

Cheol-Woong Yang

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Observation of the Early Stages of Rapid Solid-Liquid Reaction in Closed Liquid Cell TEM Using Graphene Encapsulation.. <i>Microscopy and Microanalysis</i> , 2022 , 28, 53-60	0.5	
119	Self-Catalytic Growth of Elementary Semiconductor Nanowires with Controlled Morphology and Crystallographic Orientation. <i>Nano Letters</i> , 2021 , 21, 9909-9915	11.5	0
118	Determination of Dy substitution site in NdDyFeB by HAADF-STEM and illustration of magnetic anisotropy of "g" and "f" sites, before and after substitution. <i>Scientific Reports</i> , 2021 , 11, 6347	4.9	3
117	Improvements in Thermal Stability of Sb ₂ Te ₃ by Modulation of Microstructure via Carbon Incorporation. <i>ACS Applied Electronic Materials</i> , 2021 , 3, 3472-3481	4	1
116	Effect of Electromigration-Induced Joule Heating on the Reliability of Sn-Ag Microbump with Different UBM Structures. <i>Journal of Electronic Materials</i> , 2020 , 49, 7228-7237	1.9	2
115	Rapid and mass-producible synthesis of high-crystallinity MoSe nanosheets by ampoule-loaded chemical vapor deposition. <i>Nanoscale</i> , 2020 , 12, 6991-6999	7.7	4
114	Hydrogen Evolution Reaction: Wafer-Scale and Low-Temperature Growth of 1T-WS ₂ Film for Efficient and Stable Hydrogen Evolution Reaction (Small 6/2020). <i>Small</i> , 2020 , 16, 2070033	11	
113	Method of Ga removal from a specimen on a microelectromechanical system-based chip for in-situ transmission electron microscopy. <i>Applied Microscopy</i> , 2020 , 50, 22	1.1	1
112	Wafer-Scale and Low-Temperature Growth of 1T-WS Film for Efficient and Stable Hydrogen Evolution Reaction. <i>Small</i> , 2020 , 16, e1905000	11	32
111	Characteristics of an Amorphous Carbon Layer as a Diffusion Barrier for an Advanced Copper Interconnect. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 3104-3113	9.5	9
110	Phase Change via Intermediary Metastable Local Structure of Ge Atoms in Ge ₂ Sb ₂ Te ₅ Nanowires during Electrical Switching. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 2418-2428	4	1
109	Electroplated Silver-Nickel Core-Shell Nanowire Network Electrodes for Highly Efficient Perovskite Nanoparticle Light-Emitting Diodes. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 39479-39486	9.5	9
108	Active-matrix monolithic gas sensor array based on MoS ₂ thin-film transistors. <i>Communications Materials</i> , 2020 , 1,	6	8
107	Improvement of corrosion penetration resistance for aluminum heat exchanger by alloying zirconium. <i>Materials Chemistry and Physics</i> , 2020 , 241, 122275	4.4	5
106	Evaluation of ion/electron beam induced deposition for electrical connection using a modern focused ion beam system. <i>Applied Microscopy</i> , 2019 , 49, 6	1.1	4
105	High-Density Ordered Arrays of CoPt ₃ Nanoparticles with Individually Addressable Out-of-Plane Magnetization. <i>ACS Applied Nano Materials</i> , 2019 , 2, 975-982	5.6	2
104	Low angle boundary migration of shot-peened pure nickel investigated by electron channeling contrast imaging and electron backscatter diffraction. <i>Microscopy Research and Technique</i> , 2019 , 82, 849-855	2.8	3

103	Electrical properties of the HfO ₂ /Al ₂ O ₃ dielectrics stacked using single- and dual-temperature atomic-layer deposition processes on In _{0.53} Ga _{0.47} As. <i>Semiconductor Science and Technology</i> , 2019 , 34, 105018	1.8	1
