

# Shojiro Miyake

## List of Publications by Year in descending order

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docs citations

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times ranked

793  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of Friction Durability of Extremely Thin Diamond-Like Carbon Films by Statistical Cluster and Regression Analyses of Friction Coefficient. Tribology Online, 2021, 16, 113-124.	0.2	0
2	Surface Morphology and Tribological Properties of Nanoscale (Ti, Al, Si, C)N Multilayer Coatings Deposited by Reactive Magnetron Sputtering. , 2018, , .		0
3	Particulate Matter Generation Properties from Sliding Parts Made of Various Carbonaceous Films. Tribology Letters, 2018, 66, 1.	1.2	1
4	Friction Durability of Extremely Thin Diamond-Like Carbon Films at High Temperature. Materials, 2017, 10, 159.	1.3	12
5	Mechanical Nanoprocessing and Nanoviscoelasticity of Surface- Modified Polycarbonate. , 2017, , .		0
6	Improving the Friction Durability of Magnetic Head-Disk Interfaces by Thin Lubricant Films. Journal of Nanomaterials, 2016, 2016, 1-15.	1.5	0
7	Dependence of the friction durability of extremely thin diamond-like carbon films on film thickness. Wear, 2016, 356-357, 66-76.	1.5	4
8	Friction properties of surface-modified polished chemical-vapor-deposited diamond films under boundary lubrication with water and poly-alpha olefin. Tribology International, 2016, 102, 287-296.	3.0	13
9	Deposition and Tribology of Electroconductive and Wear-Resistant Nanocomposite Solid Lubricant Films Composed of Carbon and Silver or Gold. Tribology Letters, 2016, 61, 1.	1.2	6
10	Tribology of Thin Films. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2015, 66, 390-396.	0.1	0
11	Creation of Solid Lubricant Firms by Nanostructure Control. Journal of the Vacuum Society of Japan, 2015, 58, 203-208.	0.3	0
12	Nanoprocessing of layered crystalline materials by atomic force microscopy. Nanoscale Research Letters, 2015, 10, 123.	3.1	13
13	Silicon Nanofabrication by Atomic Force Microscopy-Based Mechanical Processing. Journal of Nanotechnology, 2014, 2014, 1-19.	1.5	23
14	Regression Analysis of the Effect of Bias Voltage on Nano- and Macrotribological Properties of Diamond-Like Carbon Films Deposited by a Filtered Cathodic Vacuum Arc Ion-Plating Method. Journal of Nanomaterials, 2014, 2014, 1-13.	1.5	14
15	Repeatable change in electrical resistance of Si surface by mechanical and electrical nanoprocessing. Nanoscale Research Letters, 2014, 9, 455.	3.1	0
16	Surface morphology and tribological properties of DC sputtered nanoscale multilayered TiAlN/CNx coatings. Tribology International, 2014, 73, 36-46.	3.0	20
17	Evaluation of protuberance and groove formation in extremely thin DLC films on Si substrates due to diamond tip sliding by atomic force microscopy. Wear, 2014, 318, 135-144.	1.5	8
18	Low-damage direct patterning of silicon oxide mask by mechanical processing. Nanoscale Research Letters, 2014, 9, 269.	3.1	1

