

# Satoshi Emura

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Crystallography and deformation behavior of $\beta$ 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
2	Transformation-induced plasticity via $\beta \rightarrow \beta'$ and $\beta \rightarrow \beta''$ martensitic transformations in Fe-15Mn-10Cr-8Ni-4Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142583.	5.6	8
3	Clustering Analysis of Acoustic Emission Signals during Compression Tests in Mille-Feuille Structure Materials. Materials Transactions, 2022, 63, .	1.2	1
4	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
5	Potential kink band formation on $\beta$ phase in two-phase Ti-10Cr alloy under compressive condition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 849, 143538.		5
6	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
7	Microstructure-twinning relations in beta-Ti alloys. MATEC Web of Conferences, 2020, 321, 12021.	0.2	0
8	Effects of Mo segregation on Charpy absorbed energy in Ti-12Mo alloys. MATEC Web of Conferences, 2020, 321, 11050.	0.2	1
9	Effect of Quasi-Hydrostatic Pressure on Deformation Mechanism in Ti-10Mo Alloy. Metals, 2020, 10, 1387.	2.3	1
10	Introduction of Mille-Feuille-Like $\beta/\beta'$ Layered Structure into Ti-6Al-4V Alloy. Materials Transactions, 2020, 61, 856-861.	1.2	8
11	Deformation mechanisms and effect of oxygen addition on mechanical properties of Ti-7.5Mo alloy with $\beta$ -martensite. MATEC Web of Conferences, 2020, 321, 11059.	0.2	1
12	Coupling effect of deformation mode and temperature on tensile properties in TWIP type Ti-6Al-4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 766, 138363.	5.6	24
13	Enhancement of impact toughness of $\beta$ -type Ti-6Al-4V alloy by $\beta$ twinning. Journal of Materials Science, 2019, 54, 11279-11291.	3.7	26
14	Twinning behavior of orthorhombic $\beta$ -martensite in a Ti-7.5Mo alloy. Science and Technology of Advanced Materials, 2019, 20, 401-411.	6.1	39
15	Very High-Cycle Fatigue and High-Cycle Fatigue of Minor Boron-Modified Ti-6Al-4V Alloy. Materials Transactions, 2019, 60, 2213-2222.	1.2	10
16	Hot Working Flow Behavior of Ti-6242S Alloy. Materials Performance and Characterization, 2019, 8, 782-795.	0.3	1
17	Measurement and Prediction of Temperature Increase during Isothermal Forging of Titanium-6 Aluminum-4 Vanadium. Materials Performance and Characterization, 2019, 8, 389-401.	0.3	3
18	Effect of Pre-cold Rolling-Induced Twins and Subsequent Precipitated $\beta$ -Phase on Mechanical Properties in a $\beta$ -Type Ti-6Al-4V Alloy. Acta Metallurgica Sinica (English Letters), 2018, 31, 604-614.	2.9	6

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19	Mo segregation and distribution in Ti–Mo alloy investigated using nanoindentation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 718, 48-55.	5.6	50
20	Formation of equiaxed $\beta$ phase in Ti-5Al-5Mo-5V-3Cr alloy deformed by high-pressure torsion. <i>Journal of Alloys and Compounds</i> , 2018, 738, 283-291.	5.5	13
21	Relationship between microstructures, facet morphologies at the high-cycle fatigue (HCF) crack initiation site, and HCF strength in Ti-6242S. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 727, 43-50.	5.6	7
22	Improvement of ductility in Ti-5Al-5Mo-5V-3Cr alloy by network-like precipitation of blocky $\beta$ phase. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 722, 129-135.	5.6	25
23	Effect of oxygen addition on microstructures and mechanical properties of Ti-7.5Mo alloy. <i>Journal of Alloys and Compounds</i> , 2018, 737, 221-229.	5.5	45
24	Twinning and Detwinning Mechanisms in Beta-Ti Alloys. <i>Materials Science Forum</i> , 2018, 941, 821-826.	0.3	2
25	Quantitative analysis of $\{332\}\langle 113 \rangle$ twinning in a Ti-15Mo alloy by <i>in situ</i> scanning electron microscopy. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 474-483.	6.1	7
26	Continuous microstructure evolution of ball rolled TWIP Ti 15Mo alloy and its effect on phase precipitation behavior. <i>Materials Characterization</i> , 2018, 145, 116-125.	4.4	5
27	Microstructural evolution and its effect on the mechanical behavior of Ti-5Al-5Mo-5V-3Cr alloy during aging. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 731, 239-248.	5.6	27
28	Effects of microstructure on fatigue properties of structural titanium alloys. <i>The Proceedings of the Materials and Mechanics Conference</i> , 2018, 2018, OS1421.	0.0	0
29	Effect of oxygen content on deformation mode and corrosion behavior in $\beta$ -type Ti-Mo alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 684, 534-541.	5.6	46
30	Accommodative $\{332\}\langle 113 \rangle$ primary and secondary twinning in a slightly deformed $\beta$ -type Ti-Mo titanium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 684, 456-465.	5.6	46
31	Strain-rate effect on work-hardening behavior in $\beta$ -type Ti-10Mo-1Fe alloy with TWIP effect. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 707, 701-707.	5.6	51
32	Twinning and detwinning mechanisms in a BCC Ti Mo-Fe multilayered alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 219, 012042.	0.6	4
33	Effect of Additional Boron Amount on Surface Roughness after Lathe Turning in h-BN Dispersed Type 304 Stainless Steels. <i>ISIJ International</i> , 2016, 56, 1031-1037.	1.4	2
34	Study of $\{332\}\langle 113 \rangle$ twinning in a multilayered Ti-10Mo-xFe ( $x = 1-3$ ) alloy by ECCI and EBSD. <i>Science and Technology of Advanced Materials</i> , 2016, 17, 220-228.	6.1	25
35	Deformation microstructural evolution and strain hardening of differently oriented grains in twinning-induced plasticity $\beta$ titanium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 659, 1-11.	5.6	38
36	Mechanical twinning and dislocation slip multilayered deformation microstructures in $\beta$ -type Ti–Mo base alloy. <i>Scripta Materialia</i> , 2015, 102, 79-82.	5.2	47

