Shinta Watanabe

List of Publications by Year in Descending Order

38 papers	279 citations	10 h-index	14 g-index
42 ext. papers	325 ext. citations	2.8 avg, IF	3.03 L-index

#	Paper	IF	Citations
38	The uptake characteristics of Prussian-blue nanoparticles for rare metal ions for recycling of precious metals from nuclear and electronic wastes.. *Scientific Reports*, **2022**, 12, 5135	4.9	1
37	Structural analyses of Gd3(Al,Ga)5O12 garnet solid solutions via X-ray and UV absorption spectroscopy experiments for Gd atoms. *Journal of Alloys and Compounds*, **2021**, 867, 159055	5.7	1
36	Photopolymerization effects on the external quantum efficiency of fullerene/zinc phthalocyanine heterojunction solar cells. *AIP Advances*, **2021**, 11, 075227	1.5	1
35	The uptake mechanism of palladium ions into Prussian-blue nanoparticles in a nitric acid solution toward application for the recycling of precious metals from electronic and nuclear wastes.. *RSC Advances*, **2021**, 11, 20701-20707	3.7	1
34	Local structure analysis of Sb, Bi, and Ag dopant atoms in Mg2Si semiconductor by x-ray absorption spectroscopy and first-principles calculation. *Journal of Applied Physics*, **2021**, 130, 245105	2.5	0
33	Visualizing cation vacancies in Ce:Gd3Al2Ga3O12 scintillators by gamma-ray-induced positron annihilation lifetime spectroscopy. *Applied Physics Express*, **2020**, 13, 085505	2.4	4
32	Sorption Properties of Aluminum Hexacyanoferrate for Platinum Group Elements. *Chemistry Letters*, **2020**, 49, 83-86	1.7	2
31	Morphological and optical properties of □and □phase zinc (II) phthalocyanine thin films for application to organic photovoltaic cells. *Journal of Chemical Physics*, **2020**, 153, 144704	3.9	6
30	Chemical forms of rhodium ion in pure water and nitric acid solution studied using ultraviolet-visible spectroscopy and first-principles calculations. *IOP Conference Series: Materials Science and Engineering*, **2020**, 835, 012001	0.4	1
29	Electron-beam irradiation of photopolymerized C60 film studied using in situ scanning tunneling microscope, in situ Fourier-transform infrared spectroscopy, and first-principles calculations. *AIP Advances*, **2020**, 10, 085212	1.5	2
28	Chemical forms of molybdenum ion in nitric acid solution studied using liquid-phase X-ray absorption fine structure, Ultraviolet□Visible absorption spectroscopy and first-principles calculations. *Chemical Physics Letters*, **2019**, 723, 76-81	2.5	6
27	Control of electric, optical, thermal properties of C60 films by electron-beam irradiation. *Carbon*, **2019**, 152, 882-887	10.4	9
26	Local environment of W and Mo atoms in CaW1□ Mo x O4 (x = 0.12) solid solution studied by X-ray structural analyzes. *Japanese Journal of Applied Physics*, **2019**, 58, 120602	1.4	2
25	Visualizing hidden electron trap levels in Gd3Al2Ga3O12:Ce crystals using a mid-infrared free-electron laser. *Applied Physics Letters*, **2018**, 112, 031112	3.4	4
24	Shallow electron traps formed by Gd2+ ions adjacent to oxygen vacancies in cerium-doped Gd3Al2Ga3O12 crystals. *Applied Physics Letters*, **2018**, 113, 041906	3.4	8
23	Spectroscopic and first-principles calculation studies of the chemical forms of palladium ion in nitric acid solution for development of disposal of high-level radioactive nuclear wastes. *AIP Advances*, **2018**, 8, 045221	1.5	8
22	Two-Dimensional Organometallic Kondo Lattice with Long-Range Antiferromagnetic Order. *Journal of Physical Chemistry C*, **2018**, 122, 20046-20054	3.8	7

