Masaki Omiya

List of Publications by Year
in descending order

57	288	840776 11	940533 16
papers	citations	h-index	g-index

57	57	57	166
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evaluation of thermal fatigue crack propagation in underfill resin materials for electronic packages. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 1349-1360.	3.4	2
2	Generation of micro/nano hybrid surface structures on copper by femtosecond pulsed laser irradiation. Nanomanufacturing and Metrology, 2022, 5, 274-282.	3.0	13
3	Influence of strength and notch shape on crack initiation and propagation behavior of advanced high strength steel sheets. Engineering Fracture Mechanics, 2022, 271, 108573.	4.3	11
4	Modelling and hydrogen-induced stress characterization of hydrogen-driven soft actuator using water splitting. International Journal of Hydrogen Energy, 2021, 46, 2835-2843.	7.1	1
5	Improvement of experimental device for high cycle fatigue tests of copper alloy strips and characterizing fatigue properties. The Proceedings of Conference of Kanto Branch, 2021, 2021.27, 10B05.	0.0	0
6	Improvement of experimental device for high cycle fatigue tests of copper alloy strips and characterizing fatigue properties. Transactions of the JSME (in Japanese), 2021, 87, 21-00105-21-00105.	0.2	2
7	Load transfer Ubistar(U^{**}) calculation in structures under dynamic loading. Transactions of the JSME (in Japanese), 2021, 87, 21-00044-21-00044.	0.2	0
8	Modelling of intracranial behaviour on occiput impact in judo. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 797-805.	1.6	0
9	Determination of traction-separation laws on an acrylic adhesive under shear and tensile loading. Journal of Adhesion Science and Technology, 2019, 33, 646-659.	2.6	6
10	Investigation on Simplified Equation for Estimating J-Integral of Adhesive Joint and Its Application to Galvannealed Steel Plate. Materials Transactions, 2019, 60, 1928-1935.	1.2	2
11	Estimation of static strength of adhesively bonded single lap joints with an acrylic adhesive under tensile shear condition based on cohesive zone model. Journal of Adhesion Science and Technology, 2019, 33, 660-674.	2.6	3
12	Development of fast computation algorithm for load transfer Ustar (U*) calculation in structures with slidable supports. Transactions of the JSME (in Japanese), 2019, 85, 18-00374-18-00374.	0.2	0
13	Determination of Cohesive Laws of an Acrylic Adhesive and theirApplication to Estimation of Adhesively Bonded Lap Joint Strengths. Journal of the Adhesion Society of Japan, 2019, 55, 130-142.	0.0	0
14	Development of head protector for judo practice considering neck extension suppression. Journal of Biomechanical Science and Engineering, 2018, 13, 17-00276-17-00276.	0.3	2
15	Investigation on Simplified Equation for Estimating J-Integral of Adhesive Joint and Its Application to Galvannealed Steel Plate. Zairyo/Journal of the Society of Materials Science, Japan, 2018, 67, 1042-1049.	0.2	0
16	On the way to the Tokyo Summer Olympic Games (2020). Prevention of severe head and neck injuries in judo: itâ€™s time for action. British Journal of Sports Medicine, 2017, 51, 1581-1582.	6.7	11
17	Anion Effects on the Ion Exchange Process and the Deformation Property of Ionic Polymer Metal Composite Actuators. Materials, 2016, 9, 479.	2.9	4
18	Effect of environmental condition on essential work of fracture of proton exchange membranes. Mechanical Engineering Journal, 2015, 2, 15-00320-15-00320.	0.4	1

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19	OS7-6 Observations of Intracranial Behaviour during Occipital Collisions in Judo using Physical Head Model(OS7: Injury Biomechanics II). The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics, 2015, 2015.8, 106.	0.0	0
20	Specimen size effect on elasticâ€“plastic strength evaluation of interface between thin films. Engineering Fracture Mechanics, 2014, 131, 371-381.	4.3	2
21	Local distribution of residual stress of Cu in LSI interconnect. Materials Letters, 2014, 136, 362-365.	2.6	0
22	Evaluation for interface strength fluctuations induced by inhomogeneous grain structure of Cu line in LSI Interconnects. Microelectronic Engineering, 2014, 120, 52-58.	2.4	2
23	Experimental and numerical evaluation of interfacial adhesion on Cu/SiN in LSI interconnect structures. Microelectronics Reliability, 2013, 53, 612-621.	1.7	6
24	Grain-scale adhesion strength mapping of copper wiring structures in integrated circuits. Surface and Coatings Technology, 2013, 215, 280-284.	4.8	12
25	Development of Cu/Insulation Layer Interface Crack Extension Simulation with Crystal Plasticity. Japanese Journal of Applied Physics, 2013, 52, 04CB05.	1.5	2
26	Mechanical and electrochemical properties of an IPMC actuator with palladium electrodes in acid and alkaline solutions. Smart Materials and Structures, 2013, 22, 055028.	3.5	13
27	Failure Prediction for Membrane Electrode Assembly. Journal of Computational Science and Technology, 2013, 7, 221-230.	0.4	2
28	Deformation behaviors of ionic-polymerâ€“metal composite actuator with palladium electrodes for various solvents, temperatures, and frequencies. Smart Materials and Structures, 2012, 21, 105031.	3.5	11
29	OS0620 Failure Prediction for Membrane Electrode Assembly. The Proceedings of the Materials and Mechanics Conference, 2012, 2012, _OS0620-1_-_OS0620-2_.	0.0	0
30	OS13-1-5 Nano-structured for low-k insulating layer. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS13-1-5-.	0.0	0
31	OS13-1-4 Evaluation of Thin Film Adhesion by Microcutting System. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS13-1-4-.	0.0	0
32	Effect of Hardness Ratio on Plastic Dissipation in Fine Particle Peening. Journal of Solid Mechanics and Materials Engineering, 2010, 4, 1585-1594.	0.5	6
33	Extended Theory of U[*] to Electrostatic Problem and Its Application to Pore Arrangements for Porous Low-k and High-k Dielectric Film. Journal of Solid Mechanics and Materials Engineering, 2010, 4, 414-425.	0.5	0
34	Material Design for Porous low-k Dielectrics by Genetic Algorithm (GA) and U* Analyses. Journal of Solid Mechanics and Materials Engineering, 2010, 4, 700-710.	0.5	0
35	A comparative study of a new microscale technique and conventional bending techniques for evaluating the interface adhesion strength in IC metallization systems. Journal of Materials Research, 2010, 25, 1917-1928.	2.6	11
36	Fabrication of Ionic Polymer Metal Composite Actuator with Palladium Electrodes and Evaluation of its Bending Response. Materials Research Society Symposia Proceedings, 2009, 1190, 178.	0.1	0