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37	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
38	Improvement of strength–ductility tradeoff in $\beta^2$ titanium alloy through pre-strain induced twins combined with brittle $\beta'$ phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 646, 279-287.	5.6	34
39	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
40	First-principles study of electronic structures and stability of body-centered cubic Ti–Mo alloys by special quasirandom structures. Science and Technology of Advanced Materials, 2014, 15, 035014.	6.1	23
41	Transition of multi-deformation modes in Ti–10Mo alloy with oxygen addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 88-96.	5.6	24
42	Effect of High-Pressure Torsion Process on Precipitation Behavior of $\alpha$ Phase in $\beta$ -Type Ti–15Mo Alloy. Materials Transactions, 2014, 55, 877-884.	1.2	22
43	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
44	Mechanism of twinning-induced plasticity in $\beta^2$ -type Ti–15Mo alloy. Scripta Materialia, 2013, 69, 393-396.	5.2	171
45	{332} $\beta'$ Twinning system selection in a $\beta^2$ -type Ti–15Mo–5Zr polycrystalline alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 579, 164-169.	5.6	59
46	Superconductivity in 122 antimonide SrPt <sub>2</sub> Sb <sub>2</sub> . Superconductor Science and Technology, 2013, 26, 075001.	3.5	19
47	Machinability Improvement and Its Mechanism in SUS304 Austenitic Stainless Steel by Precipitated Hexagonal Boron Nitride. ISIJ International, 2013, 53, 1841-1849.	1.4	5
48	Quantitative Analysis of Twinning-Induced Plasticity (TWIP) in Beta-Titanium Alloy. , 2013, , 1149-1156.		0
49	Strength evaluation of $\beta'$ and $\beta^2$ phases by nanoindentation in Ti–15Mo alloys with Fe and Al addition. Materials Science and Technology, 2012, 28, 342-347.	1.6	14
50	Heterogeneous twin formation and its effect on tensile properties in Ti–Mo based $\beta^2$ titanium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 554, 53-60.	5.6	49
51	Enhanced uniform elongation by pre-straining with deformation twinning in high-strength $\beta^2$ -titanium alloys with an isothermal $\beta'$ -phase. Philosophical Magazine Letters, 2012, 92, 726-732.	1.2	16
52	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
53	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
54	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

