Akio Yonezu

List of Publications by Year
in descending order

111	1,055	430442	552369
papers	citations	18 h-index	26 g-index

111	111	111	950
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development of biaxial tensile testing for porous polymer membranes. Polymer Testing, 2022, 106, 107440.	2.3	4
2	Characterization of creep deformation behavior of porous polymer membrane under Small-Punch test. Engineering Failure Analysis, 2022, 135, 106149.	1.8	5
3	Adhesion Strength of Al/Epoxy Resin Interface over a Wide Range of Loading Rates. EPJ Web of Conferences, 2021, 250, 01003.	0.1	0
4	Characterization of the surface degraded layer of polymers using an indentation method. Materials Today Communications, 2021, 26, 101873.	0.9	1
5	Repeated Laser Shock-Wave Adhesion Test for Metallic Coatings: Adhesion Durability and Its Mechanism Studied by Molecular Dynamics Simulation. Coatings, 2021, 11, 291.	1.2	3
6	Evaluation of crack propagation behavior of porous polymer membranes. Polymer Testing, 2021, 96, 107124.	2.3	4
7	On the cyclic fatigue of adhesively bonded aluminium: Experiments and molecular dynamics simulation. International Journal of Adhesion and Adhesives, 2021, 107, 102848.	1.4	6
8	FEM simulation of polymeric foam with random pore structure: Uniaxial compression with loading rate effect. Polymer Testing, 2020, 82, 106303.	2.3	6
9	Moisture-Driven CO2 Sorbents. Joule, 2020, 4, 1823-1837.	11.7	65
10	Development of Adhesion Durability Evaluation of Surface Coatings Using Repeated Laser Shock-wave Adhesion Test. Journal of Nondestructive Evaluation, 2020, 39, 1.	1.1	2
11	Indentation failure of polymeric membrane with anisotropic pore structures. Engineering Failure Analysis, 2020, 115, 104620.	1.8	9
12	Evaluation of adhesion durability of Niâ€“P coating using repeated Laser Shock Adhesion Test. Surface and Coatings Technology, 2020, 396, 125953.	2.2	10
13	Surface buckling delamination patterns of film on soft spherical substrates. Soft Matter, 2020, 16, 3952-3961.	1.2	4
14	Strainâ€Guided Oxidative Nanoperforation on Graphene. Small, 2019, 15, e1903213.	5.2	5
15	Interfacial Strength Evaluation of Oxide Films on Carbon Steel by Using the Laser Shock Adhesion Test. Journal of Materials Engineering and Performance, 2019, 28, 4762-4773.	1.2	3
16	On the surface hydrophilization of a blended polysulfone membrane: atomic force microscopy measurement and molecular dynamics simulation. Surface Topography: Metrology and Properties, 2019, 7, 035003.	0.9	6
17	Creep deformation behavior of polymer materials with a 3D random pore structure: Experimental investigation and FEM modeling. Polymer Testing, 2019, 80, 106097.	2.3	7
18	Deformation modeling of polyamide 6 and the effect of water content using molecular dynamics simulation. Journal of Polymer Research, 2019, 26, 1.	1.2	7

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19	Molecular deformation mechanism of polycarbonate during nano-indentation: Molecular dynamics simulation and experimentation. Polymer, 2019, 173, 80-87.	1.8	19
20	Nonlinear Creep Deformation of Polycarbonate at High Stress Level: Experimental Investigation and Finite Element Modeling. Journal of Materials Engineering and Performance, 2019, 28, 1612-1617.	1.2	4
21	Strain Rate Dependency of Fracture Toughness of Al/Epoxy Resin Interface. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2019, 2019, 1009B0945.	0.0	0
22	Evaluation of weathering degradation of polymer using indentation method. The Proceedings of Mechanical Engineering Congress Japan, 2019, 2019, J04217.	0.0	0
23	Manufacturing of Nao-porous Graphene. The Proceedings of Mechanical Engineering Congress Japan, 2019, 2019, J02346.	0.0	0
24	Strain-guided Nano Perforation on 2D materials. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2019, 2019, 1010C1200.	0.0	0
25	Hydrogen Embrittlement Cracking Produced by Indentation Test. , 2019, , 289-313.		0
26	Molecular origins of elastoplastic behavior of polycarbonate under tension: A coarse-grained molecular dynamics approach. Computational Materials Science, 2018, 145, 306-319.	1.4	14
27	Measurement of Interfacial Fracture Toughness of Surface Coatings Using Pulsed-Laser-Induced Ultrasonic Waves. Journal of Nondestructive Evaluation, 2018, 37, 1.	1.1	10
28	Characterization of fatigue crack growth of concrete mortar under cyclic indentation loading. Engineering Failure Analysis, 2018, 83, 156-166.	1.8	18
29	Unconventional localization prior to wrinkles and controllable surface patterns of film/substrate bilayers through patterned cavities. Extreme Mechanics Letters, 2018, 25, 66-70.	2.0	3
30	Tunable surface morphology via patterned cavities in soft materials. Physical Review E, 2018, 98, .	0.8	2
31	An indentation method for evaluating the residual stress of polymeric materials: Equi-biaxial and non-equi-biaxial residual stress states. Polymer Testing, 2018, 70, 378-388.	2.3	15
32	Hydrogen Embrittlement Cracking Produced by Indentation Test. , 2018, , 1-25.		0
33	Prediction of Asymmetric Yield Strengths of Polymeric Materials at Tension and Compression Using Spherical Indentation. Journal of Engineering Materials and Technology, Transactions of the ASME, 2017, 139, .	0.8	8
34	Evaluation of Elastoplasticity-Dependent Creep Property of Magnesium Alloy With Indentation Method: A Reverse Numerical Algorithm and Experimental Validation. Journal of Engineering Materials and Technology, Transactions of the ASME, 2017, 139, .	0.8	5
35	Fracture characterization of inhomogeneous wrinkled metallic films deposited on soft substrates. Journal Physics D: Applied Physics, 2017, 50, 495301.	1.3	1
36	Experimental and numerical investigations of the anisotropic deformation behavior of low-density polymeric foams. Polymer Testing, 2017, 63, 605-613.	2.3	17