102	Amorphous TaMnO Layer as a Diffusion Barrier for Advanced Copper Interconnects. <i>Scientific Reports</i> , 2019 , 9, 20132	4.9	4
101	Millimeter-Scale Growth of Single-Oriented Graphene on a Palladium Silicide Amorphous Film. <i>ACS Nano</i> , 2019 , 13, 1127-1135	16.7	
100	Low-temperature wafer-scale growth of MoS ₂ -graphene heterostructures. <i>Applied Surface Science</i> , 2019 , 470, 129-134	6.7	34
99	Quantification of crystallinity using zero-loss filtered electron diffraction. <i>Microscopy Research and Technique</i> , 2019 , 82, 39-46	2.8	4
98	Direct observation of interfacial reaction of Ni/6H-SiC and carbon redistribution by in situ transmission electron microscopy. <i>Materials Characterization</i> , 2018 , 140, 259-264	3.9	4
97	Epitaxial-Growth-Induced Junction Welding of Silver Nanowire Network Electrodes. <i>ACS Nano</i> , 2018 , 12, 4894-4902	16.7	41
96	Crystallographic alignment of Fe ₂ B and Nd ₂ Fe ₁₄ B for texture memory in hydrogenation-disproportionation-desorption-recombination-processed NdFeB powders. <i>Journal of Alloys and Compounds</i> , 2018 , 732, 32-42	5.7	10
95	Transmission Electron Microscopy Specimen Preparation for Two Dimensional Material Using Electron Beam Induced Deposition of a Protective Layer in the Focused Ion Beam Method. <i>Applied Microscopy</i> , 2018 , 48, 122-125	1.1	2
94	Microstructural Evolution and Recrystallization Behavior Traced by Electron Channeling Contrast Imaging. <i>Applied Microscopy</i> , 2018 , 48, 130-131	1.1	
93	Grain Boundaries Imaged by Integration of Sobel Filtered Scanning Transmission Electron Micrographs. <i>Applied Microscopy</i> , 2018 , 48, 132-133	1.1	
92	Nickel Doping on Cobalt Oxide Thin Film Using by Sputtering Process-a Route for Surface Modification for p-type Metal Oxide Gas Sensors. <i>Journal of the Korean Physical Society</i> , 2018 , 73, 1867-1872	0.6	2
91	Investigation of Zirconium Effect on the Corrosion Resistance of Aluminum Alloy Using Electrochemical Methods and Numerical Simulation in an Acidified Synthetic Sea Salt Solution. <i>Materials</i> , 2018 , 11,	3.5	5
90	Dirac electrons in a dodecagonal graphene quasicrystal. <i>Science</i> , 2018 , 361, 782-786	33.3	132
89	Realization of continuous Zachariasen carbon monolayer. <i>Science Advances</i> , 2017 , 3, e1601821	14.3	28
88	Electrically Driven Reversible Phase Changes in Layered In Se Crystalline Film. <i>Advanced Materials</i> , 2017 , 29, 1703568	24	45
87	Novel Method for Preparing Transmission Electron Microscopy Samples of Micrometer-Sized Powder Particles by Using Focused Ion Beam. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1055-1060	0.5	5
86	Grain Growth and Precipitation in Nanostructured 304SS After Heat Treatment. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 7436-7441	1.3	1

85	Surface Nanocrystallization of Pure Ni Induced by Ultrasonic Shot Peening. <i>Science of Advanced Materials</i> , 2017 , 9, 188-192	2.3	5
84	Direct observation of texture memory in hydrogenation–disproportionation–desorption–recombination processed Nd-Fe-B magnets using electron backscatter diffraction. <i>Scripta Materialia</i> , 2016 , 115, 6-9	5.6	5
83	Transmission Electron Microscopy Specimen Preparation of Delicate Materials Using Tripod Polisher. <i>Applied Microscopy</i> , 2016 , 46, 110-115	1.1	6
