Takako Nakamura

List of Publications by Year
in descending order

83	1,736	257101 24	315357 38
papers	citations	h-index	g-index

84	84	84	1722
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Polycondensation/pyrolysis of tris-s-triazine derivatives leading to graphite-like carbon nitrides. Journal of Materials Chemistry, 2001, 11, 474-478.	6.7	141
2	Tribological properties and characterization of DLC films deposited by pulsed bias CVD. Diamond and Related Materials, 2004, 13, 1500-1504.	1.8	91
3	Antibacterial activity of fluorine incorporated DLC films. Diamond and Related Materials, 2006, 15, 1011-1014.	1.8	74
4	Geometric Properties of Covalently Bonded DNA on Single-Crystalline Diamond. Journal of the American Chemical Society, 2006, 128, 3884-3885.	6.6	65
5	Tribological properties of DLC films deposited on steel substrate with various surface roughness. Diamond and Related Materials, 2004, 13, 2211-2215.	1.8	53
6	Rapid formation of black titania photoanodes: pulsed laser-induced oxygen release and enhanced solar water splitting efficiency. Journal of Materials Chemistry A, 2014, 2, 6762-6771.	5.2	52
7	WO₃ nanosponge photoanodes with high applied bias photon-to-current efficiency for solar hydrogen and peroxydisulfate production. Journal of Materials Chemistry A, 2016, 4, 17809-17818.	5.2	49
8	Photo- and electrochemical bonding of DNA to single crystalline CVD diamond. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 3245-3272.	0.8	45
9	Chemical modification of diamond powder using photolysis of perfluoroazooctane. Chemical Communications, 2003, , 900-901.	2.2	42
10	Chemical modification of single-walled carbon nanotubes with sulfur-containing functionalities. Diamond and Related Materials, 2007, 16, 1091-1094.	1.8	42
11	Synthesis of heterofullerenes by laser ablation. Physical Chemistry Chemical Physics, 1999, 1, 2631-2633.	1.3	41
12	Preparation of AlN and LiNbO3 thin films on diamond substrates by sputtering method. Diamond and Related Materials, 2002, 11, 408-412.	1.8	40
13	Low-friction behaviour of diamond-like carbon films in a water environment. Diamond and Related Materials, 2006, 15, 962-966.	1.8	39
14	Photochemical Amine Layer Formation on H-Terminated Single-Crystalline CVD Diamond. Chemistry of Materials, 2007, 19, 2852-2859.	3.2	37
15	Intramolecular cyclization of (.omega.-carboxyalkyl)sulfonium salts. A novel synthesis of macrocyclic lactones. Journal of Organic Chemistry, 1989, 54, 5218-5223.	1.7	36
16	Laser induced chemical and physical modifications of polymer films: dependence on the irradiation wavelength. Applied Surface Science, 1997, 109-110, 227-231.	3.1	35
17	Synthesis and characterization of fluorinated amorphous carbon films by reactive magnetron sputtering. Diamond and Related Materials, 2005, 14, 989-993.	1.8	34
18	Comparison of the transmission behavior of a triazeno-polymer with a theoretical model. Applied Physics A: Materials Science and Processing, 1996, 63, 257-265.	1.1	33

#	Article	IF	Citations
19	Surface modification of diamond-like carbon films with perfluorooctyl functionalities and their surface properties. Surface Science, 2005, 580, 101-106.	0.8	32
20	Photochemical modification of diamond powders with elemental sulfur and their surface-attachment behavior on gold surfaces. Physical Chemistry Chemical Physics, 2009, 11, 730-734.	1.3	32
21	Alkene/Diamond Liquid/Solid Interface Characterization Using Internal Photoemission Spectroscopy. Langmuir, 2006, 22, 5645-5653.	1.6	31
22	Photochemical Modification of Diamond Films:â€‰ Introduction of Perfluorooctyl Functional Groups on Their Surface. Langmuir, 2004, 20, 5846-5849.	1.6	29
23	DNAâ€sensor based on AlGaN/GaN high electron mobility transistor. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1626-1629.	0.8	29
24	Sidewall modification of single-walled carbon nanotubes using photolysis of perfluoroazooctaneElectronic supplementary information (ESI) available: Fig. S1. UV-vis-NIR spectra of pristine and modified SWNTs. See http://www.rsc.org/suppdata/cc/b4/b402206h/. Chemical Communications, 2004, , 1336.	2.2	25
25	Photochemical modification of DLC films with oxygen functionalities and their chemical structure control. Diamond and Related Materials, 2013, 33, 16-19.	1.8	24
26	Irradiation Wavelength Selective Surface Modification of a Triazeno Polymer. Macromolecules, 1996, 29, 6301-6309.	2.2	23
27	The structure and tribological property of amorphous carbon and carbon nitride films prepared by ECR plasma sputtering method. Diamond and Related Materials, 2001, 10, 1093-1097.	1.8	23
28	Synthesis and Surface Acoustic Wave Property of Aluminum Nitride Thin Films Fabricated on Silicon and Diamond Substrates Using the Sputtering Method. Japanese Journal of Applied Physics, 2001, 40, 5065-5068.	0.8	23
29	Friction behaviour of Si-DLC/DLC multi layer films on steel substrate in water environment. Diamond and Related Materials, 2005, 14, 1089-1093.	1.8	23
30	Simple Fabrication of Gd(III)-DTPA-Nanodiamond Particles by Chemical Modification for Use as Magnetic Resonance Imaging (MRI) Contrast Agent. Applied Physics Express, 2013, 6, 015001.	1.1	23
31	Synthesis of nitrogen-rich Bâ€“Câ€“N materials from melamine and boron trichloride. Journal of Materials Science, 1998, 33, 1281-1286.	1.7	22
32	Synthesis of Fischer-Type (Alkoxy)carbene Complexes Using Diphenylsulfonium Salts with Functionalized Alkyl Groups. Journal of Organic Chemistry, 2000, 65, 4796-4803.	1.7	21
33	Photochemical modification of nanodiamond films with perfluorooctyl functionalities. Diamond and Related Materials, 2006, 15, 678-681.	1.8	21
34	Formation of lubrication film of diamond-like carbon films in water and air environments against stainless steel and Cr-plated balls. Diamond and Related Materials, 2007, 16, 1336-1339.	1.8	21
35	Flexible humidity sensors composed of graphite-like carbon micro-pinecone arrays. RSC Advances, 2016, 6, 95342-95348.	1.7	21
36	Time-of-flight mass spectroscopic studies of positive ionic species generated by laser ablation of silicon carbide. Chemical Physics Letters, 2001, 340, 296-301.	1.2	20