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55	Enhancement of uniform elongation in high strength Ti-Mo based alloys by combination of deformation modes. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 4569-4578.	5.6	96
56	Effects of $\beta$ phase precipitation on crevice corrosion and tensile strength in Ti-15Mo alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 1480-1488.	5.6	30
57	Improvement of room temperature ductility for Mo and Fe modified TiAlNb alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 528, 355-362.	5.6	61
58	Effects of Fe addition on tensile deformation mode and crevice corrosion resistance in Ti-15Mo alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 2693-2701.	5.6	65
59	Microstructure, tensile deformation mode and crevice corrosion resistance in Ti-10Mo-xFe alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 5499-5506.	5.6	68
60	Evaluation of matrix strength in ultra-fine grained pure Al by nanoindentation. <i>Journal of Materials Research</i> , 2009, 24, 2917-2923.	2.6	14
61	Effect of Fe and Zr additions on $\beta$ phase formation in $\beta$ -type Ti-Mo alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 497, 74-78.	5.6	61
62	“Strategy for Ubiquitous Titanium Alloys” Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 915.	0.4	3
63	Effect of Heat Treatment on the Creep Properties of Ti-22Al-27Nb/TiB Composite. <i>Key Engineering Materials</i> , 2007, 345-346, 545-548.	0.4	1
64	Blended Elemental P/M Synthesis of Titanium Alloys and Titanium Alloy-Based Particulate Composites. <i>Materials Science Forum</i> , 2007, 534-536, 777-780.	0.3	0
65	Creep behavior and tensile properties of Mo- and Fe-added orthorhombic Ti-22Al-11Nb-2Mo-1Fe alloy. <i>Scripta Materialia</i> , 2007, 57, 261-264.	5.2	53
66	High and Low Cycle Fatigue of Orthorhombic Ti-22Al-27Nb Alloy. <i>Materials Science Forum</i> , 2005, 475-479, 589-594.	0.3	0
67	The effect of lamellar morphology on tensile and high-cycle fatigue behavior of orthorhombic Ti-22Al-27Nb alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004, 35, 2161-2170.	2.2	38
68	Room-temperature tensile and high-cycle-fatigue strength of fine TiB particulate-reinforced Ti-22Al-27Nb composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004, 35, 2971-2979.	2.2	33
69	Improvement of creep resistance in TiB particle reinforced TiAlNb composite particularly above 700 $^{\circ}$ C. <i>Materials Letters</i> , 2004, 58, 3187-3191.	2.6	9
70	Enhanced mechanical properties of orthorhombic TiAlNb-based intermetallic alloy. <i>Metals and Materials International</i> , 2003, 9, 265-272.	3.4	55
71	$\beta_2$ grain size refinement and its effect on room temperature tensile properties of a Ti-22Al-27Nb orthorhombic intermetallic alloy. <i>Scripta Materialia</i> , 2003, 48, 629-634.	5.2	93
72	The role of TiB particulate reinforcement in TiAlNb based composite under high cycle fatigue. <i>Scripta Materialia</i> , 2003, 49, 897-902.	5.2	18

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73	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
74	Property Enhancement of Orthorhombic Ti <sub>2</sub> AlNb-Based Intermetallic Alloys. Materials Science Forum, 2003, 426-432, 1715-1720.	0.3	6
75	Mechanical properties of TiB particulate reinforced Ti <sub>2</sub> AlNb intermetallics produced by prealloyed powder metallurgy method. International Journal of Materials and Product Technology, 2001, 16, 103.	0.2	1
76	Tensile properties of Tungsten-modified orthorhombic Ti-22Al-20Nb-2W alloy. Scripta Materialia, 2001, 44, 671-676.	5.2	21
77	Reinforcing effect of in situ grown TiB fibers on Ti-22Al-11Nb-4Mo alloy. Scripta Materialia, 2000, 43, 573-578.	5.2	19
78	Improvement of Room and High Temperature Mechanical Properties of a Ti <sub>2</sub> AlNb-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
79	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
80	Effect of a Matrix Microstructure on the High Cycle Fatigue Properties of TiB Particulate Reinforced Ti <sub>3</sub> Al-Nb Matrix Composites. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1999, 63, 383-390.	0.4	0
81	Relationship between fracture toughness and microstructure of Ti-6Al-2Sn-4Zr-2Mo alloy reinforced with TiB particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 263, 319-325.	5.6	28
82	Modulated microstructure in Ti-22Al-11 Nb-4Mo alloy. Scripta Materialia, 1999, 40, 471-476.	5.2	5
83	MA Synthesis of TiC-Reinforced Titanium Composites and Particle Size Dependence of Tensile Properties.. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 1999, 46, 484-488.	0.2	6
84	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
85	Microstructural Control and Improvement of Fatigue Properties in Ti <sub>3</sub> Al-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
86	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
87	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
88	Processing Condition and Mechanical Properties of Blended Elemental P/M Particulate-reinforced Ti <sub>3</sub> Al Intermetallics Matrix Composite.. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 1996, 43, 433-437.	0.2	1
89	Effects of magnetic fields on martensitic transformation and serration of austenitic Fe-Ni and Fe-Cr-Ni steels at 4 K. Fusion Engineering and Design, 1993, 20, 445-450.	1.9	8
90	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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91	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