

Hyuck Mo Lee

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.

185
papers

6,364
citations

42
h-index

71
g-index

192
ext. papers

7,435
ext. citations

5.7
avg, IF

5.98
L-index

#	Paper	IF	Citations
185	Atomically ordered Pt ₃ Mn intermetallic electrocatalysts for the oxygen reduction reaction in fuel cells. <i>Journal of Materials Chemistry A</i> , 2022 , 10, 7399-7408	13	1
184	Machine learning assisted synthesis of lithium-ion batteries cathode materials. <i>Nano Energy</i> , 2022 , 98, 107214	17.1	2
183	Iterative Redox Activation Promotes Interfacial Synergy in an Ag/CuxO Catalyst for Oxygen Reduction. <i>Chemical Engineering Journal</i> , 2022 , 136966	14.7	1
182	Controlled Removal of Surfactants from Double-Walled Carbon Nanotubes for Stronger p-Doping Effect and Its Demonstration in Perovskite Solar Cells.. <i>Small Methods</i> , 2021 , 5, e2100080	12.8	4
181	Structural Effectiveness of AgCl-decorated Ag Nanowires Enhancing Oxygen Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 7519-7528	8.3	5
180	Hetero-Dimensional 2D TiCT MXene and 1D Graphene Nanoribbon Hybrids for Machine Learning-Assisted Pressure Sensors. <i>ACS Nano</i> , 2021 , 15, 10347-10356	16.7	18
179	Multidimensional TiCT MXene Architectures Interfacial Electrochemical Self-Assembly. <i>ACS Nano</i> , 2021 , 15, 10058-10066	16.7	18
178	In Silico High-Throughput Screening of Ag-Based Electrocatalysts for Anion-Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 5660-5667	6.4	1
177	Accelerated mapping of electronic density of states patterns of metallic nanoparticles via machine-learning. <i>Scientific Reports</i> , 2021 , 11, 11604	4.9	3
176	Microstructure Modification of Liquid Phase Sintered FeNiBC Alloys for Improved Mechanical Properties. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021 , 52, 4395-4401	2.3	0
175	Reducing Time to Discovery: Materials and Molecular Modeling, Imaging, Informatics, and Integration. <i>ACS Nano</i> , 2021 , 15, 3971-3995	16.7	11
174	Intimate atomic Cu-Ag interfaces for high CO ₂ RR selectivity towards CH ₄ at low over potential. <i>Nano Research</i> , 2021 , 14, 3497-3501	10	17
173	Monodisperse Carbon Nitride Nanosheets as Multifunctional Additives for Efficient and Durable Perovskite Solar Cells.. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 61215-61226	9.5	1
172	Transparent Electronics: Integration of Ultrathin Silicon and Metal Nanowires for High-Performance Transparent Electronics (Adv. Mater. Technol. 4/2020). <i>Advanced Materials Technologies</i> , 2020 , 5, 2070021	6.8	1
171	Highly porous NiB electrode synthesized by an ultrafast electrodeposition process for efficient overall water electrolysis. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 12069-12079	13	22
170	Integration of Ultrathin Silicon and Metal Nanowires for High-Performance Transparent Electronics. <i>Advanced Materials Technologies</i> , 2020 , 5, 1900962	6.8	1
169	Polyaromatic Nanotweezers on Semiconducting Carbon Nanotubes for the Growth and Interfacing of Lead Halide Perovskite Crystal Grains in Solar Cells. <i>Chemistry of Materials</i> , 2020 , 32, 5125-5133	9.6	29