#	Article	IF	Citations
37	Synthesis of macrocyclic dilactones by cyclization of sulfonium salts. Journal of Organic Chemistry, 1992, 57, 3783-3789.	1.7	19
38	Synthesis of heterofullerene using a direct BN substitution reaction of fullerene. Diamond and Related Materials, 2003, 12, 1908-1911.	1.8	17
39	BN substitution reaction of fullerene using an excimer laser irradiation. Diamond and Related Materials, 2001, 10, 1228-1230.	1.8	16
40	New Method for the Preparation of Alkoxycarbene Complexes of Chromium, Molybdenum, and Tungsten Using Sulfonium Salts. Chemistry Letters, 1994, 23, 1537-1540.	0.7	14
41	Single pulse threshold and transmission behaviour of a triazeno-polymer during pulsed UV-laser irradiation. Applied Surface Science, 1996, 96-98, 601-604.	3.1	14
42	Perfluorooctylation of aromatic compounds with perfluoroazooctane upon 185 nm irradiation in a two-phase system. Journal of the Chemical Society Perkin Transactions II, 1998, , 659-662.	0.9	14
43	Sidewall modification of single-walled carbon nanotubes using photolysis of perfluoroazooctane. Diamond and Related Materials, 2004, 13, 1971-1974.	1.8	14
44	Photochemical Modification of Diamond Films with Sulfur-Containing Functionalities. Japanese Journal of Applied Physics, 2007, 46, 348-350.	0.8	13
45	Inhomogeneous DNA bonding to polycrystalline CVD diamond. Diamond and Related Materials, 2007, 16, 1648-1651.	1.8	13
46	Photochemical modification of single-walled carbon nanotubes with amino functionalities and their metal nanoparticles attachment. Diamond and Related Materials, 2008, 17, 559-562.	1.8	13
47	Photochemical modification and functionalization of carbon surfaces with fluorine moieties. Diamond and Related Materials, 2010, 19, 374-381.	1.8	13
48	A direct introduction of perfluorooctyl group into cycloalkanes using the photolysis of perfluoroazooctane upon 185 nm irradiation. Journal of the Chemical Society Chemical Communications, 1995, , 2027.	2.0	12
49	Sidewall Modification of Single-walled Carbon Nanotubes with Sulfur-containing Functionalities and Gold Nanoparticle Attachment. Chemistry Letters, 2006, 35, 742-743.	0.7	12
50	Gaseous Tribochemical Products of Hydrogenated DLC Film and Stainless Steel Pair in Air Detected by Mass Spectrometry. Tribology Letters, 2015, 57, 1.	1.2	12
51	Chemical modification of diamond powder with optically active functionalities and its chiral recognition behavior. Applied Surface Science, 2010, 257, 1368-1370.	3.1	11
52	Chemical modification of DLC films with perfluorooctyl functionality. Diamond and Related Materials, 2005, 14, 1019-1022.	1.8	10
53	The significant effect of heterojunction quality on photoelectrochemical water splitting in bilayer photoelectrodes: Rb_xWO₃thin films on RbLaNb₂O₇layers. Physical Chemistry Chemical Physics, 2014, 16, 26901-26908.	1.3	10
54	Preparation of lithium niobate thin films on diamond-coated silicon substrate for surface acoustic devices. Diamond and Related Materials, 2003, 12, 1809-1813.	1.8	9