82	Optimal Conditions for Defect Analysis Using Electron Channeling Contrast Imaging. <i>Applied Microscopy</i> , 2016 , 46, 164-166	1.1	2
81	Cross-Sectional Transmission Electron Microscopy Sample Preparation of Soldering Joint Using Ultramicrotomy. <i>Applied Microscopy</i> , 2016 , 46, 167-169	1.1	
80	Effect of desorption and recombination on texture development in hydrogenation–disproportionation–desorption–recombination processed Nd-Fe-B magnets. <i>Journal of Alloys and Compounds</i> , 2016 , 672, 582-589	5.7	3
79	Interfacial Reactions in Ni/6H-SiC at Low Temperatures. <i>Journal of Nanoscience and Nanotechnology</i> , 2016 , 16, 10853-10857	1.3	2
78	In situ Measurement of the Adhesion Strength and Effective Elastic Stiffness of Single Soft Micropillar 2015 , 91, 369-380		
77	B13-P-05 In-situ scanning electron microscopy observation of electric field induced domain switching behavior in ferroelectric materials. <i>Microscopy (Oxford, England)</i> , 2015 , 64, i95.1-i95	1.3	
76	B22-P-05 Observation of recrystallization behavior of shot-peened pure nickel using ECCI combined with EBSD. <i>Microscopy (Oxford, England)</i> , 2015 , 64, i105.1-i105	1.3	
75	Epitaxial growth of a single-crystal hybridized boron nitride and graphene layer on a wide-band gap semiconductor. <i>Journal of the American Chemical Society</i> , 2015 , 137, 6897-905	16.4	43
74	Effect of Ultrasonic Nanocrystalline Surface Modification on the Microstructural Evolution of Inconel 690 Alloy. <i>Materials and Manufacturing Processes</i> , 2015 , 30, 194-198	4.1	10
73	Kinetics of the Ni/Ta-Interlayer/Ge Reactions Studied by In Situ Transmission Electron Microscopy. <i>Science of Advanced Materials</i> , 2015 , 7, 1497-1501	2.3	4
72	Development of High-Temperature Solders: Contribution of Transmission Electron Microscopy. <i>Applied Microscopy</i> , 2015 , 45, 89-94	1.1	4
71	Temperature Calibration of a Specimen-heating Holder for Transmission Electron Microscopy. <i>Applied Microscopy</i> , 2015 , 45, 95-100	1.1	5
70	Microstructural Characterization of SS304 upon Various Shot Peening Treatments. <i>Applied Microscopy</i> , 2015 , 45, 155-169	1.1	18
69	Study of the Microstructural Evolution of Tempered Martensite Ferritic Steel T91 upon Ultrasonic Nanocrystalline Surface Modification. <i>Applied Microscopy</i> , 2015 , 45, 170-176	1.1	5
68	In Situ Transmission Electron Microscopy Study on the Reaction Kinetics of the Ni/Zr-interlayer/Ge System. <i>Applied Microscopy</i> , 2015 , 45, 16-22	1.1	

67	High-Temperature Chemical Vapor Deposition for SiC Single Crystal Bulk Growth Using Tetramethylsilane as a Precursor. <i>Crystal Growth and Design</i> , 2014 , 14, 5569-5574	3.5	23
66	Core-shell Si _{1-x} Ge _x nanowires with controlled structural defects for phonon scattering enhancement. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 12153-12157	13	7
65	Surface nanocrystallization of pure Cu induced by ultrasonic shot peening. <i>Journal of Nanoscience and Nanotechnology</i> , 2014 , 14, 9637-43	1.3	16
64	Effect of the dehydrogenation speed and Nd content on the microstructure and magnetic properties of HDDR processed Nd-Fe-B magnets. <i>Metals and Materials International</i> , 2014 , 20, 909-914	2.4	10
63	Detection of graphene domains and defects using liquid crystals. <i>Nature Communications</i> , 2014 , 5, 3484	17.4	56