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19	Deposition and tribological properties of multilayer and mixed films composed of gold and polytetrafluoroethylene. <i>Thin Solid Films</i> , 2013, 527, 210-221.	0.8	8
20	Nanoscratch properties of extremely thin diamond-like carbon films. <i>Wear</i> , 2013, 305, 69-77.	1.5	17
21	Nanotribology properties of extremely thin diamond-like carbon films at high temperatures with and without vibration. <i>Wear</i> , 2013, 300, 189-199.	1.5	17
22	Nanomechanical and boundary lubrication properties of titanium carbide and diamond-like carbon nanoperiod multilayer and nanocomposite films. <i>Surface and Coatings Technology</i> , 2013, 221, 124-132.	2.2	21
23	Evaluation of Nanomechanical Properties of Diamond-like Carbon Films. <i>Journal of Surface Analysis (Online)</i> , 2013, 20, 8-17.	0.1	0
24	Nano- and Macrotribological Properties of Nanoperiod Multilayer Films Deposited by Bias Sputtering. <i>Journal of Nanotechnology</i> , 2012, 2012, 1-16.	1.5	0
25	Boundary Lubrication Properties of Nanoperiod Solid Lubricant Multilayer Films Composed of Diamond-Like Carbon and Gold Layers. <i>Tribology Letters</i> , 2012, 46, 1-9.	1.2	14
26	Low friction wear resistant electroconductive gold and silver nanoperiod multilayer solid lubricant films. <i>Tribology - Materials, Surfaces and Interfaces</i> , 2011, 5, 114-120.	0.6	7
27	Evaluation of Mechanical Properties of Lubricant-Coated Magnetic Disk Subjected to Ultra-Violet Irradiation and Heat Treatment. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2009, 60, 280-284.	0.1	0
28	Evaluation of Nanometer Scale Mechanical Properties of Extremely Thin Diamond-Like Carbon (DLC) Films. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2009, 60, 603-608.	0.1	1
29	P-MNS-02 VIBRATION PROCESSING AND PROCESSED SURFACE EVALUATION OF NANOPERIOD MULTILAYER FILMS BY ATOMIC FORCE MICROSCOPY (Micro/Nanosystem Science and Technology, Technical Program) <i>Tj ETQq1 1 0.784314 rgBT / Ov Information and Precision Equipment IIP/ISPS Joint MIPE</i> , 2009, 2009, 419-420.	0.0	0
30	Surface morphology and mechanical properties of nanoscale TiAlN/SiNx multilayer coating deposited by reactive magnetron sputtering. <i>Surface and Coatings Technology</i> , 2008, 203, 171-179.	2.2	27
31	Nanofabrication by mechanical and electrical processes using electrically conductive diamond tip. <i>Journal of Vacuum Science &amp; Technology B</i> , 2008, 26, 1660.	1.3	5
32	Boundary Lubrication Characteristic of Metal-Containing Diamond-Like Carbon (DLC) Films with Poly Alpha Olefin (PAO) Lubricant. <i>Tribology Online</i> , 2008, 3, 310-315.	0.2	14
33	Deposition and tribology of carbon and boron nitride nanoperiod multilayer solid lubricating films. <i>Surface and Coatings Technology</i> , 2007, 202, 1023-1028.	2.2	17
34	Evaluation of Nanomechanical Properties of Surfaces. <i>Journal of the Japan Society for Precision Engineering</i> , 2007, 73, 859-863.	0.0	1
35	Shinku/Journal of the Vacuum Science and Technology B, 2007, 25, 1660-1660.	0.0	0
36	Influence on Microstructure of BCN Films by Thermal Annealing in Air. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2006, 57, 722-726.	0.1	2

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37	Nanoprocessing and evaluation of carbon and boron nitride nanoperiod multilayer films by lateral force modulation method. <i>Surface and Interface Analysis</i> , 2006, 38, 873-878.	0.8	11
38	Friction properties of co-sputtered sulfide/DLC solid lubricating films. <i>Surface and Coatings Technology</i> , 2006, 200, 5849-5854.	2.2	51
39	Nanotribological properties of perfluoropolyether-coated magnetic disk evaluated by vertical and lateral vibration wear tests. <i>Surface and Coatings Technology</i> , 2006, 200, 6137-6154.	2.2	19
40	Tribology of carbon nitride and boron nitride nanoperiod multilayer films and its application to nanoscale processing. <i>Thin Solid Films</i> , 2005, 493, 160-169.	0.8	19
41	Microtribological properties of B <sub>4</sub> C extremely thin protective films deposited on plasma pretreated magnetic layers. <i>Surface and Coatings Technology</i> , 2005, 195, 214-226.	2.2	17
42	Micro-tribological properties of heat treated hard disk evaluated by force modulation method. <i>Microsystem Technologies</i> , 2005, 11, 1138-1145.	1.2	3
43	Deposition of WS <sub>2</sub> /DLC Nano-composite Films and Their Tribological Properties. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2005, 56, 535-540.	0.1	1
44	Lubricant State Evaluation of Ultraviolet-Irradiated Magnetic Disk Using Lateral Friction Force Modulation Microscopy with Electric Current Distribution. <i>Japanese Journal of Applied Physics</i> , 2005, 44, L299-L302.	0.8	9
45	Amplitude Dependence of the Lateral-Vibration Wear Test for Perpendicular Recording Magnetic Disks Treated by Heat Curing. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 3209-3217.	0.8	14
46	Nanoprocessing of silicon by mechanochemical reaction using atomic force microscopy and additional potassium hydroxide solution etching. <i>Nanotechnology</i> , 2005, 16, 149-157.	1.3	24
47	Nanometer Scale Mechanical Properties of DLC Films Deposited by Filtered Cathodic Vacuum Arc Ion-plating Method (FCVA). <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2004, 55, 669-676.	0.1	6
48	AFM of AFM. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2004, 55,		
49	Lubricant Supply from Crystal Boundaries of Perpendicular Magnetic Disk Evaluated by Lateral Modulation Friction Force Microscopy. <i>Japanese Journal of Applied Physics</i> , 2004, 43, L1469-L1471.	0.8	9
50	Mechanical Properties of Extremely Thin B <sub>4</sub> C Protective Layer Deposited With Helium Addition. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 3566-3571.	0.8	16
51	Improvement of boundary lubrication properties of diamond-like carbon (DLC) films due to metal addition. <i>Tribology International</i> , 2004, 37, 751-761.	3.0	91
52	Frictional behavior of cubic BN films sliding against DLC. <i>Tribology International</i> , 2004, 37, 923-927.	3.0	5
53	Low-Friction and Long-Life Solid Lubricant Films Structured of Nanoperiod Tungsten Disulfide and Molybdenum Disulfide Multilayer. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 4338-4343.	0.8	25
54	Deposition and Tribology of Carbon and Boron Nitride Super Lattice Solid Lubricant Films. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , 2004, 47, 377-383.	0.3	6

