

# Hyuck Mo Lee

## List of Publications by Year in descending order

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189  
papers

8,594  
citations

41258

49  
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54797

84  
g-index

192  
all docs

192  
docs citations

192  
times ranked

10172  
citing authors

#	ARTICLE	IF	CITATIONS
1	CO Oxidation Mechanism on CeO <sub>2</sub> -Supported Au Nanoparticles. Journal of the American Chemical Society, 2012, 134, 1560-1570.	6.6	496
2	Perovskite-polymer composite cross-linker approach for highly-stable and efficient perovskite solar cells. Nature Communications, 2019, 10, 520.	5.8	405
3	Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. Journal of the American Chemical Society, 2018, 140, 6317-6324.	6.6	338
4	Wireless bioresorbable electronic system enables sustained nonpharmacological neuroregenerative therapy. Nature Medicine, 2018, 24, 1830-1836.	15.2	331
5	Highly active and stable stepped Cu surface for enhanced electrochemical CO <sub>2</sub> reduction to C <sub>2</sub> H <sub>4</sub> . Nature Catalysis, 2020, 3, 804-812.	16.1	298
6	Prediction of interface reaction products between Cu and various solder alloys by thermodynamic calculation. Acta Materialia, 1997, 45, 1867-1874.	3.8	242
7	Brush-Like Cobalt Nitride Anchored Carbon Nanofiber Membrane: Current Collector-Catalyst Integrated Cathode for Long Cycle Li-O <sub>2</sub> Batteries. ACS Nano, 2018, 12, 128-139.	7.3	230
8	Mussel Inspired Highly Aligned Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene Film with Synergistic Enhancement of Mechanical Strength and Ambient Stability. ACS Nano, 2020, 14, 11722-11732.	7.3	212
9	Effect of soldering and aging time on interfacial microstructure and growth of intermetallic compounds between Sn-3.5Ag solder alloy and Cu substrate. Journal of Electronic Materials, 2000, 29, 1207-1213.	1.0	180
10	Bifunctional Mechanism of CO <sub>2</sub> Methanation on Pd-MgO/SiO <sub>2</sub> Catalyst: Independent Roles of MgO and Pd on CO <sub>2</sub> Methanation. Journal of Physical Chemistry C, 2010, 114, 7128-7131.	1.5	156
11	Adsorption properties of hydrogen on (10,0) single-walled carbon nanotube through density functional theory. Carbon, 2004, 42, 2169-2177.	5.4	130
12	Effects of Minor Additions of Zn on Interfacial Reactions of Sn-Ag-Cu and Sn-Cu Solders with Various Cu Substrates during Thermal Aging. Journal of Electronic Materials, 2007, 36, 1501-1509.	1.0	127
13	Thermodynamics-aided alloy design and evaluation of Pb-free solder, SnBiInZn system. Acta Materialia, 1997, 45, 951-960.	3.8	117
14	Cu-Ag core-shell nanoparticles with enhanced oxidation stability for printed electronics. Nanotechnology, 2015, 26, 455601.	1.3	117
15	CO Oxidation by Rutile TiO <sub>2</sub> (110) Doped with V, W, Cr, Mo, and Mn. Journal of Physical Chemistry C, 2008, 112, 12398-12408.	1.5	115
16	Ag-Cu Bimetallic Nanoparticles with Enhanced Resistance to Oxidation: A Combined Experimental and Theoretical Study. Journal of Physical Chemistry C, 2014, 118, 26324-26331.	1.5	114
17	Structural stability of AgCu bimetallic nanoparticles and their application as a catalyst: A DFT study. Catalysis Today, 2012, 185, 94-98.	2.2	103
18	High-Performance Solution-Processed Double-Walled Carbon Nanotube Transparent Electrode for Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1901204.	10.2	101

