

# Keiji Oyoshi

## List of Publications by Year in descending order

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52  
papers

1,121  
citations

394286

19  
h-index

395590

33  
g-index

52  
all docs

52  
docs citations

52  
times ranked

925  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microstructure, physical and chemical properties of nanostructured (Ti-Hf-Zr-V-Nb)N coatings under different deposition conditions. <i>Materials Chemistry and Physics</i> , 2014, 147, 1079-1091.	2.0	174
2	Irradiation resistance, microstructure and mechanical properties of nanostructured (TiZrHfVNbTa)N coatings. <i>Journal of Alloys and Compounds</i> , 2016, 679, 155-163.	2.8	137
3	Structure of $\hat{1}\pm$ -Al <sub>2</sub> O <sub>3</sub> (0001) surface and Ti deposited on $\hat{1}\pm$ -Al <sub>2</sub> O <sub>3</sub> (0001) substrate. <i>Surface Science</i> , 1999, 437, 289-298.	0.8	71
4	Effect of ion implantation on the physical and mechanical properties of Ti-Si-N multifunctional coatings for biomedical applications. <i>Materials and Design</i> , 2016, 110, 821-829.	3.3	70
5	Experimental investigation of nonlinear optical properties of Ag nanoparticles: Effects of size quantization. <i>Physical Review B</i> , 2014, 90, .	1.1	55
6	Formation of nanoscale phosphorus colloids in implanted SiO <sub>2</sub> glass. <i>Journal of Non-Crystalline Solids</i> , 1992, 142, 287-290.	1.5	41
7	Formation of buried oxynitride layers in silica glass by ion implantation. <i>Journal of Applied Physics</i> , 1990, 68, 3653-3660.	1.1	39
8	The effect of the deposition parameters of nitrides of high-entropy alloys (TiZrHfVNb)N on their structure, composition, mechanical and tribological properties. <i>Journal of Superhard Materials</i> , 2013, 35, 356-368.	0.5	37
9	Antibacterial Effect of Au Implantation in Ductile Nanocomposite Multilayer (TiAlSiY)N/CrN Coatings. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 48540-48550.	4.0	36
10	Smoothing of Silica Glass Surfaces by Ion Implantation. <i>Japanese Journal of Applied Physics</i> , 1991, 30, 1854-1859.	0.8	27
11	Ca segregation at the MgO(001) surface studied by ion scattering spectroscopy. <i>Surface Science</i> , 1997, 387, 136-141.	0.8	27
12	Effects of coimplantation of silicon and nitrogen on structural defects and Si-N bond formation in silica glass. <i>Physical Review B</i> , 1991, 43, 11966-11970.	1.1	25
13	Paramagnetic resonance of E <sup>2</sup> -type centers in Si-implanted amorphous SiO <sub>2</sub> . Si <sup>29</sup> hyperfine structure and characteristics of Zeeman resonances. <i>Journal of Non-Crystalline Solids</i> , 1994, 179, 39-50.	1.5	25
14	Influence of implantation of Au <sup>3+</sup> ions on the microstructure and mechanical properties of the nanostructured multielement (TiZrHfVNbTa)N coating. <i>Physics of the Solid State</i> , 2015, 57, 1559-1564.	0.2	24
15	Initial stage growth mechanisms of metal adsorbates (Ti, Zr, Fe, Ni, Ge, and Ag) on MgO(001) surface. <i>Surface Science</i> , 1999, 442, 291-299.	0.8	23
16	Influence of residual pressure and ion implantation on the structure, elemental composition, and properties of (TiZrAlYNb)N nitrides. <i>Technical Physics</i> , 2015, 60, 1176-1183.	0.2	23
17	Analysis of local regions near interfaces in nanostructured multicomponent (Ti-Zr-Hf-V-Nb)N coatings produced by the cathodic-arc-vapor-deposition from an arc of an evaporating cathode. <i>Physics of Metals and Metallography</i> , 2013, 114, 672-680.	0.3	22
18	Study of ion beam induced epitaxial crystallization of SrTiO <sub>3</sub> . <i>Journal of Applied Physics</i> , 2000, 87, 3450-3456.	1.1	21