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55	Trend of Diamondlike-carbon Film. Shinku/Journal of the Vacuum Society of Japan, 2004, 47, 811-819.	0.2	3
56	Micro-mechanical properties of ion-plated carbon nitride thin films. Surface and Coatings Technology, 2003, 169-170, 295-298.	2.2	1
57	Nanoprocessing of Carbon and Boron Nitride Nanoperiod Multilayer Films. Japanese Journal of Applied Physics, 2003, 42, L322-L325.	0.8	19
58	Improvement of mechanical properties of nanometer period multilayer films at interfaces of each layer. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 785.	1.6	35
59	Dynamic Deformation Properties of the PFPE Coated Hard Disk Evaluated by Force Modulation Method. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2003, 54, 471-476.	0.1	3
60	Mechanical Nanoprocessing of Layered Crystal Structure Materials by Atomic Force Microscopy. Japanese Journal of Applied Physics, 2002, 41, 5706-5712.	0.8	14
61	Increase and Decrease of Etching Rate of Silicon due to Diamond Tip Sliding by Changing Scanning Density. Japanese Journal of Applied Physics, 2002, 41, L1116-L1119.	0.8	14
62	Surface Modification of Magnetic Recording Layer by Low Energy Beam Irradiation.. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2002, 53, 939-944.	0.1	3
63	Nanometer Scale Protuberance and Groove Processing of Silicon by Mechano-chemical Action and Its Application of Etching Mask.. Journal of the Japan Society for Precision Engineering, 2002, 68, 695-699.	0.0	6
64	èj"éçæ"1è³à. Materia Japan, 2001, 40, 861-866.	0.1	0
65	Fabrication of Silicon Utilizing Mechanochemical Local Oxidation by Diamond Tip Sliding. Japanese Journal of Applied Physics, 2001, 40, L1247-L1249.	0.8	26
66	Realization of Nanometer-scale Processing by Fluorocarbon Plasma Treatment of Polycarbonate and Its Potential Application to High-Density Memory. IEEJ Transactions on Sensors and Micromachines, 2001, 121, 564-570.	0.0	3
67	Boundary Lubrication Properties of Diamond and Surface-Modified Diamond Films With Various Water Solutions. Tribology Series, 2000, 38, 559-568.	0.1	5
68	Dust Generation Properties of Solid Lubricant Film Coated and Perfluoropolyether Lubricated Ball Bearings. Journal of Tribology, 2000, 122, 796-802.	1.0	3
69	Nano Protuberance and Groove Processing of Silicon by Diamond Tip Sliding. IEEJ Transactions on Sensors and Micromachines, 2000, 120, 350-356.	0.0	2
70	Nanometer-scale Mechanical Processing of Muscovite Mica and Application to High-Density Memory. IEEJ Transactions on Sensors and Micromachines, 2000, 120, 8-14.	0.0	1
71	ãfŠãfŽã"æceŸç©â±è†œã®æ'©è€—ç%°¹æ€Šã,'æ»ç"ã—ãŸãfŠãfŽãŠãŸæŠ€èj"ã®é—ç™º. Journal of the Japan Society for Precision Eng	0.0	1
72	Microprotuberance Processing of Silicon by Diamond Tip Scanning.. Journal of the Japan Society for Precision Engineering, 1999, 65, 1788-1792.	0.0	10