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37	Extension of U^* to Electro-Static Problem and Its Application to Structural Design for Porous Low-k Dielectric Film. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2009, 75, 999-1006.	0.2	1
38	PS25 Evaluation of Compressive Properties of PLA/PBAT Polymer Blends. The Proceedings of the Materials and Mechanics Conference, 2009, 2009, 485-487.	0.0	0
39	PS20 Evaluation of Properties of Ionic Polymer Metal Composite. The Proceedings of the Materials and Mechanics Conference, 2009, 2009, 473-475.	0.0	0
40	OS0413 Effects of Pore Arrangement on the Properties of Low-k Dielectrics. The Proceedings of the Materials and Mechanics Conference, 2009, 2009, 567-569.	0.0	0
41	Tensile behavior of polypropylene blended with bimodal distribution of styreneâ€ethyleneâ€butadieneâ€styrene particle size. Journal of Applied Polymer Science, 2008, 107, 3520-3528.	2.6	27
42	Comparison of mechanical properties of PP/SEBS blends at intermediate and high strain rates with SiO₂ nanoparticles vs. CaCO₃ fillers. Journal of Applied Polymer Science, 2008, 110, 1145-1157.	2.6	20
43	Material ductility and toughening mechanism of polypropylene blended with bimodal distributed particle size of styreneâ€“ethyleneâ€“butadieneâ€“styrene triblock copolymer at high strain rate. Journal of Applied Polymer Science, 2008, 110, 3941-3953.	2.6	12
44	A novel evaluation method for interfacial adhesion strength in ductile dissimilar materials. Engineering Fracture Mechanics, 2008, 75, 5007-5017.	4.3	8
45	Effect of Nickel Pad Metallization Thickness on Fatigue Failure of BGA Lead-Free Solder Joints. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 734-740.	1.3	1
46	TENSILE STRESS STRAIN BEHAVIOR OF POLYPROPYLENE TOUGHENED WITH BI-MODAL SEBS. International Journal of Modern Physics B, 2008, 22, 1129-1134.	2.0	3
47	Effect of Micro Porous Shape on Mechanical Properties in Polypropylene Syntactic Foams. Journal of Solid Mechanics and Materials Engineering, 2008, 2, 616-635.	0.5	5
48	Microstructural Observation and Simulation of Micro Damage Evolution of Ternary Polypropylene Blend with Ethylene-Propylene-Rubber (EPR) and Talc. Journal of Solid Mechanics and Materials Engineering, 2008, 2, 1018-1036.	0.5	7
49	Effects of Morphology and Interfacial Strength on Mechanical Properties of Ternary Polypropylene Blends with Ethylene-Propylene-Rubber (EPR) and Talc: Molecular Dynamics Study. Journal of Solid Mechanics and Materials Engineering, 2008, 2, 1369-1388.	0.5	1
50	Influence of SiO2 Nanoparticles on Mechanical Properties of PP/SEBS Blends at Intermediate and High Strain Rates. Journal of Solid Mechanics and Materials Engineering, 2008, 2, 254-268.	0.5	15
51	Study on fatigue strength characteristics for solder joints. , 2007, , .		0
52	A Trial for Micro-Scale Evaluation of Adhesion Strength around Cu Metallization Systems. Materials Research Society Symposia Proceedings, 2007, 990, 1.	0.1	0
53	Adhesion energy of Cu/polyimide interface in flexible printed circuits. Surface and Coatings Technology, 2007, 202, 1084-1088.	4.8	41
54	OS5-1-4 Nano-Indentation approach to interfacial strength evaluation. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2007, 2007.6, _OS5-1-4-1-_OS5-1-4-6.	0.0	0

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55	1927 A study of evaluation methods for the interface adhesion of Cu metallization systems. The Proceedings of the JSME Annual Meeting, 2007, 2007.7, 219-220.	0.0	0
56	Evaluation of Interfacial Strength by Multi-Stages Peel Test. Key Engineering Materials, 2004, 261-263, 483-488.	0.4	20
57	Deformation mechanism of hydrogen-assisted ionic polymer metal composite actuator. Mechanics of Advanced Materials and Structures, 0, , 1-11.	2.6	2