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37	On compressive deformation behavior of hollow-strut cellular materials. Materials and Design, 2016, 105, 1-8.	3.3	13
38	Quantitative evaluation of adhesion quality of surface coating by using pulse laser-induced ultrasonic waves. Surface and Coatings Technology, 2016, 286, 231-238.	2.2	26
39	Characterization of the compressive deformation behavior with strain rate effect of low-density polymeric foams. Polymer Testing, 2016, 50, 1-8.	2.3	16
40	Deformation modeling of polyvinylidenedifluoride (PVDF) symmetrical microfiltration hollow-fiber (HF) membrane. Journal of Membrane Science, 2016, 497, 421-429.	4.1	14
41	My Resent Research. Zairyo/Journal of the Society of Materials Science, Japan, 2016, 65, 694.	0.1	0
42	Failure assessment of a hard brittle coating on a ductile substrate subjected to cyclic contact loading. Engineering Failure Analysis, 2015, 57, 118-128.	1.8	11
43	Characterization of Hydrogen-Induced Contact Fracture in High-Strength Steel. Journal of Engineering Materials and Technology, Transactions of the ASME, 2015, 137, .	0.8	2
44	Prediction of viscoplastic properties of polymeric materials using sharp indentation. Computational Materials Science, 2015, 110, 321-330.	1.4	8
45	Mechanism of hydrogen embrittlement cracking produced by residual stress from indentation impression. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 624, 52-61.	2.6	24
46	A Method to Estimate Residual Stress in Austenitic Stainless Steel Using a Microindentation Test. Journal of Materials Engineering and Performance, 2015, 24, 362-372.	1.2	19
47	OS4-16 Finite Element Modeling of Porous Polymer Membrane under Tensile Loading(3D/4D image-based) Tj ETQq1 1 0.784314 rgBT /C The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2015, 2015.14, 58.	0.0	0
48	OS4-17 Observation of Compressive Deformation Behavior of Micro-porous Materials by X-ray CT Imaging(3D/4D image-based analyses and simulations 5,OS4 3D/4D image-based analyses and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 30 Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2015, 2015.14, 59.	0.0	0
49	Tensile deformation of polytetrafluoroethylene hollow fiber membranes used for water purification. Water Science and Technology, 2014, 70, 1244-1250.	1.2	5
50	Estimation of microstructural plastic property of die-cast Mg alloy (AZ91D) with an elevated temperature indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 616, 63-70.	2.6	4
51	Micro-scale damage characterization in porous ceramics by an acoustic emission technique. Ceramics International, 2014, 40, 9859-9866.	2.3	13
52	Creation of freestanding wrinkled nano-films with desired deformation properties by controlling the surface morphology of a sacrificial layer. Journal of Applied Physics, 2013, 113, .	1.1	6
53	On the mechanism of intergranular stress corrosion cracking of sensitized stainless steel in tetrathionate solution. Journal of Materials Science, 2013, 48, 2447-2453.	1.7	16
54	Spherical indentation method for measuring local mechanical properties of welded stainless steel at high temperature. Materials & Design, 2013, 52, 812-820.	5.1	24

