Cheol-Woong Yang

List of Publications by Citations

120 papers	4,532 citations	28 h-index	66 g-index
125 ext. papers	4,947 ext. citations	5.2 avg, IF	4.81 L-index

#	Paper	IF	Citations
120	Evidence of graphitic AB stacking order of graphite oxides. *Journal of the American Chemical Society* , **2008**, 130, 1362-6	16.4	914
119	Synthesis of Large-Area Graphene Layers on Poly-Nickel Substrate by Chemical Vapor Deposition: Wrinkle Formation. *Advanced Materials*, **2009**, 21, 2328-2333	24	766
118	Wafer-scale growth of single-crystal monolayer graphene on reusable hydrogen-terminated germanium. *Science*, **2014**, 344, 286-9	33.3	697
117	Synthesis of Silicon Nanotubes on Porous Alumina Using Molecular Beam Epitaxy. *Advanced Materials*, **2003**, 15, 1172-1176	24	140
116	X-ray photoemission spectroscopy study of fluorinated single-walled carbon nanotubes. *Applied Physics Letters*, **2002**, 80, 4235-4237	3.4	136
115	Dirac electrons in a dodecagonal graphene quasicrystal. *Science*, **2018**, 361, 782-786	33.3	132
114	Role of anions in the AuCl3-doping of carbon nanotubes. *ACS Nano*, **2011**, 5, 1236-42	16.7	126
113	Intermetallic compound layer growth at the interface between Sn□Cu□Ni solder and Cu substrate. *Journal of Alloys and Compounds*, **2004**, 381, 151-157	5.7	84
112	Design of Dispersants for the Dispersion of Carbon Nanotubes in an Organic Solvent. *Advanced Functional Materials*, **2007**, 17, 1775-1783	15.6	80
111	Large-scale production of aligned carbon nanotubes by the vapor phase growth method. *Chemical Physics Letters*, **2002**, 359, 109-114	2.5	80
110	Single-walled carbon nanotubes produced by catalytic chemical vapor deposition of acetylene over Fe□Mo/MgO catalyst. *Chemical Physics Letters*, **2004**, 383, 104-108	2.5	75
109	High-Quality Double-Walled Carbon Nanotubes Produced by Catalytic Decomposition of Benzene. *Chemistry of Materials*, **2003**, 15, 3951-3954	9.6	73
108	One-pot synthesis of core□shell-like Pt3Co nanoparticle electrocatalyst with Pt-enriched surface for oxygen reduction reaction in fuel cells. *Energy and Environmental Science*, **2011**, 4, 4947	35.4	72
107	High-Yield Catalytic Synthesis of Thin Multiwalled Carbon Nanotubes. *Journal of Physical Chemistry B*, **2004**, 108, 17695-17698	3.4	62
106	Dispersion Stability of Single-Walled Carbon Nanotubes Using Nafion in Bisolvent. *Journal of Physical Chemistry C*, **2007**, 111, 2477-2483	3.8	58
105	Detection of graphene domains and defects using liquid crystals. *Nature Communications*, **2014**, 5, 3484	17.4	56
104	Synthesis of single- and double-walled carbon nanotubes by catalytic decomposition of methane. *Chemical Physics Letters*, **2003**, 373, 475-479	2.5	54