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73	Mechanical Processing of Standard Rulers with One-Nanometer Depth of Muscovite Mica Using an Atomic Force Microscope.. Journal of the Japan Society for Precision Engineering, 1999, 65, 570-574.	0.0	7
74	Deposition and Microtribology of Carbon Nitride and Boron Nitride Super Lattice Films.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 1999, 65, 4496-4501.	0.2	2
75	Deposition and Tribological Properties of Hard Boron, Carbon and Nitrogen, Mixed Films.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 1999, 65, 2892-2897.	0.2	1
76	Low Wear of Magnetic Disk Slid with Diamond Slider.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 1999, 65, 3389-3394.	0.2	0
77	CVD diamond, DLC, and cBN coatings for solid film lubrication. Tribology Letters, 1998, 5, 123-129.	1.2	23
78	Nanometer-scale Mechanical Processing of Muscovite Mica by Atomic Force Microscope.. Journal of the Japan Society for Precision Engineering, 1997, 63, 426-430.	0.0	11
79	Modification of nanometer scale wear of nitrogen-containing carbon films due to ion implantation. Nuclear Instruments & Methods in Physics Research B, 1997, 122, 643-649.	0.6	9
80	Increase of nanometer-scale wear of polished chemical-vapor-deposited diamond films due to nitrogen ion implantation. Nuclear Instruments & Methods in Physics Research B, 1996, 108, 70-74.	0.6	15
81	Micro-, Meso- and Macrotribological Properties of N+-Implanted Silicon.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 1995, 61, 4757-4762.	0.2	0
82	1 nm deep mechanical processing of muscovite mica by atomic force microscopy. Applied Physics Letters, 1995, 67, 2925-2927.	1.5	68
83	Tribological Behavior of Cubic Boron Nitride Film Sliding Against Diamond. Journal of Tribology, 1995, 117, 629-633.	1.0	17
84	Basic Study on Laser-assisted Thermochemical Processing of Diamond.. Journal of the Japan Society for Precision Engineering, 1995, 61, 415-419.	0.0	1
85	Ultra-solid-lubrication. Extremely Low Friction Properties of Super Hard Films.. Journal of the Japan Society for Precision Engineering, 1995, 61, 187-192.	0.0	0
86	Atomic-scale wear properties of muscovite mica evaluated by scanning probe microscopy. Applied Physics Letters, 1994, 65, 980-982.	1.5	43
87	Deposition technique and tribological properties of cubic BN. Vacuum, 1994, 45, 1009-1011.	1.6	5
88	Laser-assisted thermochemical processing of diamond. Applied Physics Letters, 1994, 64, 387-389.	1.5	14
89	Effects of N+ ion implantation into cubic BN film for tribological usages. Surface and Coatings Technology, 1993, 62, 558-563.	2.2	13
90	Optical properties of cubic boron nitride films made by a reactive ion plating method. Thin Solid Films, 1993, 226, 82-86.	0.8	18