168	Artificial Intelligence to Accelerate the Discovery of N ₂ Electroreduction Catalysts. <i>Chemistry of Materials</i> , 2020 , 32, 709-720	9.6	32
167	Atomically Embedded Ag via Electrodifffusion Boosts Oxygen Evolution of CoOOH Nanosheet Arrays. <i>ACS Catalysis</i> , 2020 , 10, 562-569	13.1	43
166	Denatured M13 Bacteriophage-Templated Perovskite Solar Cells Exhibiting High Efficiency. <i>Advanced Science</i> , 2020 , 7, 2000782	13.6	15
165	Wirelessly controlled, bioresorbable drug delivery device with active valves that exploit electrochemically triggered crevice corrosion. <i>Science Advances</i> , 2020 , 6, eabb1093	14.3	35
164	Mussel Inspired Highly Aligned TiCT MXene Film with Synergistic Enhancement of Mechanical Strength and Ambient Stability. <i>ACS Nano</i> , 2020 , 14, 11722-11732	16.7	78
163	Highly active and stable stepped Cu surface for enhanced electrochemical CO ₂ reduction to C ₂ H ₄ . <i>Nature Catalysis</i> , 2020 , 3, 804-812	36.5	118
162	A feasible strategy to prepare quantum dot-incorporated carbon nanofibers as free-standing platforms. <i>Nanoscale Advances</i> , 2019 , 1, 3948-3956	5.1	1
161	Perovskite-polymer composite cross-linker approach for highly-stable and efficient perovskite solar cells. <i>Nature Communications</i> , 2019 , 10, 520	17.4	262
160	Hierarchical analysis of alloying element effects on gas nitriding rate of Fe alloys: A DFT, microkinetic and kMC study. <i>Acta Materialia</i> , 2019 , 174, 173-180	8.4	1
159	High-Performance Solution-Processed Double-Walled Carbon Nanotube Transparent Electrode for Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019 , 9, 1901204	21.8	64
158	Semiconducting carbon nanotubes as crystal growth templates and grain bridges in perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12987-12992	13	44
157	Effects of phase composition and elemental partitioning on soft magnetic properties of AlFeCoCrMn high entropy alloys. <i>Acta Materialia</i> , 2019 , 171, 31-39	8.4	30
156	Preparation of non-woven nanofiber webs for detoxification of nerve gases. <i>Polymer</i> , 2019 , 179, 121664	3.9	3
155	Ag ₂ S-CoS hetero-nanowires terminated with stepped surfaces for improved oxygen evolution reaction. <i>Catalysis Communications</i> , 2019 , 129, 105749	3.2	8
154	A Bioresorbable Magnetically Coupled System for Low-Frequency Wireless Power Transfer. <i>Advanced Functional Materials</i> , 2019 , 29, 1905451	15.6	35
153	Recent Progress in First Principle Calculation and High-Throughput Screening of Electrocatalysts: A Review. <i>Journal of Korean Institute of Metals and Materials</i> , 2019 , 57, 1-9	1	5
152	Tin sulfide modified separator as an efficient polysulfide trapper for stable cycling performance in Li-S batteries. <i>Nanoscale Horizons</i> , 2019 , 4, 214-222	10.8	59
151	Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6317-6324	16.4	233

150	The effect of Ti on the sintering and mechanical properties of refractory high-entropy alloy Ti _x W _{1-x} TaV _{1-x} Cr fabricated via spark plasma sintering for fusion plasma-facing materials. <i>Materials Chemistry and Physics</i> , 2018 , 210, 87-94	4.4	54
149	A combinatorial approach for the synthesis and analysis of Al _x CryMozNbTiZr high-entropy alloys: Oxidation behavior. <i>Journal of Materials Research</i> , 2018 , 33, 3226-3234	2.5	17
148	Synthesis of oxide-free aluminum nanoparticles for application to conductive film. <i>Nanotechnology</i> , 2018 , 29, 055602	3.4	12
147	Brush-Like Cobalt Nitride Anchored Carbon Nanofiber Membrane: Current Collector-Catalyst Integrated Cathode for Long Cycle Li-O Batteries. <i>ACS Nano</i> , 2018 , 12, 128-139	16.7	175
146	Effects of shell thickness on Ag-Cu ₂ O core-shell nanoparticles with bumpy structures for enhancing photocatalytic activity and stability. <i>Catalysis Today</i> , 2018 , 303, 313-319	5.3	27
145	Polarizable Charge Equilibration Model for Transition-Metal Elements. <i>Journal of Physical Chemistry A</i> , 2018 , 122, 9350-9358	2.8	7
144	Wireless bioresorbable electronic system enables sustained nonpharmacological neuroregenerative therapy. <i>Nature Medicine</i> , 2018 , 24, 1830-1836	50.5	190
143	Uniform thin film electrode made of low-temperature-sinterable silver nanoparticles: optimized extent of ligand exchange from oleylamine to acrylic acid. <i>Journal of Nanoparticle Research</i> , 2017 , 19, 1	2.3	2
142	Prediction of the glass transition temperature and design of phase diagrams of butadiene rubber and styrene-butadiene rubber via molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 16498-16506	3.6	9
141	Interface engineering for a rational design of poison-free bimetallic CO oxidation catalysts. <i>Nanoscale</i> , 2017 , 9, 5244-5253	7.7	21
140	Synthesis of Chemically Ordered PtFe/C Intermetallic Electrocatalysts for Oxygen Reduction Reaction with Enhanced Activity and Durability via a Removable Carbon Coating. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 31806-31815	9.5	54
139	Fabrication of sintering-free flexible copper nanowire/polymer composite transparent electrodes with enhanced chemical and mechanical stability. <i>Nano Research</i> , 2016 , 9, 2162-2173	10	32
138	A Study on the Growth Behavior and Stability of Molecular Layer Deposited Alucone Films Using Diethylene Glycol and Trimethyl Aluminum Precursors, and the Enhancement of Diffusion Barrier Properties by Atomic Layer Deposited Al ₂ O ₃ Capping. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 12263-71	9.5	28
137	Ethylenediamine-Enhanced Oxidation Resistivity of a Copper Surface during Water-Based Copper Nanowire Synthesis. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3334-3340	3.8	15
136	Titanium-promoted Au ₁₉ bimetallic nanoparticle catalysts for CO oxidation: A theoretical approach. <i>Catalysis Today</i> , 2016 , 265, 14-18	5.3	6
135	Reactive Structural Motifs of Au Nanoclusters for Oxygen Activation and Subsequent CO Oxidation. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 9292-9298	3.8	16
134	CO oxidation by MoS ₂ -supported Au ₁₉ nanoparticles: effects of vacancy formation and tensile strain. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 13232-8	3.6	13
133	Surface modification of oleylamine-capped Ag-Cu nanoparticles to fabricate low-temperature-sinterable Ag-Cu nanoink. <i>Nanotechnology</i> , 2016 , 27, 345706	3.4	15