62	Wafer-scale growth of single-crystal monolayer graphene on reusable hydrogen-terminated germanium. <i>Science</i> , 2014 , 344, 286-9	33.3	697
61	Oxidation mechanism of nickel oxide/carbon nanotube composite. <i>Microscopy and Microanalysis</i> , 2013 , 19 Suppl 5, 202-6	0.5	4
60	Residual Hydrogen in Nd-Fe-B HDDR Powder and Its Effect on Coercivity of Hot-Pressed Compact. <i>IEEE Transactions on Magnetics</i> , 2013 , 49, 3398-3401	2	6
59	Rehybridization-induced defect-level of open-core edge dislocation in GaN. <i>Scripta Materialia</i> , 2013 , 69, 537-540	5.6	2
58	Formation of an oxygen vacancy-dinitrogen complex in nitrogen-doped hafnium oxide. <i>Journal of Analytical Atomic Spectrometry</i> , 2013 , 28, 482	3.7	5
57	Effects of atmospheric pressure plasma surface treatments on the patternability and electrical property of screen-printed Ag nanopaste. <i>Metals and Materials International</i> , 2013 , 19, 829-834	2.4	1
56	Quantum confinement effects in transferrable silicon nanomembranes and their applications on unusual substrates. <i>Nano Letters</i> , 2013 , 13, 5600-7	11.5	41
55	Density control and wettability enhancement by functionalizing carbon nanotubes with nickel oxide in aluminum-carbon nanotube system. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 7685-8	1.3	1
54	Transmission electron microscopy characterization of thermomechanically treated Al ₈₀ Cr ₂₀ -(8, 15)% Cr intermetallics. <i>Microscopy and Microanalysis</i> , 2013 , 19 Suppl 5, 89-94	0.5	1
53	Spatial distribution of dislocations in relation to a substructure in high-quality GaN film. <i>Microscopy and Microanalysis</i> , 2013 , 19 Suppl 5, 127-30	0.5	
52	Meso-scale transmission electron microscope tomography applied for wax distribution in toner particles. <i>Microscopy and Microanalysis</i> , 2013 , 19 Suppl 5, 58-61	0.5	1
51	Enhanced morphological and thermal stabilities of nickel germanide with an ultrathin tantalum layer studied by ex situ and in situ transmission electron microscopy. <i>Microscopy and Microanalysis</i> , 2013 , 19 Suppl 5, 114-8	0.5	3
50	Dynamic study on microstructural evolution of nickel germanide utilizing zirconium interlayer. <i>Microelectronic Engineering</i> , 2012 , 89, 23-26	2.5	8

49	Self-assembled Cu(In,Ga)Se ₂ nanocrystals formed by Ar ion beam irradiation. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 105, 119-124	6.4	6
48	The role of a ternary Ni-Sn-P layer as a diffusion barrier in the Sn-Ag solder/electroless Ni-P system. <i>Surface and Interface Analysis</i> , 2012 , 44, 1503-1506	1.5	1
47	Thickness contrast of few-layered graphene in SEM. <i>Surface and Interface Analysis</i> , 2012 , 44, 1538-1541	1.5	31
46	In-situ observation of ion beam-induced nanostructure formation on a Cu(In,Ga)Se ₂ Surface. <i>Surface and Interface Analysis</i> , 2012 , 44, 1542-1546	1.5	4
45	One-pot synthesis of core-shell-like Pt ₃ Co nanoparticle electrocatalyst with Pt-enriched surface for oxygen reduction reaction in fuel cells. <i>Energy and Environmental Science</i> , 2011 , 4, 4947	35.4	72
44	Fabrication of CdTe/Te hetero-nanostructures by vapor-solid process. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 6559-62	1.3	
43	Mechanism of Pt loading on multi-walled carbon nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 6293-7	1.3	
42	In situ TEM characterization of interfacial reaction in Sn ₃ .5Ag/electroless Ni(P) solder joint. <i>Scripta Materialia</i> , 2011 , 64, 597-600	5.6	14