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91	Amorphous C:Si:F(Cl):Na film with metal-like conductivity. Synthetic Metals, 1992, 46, 93-104.	2.1	4
92	Preparation of Plasma Sprayed Superconductive Film through Laser Post-treatment.. Journal of the Japan Society for Precision Engineering, 1992, 58, 829-834.	0.0	1
93	Tribological properties of cubic, amorphous and hexagonal boron nitride films. Surface and Coatings Technology, 1991, 49, 406-410.	2.2	56
94	Tribological behavior of C-F bonds in plasma-synthesized fluoropolymers analyzed by polarized infrared microspectroscopy. Journal of Applied Physics, 1991, 70, 2618-2622.	1.1	5
95	Bearing for clean circumstances.. Journal of the Japan Society for Precision Engineering, 1991, 57, 599-604.	0.0	0
96	Magnetic condensation of a photoexcited plasma during fluoropolymer sputtering. Journal of Applied Physics, 1990, 67, 2093-2099.	1.1	7
97	High lubrication performance of tribologically oriented fluoropolymer molecules analyzed by polarized infrared microspectroscopy. Journal of Applied Physics, 1990, 67, 4083-4089.	1.1	9
98	Oriented hydrocarbons transferred from a high performance lubricative amorphous C:H:Si film during sliding in a vacuum. Applied Physics Letters, 1990, 56, 1868-1870.	1.5	87
99	Optical-emission studies on the interaction between halogenated carbon species and noble gas during fluoropolymer sputtering. Journal of Applied Physics, 1989, 65, 4639-4645.	1.1	7
100	Surface microanalytical study on the tribological interface between the sputtered fluoropolymer film and a sliding ball. Journal of Applied Physics, 1989, 65, 767-774.	1.1	7
101	Oxidativ wear in boron-implanted Fe. Nuclear Instruments & Methods in Physics Research B, 1989, 39, 540-543.	0.6	6
102	Analytical and experimental investigations for satellite antenna deployment mechanisms. Journal of Spacecraft and Rockets, 1989, 26, 181-187.	1.3	16
103	Lubricating performance enhancement of amorphous silicon carbide film by annealing effects and microbeam analyses of the tribological interface. Journal of Applied Physics, 1989, 66, 596-604.	1.1	20
104	Solid lubricating fluorine-containing polymer film synthesized by perfluoropolyether sputtering. Thin Solid Films, 1988, 158, 51-60.	0.8	24
105	Ultraviolet-light irradiation of a radio-frequency plasma applied to fluoropolymer sputtering deposition. Journal of Applied Physics, 1988, 64, 2700-2705.	1.1	16
106	Effects of target temperature on crystallinity and hardness of B-implanted Fe. Journal of Applied Physics, 1988, 64, 6241-6245.	1.1	4
107	Crystallinity and hardness of B-implanted Fe. Applied Physics Letters, 1988, 52, 1469-1471.	1.5	7
108	Effect of High Energy Ion Bombardment on the Tribological Properties of WS <sub>2</sub> Sputtered Films. Journal of Tribology, 1988, 110, 621-627.	1.0	6

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109	Tribological Improvement of Ag Films by Ion Beam Enhanced Deposition. Journal of Tribology, 1988, 110, 64-68.	1.0	17
110	Reliability evaluation on on-board satellite antenna deployment mechanism.. Journal of the Japan Society for Aeronautical and Space Sciences, 1988, 36, 125-130.	0.0	1
111	Small-Angle Oscillatory Performance of Solid-Lubricant Film-Coated Ball Bearings for Vacuum Applications. ASLE Transactions, 1987, 30, 248-253.	0.6	20
112	Friction and Wear Behavior of Hard Carbon Films. ASLE Transactions, 1987, 30, 121-127.	0.6	86
113	On-board antenna pointing mechanism for multi-beam satellite communication system.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 1987, 53, 1047-1052.	0.2	0
114	State of the art of surface modification processing.. Journal of the Japan Society for Precision Engineering, 1987, 53, 1503-1506.	0.0	0
115	Extension of bearing endurance life by ion implantation. Applied Physics Letters, 1986, 49, 779-781.	1.5	16
116	Applications of magnetic fluid seals to vacuum.. Shinku/Journal of the Vacuum Society of Japan, 1985, 28, 483-493.	0.2	2
117	Sliding life enhancement of a WS <sub>2</sub> sputtered film by ion beam mixing. Applied Physics Letters, 1985, 47, 683-685.	1.5	46
118	Characteristics of a Ferromagnetic Linear Vacuum Seal. ASLE Transactions, 1985, 28, 358-363.	0.6	4
119	Sliding Bearing Lubricated with Ferromagnetic Fluid. ASLE Transactions, 1985, 28, 461-466.	0.6	21
120	Dry Cleaning of Si Surface Contamination by Reactive Sputter Etching. Japanese Journal of Applied Physics, 1982, 21, 529-533.	0.8	2
121	Journal of the Japan Society of Precision Engineering, 1987, 53, 1047-1052.		
122	Deposition and Tribology of Carbon and Boron Nitride Nanoperiod Multilayer Hard and Solid Lubricating Films. , 0, , .		2