21	Correlational analysis of Eu3+ charge transfer state using La effective charge in La-based mixed-anion host compounds. *Japanese Journal of Applied Physics*, **2017**, 56, 032601	1.4	2
20	Energy location of Ce3+ 4f level and majority carrier type in Gd3Al2Ga3O12:Ce crystals studied by surface photovoltage spectroscopy. *Applied Physics Letters*, **2017**, 110, 251101	3.4	7
19	Spectroscopic and theoretical studies on the structural, electronic, and optical properties of zinc octaethylporphyrin/C co-deposited films. *Journal of Chemical Physics*, **2017**, 147, 214701	3.9	6
18	Intra- and inter-atomic optical transitions of Fe, Co, and Ni ferrocyanides studied using first-principles many-electron calculations. *Journal of Applied Physics*, **2016**, 119, 235102	2.5	9
17	Molecular orbital calculations of Eu-doped SrAl2O4 clusters. *Solid State Communications*, **2015**, 206, 42-45	1.6	4
16	Comparative Study on Optical Properties of YPO4: Mn, Zr Phosphor by Experiment and Calculation **2015**, 217-235		
15	Comparative study of Auger-free luminescence of Rb2ZnCl4 crystals between experiment and calculation. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2013**, 10, 993-996		2
14	Relativistic many-electron calculations of Cr3+ L2,3-edge x ray absorption near-edge structures for Cr3+:□Al2O3 and □Cr2O3 and magnetic circular dichroism of Cr3+L2,3-edge x ray absorption near-edge structures for Cr3+:□Al2O3. *Journal of Applied Physics*, **2011**, 110, 123524	2.5	11
13	[H(x)TeV9O28]((5-x)-) (x=1 and 2): vanadotellurates with decavanadate structure. *Inorganic Chemistry*, **2011**, 50, 6183-8	5.1	16
12	First-principles and experimental analysis of fn□n□1d1 absorption spectra and multiplet energy levels of Pr3+, Nd3+, and U3+ in LiYF4. *Physical Review B*, **2010**, 81,	3.3	16
11	First-principles calculation of ground and excited-state absorption spectra of ruby and alexandrite considering lattice relaxation. *Physical Review B*, **2009**, 79,	3.3	16
10	Experimental and First-Principles Analysis of 4f□5d Absorption Spectrum for Ce3+ in LiYF4 Considering Lattice Relaxation. *Journal of the Physical Society of Japan*, **2008**, 77, 084702	1.5	10
9	Current Situation and Future Development of Discrete Variational Multielectron Method. *Advances in Quantum Chemistry*, **2008**, 54, 297-314	1.4	5
8	Chapter 231 First-principles calculations of transition spectra. *Fundamental Theories of Physics*, **2007**, 1-59	0.8	12
7	Theoretical and Experimental Consideration of Valence Band X-ray Photoelectron Spectroscopy Spectra of Cr-Deficient MgCr2-xO4. *Japanese Journal of Applied Physics*, **2007**, 46, 4175-4178	1.4	1
6	Experimental and Theoretical Investigations for Excitation Properties of Ba[sub 1-x]Eu[sub x]MgAl[sub 10]O[sub 17]. *Journal of the Electrochemical Society*, **2007**, 154, J196	3.9	11
5	First-principles relativistic calculation for 4f□5d transition energy of Ce3+ in various fluoride hosts. *Journal of Solid State Chemistry*, **2006**, 179, 2438-2442	3.3	20
4	Optical Transitions near the Fundamental Absorption Edge and Electronic Structures of YAl3(BO3)4:Gd3+. *Japanese Journal of Applied Physics*, **2006**, 45, 146-151	1.4	22

3	Luminescence properties of YAl3(BO3)4 substituted with Sc3+ ions. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 2701-2704	1.6	3
2	Relativistic Calculations of Complete 4fnEnergy Level Schemes of Free Trivalent Rare-Earth Ions. *Japanese Journal of Applied Physics*, **2005**, 44, 7488-7490	1.4	16
1	Calculations of Complete 4fnand 4fn-15d1Energy Level Schemes of Free Trivalent Rare-Earth Ions. *Japanese Journal of Applied Physics*, **2004**, 43, L611-L613	1.4	26