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19	Synthesis and characterization of low temperature Sn nanoparticles for the fabrication of highly conductive ink. <i>Nanotechnology</i> , 2011, 22, 225701.	1.3	96
20	Steering Epitaxial Alignment of Au, Pd, and AuPd Nanowire Arrays by Atom Flux Change. <i>Nano Letters</i> , 2010, 10, 432-438.	4.5	93
21	Atomically Embedded Ag via Electrodifusion Boosts Oxygen Evolution of CoOOH Nanosheet Arrays. <i>ACS Catalysis</i> , 2020, 10, 562-569.	5.5	93
22	Optimization and Application of Lithium Parameters for the Reactive Force Field, ReaxFF. <i>Journal of Physical Chemistry A</i> , 2005, 109, 4575-4582.	1.1	92
23	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.	4.1	92
24	Thermodynamic prediction of interface phases at Cu/solder joints. <i>Journal of Electronic Materials</i> , 1998, 27, 1161-1166.	1.0	89
25	Wirelessly controlled, bioresorbable drug delivery device with active valves that exploit electrochemically triggered crevice corrosion. <i>Science Advances</i> , 2020, 6, eabb1093.	4.7	87
26	The effect of Ti on the sintering and mechanical properties of refractory high-entropy alloy Ti <sub>x</sub> WTaVCr fabricated via spark plasma sintering for fusion plasma-facing materials. <i>Materials Chemistry and Physics</i> , 2018, 210, 87-94.	2.0	83
27	Synthesis of Chemically Ordered Pt <sub>3</sub> Fe/C Intermetallic Electrocatalysts for Oxygen Reduction Reaction with Enhanced Activity and Durability via a Removable Carbon Coating. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 31806-31815.	4.0	81
28	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.	0.9	78
29	Effects of Mn on the crystal structure of $\hat{\pm}$ -Al(Mn,Fe)Si particles in A356 alloys. <i>Journal of Crystal Growth</i> , 2006, 291, 207-211.	0.7	77
30	Yellow-emitting $\hat{\pm}$ <sup>3</sup> -Ca <sub>2</sub> SiO <sub>4</sub> :Ce <sup>3+</sup> , Li <sup>+</sup> phosphor for solid-state lighting: luminescent properties, electronic structure, and white light-emitting diode application. <i>Optics Express</i> , 2012, 20, 2761.	1.7	76
31	Effect of Ni layer thickness and soldering time on intermetallic compound formation at the interface between molten Sn-3.5Ag and Ni/Cu substrate. <i>Journal of Electronic Materials</i> , 1999, 28, 1251-1255.	1.0	73
32	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.	1.0	71
33	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.	5.2	65
34	Effects of phase composition and elemental partitioning on soft magnetic properties of AlFeCoCrMn high entropy alloys. <i>Acta Materialia</i> , 2019, 171, 31-39.	3.8	60
35	Artificial Intelligence to Accelerate the Discovery of N <sub>2</sub> Electroreduction Catalysts. <i>Chemistry of Materials</i> , 2020, 32, 709-720.	3.2	59
36	The influence of Mn and Cr on the tensile properties of A356-0.20Fe alloy. <i>Materials Letters</i> , 2006, 60, 1880-1883.	1.3	58

