Takashi Sumigawa

List of Publications by Year
in descending order

32	214	1478505 6	1125743 13
papers	citations	h-index	g-index

32	32	32	200
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Simultaneously Toughening and Stiffening Elastomers with Octuple Hydrogen Bonding. Advanced Materials, 2021, 33, e2008523.	21.0	92
2	Griffith Criterion for Nanoscale Stress Singularity in Brittle Silicon. ACS Nano, 2017, 11, 6271-6276.	14.6	38
3	Superior room-temperature ductility of typically brittle quasicrystals at small sizes. Nature Communications, 2016, 7, 12261.	12.8	32
4	Fracture Behavior of Nanoscale Notched Silicon Beams Investigated by the Theory of Critical Distances. Advanced Theory and Simulations, 2018, 1, 1700006.	2.8	22
5	Size dependence of fatigue damage in sub-micrometer single crystal gold. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 618, 416-423.	5.6	14
6	Mechanics of fracture in nanometer-scale components. Mechanical Engineering Reviews, 2014, 1, SMM0007-SMM0007.	4.7	6
7	Development of in-situ TEM Observation Method on Plasticity in Nanoscale Component. Journal of Solid Mechanics and Materials Engineering, 2011, 5, 128-137.	0.5	3
8	Three-Dimensional Cohesive Zone Modeling on Interface Crack Initiation from Nanoscale Stress Concentration. Journal of Solid Mechanics and Materials Engineering, 2011, 5, 117-127.	0.5	2
9	Development of in-situ TEM Observation Method on Plasticity in Nanoscale Component. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2010, 76, 1713-1720.	0.2	1
10	Mechanical Instability Criterion of Dislocation Structures Based on Discrete Dislocation Dynamics. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2010, 76, 1721-1728.	0.2	1
11	Dominant factor on fracture strength of thin film comprising of copper helical nano-elements grown by glancing angle deposition. Transactions of the JSME (in Japanese), 2015, 81, 15-00446-15-00446.	0.2	1
12	A Highly Reliable Structure for Power-Semiconductor Devices That a Nano-spring Layer Absorbs Thermal Deformation. Journal of Smart Processing, 2016, 5, 251-258.	0.1	1
13	Estimation of anisotropic properties of nano-structured arrays by modal vibration control at microscale. Mechanics of Advanced Materials and Structures, 2018, 25, 386-394.	2.6	1
14	Fracture Nano-Mechanics : 1st Report, Interface Strength of Nano-Components(<Special Issue>Thermal) Tj ETQq0 0 0 rgBT /Overlock 10 Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2009, 75, 778-783.	0.2	0
15	Fracture Nano-Mechanics : 2nd Report, Strength of Nano-Elements(<Special Issue>Thermal and) Tj ETQq1 1 0.784314 rgBT /Overlock Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2009, 75, 784-791.	0.2	0
16	Development of experimental methodology on fracture toughness of microscale polymer resins under in situ observation. Material Design and Processing Communications, 2020, 2, e102.	0.9	0
17	535 Analysis for stress distribution near interface edge between nanostructured thin film and solid body. The Proceedings of the Materials and Mechanics Conference, 2007, 2007, 405-406.	0.0	0
18	T0301-1-2 Strength of Crack Initiation at Nano-thickness Cu Film and Si Substrate Interface Edge. The Proceedings of the JSME Annual Meeting, 2009, 2009.8, 35-36.	0.0	0

#	Article	IF	Citations
19	OS1107 Crack Initiation at the center of Interface between Cu Thin Film and Si Substrate in Nano-sized Component. The Proceedings of the Materials and Mechanics Conference, 2009, 2009, 113-114.	0.0	0
20	1504 Fatigue of Copper Film in Nanometer Scale. The Proceedings of the Materials and Mechanics Conference, 2010, 2010, 82-83.	0.0	0
21	109 éŠ…å¾®ç´°æŽ¥å•éƒ¨ã®å¡‘æ€§ã²ãšã¿å±€åœ¨åŒ–ã«é–¢ã™ã‚‹è§£æžçš„æœ¬è¨Ž(OS-1 ç²’ç•Œã ƒè»¢ä½½). The Proceedings of Confer	0.0	0
22	OS13F017 Fracture Criterion for Cracking along the Cu/Si Interface in Nanoscale Thin Films by Cohesive Zone Model. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS13F017-_OS13F017-.	0.0	0
23	OS2404 Analysis of local strain in Cu micro-interconnection based on crystallographic plasticity. The Proceedings of the Materials and Mechanics Conference, 2011, 2011, _OS2404-1_-_OS2404-3_.	0.0	0
24	OS1608 Deformation and fracture of nano-component with dissimilar interface. The Proceedings of the Materials and Mechanics Conference, 2011, 2011, _OS1608-1_-_OS1608-3_.	0.0	0
25	OS06-1-3 In-situ TEM observation on fracture of dissimilar interface in nanoscale component. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS06-1-3-.	0.0	0
26	OS13-1-2 Fracture Criterion for Cracking along the Cu/Si Interface in Nanoscale Thin Films by Cohesive Zone Model. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS13-1-2-.	0.0	0
27	J2240405 Effect of Microscopic Structure on Fatigue Slip Band Formation in Copper Polycrystalline Nano-component. The Proceedings of Mechanical Engineering Congress Japan, 2014, 2014, _J2240405-_J2240405-.	0.0	0
28	OS1112 Size Effect of Fatigue Slip Band Formation in Micron-/Submicron-scale Gold Single Crystal. The Proceedings of the Materials and Mechanics Conference, 2014, 2014, _OS1112-1_-_OS1112-3_.	0.0	0
29	OS12-11 Crack propagation along interface between submicron-thick epoxy film and silicon substrate due to creep(Mechanical properties of nano- and micro-materials-3,OS12 Mechanical properties of) Tj ETQq1 1 0.784314 rgBT /Overlock Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental	0.0	0
30	OS12-7 Criterion for Crack Propagation due to Nanometer-scale Singular Stress Field in Silicon Single Crystal(Mechanical properties of nano- and micro-materials-2,OS12 Mechanical properties of nano-) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2015, 2015.14, 189.	0.0	0
31	Delamination Behavior Along Interface between Submicron Thick Polymer Film and Substrate under Creep. Zairyo/Journal of the Society of Materials Science, Japan, 2016, 65, 176-181.	0.2	0
32	Notch sensitivity of metamaterial with snapping microstructure. Transactions of the JSME (in) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222	0.2	0