132	Recrystallization as a Growth Mechanism for Whiskers on Plastically Deformed Sn Films. <i>Journal of Electronic Materials</i> , 2015 , 44, 3486-3499	1.9	2
131	Microstructural discovery of Al addition on Sn _{0.5} Cu-based Pb-free solder design. <i>Journal of Alloys and Compounds</i> , 2015 , 650, 106-115	5.7	20
130	Cu-Ag core-shell nanoparticles with enhanced oxidation stability for printed electronics. <i>Nanotechnology</i> , 2015 , 26, 455601	3.4	75
129	Investigation of Sn Whisker Growth in Electroplated Sn and Sn-Ag as a Function of Plating Variables and Storage Conditions. <i>Journal of Electronic Materials</i> , 2014 , 43, 259-269	1.9	7
128	Ag ₂ Cu Bimetallic Nanoparticles with Enhanced Resistance to Oxidation: A Combined Experimental and Theoretical Study. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 26324-26331	3.8	94
127	Mechanistic Investigation of the Catalytic Decomposition of Ammonia (NH ₃) on an Fe(100) Surface: A DFT Study. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 5309-5316	3.8	37
126	Highly activated K-doped iron carbide nanocatalysts designed by computational simulation for Fischer-Tropsch synthesis. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 14371-14379	13	55
125	New Sn _{0.7} Cu-based solder alloys with minor alloying additions of Pd, Cr and Ca. <i>Journal of Alloys and Compounds</i> , 2014 , 608, 126-132	5.7	33
124	Study of Shallow Backside Junctions for Backside Illumination of CMOS Image Sensors. <i>Journal of Electronic Materials</i> , 2014 , 43, 3933-3941	1.9	
123	Theoretical study of the ammonia nitridation rate on an Fe (100) surface: a combined density functional theory and kinetic Monte Carlo study. <i>Journal of Chemical Physics</i> , 2014 , 141, 134108	3.9	2
122	Adsorption, dissociation, penetration, and diffusion of N ₂ on and in bcc Fe: first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 5186-92	3.6	23
121	Catalytic characteristics of AgCu bimetallic nanoparticles in the oxygen reduction reaction. <i>ChemSusChem</i> , 2013 , 6, 1044-9	8.3	42
120	Synthesis of low-temperature-processable and highly conductive Ag ink by a simple ligand modification: the role of adsorption energy. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 1855	7.1	29
119	A simple process for the preparation of copper (I) oxide nanoparticles by a thermal decomposition process with borane tert-butylamine complex. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 6027-32	1.3	1
118	Three-dimensional sponge-like architected cupric oxides as high-power and long-life anode material for lithium rechargeable batteries. <i>Electrochimica Acta</i> , 2012 , 70, 98-104	6.7	23
117	A Simple Process for Synthesis of Ag Nanoparticles and Sintering of Conductive Ink for Use in Printed Electronics. <i>Journal of Electronic Materials</i> , 2012 , 41, 115-121	1.9	33
116	Control of chemical kinetics for sub-10 nm Cu nanoparticles to fabricate highly conductive ink below 150 °C. <i>Nanotechnology</i> , 2012 , 23, 065601	3.4	33
115	Phase diagram and structural evolution of Ag-Au bimetallic nanoparticles: molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 2791-6	3.6	27