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37	A Bioresorbable Magnetically Coupled System for Low-Frequency Wireless Power Transfer. <i>Advanced Functional Materials</i> , 2019, 29, 1905451.	7.8	58
38	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, .	1.1	57
39	The Crystal Orientation of $\hat{\text{I}}^2\text{-Sn}$ 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.	1.0	57
40	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.	5.2	57
41	Hetero-Dimensional 2D $\text{Ti}_3\text{C}_2\text{T}_x$ MXene and 1D Graphene Nanoribbon Hybrids for Machine Learning-Assisted Pressure Sensors. <i>ACS Nano</i> , 2021, 15, 10347-10356.	7.3	57
42	Interfacial Microstructure and Joint Strength of $\text{Sn}^{-3.5}\text{Ag}^{\text{X}}$ (X = Cu, In, Ni) Solder Joint. <i>Journal of Materials Research</i> , 2002, 17, 43-51.	1.2	56
43	Highly porous $\text{Ni}^{\text{P}}$ electrode synthesized by an ultrafast electrodeposition process for efficient overall water electrolysis. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12069-12079.	5.2	56
44	Electromigration in flip chip solder bump of $97\text{Pb}^{-3}\text{Sn}/37\text{Pb}^{-63}\text{Sn}$ combination structure. <i>Acta Materialia</i> , 2004, 52, 129-136.	3.8	55
45	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.	1.2	54
46	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.	1.2	54
47	Graphene Veils and Sandwiches. <i>Nano Letters</i> , 2011, 11, 3290-3294.	4.5	54
48	Intimate atomic Cu-Ag interfaces for high $\text{CO}_2\text{RR}$ selectivity towards $\text{CH}_4$ at low over potential. <i>Nano Research</i> , 2021, 14, 3497-3501.	5.8	54
49	Grain Morphology of Intermetallic Compounds at Solder Joints. <i>Journal of Materials Research</i> , 2002, 17, 597-599.	1.2	51
50	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.	1.0	51
51	Mechanistic Investigation of the Catalytic Decomposition of Ammonia ( $\text{NH}_3$ ) on an Fe(100) Surface: A DFT Study. <i>Journal of Physical Chemistry C</i> , 2014, 118, 5309-5316.	1.5	51
52	Catalytic Characteristics of AgCu Bimetallic Nanoparticles in the Oxygen Reduction Reaction. <i>ChemSusChem</i> , 2013, 6, 1044-1049.	3.6	50
53	M <sub>2</sub> C precipitates in isothermal tempering of high Co-Ni secondary hardening steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1996, 27, 3466-3472.	1.1	49
54	Multidimensional $\text{Ti}_3\text{C}_2\text{T}_x$ MXene Architectures via Interfacial Electrochemical Self-Assembly. <i>ACS Nano</i> , 2021, 15, 10058-10066.	7.3	46

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55	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.	5.8	45
56	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.	3.2	45
57	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.	1.2	44
58	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.	1.3	41
59	Effects of shell thickness on Ag-Cu <sub>2</sub> O core-shell nanoparticles with bumpy structures for enhancing photocatalytic activity and stability. <i>Catalysis Today</i> , 2018, 303, 313-319.	2.2	41
60	A thermodynamic study of phase equilibria in the Sn-Bi-Pb solder system. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 1998, 22, 167-178.	0.7	39
61	A thermodynamic study of phase equilibria in the Au-Sb-Sn solder system. <i>Journal of Electronic Materials</i> , 2002, 31, 557-563.	1.0	39
62	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.	1.0	39
63	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.	1.0	38
64	Oxidative Dehydrogenation of Methanol to Formaldehyde by Isolated Vanadium, Molybdenum, and Chromium Oxide Clusters Supported on Rutile TiO <sub>2</sub> (110). <i>Journal of Physical Chemistry C</i> , 2009, 113, 16083-16093.	1.5	38
65	Wettability and interfacial reactions of Sn-based Pb-free solders with Cu-xZn alloy under bump metallurgies. <i>Journal of Alloys and Compounds</i> , 2009, 474, 510-516.	2.8	38
66	Prediction of primary intermetallic compound formation during interfacial reaction between Sn-based solder and Ni substrate. <i>Scripta Materialia</i> , 2002, 46, 777-781.	2.6	37
67	Enhancement of heterogeneous nucleation of $\beta$ -Sn phases in Sn-rich solders by adding minor alloying elements with hexagonal closed packed structures. <i>Applied Physics Letters</i> , 2009, 95, 021905.	1.5	37
68	Ligand-Induced Structural Evolution of Pt Nanoparticles: Amine versus Thiol. <i>ACS Nano</i> , 2011, 5, 8515-8522.	7.3	37
69	New Sn-0.7Cu-based solder alloys with minor alloying additions of Pd, Cr and Ca. <i>Journal of Alloys and Compounds</i> , 2014, 608, 126-132.	2.8	37
70	Interfacial reaction between Sn-1Bi-5In-9Zn solder and Cu substrate. <i>Scripta Materialia</i> , 1999, 40, 327-332.	2.6	36
71	Undercooling and microhardness of Pb-free solders on various under bump metallurgies. <i>Journal of Materials Research</i> , 2008, 23, 1147-1154.	1.2	36
72	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 <sub>2</sub> O <sub>3</sub> Capping. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 12263-12271.	4.0	36