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55	Probing out-of-plane anisotropic plasticity using spherical indentation: A numerical approach. Computational Materials Science, 2013, 79, 336-344.	1.4	8
56	Contact fracture mechanism of electroplated Niâ€“P coating upon stainless steel substrate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 563, 184-192.	2.6	20
57	Fabrication and mechanical properties of columnâ€“particle nanocomposites by multiscale shape-assisted self-assembly. Journal Physics D: Applied Physics, 2012, 45, 025302.	1.3	4
58	Development of Fatigue Crack Propagation Technique for Freestanding Nano-Films. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2012, 78, 808-816.	0.2	3
59	The effect of thickness on the steady-state creep properties of freestanding aluminum nano-films. Acta Materialia, 2012, 60, 4438-4447.	3.8	23
60	Evaluation of threshold stress intensity factor of hydrogen embrittlement cracking by indentation testing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 531, 147-154.	2.6	18
61	Realization of freestanding wrinkled thin films with flexible deformability. Applied Physics Letters, 2011, 98, 041908.	1.5	4
62	OS2208 Evaluation of Susceptibility to Hydrogen Embrittlement Cracking in High Strength Steel using Indentation Test. The Proceedings of the Materials and Mechanics Conference, 2011, 2011, _OS2208-1_-_OS2208-3_.	0.0	0
63	Prediction of Residual Life of Low-Cycle Fatigue in Austenitic Stainless Steel Based on Indentation Test. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2011, 77, 1859-1870.	0.2	1
64	Size effect on fracture toughness of freestanding copper nano-films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 8120-8127.	2.6	57
65	Evaluation of critical strain for crack nucleation of magnesium di-boride superconductor using indentation method. Materials Chemistry and Physics, 2011, 125, 528-535.	2.0	5
66	Interface strength of structured nanocolumns grown by glancing angle deposition. Engineering Fracture Mechanics, 2011, 78, 2800-2808.	2.0	11
67	Frictional Anisotropy of Oblique Nanocolumn Arrays Grown by Glancing Angle Deposition. Tribology Letters, 2011, 44, 259-268.	1.2	10
68	OS12-4-2 Fatigue crack propagation in freestanding copper nano-films. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS12-4-2-.	0.0	0
69	OS06-1-1 Interface Fracture of Titanium Oblique Nanocolumns Grown by Glancing Angle Deposition. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS06-1-1-.	0.0	0
70	OS18-2-1 Indentation Method to Characterize Degradation of High-strength Steel in Hydrogen Environment. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS18-2-1-.	0.0	0
71	Corrosion Fatigue Properties of High-Strength Cold-Rolled Eutectoid Steel in Deionized Water. Zairyo/Journal of the Society of Materials Science, Japan, 2011, 60, 1023-1030.	0.1	0
72	OS06-2-1 Fabrication and mechanical property of freestanding flexible thin films with wrinkled structure. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS06-2-1-.	0.0	0

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73	Evaluation Method of Local Mechanical Properties Using Micro Tensile Testing and Its Application to Cold-Worked Materials. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2010, 76, 493-499.	0.2	1
74	On hydrogen-induced Vickers indentation cracking in high-strength steel. Mechanics Research Communications, 2010, 37, 230-234.	1.0	12
75	A simple method to evaluate anisotropic plastic properties based on dimensionless function of single spherical indentation â€“ Application to SiC whisker-reinforced aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 7646-7657.	2.6	47
76	Hydrogen effect on fracture toughness of thin film/substrate interfaces. Engineering Fracture Mechanics, 2010, 77, 803-818.	2.0	13
77	An experimental methodology for characterizing fracture of hard thin films under cyclic contact loading. Thin Solid Films, 2010, 518, 2082-2089.	0.8	19
78	Evaluation of incipient plasticity from interfaces between ultra-thin gold films and compliant substrates. Thin Solid Films, 2010, 518, 5249-5256.	0.8	5
79	Strength of self-organized TiO2 nanotube arrays. Acta Materialia, 2010, 58, 4956-4967.	3.8	33
80	ESTIMATION OF ANISOTROPIC PLASTIC PROPERTIES OF ENGINEERING STEELS FROM SPHERICAL IMPRESSIONS. International Journal of Applied Mechanics, 2010, 02, 355-379.	1.3	9
81	An indentation fatigue strength law. Philosophical Magazine Letters, 2010, 90, 313-322.	0.5	17
82	Evaluation of elastoplastic properties and fracture strength of thick diamond like carbon film by indentation. Diamond and Related Materials, 2010, 19, 40-49.	1.8	11
83	Indentation induced lateral crack in ceramics with surface hardening. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 507, 226-235.	2.6	25
84	Indentation creep surface morphology of nickel-based single crystal superalloys. Computational Materials Science, 2009, 46, 275-285.	1.4	15
85	Estimation of the anisotropic plastic property using single spherical indentationâ€”An FEM study. Computational Materials Science, 2009, 47, 611-619.	1.4	27
86	OS0517 On hydrogen embrittlement cracking in high strength steel subjected to local contact loading. The Proceedings of the Materials and Mechanics Conference, 2009, 2009, 609-611.	0.0	0
87	Analysis on spiral crack in thick diamond-like carbon film subjected to spherical contact loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 496, 67-76.	2.6	22
88	On radial crack and half-penny crack induced by Vickers indentation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 2967-2984.	1.0	33
89	Water Drop Erosion on Turbine Blades: Numerical Framework and Applications. Materials Transactions, 2008, 49, 1606-1615.	0.4	15
90	Fracture Mechanism of Diamond Like Carbon (DLC) Film Subjected to Contact Loading. Zairyo/Journal of the Society of Materials Science, Japan, 2008, 57, 474-480.	0.1	3