114	CO oxidation mechanism on CeO(2)-supported Au nanoparticles. <i>Journal of the American Chemical Society</i> , 2012 , 134, 1560-70	16.4	423
113	Synthesis and characterization of highly conductive SnAg bimetallic nanoparticles for printed electronics. <i>Journal of Nanoparticle Research</i> , 2012 , 14, 1	2.3	21
112	Structural stability of AgCu bimetallic nanoparticles and their application as a catalyst: A DFT study. <i>Catalysis Today</i> , 2012 , 185, 94-98	5.3	92
111	Yellow-emitting $\text{Ca}_2\text{SiO}_4:\text{Ce}^{3+}, \text{Li}^+$ phosphor for solid-state lighting: luminescent properties, electronic structure, and white light-emitting diode application. <i>Optics Express</i> , 2012 , 20, 2761-71	3.3	70
110	Effects of Be and Co addition on the growth of Sn whiskers and the properties of Sn-based Pb-free solders. <i>Journal of Materials Research</i> , 2012 , 27, 1877-1886	2.5	3
109	Ligand-induced structural evolution of Pt55 nanoparticles: amine versus thiol. <i>ACS Nano</i> , 2011 , 5, 8515-226.7	3.7	34
108	Graphene veils and sandwiches. <i>Nano Letters</i> , 2011 , 11, 3290-4	11.5	49
107	Effect of Ag Addition on the Ripening Growth of $\text{Cu}_{60}\text{Sn}_{5}$ Grains at the Interface of Sn-xAg-0.5Cu/Cu During a Reflow. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2011 , 1, 1939-1946	1.7	8
106	Synthesis and characterization of low temperature Sn nanoparticles for the fabrication of highly conductive ink. <i>Nanotechnology</i> , 2011 , 22, 225701	3.4	76
105	Effect of Strontium Addition on the Microstructures and Mechanical Properties of Mg-5Al-3Ca Alloys. <i>Materials Transactions</i> , 2011 , 52, 1181-1185	1.3	3
104	2011 ,		2
103	CO Oxidation on Positively and Negatively Charged Ag13 Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 24771-24777	3.8	21
102	Temperature and composition dependent structural evolution of AgPd bimetallic nanoparticle: phase diagram of (AgPd) ₁₅₁ nanoparticle. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 2251-5	1.3	6
101	New synthesis approach for low temperature bimetallic nanoparticles: size and composition controlled Sn-Cu nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 1037-41	1.3	15
100	Crystal orientation of Sn grain in Ni(P)/Sn-0.5Cu/Cu and Ni(P)/Sn-1.8Ag/Cu joints. <i>Journal of Materials Research</i> , 2010 , 25, 1950-1957	2.5	7
99	Immobilization of Au Nanoclusters Supported on Graphite: Molecular Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 2022-2026	3.8	13
98	Oxidative Dehydrogenation of Methanol to Formaldehyde by a Vanadium Oxide Cluster Supported on Rutile TiO ₂ (110): Which Oxygen is Involved?. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 13736-13738	3.8	29
97	Bifunctional Mechanism of CO ₂ Methanation on Pd-MgO/SiO ₂ Catalyst: Independent Roles of MgO and Pd on CO ₂ Methanation. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 7128-7131	3.8	136

