

Norman Y Zhou

List of Publications by Year in descending order

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220
papers

8,592
citations

41627

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docs citations

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times ranked

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| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Failure behavior of resistance spot welded advanced high strength steel: The role of surface condition and initial microstructure. <i>Journal of Materials Processing Technology</i> , 2022, 299, 117370. | 3.1 | 29 |
| 2 | Versatile memristor for memory and neuromorphic computing. <i>Nanoscale Horizons</i> , 2022, 7, 299-310. | 4.1 | 38 |
| 3 | A Comparison Between Hardness-Scaling and Ball-Indentation Techniques on Predicting Stress/Strain Distribution and Failure Behavior of Resistance Spot Welded Advanced High Strength Steel. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2022, 144, . | 1.3 | 4 |
| 4 | Laser welding-brazing of NiTi/304 stainless steel wires with beam defocus and large offset. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 835, 142660. | 2.6 | 15 |
| 5 | Water-Enabled Electricity Generation: A Perspective. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, . | 2.8 | 17 |
| 6 | Laser modification of Au-Cu-Au structures for improved electrical and electro-optical properties. <i>Nanotechnology</i> , 2022, 33, 245205. | 1.3 | 6 |
| 7 | The influence of in-situ alloying of electro-spark deposited coatings on the multiscale morphological and mechanical properties of laser welded Al-Si coated 22MnB5. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 839, 142830. | 2.6 | 18 |
| 8 | High-Performance Mid-IR to Deep-UV van der Waals Photodetectors Capable of Local Spectroscopy at Room Temperature. <i>Nano Letters</i> , 2022, 22, 3425-3432. | 4.5 | 6 |
| 9 | The effect of laser impingement angle on the optimization of melt pool geometry to improve process stability during high-speed laser welding of thin-gauge automotive steels. <i>Journal of Manufacturing Processes</i> , 2022, 78, 242-253. | 2.8 | 25 |
| 10 | The failure mechanism of resistance spot welded third-generation medium-Mn steel during shear-tension loading. <i>Journal of Manufacturing Processes</i> , 2022, 79, 520-531. | 2.8 | 16 |
| 11 | Effect of torch angle and position on bead geometry and joint strength during arc brazing of thin-gauge dual-phase steel. <i>International Journal of Advanced Manufacturing Technology</i> , 2022, 121, 543-557. | 1.5 | 11 |
| 12 | Mechanical properties and failure behavior of resistance spot welded medium-Mn steel under static and quasi-static shear-tension loading. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2022, 66, 1609-1622. | 1.3 | 3 |
| 13 | Predicting liquid metal embrittlement severity in resistance spot welding using hot tensile testing data. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2022, 66, 1705-1714. | 1.3 | 5 |
| 14 | Effect of heat input modes on microstructure, mechanical properties and porosity of laser welded NiTi-316L joints: A comparative study. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 848, 143426. | 2.6 | 4 |
| 15 | Soft Biomaterials Based Flexible Artificial Synapse for Neuromorphic Computing. <i>Advanced Electronic Materials</i> , 2022, 8, . | 2.6 | 8 |
| 16 | Effect of external loading on liquid metal embrittlement severity during resistance spot welding. <i>Manufacturing Letters</i> , 2022, 33, 11-14. | 1.1 | 3 |
| 17 | Laser engineering of ITO/ZnO/ITO structures for photodetector applications. <i>Journal of Laser Applications</i> , 2022, 34, 032006. | 0.8 | 3 |
| 18 | Resistance spot welding of NiTi shape memory alloy sheets: Microstructural evolution and mechanical properties. <i>Journal of Manufacturing Processes</i> , 2022, 81, 467-475. | 2.8 | 5 |