103	Large-Scale Synthesis of High-Quality Double-Walled Carbon Nanotubes by Catalytic Decomposition of n-Hexane. *Journal of Physical Chemistry B*, **2004**, 108, 2192-2194	3.4	51
102	Effects of deposition parameters on the crystallinity of CeO2 thin films deposited on Si(100) substrates by r.f.-magnetron sputtering. *Thin Solid Films*, **2000**, 360, 154-158	2.2	49
101	Electrically Driven Reversible Phase Changes in Layered In Se Crystalline Film. *Advanced Materials*, **2017**, 29, 1703568	24	45
100	Epitaxial growth of a single-crystal hybridized boron nitride and graphene layer on a wide-band gap semiconductor. *Journal of the American Chemical Society*, **2015**, 137, 6897-905	16.4	43
99	Epitaxial-Growth-Induced Junction Welding of Silver Nanowire Network Electrodes. *ACS Nano*, **2018**, 12, 4894-4902	16.7	41
98	Quantum confinement effects in transferrable silicon nanomembranes and their applications on unusual substrates. *Nano Letters*, **2013**, 13, 5600-7	11.5	41
97	Intermetallic compound layer formation between Sn□3.5 mass %Ag BGA solder ball and (Cu, immersion Au/electroless Ni□P/Cu) substrate. *Journal of Materials Science: Materials in Electronics*, **2003**, 14, 487-493	2.1	34
96	Low-temperature wafer-scale growth of MoS2-graphene heterostructures. *Applied Surface Science*, **2019**, 470, 129-134	6.7	34
95	Wafer-Scale and Low-Temperature Growth of 1T-WS Film for Efficient and Stable Hydrogen Evolution Reaction. *Small*, **2020**, 16, e1905000	11	32
94	Thickness contrast of few-layered graphene in SEM. *Surface and Interface Analysis*, **2012**, 44, 1538-1541	1.5	31
93	Realization of continuous Zachariasen carbon monolayer. *Science Advances*, **2017**, 3, e1601821	14.3	28
92	Control of interfacial reaction layers formed in Sn□3.5Ag□0.7Cu/electroless Ni□P solder joints. *Scripta Materialia*, **2009**, 60, 257-260	5.6	26
91	Characteristics of HfO2/HfSixOy film as an alternative gate dielectric in metal□oxide□emiconductor devices. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2002**, 20, 1360		25
90	Study of ZrO2 thin films for gate oxide applications. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2001**, 19, 1720-1724	2.9	24
89	High-Temperature Chemical Vapor Deposition for SiC Single Crystal Bulk Growth Using Tetramethylsilane as a Precursor. *Crystal Growth and Design*, **2014**, 14, 5569-5574	3.5	23
88	Formation of Reliable HfO2/HfSixOyGate-Dielectric for Metal-Oxide-Semiconductor Devices. *Japanese Journal of Applied Physics*, **2002**, 41, 6904-6907	1.4	23
87	Characterization of ternary Ni2SnP layer in Sn□3.5Ag□0.7Cu/electroless Ni (P) solder joint. *Scripta Materialia*, **2010**, 63, 1108-1111	5.6	20
86	Characterization of Interfacial Reaction Layers Formed Between Sn-3.5Ag Solder and Electroless Ni-Immersion Au-Plated Cu Substrates. *Journal of Electronic Materials*, **2008**, 37, 84-89	1.9	19

85	Microstructural Characterization of SS304 upon Various Shot Peening Treatments. *Applied Microscopy*, **2015**, 45, 155-169	1.1	18
84	Surface nanocrystallization of pure Cu induced by ultrasonic shot peening. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 9637-43	1.3	16
83	In situ TEM characterization of interfacial reaction in Sn□3.5Ag/electroless Ni(P) solder joint. *Scripta Materialia*, **2011**, 64, 597-600	5.6	14
82	Initial interfacial reaction layers formed in Sn□3.5Ag solder/electroless Ni□P plated Cu substrate system. *Journal of Materials Research*, **2008**, 23, 2195-2201	2.5	13
81	MORPHOLOGY, THERMAL STABILITY, AND SOLDERABILITY OF ELECTROLESS NICKEL□PHOSPHORUS PLATING LAYER. *Surface Review and Letters*, **2007**, 14, 827-832	1.1	12
80	The effects of Ta on the formation of Ni-silicide in Ni0.95xTax0.05/Si systems. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2004**, 114-115, 241-245	3.1	11
79	Crystallographic alignment of Fe2B and Nd2Fe14B for texture memory in hydrogenation□disproportionation□desorption□recombination-processed Nd□Fe□B powders. *Journal of Alloys and Compounds*, **2018**, 732, 32-42	5.7	10
78	Effect of Ultrasonic Nanocrytalline Surface Modification on the Microstructural Evolution of Inconel 690 Alloy. *Materials and Manufacturing Processes*, **2015**, 30, 194-198	4.1	10
77	Effect of the dehydrogenation speed and Nd content on the microstructure and magnetic properties of HDDR processed Nd-Fe-B magnets. *Metals and Materials International*, **2014**, 20, 909-914	2.4	10
76	Effect of buffer layer on the growth of GaN on Si substrate. *Journal of Crystal Growth*, **2002**, 237-239, 1094-1098	1.6	10
75	Characteristics of an Amorphous Carbon Layer as a Diffusion Barrier for an Advanced Copper Interconnect. *ACS Applied Materials & Interfaces*, **2020**, 12, 3104-3113	9.5	9
74	Electroplated Silver-Nickel Core-Shell Nanowire Network Electrodes for Highly Efficient Perovskite Nanoparticle Light-Emitting Diodes. *ACS Applied Materials & Interfaces*, **2020**, 12, 39479-39486	9.5	9
73	Dynamic study on microstructural evolution of nickel germanide utilizing zirconium interlayer. *Microelectronic Engineering*, **2012**, 89, 23-26	2.5	8
72	Superconducting joint between Bi-Pb-Sr-Ca-Cu-O superconductor tapes. *IEEE Transactions on Applied Superconductivity*, **2000**, 10, 1182-1185	1.8	8
71	Active-matrix monolithic gas sensor array based on MoS2 thin-film transistors. *Communications Materials*, **2020**, 1,	6	8
70	Core□shell Si1□Gex nanowires with controlled structural defects for phonon scattering enhancement. *Journal of Materials Chemistry A*, **2014**, 2, 12153-12157	13	7
69	Characteristics of ZrO[sub 2] Films with Al and Pt Gate Electrodes. *Journal of the Electrochemical Society*, **2003**, 150, G849	3.9	7
68	Residual Hydrogen in Nd-Fe-B HDDR Powder and Its Effect on Coercivity of Hot-Pressed Compact. *IEEE Transactions on Magnetics*, **2013**, 49, 3398-3401	2	6