96	Balance in Adsorption Energy of Reactants Steers CO Oxidation Mechanism of Ag ₁₃ and Ag ₁₂ Pd ₁ Nanoparticles: Association Mechanism versus Carbonate-Mediated Mechanism. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 3156-3160	3.8	29
95	Steering epitaxial alignment of Au, Pd, and AuPd nanowire arrays by atom flux change. <i>Nano Letters</i> , 2010 , 10, 432-8	11.5	84
94	Electromigration performance of Pb-free solder joints in terms of solder composition and joining path. <i>Jom</i> , 2010 , 62, 22-29	2.1	18
93	Phase Equilibria in the Sn-Ni-Zn Ternary System: Isothermal Sections at 200°C, 500°C, and 800°C. <i>Journal of Electronic Materials</i> , 2010 , 39, 2643-2652	1.9	23
92	Enhancement of heterogeneous nucleation of βSn phases in Sn-rich solders by adding minor alloying elements with hexagonal closed packed structures. <i>Applied Physics Letters</i> , 2009 , 95, 021905	3.4	32
91	Effects of under bump metallization and nickel alloying element on the undercooling behavior of Sn-based, Pb-free solders. <i>Journal of Materials Research</i> , 2009 , 24, 534-543	2.5	11
90	The evolution of microstructure and microhardness of Sn-Ag and Sn-Cu solders during high temperature aging. <i>Microelectronics Reliability</i> , 2009 , 49, 288-295	1.2	68
89	Effects of Co Addition on Bulk Properties of Sn-3.5Ag Solder and Interfacial Reactions with Ni-P UBM. <i>Journal of Electronic Materials</i> , 2009 , 38, 39-45	1.9	32
88	An Investigation of Microstructure and Microhardness of Sn-Cu and Sn-Ag Solders as Functions of Alloy Composition and Cooling Rate. <i>Journal of Electronic Materials</i> , 2009 , 38, 257-265	1.9	55
87	Wetting Properties and Interfacial Reactions of Mechanically Alloyed Cu ₅ Zn ₈ -Bearing Pb-Free Solders on a Copper Substrate. <i>Journal of Electronic Materials</i> , 2009 , 38, 2301-2307	1.9	3
86	Interfacial Reactions and Microstructures of Sn-0.7Cu-xZn Solders with Ni-P UBM During Thermal Aging. <i>Journal of Electronic Materials</i> , 2009 , 38, 2242-2250	1.9	19
85	The Crystal Orientation of βSn Grains in Sn-Ag and Sn-Cu Solders Affected by Their Interfacial Reactions with Cu and Ni(P) Under Bump Metallurgy. <i>Journal of Electronic Materials</i> , 2009 , 38, 2461-2469 ¹⁻⁹	1.9	49
84	Design of Robust and Reactive Nanoparticles with Atomic Precision: 13Ag-Ih and 12Ag-1X (X = Pd, Pt, Au, Ni, or Cu) Core-Shell Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 15559-15564	3.8	30
83	Oxidative Dehydrogenation of Methanol to Formaldehyde by Isolated Vanadium, Molybdenum, and Chromium Oxide Clusters Supported on Rutile TiO ₂ (110). <i>Journal of Physical Chemistry C</i> , 2009 , 113, 16083-16093	3.8	36
82	Wettability and interfacial reactions of Sn-based Pb-free solders with Cu-Zn alloy under bump metallurgies. <i>Journal of Alloys and Compounds</i> , 2009 , 474, 510-516	5.7	34
81	Phase diagram of Ag-Pd bimetallic nanoclusters by molecular dynamics simulations: solid-to-liquid transition and size-dependent behavior. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 5079-85	3.6	38
80	Molecular Dynamics Simulation of the Diffusion of Au and Pt Nanoclusters on Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 10416-10421	3.8	18
79	Molecular dynamics simulations of the diffusion and rotation of Pt nanoclusters supported on graphite. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 503-7	3.6	11