41	Microstructure of interfacial reaction layer in Sn ₃ .5Ag ₀ .7Cu/electroless Ni (P) solder joint. <i>Journal of Materials Science: Materials in Electronics</i> , 2011 , 22, 1308-1312	2.1	3
40	Role of anions in the AuCl ₃ -doping of carbon nanotubes. <i>ACS Nano</i> , 2011 , 5, 1236-42	16.7	126
39	Graphene growth at the interface between Ni catalyst layer and SiO ₂ /Si substrate. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 6468-71	1.3	2
38	Crystallization Behaviour of Electroless Ni-P UBM with Medium Phosphorous Induced by Single and Step Heat Treatment. <i>Materials Transactions</i> , 2010 , 51, 1878-1882	1.3	2
37	Characterization of ternary Ni ₂ SnP layer in Sn ₃ .5Ag ₀ .7Cu/electroless Ni (P) solder joint. <i>Scripta Materialia</i> , 2010 , 63, 1108-1111	5.6	20
36	Control of interfacial reaction layers formed in Sn ₃ .5Ag ₀ .7Cu/electroless Ni ₃ P solder joints. <i>Scripta Materialia</i> , 2009 , 60, 257-260	5.6	26
35	Synthesis of Large-Area Graphene Layers on Poly-Nickel Substrate by Chemical Vapor Deposition: Wrinkle Formation. <i>Advanced Materials</i> , 2009 , 21, 2328-2333	24	766
34	Evidence of graphitic AB stacking order of graphite oxides. <i>Journal of the American Chemical Society</i> , 2008 , 130, 1362-6	16.4	914
33	Initial interfacial reaction layers formed in Sn ₃ .5Ag solder/electroless Ni ₃ P plated Cu substrate system. <i>Journal of Materials Research</i> , 2008 , 23, 2195-2201	2.5	13
32	Microstructural evolution of nickel-germanide in the Ni _{1-x} Tax/Ge systems during in situ annealing. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008 , 26, 688-691	2.9	2

31	Characterization of Interfacial Reaction Layers Formed Between Sn-3.5Ag Solder and Electroless Ni-Immersion Au-Plated Cu Substrates. <i>Journal of Electronic Materials</i> , 2008 , 37, 84-89	1.9	19
30	In situ observation of electron beam irradiation effects in oxidized polycrystalline Si _{1-x} Ge _x films. <i>Thin Solid Films</i> , 2008 , 516, 3486-3492	2.2	
29	Design of Dispersants for the Dispersion of Carbon Nanotubes in an Organic Solvent. <i>Advanced Functional Materials</i> , 2007 , 17, 1775-1783	15.6	80
28	TEM study on the interfacial reaction between electroless plated Ni ₃ P/Au UBM and Sn ₃ .5Ag solder. <i>Metals and Materials International</i> , 2007 , 13, 235-238	2.4	2
27	MORPHOLOGY, THERMAL STABILITY, AND SOLDERABILITY OF ELECTROLESS NICKEL-PHOSPHORUS PLATING LAYER. <i>Surface Review and Letters</i> , 2007 , 14, 827-832	1.1	12
26	Work Function Shift Mechanism of Metal-Gate Electrode with Ru ₂ Si Bilayer. <i>Electrochemical and Solid-State Letters</i> , 2007 , 10, H63		4
25	Evolution of Core-Shell Structure Using Functional Polystyrene and Gold. <i>Molecular Crystals and Liquid Crystals</i> , 2007 , 472, 193/[583]-200/[590]	0.5	
24	Dispersion Stability of Single-Walled Carbon Nanotubes Using Nafion in Bisolvent. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 2477-2483	3.8	58
23	The effects of Ta on the formation of Ni-silicide in Ni _{0.95} Ta _x 0.05/Si systems. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004 , 114-115, 241-245	3.1	11
22	Single-walled carbon nanotubes produced by catalytic chemical vapor deposition of acetylene over Fe ₂ Mo/MgO catalyst. <i>Chemical Physics Letters</i> , 2004 , 383, 104-108	2.5	75