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73	Reducing Time to Discovery: Materials and Molecular Modeling, Imaging, Informatics, and Integration. ACS Nano, 2021, 15, 3971-3995.	7.3	36
74	Control of chemical kinetics for sub-10 nm Cu nanoparticles to fabricate highly conductive ink below 150°C. Nanotechnology, 2012, 23, 065601.	1.3	34
75	Adsorption, dissociation, penetration, and diffusion of N <sub>2</sub> on and in bcc Fe: first-principles calculations. Physical Chemistry Chemical Physics, 2013, 15, 5186.	1.3	34
76	Phase equilibrium of the Ti-Cr-V ternary system in the non-burning $\beta$ -Ti alloy region. Journal of Alloys and Compounds, 1999, 291, 229-238.	2.8	33
77	Nanomechanical Behavior of $\beta$ -SiC Nanowire in Tension: Molecular Dynamics Simulations. Materials Transactions, 2004, 45, 1442-1449.	0.4	33
78	Synthesis of low-temperature-processable and highly conductive Ag ink by a simple ligand modification: the role of adsorption energy. Journal of Materials Chemistry C, 2013, 1, 1855.	2.7	33
79	Design of Robust and Reactive Nanoparticles with Atomic Precision: 13Ag-Ih and 12Ag <sup>n</sup> 1X (X = Pd, Pt, Au). Journal of Physical Chemistry C, 2010, 114, 3156-3160.	1.5	32
80	Balance in Adsorption Energy of Reactants Steers CO Oxidation Mechanism of Ag <sub>13</sub> and Ag <sub>12</sub> Pd <sub>1</sub> Nanoparticles: Association Mechanism versus Carbonate-Mediated Mechanism. Journal of Physical Chemistry C, 2010, 114, 3156-3160.	1.5	32
81	Nanopores of carbon nanotubes as practical hydrogen storage media. Applied Physics Letters, 2005, 87, 213113.	1.5	31
82	Molecular Dynamic Simulation of Coalescence between Silver and Palladium Clusters. Materials Transactions, 2007, 48, 455-459.	0.4	31
83	Thermodynamic Assessment of the Ni-Bi Binary System and Phase Equilibria of the Sn-Bi-Ni Ternary System. Journal of Electronic Materials, 2007, 36, 1536-1544.	1.0	31
84	Denatured M13 Bacteriophage-templated Perovskite Solar Cells Exhibiting High Efficiency. Advanced Science, 2020, 7, 2000782.	5.6	31
85	Liquefaction of H <sub>2</sub> molecules upon exterior surfaces of carbon nanotube bundles. Applied Physics Letters, 2005, 86, 203108.	1.5	30
86	Oxidative Dehydrogenation of Methanol to Formaldehyde by a Vanadium Oxide Cluster Supported on Rutile TiO <sub>2</sub> (110): Which Oxygen is Involved?. Journal of Physical Chemistry C, 2010, 114, 13736-13738.	1.5	30
87	Bonding structure and optical bandgap of rf sputtered hydrogenated amorphous silicon carbide alloy films. Journal of Non-Crystalline Solids, 1994, 170, 199-204.	1.5	29
88	Investigation of the phase equilibria in the Sn-Bi-In alloy system. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 1503-1515.	1.1	29
89	Overstabilization of the Metastable Structure of Isolated Ag <sup>n</sup> Pd Bimetallic Clusters. Journal of Physical Chemistry C, 2008, 112, 17138-17142.	1.5	29
90	Phase diagram and structural evolution of Ag <sup>n</sup> Au bimetallic nanoparticles: molecular dynamics simulations. Physical Chemistry Chemical Physics, 2012, 14, 2791.	1.3	29