78	Undercooling, Microstructures and Hardness of Sn-Rich Pb-Free Solders on Cu-xZn Alloy Under Bump Metallurgies. <i>Materials Transactions</i> , 2009 , 50, 2291-2296	1.3	10
77	Segregation and internal structures in the bimetallic clusters: density functional theory and molecular dynamics simulation. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 2553-7	1.3	7
76	New algorithm in the basin hopping Monte Carlo to find the global minimum structure of unary and binary metallic nanoclusters. <i>Journal of Chemical Physics</i> , 2008 , 128, 144702	3.9	49
75	CO Oxidation by Rutile TiO ₂ (110) Doped with V, W, Cr, Mo, and Mn. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 12398-12408	3.8	108
74	Development of low temperature bonding using in-based solders 2008 ,		7
73	Controlling the interfacial reactions in Pb-free interconnections by adding minor alloying elements to Sn-rich solders 2008 ,		5
72	Overstabilization of the Metastable Structure of Isolated AgPd Bimetallic Clusters. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 17138-17142	3.8	27
71	A theoretical study of a spin polarized transport and giant magnetoresistance: The effect of the number of layers in a magnetic multilayer. <i>Journal of Applied Physics</i> , 2008 , 103, 083903	2.5	
70	Undercooling and microhardness of Pb-free solders on various under bump metallurgies. <i>Journal of Materials Research</i> , 2008 , 23, 1147-1154	2.5	31
69	Synthesis of the Combination Solder of 80Au-20Sn/42Sn-58Bi and Thermodynamic Interpretation of the Microstructural Evolution. <i>Materials Transactions</i> , 2008 , 49, 376-381	1.3	1
68	Demonstration and Characterization of Sn-3.0Ag-0.5Cu/ Sn-57Bi-1Ag Combination Solder for 3-D Multistack Packaging. <i>Journal of Electronic Materials</i> , 2008 , 37, 110-117	1.9	4
67	Phase stability of Pt nanoclusters and the effect of a (0 0 0 1) graphite surface through molecular dynamics simulation. <i>Surface Science</i> , 2008 , 602, 1433-1439	1.8	26
66	Finite-element method study for the spin-polarized transport in a hybrid spin valve. <i>Journal of Magnetism and Magnetic Materials</i> , 2007 , 310, 1889-1891	2.8	
65	A theoretical study of an amorphous aluminium oxide layer used as a tunnel barrier in a magnetic tunnel junction. <i>Physica Status Solidi (B): Basic Research</i> , 2007 , 244, 4427-4430	1.3	4
64	Effects of Minor Additions of Zn on Interfacial Reactions of Sn-Ag-Cu and Sn-Cu Solders with Various Cu Substrates during Thermal Aging. <i>Journal of Electronic Materials</i> , 2007 , 36, 1501-1509	1.9	100
63	Thermodynamic Assessment of the Ni-Bi Binary System and Phase Equilibria of the Sn-Bi-Ni Ternary System. <i>Journal of Electronic Materials</i> , 2007 , 36, 1536-1544	1.9	25
62	Preferential segregation of Pd atoms in the Ag-Pd bimetallic cluster: Density functional theory and molecular dynamics simulation. <i>Physical Review B</i> , 2007 , 75,	3.3	53
61	Molecular Dynamics Simulation on Formation of Icosahedron and Coalescence of Pt Nanoclusters. <i>Materials Science Forum</i> , 2007 , 539-543, 3546-3550	0.4	2