67	Self-assembled Cu(In,Ga)Se2 nanocrystals formed by Ar ion beam irradiation. *Solar Energy Materials and Solar Cells*, **2012**, 105, 119-124	6.4	6
66	Transmission Electron Microscopy Specimen Preparation of Delicate Materials Using Tripod Polisher. *Applied Microscopy*, **2016**, 46, 110-115	1.1	6
65	Novel Method for Preparing Transmission Electron Microscopy Samples of Micrometer-Sized Powder Particles by Using Focused Ion Beam. *Microscopy and Microanalysis*, **2017**, 23, 1055-1060	0.5	5
64	Direct observation of texture memory in hydrogenation□disproportionation□desorption□recombination processed Nd-Fe-B magnets using electron backscatter diffraction. *Scripta Materialia*, **2016**, 115, 6-9	5.6	5
63	Formation of an oxygen vacancy-dinitrogen complex in nitrogen-doped hafnium oxide. *Journal of Analytical Atomic Spectrometry*, **2013**, 28, 482	3.7	5
62	Surface Nanocrystallization of Pure Ni Induced by Ultrasonic Shot Peening. *Science of Advanced Materials*, **2017**, 9, 188-192	2.3	5
61	Temperature Calibration of a Specimen-heating Holder for Transmission Electron Microscopy. *Applied Microscopy*, **2015**, 45, 95-100	1.1	5
60	Study of the Microstructural Evolution of Tempered Martensite Ferritic Steel T91 upon Ultrasonic Nanocrystalline Surface Modification. *Applied Microscopy*, **2015**, 45, 170-176	1.1	5
59	Improvement of corrosion penetration resistance for aluminum heat exchanger by alloying zirconium. *Materials Chemistry and Physics*, **2020**, 241, 122275	4.4	5
58	Investigation of Zirconium Effect on the Corrosion Resistance of Aluminum Alloy Using Electrochemical Methods and Numerical Simulation in an Acidified Synthetic Sea Salt Solution. *Materials*, **2018**, 11,	3.5	5
57	Evaluation of ion/electron beam induced deposition for electrical connection using a modern focused ion beam system. *Applied Microscopy*, **2019**, 49, 6	1.1	4
56	Rapid and mass-producible synthesis of high-crystallinity MoSe nanosheets by ampoule-loaded chemical vapor deposition. *Nanoscale*, **2020**, 12, 6991-6999	7.7	4
55	Direct observation of interfacial reaction of Ni/6H-SiC and carbon redistribution by in situ transmission electron microscopy. *Materials Characterization*, **2018**, 140, 259-264	3.9	4
54	Oxidation mechanism of nickel oxide/carbon nanotube composite. *Microscopy and Microanalysis*, **2013**, 19 Suppl 5, 202-6	0.5	4
53	In-situ observation of ion beam-induced nanostructure formation on a Cu(In,Ga)Se2 Surface. *Surface and Interface Analysis*, **2012**, 44, 1542-1546	1.5	4
52	Work Function Shift Mechanism of Metal-Gate Electrode with Ru□Ti Bilayer. *Electrochemical and Solid-State Letters*, **2007**, 10, H63		4
51	High Thermal Stability of Ni Monosilicide from Ni-Ta Alloy Films on Si(100). *Electrochemical and Solid-State Letters*, **2003**, 6, G122		4
50	Kinetics of the Ni/Ta-Interlayer/Ge Reactions Studied by In Situ Transmission Electron Microscopy. *Science of Advanced Materials*, **2015**, 7, 1497-1501	2.3	4