#	Article	IF	Citations
55	Roughness effect of mating ball on friction of diamond-like carbon film and friction mechanism in water and air environment. Diamond and Related Materials, 2008, 17, 860-863.	1.8	9
56	Surface Functionalization of Diamond Films by Photoreaction of Elemental Sulfur and Their Surface Properties. Japanese Journal of Applied Physics, 2012, 51, 085201.	0.8	8
57	Hardness effect of stainless steel substrates on tribological properties of water-lubricated DLC films against AISI 440C ball. Wear, 2010, 268, 329-334.	1.5	7
58	LACTONIZATION REACTIONS OF (Ï‰-CARBOXYALKYL)SULFONIUM SALTS. Phosphorus, Sulfur and Silicon and the Related Elements, 1992, 66, 59-65.	0.8	6
59	Photolysis of Perfluoroazooctane in Perfluorohexane upon 185 nm Irradiation. Chemistry Letters, 1995, 24, 533-534.	0.7	6
60	Cross-checking of nanoelectrospray ionization mass spectrometry and computer simulation for the evaluation of the interaction strength of non-covalently bound enkephalins in solution. Journal of Mass Spectrometry, 2001, 36, 937-942.	0.7	6
61	Properties of hydrogenated amorphous carbon thin films deposited by plasma-based ion implantation method. Diamond and Related Materials, 2004, 13, 1449-1453.	1.8	6
62	The Preparation of Ag Nanoparticle-Modified Single-Walled Carbon Nanotubes and Their Antibacterial Activity. Biocontrol Science, 2009, 14, 133-138.	0.2	6
63	Enhanced Jc of MOD-YBCO Films by Modifying Surface States of CeO2 Buffer Layers on Sapphire Substrates. Physics Procedia, 2013, 45, 177-180.	1.2	6
64	The characterization of nanocrystal graphite films deposited by ECR plasma sputtering. Diamond and Related Materials, 2003, 12, 2011-2015.	1.8	5
65	Photochemical attachment of amine-layers on H-terminated undoped single crystalline CVD diamonds. Diamond and Related Materials, 2008, 17, 1376-1379.	1.8	5
66	Tribological properties of polymer composites with diamond-like carbon flakes. Diamond and Related Materials, 2010, 19, 894-898.	1.8	5
67	Novel Synthesis of Macrocyclic Lactones from Ï‰-Carboxyalkylsulfonium Salts. Chemistry Letters, 1988, 17, 1931-1932.	0.7	4
68	Chemical modification of diamond films using photolysis of perfluoroazooctane. Diamond and Related Materials, 2004, 13, 1084-1087.	1.8	4
69	Surface Functionalization of Diamond Films by Photoreaction of Elemental Sulfur and Their Surface Properties. Japanese Journal of Applied Physics, 2012, 51, 085201.	0.8	4
70	Crystal-Plane Dependence of Nb-Doped Rutile TiO2 Single Crystals on Photoelectrochemical Water Splitting. Catalysts, 2019, 9, 725.	1.6	4
71	Lymphangiography and Post-lymphangiographic Multidetector CT for Preclinical Lymphatic Interventions in a Rabbit Model. CardioVascular and Interventional Radiology, 2019, 42, 448-454.	0.9	4
72	Amine-layer growth and electronic properties on H-terminated undoped single crystalline CVD diamond. Diamond and Related Materials, 2008, 17, 892-895.	1.8	3

#	Article	IF	Citations
73	Fabrication of sulfur-functionalized DLC films by photochemical modification and attachment of gold nanoparticles. Applied Surface Science, 2014, 317, 443-448.	3.1	3
74	Photolysis of perfluoroazooctane in an argon matrix. Physical Chemistry Chemical Physics, 2000, 2, 2535-2538.	1.3	2
75	Chemical Modification of Carbon Materials with Sulfur Functionalities. Materials Research Society Symposia Proceedings, 2007, 1039, 1.	0.1	2
76	Photochemical modification of diamond powder with sulfur functionalities and its behavior on gold surfaces. IOP Conference Series: Materials Science and Engineering, 2010, 16, 012002.	0.3	1
77	Sulfur-functionalized Diamond Powder Surface for Attachment of Gold and Biomolecules. Transactions of the Materials Research Society of Japan, 2013, 38, 415-418.	0.2	1
78	Control of Surface and Interface Functionality by Surface Photochemical Modification and Nanocoating Technologyâ€"Application to Joining of Dissimilar Materials with High Joint Strength for 5G FPCâ€". Journal of Japan Institute of Electronics Packaging, 2019, 22, 490-494.	0.0	1
79	Perfluoroalkylation of Benzene by 185 nm Photolysis of Perfluoroazooctane. Chemistry Letters, 1994, 23, 1573-1576.	0.7	0
80	DNA Bonding to CVD Diamond Probed by Scanning Electron-, Fluorescence-, and Atomic force-Microscopy. Materials Research Society Symposia Proceedings, 2006, 956, 1.	0.1	0
81	Chemical modification of carbon films with fluorine functionalities using dry process. Diamond and Related Materials, 2012, 24, 107-110.	1.8	0
82	Photochemical Modification of Diamond and Related Materials with Fluorine Functionalities. Hyomen Kagaku, 2008, 29, 181-186.	0.0	0
83	Development of Next-Generation Communication Components by Photoreaction Process. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2021, 72, 320-324.	0.1	0