60	Molecular Dynamic Simulation of Coalescence between Silver and Palladium Clusters. <i>Materials Transactions</i> , 2007 , 48, 455-459	1.3	29
59	Interfacial reaction between 42Sn-58Bi solder and electroless Ni-P/immersion Au under bump metallurgy during aging. <i>Journal of Electronic Materials</i> , 2006 , 35, 35-40	1.9	17
58	Comparison of Sn2.8Ag20In and Sn10Bi10In solders for intermediate-step soldering. <i>Journal of Electronic Materials</i> , 2006 , 35, 1975-1981	1.9	13
57	Morphological characteristics of multi-layer/substrate systems. <i>Materials Characterization</i> , 2006 , 56, 274-280	3.9	25
56	The influence of Mn and Cr on the tensile properties of A356D.20Fe alloy. <i>Materials Letters</i> , 2006 , 60, 1880-1883	3.3	47
55	Effects of Mn on the crystal structure of β -Al(Mn,Fe)Si particles in A356 alloys. <i>Journal of Crystal Growth</i> , 2006 , 291, 207-211	1.6	56
54	Optimization and application of lithium parameters for the reactive force field, ReaxFF. <i>Journal of Physical Chemistry A</i> , 2005 , 109, 4575-82	2.8	79
53	The theoretical study on interaction of hydrogen with single-walled boron nitride nanotubes. I. The reactive force field ReaxFF(HBN) development. <i>Journal of Chemical Physics</i> , 2005 , 123, 114703	3.9	51
52	Study of the effect of heat treatment on a Pt ₁₀₀ thin film by Monte Carlo simulations coupled with a modified embedded atom method. <i>International Journal of Materials Research</i> , 2005 , 96, 211-215		
51	Microstructural Evolution of Joint Interface between Eutectic 80Au‐20Sn Solder and UBM. <i>Materials Transactions</i> , 2005 , 46, 2400-2405	1.3	18
50	Theoretical study on interaction of hydrogen with single-walled boron nitride nanotubes. II. Collision, storage, and adsorption. <i>Journal of Chemical Physics</i> , 2005 , 123, 114704	3.9	41
49	Nanopores of carbon nanotubes as practical hydrogen storage media. <i>Applied Physics Letters</i> , 2005 , 87, 213113	3.4	29
48	Liquefaction of H ₂ molecules upon exterior surfaces of carbon nanotube bundles. <i>Applied Physics Letters</i> , 2005 , 86, 203108	3.4	26
47	Effect of cooling rate on growth of the intermetallic compound and fracture mode of near-eutectic Sn-Ag-Cu/Cu pad: Before and after aging. <i>Journal of Electronic Materials</i> , 2004 , 33, 1530-1544	1.9	38
46	Electromigration in flip chip solder bump of 97Pb β Sn/37Pb β 3Sn combination structure. <i>Acta Materialia</i> , 2004 , 52, 129-136	8.4	49
45	Nucleation mechanism of carbon nanotube. <i>Chemical Physics Letters</i> , 2004 , 383, 321-325	2.5	15
44	Adsorption properties of hydrogen on (10,0) single-walled carbon nanotube through density functional theory. <i>Carbon</i> , 2004 , 42, 2169-2177	10.4	121
43	Nanomechanical Behavior of β -SiC Nanowire in Tension: Molecular Dynamics Simulations. <i>Materials Transactions</i> , 2004 , 45, 1442-1449	1.3	32

42	Abnormal Grain Growth of Ni ₃ Sn ₄ at Sn-3.5Ag/Ni Interface. <i>Materials Transactions</i> , 2004 , 45, 710-713	1.3	6
41	Study on Cap Closure Mechanism of Single-Walled Carbon Nanotubes by Molecular Dynamics. <i>Materials Transactions</i> , 2004 , 45, 1437-1441	1.3	
40	Magnetic tunnel junctions with high magnetoresistance and small bias voltage dependence using epitaxial NiFe(111) ferromagnetic bottom electrodes. <i>Journal of Applied Physics</i> , 2003 , 93, 8555-8557	2.5	9
39	Molecular dynamics simulation of zigzag single-walled carbon nanotube closing mechanisms. <i>Metals and Materials International</i> , 2003 , 9, 99-105	2.4	4
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36	Effect of sputtering condition and heat treatment in Co/Cu/Co/FeMn spin valve. <i>Journal of Magnetism and Magnetic Materials</i> , 2002 , 241, 173-178	2.8	4
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34	Three-dimensional monte-carlo simulation of grain growth in Pt-Co thin film. <i>Journal of Electronic Materials</i> , 2002 , 31, 965-971	1.9	2
33	A thermodynamic study of phase equilibria in the Au-Sb-Sn solder system. <i>Journal of Electronic Materials</i> , 2002 , 31, 557-563	1.9	34
32	Grain Morphology of Intermetallic Compounds at Solder Joints. <i>Journal of Materials Research</i> , 2002 , 17, 597-599	2.5	39
31	Interfacial Microstructure and Joint Strength of Sn ₃ .5Ag _X (X = Cu, In, Ni) Solder Joint. <i>Journal of Materials Research</i> , 2002 , 17, 43-51	2.5	51
30	Study of the effect of natural oxidation and thermal annealing on microstructures of AlO _x in the magnetic tunnel junction by high-resolution transmission electron microscopy. <i>Applied Physics Letters</i> , 2002 , 80, 1168-1170	3.4	24
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16	Glass formation in metallic Al-Ni. <i>Journal of Non-Crystalline Solids</i> , 1998 , 242, 122-130	3.9	21
15	Diffusional Solidification Behavior in 304 Stainless Steel. <i>Materials Transactions, JIM</i> , 1998 , 39, 633-639		6
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12	Prediction of interface reaction products between Cu and various solder alloys by thermodynamic calculation. <i>Acta Materialia</i> , 1997 , 45, 1867-1874	8.4	204
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