49	Development of High-Temperature Solders: Contribution of Transmission Electron Microscopy. *Applied Microscopy*, **2015**, 45, 89-94	1.1	4
48	Amorphous TaMnO Layer as a Diffusion Barrier for Advanced Copper Interconnects. *Scientific Reports*, **2019**, 9, 20132	4.9	4
47	Quantification of crystallinity using zero-loss filtered electron diffraction. *Microscopy Research and Technique*, **2019**, 82, 39-46	2.8	4
46	Low angle boundary migration of shot-peened pure nickel investigated by electron channeling contrast imaging and electron backscatter diffraction. *Microscopy Research and Technique*, **2019**, 82, 849-855	2.8	3
45	Enhanced morphological and thermal stabilities of nickel germanide with an ultrathin tantalum layer studied by ex situ and in situ transmission electron microscopy. *Microscopy and Microanalysis*, **2013**, 19 Suppl 5, 114-8	0.5	3
44	Microstructure of interfacial reaction layer in Sn□Ag□Cu/electroless Ni (P) solder joint. *Journal of Materials Science: Materials in Electronics*, **2011**, 22, 1308-1312	2.1	3
43	Effect of (La, Sr)CoO3 seed layer on the reliability of Pb(Zr, Ti)O3 capacitors. *Integrated Ferroelectrics*, **1999**, 25, 341-350	0.8	3
42	Determination of Dy substitution site in NdDyFeB by HAADF-STEM and illustration of magnetic anisotropy of "g" and "f" sites, before and after substitution. *Scientific Reports*, **2021**, 11, 6347	4.9	3
41	Effect of desorption and recombination on texture development in hydrogenation□disproportionation□desorption□recombination processed Nd□Fe□B magnets. *Journal of Alloys and Compounds*, **2016**, 672, 582-589	5.7	3
40	High-Density Ordered Arrays of CoPt3 Nanoparticles with Individually Addressable Out-of-Plane Magnetization. *ACS Applied Nano Materials*, **2019**, 2, 975-982	5.6	2
39	Effect of Electromigration-Induced Joule Heating on the Reliability of Sn-Ag Microbump with Different UBM Structures. *Journal of Electronic Materials*, **2020**, 49, 7228-7237	1.9	2
38	Rehybridization-induced defect-level of open-core edge dislocation in GaN. *Scripta Materialia*, **2013**, 69, 537-540	5.6	2
37	Graphene growth at the interface between Ni catalyst layer and SiO2/Si substrate. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 6468-71	1.3	2
36	Crystallization Behaviour of Electroless Ni-P UBM with Medium Phosphorous Induced by Single and Step Heat Treatment. *Materials Transactions*, **2010**, 51, 1878-1882	1.3	2
35	Microstructural evolution of nickel-germanide in the Ni1□Tax/Ge systems during in situ annealing. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2008**, 26, 688-691	2.9	2
34	TEM study on the interfacial reaction between electroless plated Ni□P/Au UBM and Sn□.5Ag solder. *Metals and Materials International*, **2007**, 13, 235-238	2.4	2
33	Physical and electrical degradation of ZrO2 thin films with aluminum electrodes. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2003**, 102, 108-112	3.1	2
32	Properties of resistive- and superconducting-joints in Bi-Pb-Sr-Ca-Cu-O tape. *IEEE Transactions on Applied Superconductivity*, **2001**, 11, 3010-3013	1.8	2

