microstructure in Ti-22Al-11 Nb-4Mo alloy. Scripta Materialia, 1999, 40, 471-476.	5.2	5
63	Machinability Improvement and Its Mechanism in SUS304 Austenitic Stainless Steel by Precipitated Hexagonal Boron Nitride. ISIJ International, 2013, 53, 1841-1849.	1.4	5
64	Continuous microstructure evolution of ball rolled TWIP Ti 15Mo alloy and its effect on phase precipitation behavior. Materials Characterization, 2018, 145, 116-125.	4.4	5
65	Potential kink band formation on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si7.svg" display="inline" id="d1e257"><mml:mrow><mml:mi>Î±</mml:mi><mml:mo>/</mml:mo><mml:mi>Î²</mml:mi></mml:mrow></mml:math> two-phase Ti-10Cr alloy under compressive condition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 849, 143538.	5.6	5
66	Twinning and detwinning mechanisms in a BCC Ti Mo-Fe multilayered alloy. IOP Conference Series: Materials Science and Engineering, 2017, 219, 012042.	0.6	4
67	â€œStrategy for Ubiquitous Titanium Alloysâ€. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 915.	0.4	3
68	Microstructures and mechanical properties of Ti5553 alloy processed by high-pressure torsion. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012069.	0.6	3
69	Measurement and Prediction of Temperature Increase during Isothermal Forging of Titaniumâ€"6 Aluminumâ€"4 Vanadium. Materials Performance and Characterization, 2019, 8, 389-401.	0.3	3
70	Synthesis and Property Evaluation of P/M Ti-6Al-2Sn-4Zr-2Mo/TiB Particulate Composites. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1997, 83, 821-826.	0.4	3
71	Fracture Toughness and Microstructure in TiB Particulate-reinforced Ti-6Al-2Sn-4Zr-2Mo Composites. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1998, 84, 452-457.	0.4	2
72	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

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73	Twinning and Detwinning Mechanisms in Beta-Ti Alloys. Materials Science Forum, 2018, 941, 821-826.	0.3	2
74	Processing Condition and Mechanical Properties of Blended Elemental P/M Particulate-reinforced Ti3Al Intermetallics Matrix Composite.. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 1996, 43, 433-437.	0.2	1
75	Blended Elemental P/M Synthesis and Property Evaluation of an Orthorhombic Ti-22Al-27Nb Alloy. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1999, 63, 1269-1276.	0.4	1
76	Mechanical properties of TiB particulate reinforced Ti<SUB align=right>2A1Nb intermetallics produced by prealloyed powder metallurgy method. International Journal of Materials and Product Technology, 2001, 16, 103.	0.2	1
77	Effect of Heat Treatment on the Creep Properties of Ti-22Al-27Nb/TiB Composite. Key Engineering Materials, 2007, 345-346, 545-548.	0.4	1
78	Effects of Mo segregation on Charpy absorbed energy in Ti-12Mo alloys. MATEC Web of Conferences, 2020, 321, 11050.	0.2	1
79	Effect of Quasi-Hydrostatic Pressure on Deformation Mechanism in Ti-10Mo Alloy. Metals, 2020, 10, 1387.	2.3	1
80	Hot Working Flow Behavior of Ti-6242S Alloy. Materials Performance and Characterization, 2019, 8, 782-795.	0.3	1
81	Deformation mechanisms and effect of oxygen addition on mechanical properties of Ti-7.5Mo alloy with Î±â€•martensite. MATEC Web of Conferences, 2020, 321, 11059.	0.2	1
82	Clustering Analysis of Acoustic Emission Signals during Compression Tests in Mille-Feuille Structure Materials. Materials Transactions, 2022, 63, .	1.2	1
83	Microstructural Control and Improvement of Fatigue Properties in Ti₃Al-Nb Based Alloys Produced by Blended Elemental Powder Metallurgy. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1998, 62, 621-628.	0.4	0
84	Effect of a Matrix Microstructure on the High Cycle Fatigue Properties of TiB Particulate Reinforced Ti₃Al-Nb Matrix Composites. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1999, 63, 383-390.	0.4	0
85	Improvement of Room and High Temperature Mechanical Properties of a Ti₂AlNb-based alloy by the Microstructural and Compositional Modifications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2000, 64, 1033-1040.	0.4	0
86	High and Low Cycle Fatigue of Orthorhombic Ti-22Al-27Nb Alloy. Materials Science Forum, 2005, 475-479, 589-594.	0.3	0
87	Blended Elemental P/M Synthesis of Titanium Alloys and Titanium Alloy-Based Particulate Composites. Materials Science Forum, 2007, 534-536, 777-780.	0.3	0
88	Microstructure-twinning relations in beta-Ti alloys. MATEC Web of Conferences, 2020, 321, 12021.	0.2	0
89	Quantitative Analysis of Twinning-Induced Plasticity (TWIP) in Beta-Titanium Alloy. , 2013, , 1149-1156.		0
90	Effect of Additional Boron Amount on the Surface Roughness after Lathe Turning of h-BN Dispersed Type 304 Stainless Steel. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2014, 100, 1542-1547.	0.4	0

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91	Effects of microstructure on fatigue properties of structural titanium alloys. The Proceedings of the Materials and Mechanics Conference, 2018, 2018, OS1421.	0.0	0