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91	A combinatorial approach for the synthesis and analysis of Al <sub>x</sub> CryMozNbTiZr high-entropy alloys: Oxidation behavior. <i>Journal of Materials Research</i> , 2018, 33, 3226-3234.	1.2	29
92	Phase stability of Pt nanoclusters and the effect of a (0001) graphite surface through molecular dynamics simulation. <i>Surface Science</i> , 2008, 602, 1433-1439.	0.8	28
93	Interface engineering for a rational design of poison-free bimetallic CO oxidation catalysts. <i>Nanoscale</i> , 2017, 9, 5244-5253.	2.8	28
94	Coarsening behavior of L12 precipitates in melt-spun Al <sub>i</sub> -Ti <sub>ii</sub> -V <sub>i</sub> -Zr alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1993, 163, 81-90.	2.6	27
95	Phase Equilibria in the Sn-Ni-Zn Ternary System: Isothermal Sections at 200Å°C, 500Å°C, and 800Å°C. <i>Journal of Electronic Materials</i> , 2010, 39, 2643-2652.	1.0	27
96	Morphological characteristics of multi-layer/substrate systems. <i>Materials Characterization</i> , 2006, 56, 274-280.	1.9	26
97	Atomically ordered Pt <sub>3</sub> Mn intermetallic electrocatalysts for the oxygen reduction reaction in fuel cells. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7399-7408.	5.2	26
98	Synthesis and characterization of highly conductive Sn-Ag bimetallic nanoparticles for printed electronics. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	0.8	25
99	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.	2.6	25
100	Study of the effect of natural oxidation and thermal annealing on microstructures of AlO <sub>x</sub> in the magnetic tunnel junction by high-resolution transmission electron microscopy. <i>Applied Physics Letters</i> , 2002, 80, 1168-1170.	1.5	24
101	Microstructural discovery of Al addition on Sn-0.5Cu-based Pb-free solder design. <i>Journal of Alloys and Compounds</i> , 2015, 650, 106-115.	2.8	24
102	Machine learning assisted synthesis of lithium-ion batteries cathode materials. <i>Nano Energy</i> , 2022, 98, 107214.	8.2	24
103	Electron transport properties in magnetic tunnel junctions with epitaxial NiFe (111) ferromagnetic bottom electrodes. <i>Applied Physics Letters</i> , 2003, 82, 4735-4737.	1.5	23
104	Glass formation in metallic Al-Ni-Y. <i>Journal of Non-Crystalline Solids</i> , 1998, 242, 122-130.	1.5	22
105	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.	1.0	22
106	CO Oxidation on Positively and Negatively Charged Ag <sub>13</sub> Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2011, 115, 24771-24777.	1.5	22
107	Biodegradable Molybdenum/Polybutylene Adipate Terephthalate Conductive Paste for Flexible and Stretchable Transient Electronics. <i>Advanced Materials Technologies</i> , 2022, 7, 2001297.	3.0	22
108	Effect of Mo and Nb on the phase equilibrium of the Ti-Cr-V ternary system in the non-burning $\beta^2$ -Ti alloy region. <i>Journal of Alloys and Compounds</i> , 2000, 297, 231-239.	2.8	20

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109	Microstructural Evolution of Joint Interface between Eutectic 80Au&ndash;20Sn Solder and UBM. <i>Materials Transactions</i> , 2005, 46, 2400-2405.	0.4	20
110	Reactive Structural Motifs of Au Nanoclusters for Oxygen Activation and Subsequent CO Oxidation. <i>Journal of Physical Chemistry C</i> , 2016, 120, 9292-9298.	1.5	20
111	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.	1.5	20
112	Morphological transition of interfacial Ni <sub>3</sub> Sn <sub>4</sub> grains at the Sn-3.5Ag/Ni joint. <i>Journal of Electronic Materials</i> , 2003, 32, 1228-1234.	1.0	19
113	Electromigration performance of Pb-free solder joints in terms of solder composition and joining path. <i>Jom</i> , 2010, 62, 22-29.	0.9	19
114	Synthesis of oxide-free aluminum nanoparticles for application to conductive film. <i>Nanotechnology</i> , 2018, 29, 055602.	1.3	19
115	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.	1.0	18
116	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.	1.5	18
117	Phenomenological phase diagram calculation of the Ni–Al system in the Ni-rich region. <i>Acta Materialia</i> , 1997, 45, 4743-4749.	3.8	17
118	Comparison of Sn <sub>2.8</sub> Ag <sub>20</sub> In and Sn <sub>10</sub> Bi <sub>10</sub> In solders for intermediate-step soldering. <i>Journal of Electronic Materials</i> , 2006, 35, 1975-1981.	1.0	17
119	Composition of M <sub>2</sub> C phase in tempering of high Co–Ni steels. <i>Scripta Metallurgica Et Materialia</i> , 1991, 25, 685-688.	1.0	16
120	Nucleation mechanism of carbon nanotube. <i>Chemical Physics Letters</i> , 2004, 383, 321-325.	1.2	16
121	Development of low temperature bonding using in-based solders. , 2008, , .		16
122	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.	1.2	16
123	New Synthesis Approach for Low Temperature Bimetallic Nanoparticles: Size and Composition Controlled Sn–Cu Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 1037-1041.	0.9	16
124	Surface modification of oleylamine-capped Ag–Cu nanoparticles to fabricate low-temperature-sinterable Ag–Cu nanoink. <i>Nanotechnology</i> , 2016, 27, 345706.	1.3	15
125	CO oxidation by MoS <sub>2</sub> -supported Au <sub>19</sub> nanoparticles: effects of vacancy formation and tensile strain. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13232-13238.	1.3	14
126	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.	1.3	14