31	Optimal Conditions for Defect Analysis Using Electron Channeling Contrast Imaging. *Applied Microscopy*, **2016**, 46, 164-166	1.1	2
30	Transmission Electron Microscopy Specimen Preparation for Two Dimensional Material Using Electron Beam Induced Deposition of a Protective Layer in the Focused Ion Beam Method. *Applied Microscopy*, **2018**, 48, 122-125	1.1	2
29	Interfacial Reactions in Ni/6H-SiC at Low Temperatures. *Journal of Nanoscience and Nanotechnology* , **2016**, 16, 10853-10857	1.3	2
28	Nickel Doping on Cobalt Oxide Thin Film Using by Sputtering Process-a Route for Surface Modification for p-type Metal Oxide Gas Sensors. *Journal of the Korean Physical Society*, **2018**, 73, 1867-1872	0.6	2
27	Grain Growth and Precipitation in Nanostructured 304SS After Heat Treatment. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 7436-7441	1.3	1
26	Electrical properties of the HfO2/Al2O3 dielectrics stacked using single- and dual-temperature atomic-layer deposition processes on In0.53Ga0.47As. *Semiconductor Science and Technology*, **2019**, 34, 105018	1.8	1
25	The role of a ternary Ni-Sn-P layer as a diffusion barrier in the Sn-Ag solder/electroless Ni-P system. *Surface and Interface Analysis*, **2012**, 44, 1503-1506	1.5	1
24	Effects of atmospheric pressure plasma surface treatments on the patternability and electrical property of screen-printed Ag nanopaste. *Metals and Materials International*, **2013**, 19, 829-834	2.4	1
23	Density control and wettability enhancement by functionalizing carbon nanotubes with nickel oxide in aluminum-carbon nanotube system. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 7685-8	1.3	1
22	Transmission electron microscopy characterization of thermomechanically treated Al□i-(8, 10, 15)% Cr intermetallics. *Microscopy and Microanalysis*, **2013**, 19 Suppl 5, 89-94	0.5	1
21	Meso-scale transmission electron microscope tomography applied for wax distribution in toner particles. *Microscopy and Microanalysis*, **2013**, 19 Suppl 5, 58-61	0.5	1
20	Method of Ga removal from a specimen on a microelectromechanical system-based chip for in-situ transmission electron microscopy. *Applied Microscopy*, **2020**, 50, 22	1.1	1
19	Phase Change via Intermediary Metastable Local Structure of Ge Atoms in Ge2Sb2Te5 Nanowires during Electrical Switching. *ACS Applied Electronic Materials*, **2020**, 2, 2418-2428	4	1
18	Improvements in Thermal Stability of Sb2Te3 by Modulation of Microstructure via Carbon Incorporation. *ACS Applied Electronic Materials*, **2021**, 3, 3472-3481	4	1
17	Self-Catalytic Growth of Elementary Semiconductor Nanowires with Controlled Morphology and Crystallographic Orientation. *Nano Letters*, **2021**, 21, 9909-9915	11.5	0
16	In situ Measurement of the Adhesion Strength and Effective Elastic Stiffness of Single Soft Micropillar **2015**, 91, 369-380		
15	Hydrogen Evolution Reaction: Wafer-Scale and Low-Temperature Growth of 1T-WS2 Film for Efficient and Stable Hydrogen Evolution Reaction (Small 6/2020). *Small*, **2020**, 16, 2070033	11	
14	B13-P-05In-situ scanning electron microscopy observation of electric field induced domain switching behavior in ferroelectric materials. *Microscopy (Oxford, England)*, **2015**, 64, i95.1-i95	1.3	

13	B22-P-05Observation of recrystallization behavior of shot-peened pure nickel using ECCI combined with EBSD. *Microscopy (Oxford, England)*, **2015**, 64, i105.1-i105	1.3
12	Spatial distribution of dislocations in relation to a substructure in high-quality GaN film. *Microscopy and Microanalysis*, **2013**, 19 Suppl 5, 127-30	0.5
11	Fabrication of CdTe/Te hetero-nanostructures by vapor-solid process. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 6559-62	1.3
10	Mechanism of Pt loading on multi-walled carbon nanotubes. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 6293-7	1.3
9	In situ observation of electron beam irradiation effects in oxidized polycrystalline Si1−xGex films. *Thin Solid Films*, **2008**, 516, 3486-3492	2.2
8	Evolution of Core-Shell Structure Using Functional Polystyrene and Gold. *Molecular Crystals and Liquid Crystals*, **2007**, 472, 193/[583]-200/[590]	0.5
7	Novel Method of Measuring the Thickness of Nanoscale Films Using Energy Dispersive X-Ray Spectroscopy Line Scan Profiles. *Advanced Materials Interfaces*,2101489	4.6
6	Microstructural Evolution and Recrystallization Behavior Traced by Electron Channeling Contrast Imaging. *Applied Microscopy*, **2018**, 48, 130-131	1.1
5	Grain Boundaries Imaged by Integration of Sobel Filtered Scanning Transmission Electron Micrographs. *Applied Microscopy*, **2018**, 48, 132-133	1.1
4	In Situ Transmission Electron Microscopy Study on the Reaction Kinetics of the Ni/Zr-interlayer/Ge System. *Applied Microscopy*, **2015**, 45, 16-22	1.1
3	Cross-Sectional Transmission Electron Microscopy Sample Preparation of Soldering Joint Using Ultramicrotomy. *Applied Microscopy*, **2016**, 46, 167-169	1.1
2	Millimeter-Scale Growth of Single-Oriented Graphene on a Palladium Silicide Amorphous Film. *ACS Nano*, **2019**, 13, 1127-1135	16.7
1	Observation of the Early Stages of Rapid Solid-Liquid Reaction in Closed Liquid Cell TEM Using Graphene Encapsulation.. *Microscopy and Microanalysis*, **2022**, 28, 53-60	0.5