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91	1132 Evaluation of Local Mechanical Properties of Cold-worked Material using Indentation and Micro Tensile tests. The Proceedings of the JSME Annual Meeting, 2008, 2008.1, 81-82.	0.0	0
92	Classification of Corrosion-AEs Form Noises for Corrosion Inspection of Oil Storage Tank Floor Plate. Zairyo/Journal of the Society of Materials Science, Japan, 2008, 57, 1101-1107.	0.1	0
93	Evaluations of Elasto-Plastic Properties and Fracture Strength Using Indentation Technique. Key Engineering Materials, 2007, 353-358, 2223-2226.	0.4	8
94	An algorithm to determine the plastic properties of materials based on the loading data in single sharp indentation. Materials Research Society Symposia Proceedings, 2007, 1049, 1.	0.1	3
95	Measurement of Fracture Strength of Diamond Film Using AE and Corrosion Potential Fluctuation During Indentation Test. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2007, 73, 57-65.	0.2	3
96	2020 Hydrogen Effects on Nano Plastic Deformation in High Strength Steel under Nanoindentation. The Proceedings of the JSME Annual Meeting, 2007, 2007.1, 91-92.	0.0	0
97	2236 Evaluation of Anisotropy of Plastic Working using Micro Tensile Specimens. The Proceedings of the JSME Annual Meeting, 2007, 2007.1, 301-302.	0.0	0
98	Corrosion Monitoring of Tank Floor Plates by Acoustic Emission. Zairyo To Kankyo/ Corrosion Engineering, 2006, 55, 406-412.	0.0	1
99	Advanced indentation technique for strength evaluation of hard thin films. Science and Technology of Advanced Materials, 2006, 7, 97-103.	2.8	16
100	Monitoring of stress corrosion cracking in stainless steel weldments by acoustic and electrochemical measurements. Measurement Science and Technology, 2006, 17, 2447-2454.	1.4	27
101	Detection of Stress Corrosion Cracking of Type 304 Stainless Steel Using Acoustic Emission and Corrosion Potential Fluctuation. Advanced Materials Research, 2006, 13-14, 243-250.	0.3	5
102	Simultaneous Monitoring of Acoustic Emission and Corrosion Potential Fluctuation for Mechanistic Study of Chloride Stress Corrosion Cracking. Key Engineering Materials, 2006, 321-323, 254-259.	0.4	2
103	Acoustic Emission and Potential Fluctuation During Chloride SCC with Oxide in Its Surface. Zairyo/Journal of the Society of Materials Science, Japan, 2006, 55, 211-217.	0.1	7
104	Mechanical Properties and Fracture of Titanium Hydrides. Zairyo To Kankyo/ Corrosion Engineering, 2006, 55, 205-211.	0.0	2
105	Mechanism of Environmental Assisted Cracking of a Duplex Stainless Steel in 35% MgCl2 Solution. Zairyo To Kankyo/ Corrosion Engineering, 2006, 55, 364-370.	0.0	1
106	Detection of External Stress Corrosion Cracking by Acoustic Emission. Zairyo To Kankyo/ Corrosion Engineering, 2005, 54, 329-336.	0.0	6
107	Hybrid Method for the Evaluation of Mechanical Properties of Hard Film Deposited on Soft Substrate. Zairyo To Kankyo/ Corrosion Engineering, 2005, 54, 532-537.	0.0	2
108	Fracture Mechanism Analysis and Strength Evaluation of Ceramic Thin Film during Indentation Testing. Zairyo/Journal of the Society of Materials Science, Japan, 2005, 54, 1030-1035.	0.1	6

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109	Fracture observation of polycrystalline diamond film under indentation test. Diamond and Related Materials, 2004, 13, 2024-2030.	1.8	29
110	Fatigue Strength and Fracture Mechanisms of Porous Ceramics. Zairyo/Journal of the Society of Materials Science, Japan, 2002, 51, 116-121.	0.1	0
111	Evaluation of Fatigue Strength and Damage in Toughened Silicon Nitride by Load Increasing Test.. Journal of the Ceramic Society of Japan, 2000, 108, 842-847.	1.3	2