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127	Structural Effectiveness of AgCl-decorated Ag Nanowires Enhancing Oxygen Reduction. ACS Sustainable Chemistry and Engineering, 2021, 9, 7519-7528.	3.2	14
128	Relationship between domain structure and film thickness in epitaxial PbTiO <sub>3</sub> films deposited on MgO(001) by reactive sputtering. Journal of Materials Research, 1999, 14, 4677-4684.	1.2	13
129	Immobilization of Au Nanoclusters Supported on Graphite: Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2010, 114, 2022-2026.	1.5	13
130	Estimation of order–disorder transition temperature in Pt–Co alloy by Monte Carlo simulation using modified embedded atom method. Scripta Materialia, 2001, 45, 495-502.	2.6	12
131	Undercooling, Microstructures and Hardness of Sn-Rich Pb-Free Solders on Cu–Zn Alloy Under Bump Metallurgies. Materials Transactions, 2009, 50, 2291-2296.	0.4	12
132	Ag <sub>2</sub> S-CoS hetero-nanowires terminated with stepped surfaces for improved oxygen evolution reaction. Catalysis Communications, 2019, 129, 105749.	1.6	12
133	Thermodynamic evaluation and phase diagram of PbO–TiO <sub>2</sub> system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1994, 18, 237-244.	0.7	11
134	Molecular dynamics simulations of the diffusion and rotation of Pt nanoclusters supported on graphite. Physical Chemistry Chemical Physics, 2009, 11, 503-507.	1.3	11
135	Effect of Ag Addition on the Ripening Growth of $\{m\text{Cu}\}_{6}\{m\text{Sn}\}_{5}$ Grains at the Interface of Sn-xAg-0.5Cu/Cu During a Reflow. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2011, 1, 1939-1946.	1.4	11
136	Controlled Removal of Surfactants from Double-Walled Carbon Nanotubes for Stronger p-Doping Effect and Its Demonstration in Perovskite Solar Cells. Small Methods, 2021, 5, e2100080.	4.6	11
137	Accelerated mapping of electronic density of states patterns of metallic nanoparticles via machine-learning. Scientific Reports, 2021, 11, 11604.	1.6	11
138	Effect of alloyed Ti:Zr ratio on phase stability of Al <sub>66</sub> Mn <sub>9</sub> (Ti, Zr) <sub>25</sub> intermetallic compounds. Intermetallics, 1996, 4, 245-249.	1.8	10
139	Abnormal Grain Growth of Ni <sub>3</sub> Sn <sub>4</sub> at Sn-3.5Ag/Ni Interface. Materials Transactions, 2004, 45, 710-713.	0.4	10
140	Iterative redox activation promotes interfacial synergy in an Ag/Cu <sub>x</sub> O catalyst for oxygen reduction. Chemical Engineering Journal, 2022, 446, 136966.	6.6	10
141	Magnetic tunnel junctions with high magnetoresistance and small bias voltage dependence using epitaxial NiFe(111) ferromagnetic bottom electrodes. Journal of Applied Physics, 2003, 93, 8555-8557.	1.1	9
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