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19	Formation of Si-Rich Interfaces by Radiation-Induced Diffusion and Microsegregation in CrN/ZrN Nanolayer Coating. ACS Applied Materials & Interfaces, 2021, 13, 16928-16938.	4.0	21
20	Spectral investigation of nonlinear local field effects in Ag nanoparticles. Journal of Applied Physics, 2015, 117, 113101.	1.1	19
21	The effect of segregation and thermodiffusion on the formation of interfaces in nanostructured (Ti-Hf-Zr-V-Nb)N multielement coatings. Technical Physics Letters, 2013, 39, 280-283.	0.2	17
22	Transparent, Conducting, Amorphous Oxides: Effect of Chemical Composition on Electrical and Optical Properties of Cadmium Germanates. Journal of the American Ceramic Society, 1997, 80, 22-26.	1.9	16
23	Formation of superhard Ti-Hf-Si-N/NbN/Al <sub>2</sub> O <sub>3</sub> multilayer coatings for highly effective protection of steel. Technical Physics Letters, 2013, 39, 189-192.	0.2	16
24	Structure, optical absorption and electronic states of Zn <sup>+</sup> ion implanted and subsequently annealed sol-gel anatase TiO <sub>2</sub> films. Nuclear Instruments & Methods in Physics Research B, 2000, 168, 221-228.	0.6	15
25	Crystallization of amorphous Si on a glass substrate through nucleation by Si <sup>+</sup> ion implantation. Applied Physics Letters, 1990, 57, 1970-1972.	1.5	14
26	Study of structure and optical properties of $\hat{\Gamma}^2$ -FeSi <sub>2</sub> precipitates formed by ion-implantation of Fe <sup>+</sup> in Si(100) and effects of co-implantation of Fe <sup>+</sup> and Si <sup>+</sup> in amorphous SiO <sub>2</sub> . Thin Solid Films, 2001, 381, 194-201.	0.8	14
27	Formation of $\hat{\Gamma}^2$ -FeSi <sub>2</sub> precipitates at the SiO <sub>2</sub> /Si interface by Fe <sup>+</sup> ion implantation and their structural and optical properties. Thin Solid Films, 2001, 381, 202-208.	0.8	12
28	High Dose Implantation of Nitrogen and Phosphor into Silica Glass. Materials Research Society Symposia Proceedings, 1988, 128, 519.	0.1	11
29	The microstructure of a multielement nanostructured (TiZrHfVNbTa)N coating and its resistance to irradiation with Au <sup>+</sup> ions. Technical Physics Letters, 2015, 41, 1054-1057.	0.2	11
30	The Dependence of Field Effect Mobilities on Substrate Temperature for Amorphous Silicon Deposition for Amorphous Silicon Thin Film Transistors. Japanese Journal of Applied Physics, 1988, 27, L2010-L2012.	0.8	10
31	Dispersion of third-order susceptibility of Au nanoparticles fabricated by ion implantation. Nuclear Instruments & Methods in Physics Research B, 2019, 447, 38-42.	0.6	10
32	Roughness study of ion-irradiated silica glass surface. Applied Surface Science, 1996, 100-101, 374-377.	3.1	9
33	Visible photoluminescence in thermally annealed Bi implanted SiO <sub>2</sub> films. Materials Chemistry and Physics, 1998, 54, 286-288.	2.0	7
34	Ion implantation for large-area optoelectronics on glass substrates. Nuclear Instruments & Methods in Physics Research B, 1993, 74, 317-321.	0.6	6
35	Effects of ion beam irradiation on the crystallization of Si <sup>+</sup> C films. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 594-598.	0.6	5
36	Grain-size distribution in ion-irradiated amorphous Si films on glass substrates. Journal of Applied Physics, 1992, 71, 648-652.	1.1	4

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37	Structural features and physico-mechanical properties of AlN-TiB <sub>2</sub> -TiSi <sub>2</sub> amorphous-like coatings. Journal of Superhard Materials, 2015, 37, 310-321.	0.5	4
38	Charging Effect of Ion Implantation on Glass. Japanese Journal of Applied Physics, 1993, 32, 5170-5175.	0.8	3
39	Ion beam induced epitaxial crystallization of SrTiO <sub>3</sub> . Nuclear Instruments & Methods in Physics Research B, 1997, 121, 184-186.	0.6	3
40	Surface segregation of implanted ions: Bi, Eu, and Ti at the MgO(100) surface. Applied Surface Science, 1998, 130-132, 534-538.	3.1	3
41	Migration of Ion-implanted Fe in Silica Glass during Thermal Treatment. Japanese Journal of Applied Physics, 2002, 41, 6145-6148.	0.8	3
42	Formation and disruption of current paths of anodic porous alumina films by conducting atomic force microscopy. Applied Surface Science, 2010, 257, 837-841.	3.1	3
43	Optical properties of ion-beam-synthesized Au nanoparticles in SiO <sub>2</sub> matrix. Nuclear Instruments & Methods in Physics Research B, 2016, 375, 56-59.	0.6	3
44	Formation of Buried Oxynitride Layer into Silica Glass using Ion Beam. Materials Research Society Symposia Proceedings, 1989, 157, 149.	0.1	2
45	Crystal Nucleation in Amorphous Si Films on Glass Substrate by Si <sup>+</sup> Ion Implantation. Materials Research Society Symposia Proceedings, 1991, 230, 171.	0.1	2
46	FIB fabrication and irradiation test of stencil masks for heavy-ion patterned implantation for plasmonic application. Nuclear Instruments & Methods in Physics Research B, 2012, 272, 183-187.	0.6	1
47	Effects of ion beam irradiation on the crystallization of Copper films. Materials Research Society Symposia Proceedings, 1995, 396, 195.	0.1	0
48	Development and irradiation performance of stencil masks for heavy-ion patterned implantation. Surface and Coatings Technology, 2011, 206, 806-811.	2.2	0
49	Recrystallization and formation of spheroidal gold particles in amorphous-like AlN-TiB <sub>2</sub> -TiSi <sub>2</sub> coatings after annealing and subsequent implantation. Physics of the Solid State, 2016, 58, 1453-1457.	0.2	0
50	Ion implantation for large-area optoelectronics on glass substrates. , 1993, , 317-321.		0
51	MODIFICATION OF LARGE AREA GLASS SURFACES BY ION IMPLANTATION. , 1994, , 139-144.		0
52	Quantum size effects in the intrinsic nonlinearity of metal plasmonic nanoparticles. , 2016, , .		0