21	High-Yield Catalytic Synthesis of Thin Multiwalled Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 17695-17698	3.4	62
20	Large-Scale Synthesis of High-Quality Double-Walled Carbon Nanotubes by Catalytic Decomposition of n-Hexane. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 2192-2194	3.4	51
19	Intermetallic compound layer growth at the interface between Sn ₃ .5Cu ₃ Ni solder and Cu substrate. <i>Journal of Alloys and Compounds</i> , 2004 , 381, 151-157	5.7	84
18	Characteristics of ZrO ₂ Films with Al and Pt Gate Electrodes. <i>Journal of the Electrochemical Society</i> , 2003 , 150, G849	3.9	7
17	High Thermal Stability of Ni Monosilicide from Ni-Ta Alloy Films on Si(100). <i>Electrochemical and Solid-State Letters</i> , 2003 , 6, G122		4
16	Intermetallic compound layer formation between Sn ₃ .5 mass %Ag BGA solder ball and (Cu, immersion Au/electroless Ni ₃ P/Cu) substrate. <i>Journal of Materials Science: Materials in Electronics</i> , 2003 , 14, 487-493	2.1	34
15	Synthesis of Silicon Nanotubes on Porous Alumina Using Molecular Beam Epitaxy. <i>Advanced Materials</i> , 2003 , 15, 1172-1176	24	140
14	Synthesis of single- and double-walled carbon nanotubes by catalytic decomposition of methane. <i>Chemical Physics Letters</i> , 2003 , 373, 475-479	2.5	54

13	Physical and electrical degradation of ZrO ₂ thin films with aluminum electrodes. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2003 , 102, 108-112	3.1	2
12	High-Quality Double-Walled Carbon Nanotubes Produced by Catalytic Decomposition of Benzene. <i>Chemistry of Materials</i> , 2003 , 15, 3951-3954	9.6	73
11	Effect of buffer layer on the growth of GaN on Si substrate. <i>Journal of Crystal Growth</i> , 2002 , 237-239, 1094-1098	1.6	10
10	Large-scale production of aligned carbon nanotubes by the vapor phase growth method. <i>Chemical Physics Letters</i> , 2002 , 359, 109-114	2.5	80
9	Characteristics of HfO ₂ /HfSixOy film as an alternative gate dielectric in metaloxide semiconductor devices. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002 , 20, 1360		25
8	Formation of Reliable HfO ₂ /HfSixOyGate-Dielectric for Metal-Oxide-Semiconductor Devices. <i>Japanese Journal of Applied Physics</i> , 2002 , 41, 6904-6907	1.4	23
7	X-ray photoemission spectroscopy study of fluorinated single-walled carbon nanotubes. <i>Applied Physics Letters</i> , 2002 , 80, 4235-4237	3.4	136
6	Study of ZrO ₂ thin films for gate oxide applications. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001 , 19, 1720-1724	2.9	24
5	Properties of resistive- and superconducting-joints in Bi-Pb-Sr-Ca-Cu-O tape. <i>IEEE Transactions on Applied Superconductivity</i> , 2001 , 11, 3010-3013	1.8	2
4	Effects of deposition parameters on the crystallinity of CeO ₂ thin films deposited on Si(100) substrates by r.f.-magnetron sputtering. <i>Thin Solid Films</i> , 2000 , 360, 154-158	2.2	49
3	Superconducting joint between Bi-Pb-Sr-Ca-Cu-O superconductor tapes. <i>IEEE Transactions on Applied Superconductivity</i> , 2000 , 10, 1182-1185	1.8	8
2	Effect of (La, Sr)CoO ₃ seed layer on the reliability of Pb(Zr, Ti)O ₃ capacitors. <i>Integrated Ferroelectrics</i> , 1999 , 25, 341-350	0.8	3
1	Novel Method of Measuring the Thickness of Nanoscale Films Using Energy Dispersive X-Ray Spectroscopy Line Scan Profiles. <i>Advanced Materials Interfaces</i> , 2101489	4.6	