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|----|---|------|-----------|
| 19 | Laser-assisted wire cladding using a retrofitted laser welding system. <i>Surface Engineering</i> , 2021, 37, 634-641. | 1.1 | 10 |
| 20 | Weld hardness ratio and liquid metal embrittlement crack's detrimental effect on resistant spot weld strength. <i>Science and Technology of Welding and Joining</i> , 2021, 26, 58-67. | 1.5 | 11 |
| 21 | Effect of Microsegregation on High-Temperature Microstructure Evolution in Rapid Solidification Processed Nb-Rich Ni Superalloys. <i>Advanced Engineering Materials</i> , 2021, 23, 2001396. | 1.6 | 4 |
| 22 | A Battery-Like Self-Selecting Biomemristor from Earth-Abundant Natural Biomaterials. <i>ACS Applied Bio Materials</i> , 2021, 4, 1976-1985. | 2.3 | 30 |
| 23 | Electrocatalytic Hydrolysis-Modulated Multistate Resistive Switching Behaviors in Memristors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000655. | 0.8 | 5 |
| 24 | Multistate resistive switching behaviors for neuromorphic computing in memristor. <i>Materials Today Advances</i> , 2021, 9, 100125. | 2.5 | 33 |
| 25 | A comprehensive insight into the superelasticity measurement of laser welded NiTi shape memory alloys. <i>Materials Letters</i> , 2021, 287, 129310. | 1.3 | 7 |
| 26 | Significance of cutting plane in liquid metal embrittlement severity quantification. <i>SN Applied Sciences</i> , 2021, 3, 620. | 1.5 | 9 |
| 27 | A True Random Number Generator Based on Ionic Liquid Modulated Memristors. <i>ACS Applied Electronic Materials</i> , 2021, 3, 2380-2388. | 2.0 | 17 |
| 28 | Synaptic devices based neuromorphic computing applications in artificial intelligence. <i>Materials Today Physics</i> , 2021, 18, 100393. | 2.9 | 110 |
| 29 | Superelasticity preservation in dissimilar joint of NiTi shape memory alloy to biomedical PtIr. <i>Materialia</i> , 2021, 16, 101090. | 1.3 | 12 |
| 30 | A Simple High Power, Fast Response Streaming Potential/Current-Based Electric Nanogenerator Using a Layer of Al ₂ O ₃ Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 27169-27178. | 4.0 | 22 |
| 31 | Numerical modelling and experimental validation of the effect of laser beam defocusing on process optimization during fiber laser welding of automotive press-hardened steels. <i>Journal of Manufacturing Processes</i> , 2021, 67, 535-544. | 2.8 | 49 |
| 32 | Multifunctional Self-Powered Electronics Based on a Reusable Low-Cost Polypropylene Fabric Triboelectric Nanogenerator. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 34266-34273. | 4.0 | 18 |
| 33 | Optimizing weld morphology and mechanical properties of laser welded Al-Si coated 22MnB5 by surface application of colloidal graphite. <i>Journal of Materials Processing Technology</i> , 2021, 293, 117093. | 3.1 | 23 |
| 34 | Laser Alloying as an Effective Way to Fabricate NiTiPt Shape Memory Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 4368-4378. | 1.1 | 1 |
| 35 | Pathway to understand liquid metal embrittlement (LME) in Fe-Zn couple: From fundamentals toward application. <i>Progress in Materials Science</i> , 2021, 121, 100798. | 16.0 | 52 |
| 36 | Femtosecond laser irradiation induced heterojunctions between carbon nanofibers and silver nanowires for a flexible strain sensor. <i>Journal of Materials Science and Technology</i> , 2021, 84, 139-146. | 5.6 | 17 |

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|----|---|------|-----------|
| 37 | Formation of metal-semiconductor nanowire heterojunctions by nanosecond laser irradiation. <i>AIP Advances</i> , 2021, 11, . | 0.6 | 3 |
| 38 | Effects of laser beam defocusing on high-strain-rate tensile behavior of press-hardened Zn-coated 22MnB5 steel welds. <i>Optics and Laser Technology</i> , 2021, 141, 107116. | 2.2 | 18 |
| 39 | A systematic study on the effect of coating type and surface preparation on the wettability of Si-Bronze brazing filler material on GI and GA-coated DP600. <i>Surface and Coatings Technology</i> , 2021, 425, 127735. | 2.2 | 14 |
| 40 | Adjustable Leaky-Integrate-and-fire neurons based on memristor-coupled capacitors. <i>Materials Today Advances</i> , 2021, 12, 100192. | 2.5 | 15 |
| 41 | Influence of Ni interlayer width on interfacial reactions and mechanical properties in laser welding/brazing of Al/Mg lap joint. <i>Science and Technology of Welding and Joining</i> , 2020, 25, 37-44. | 1.5 | 16 |
| 42 | Effect of galvanneal-coating evolution during press-hardening on laser welding of 22MnB5 steel. <i>Science and Technology of Welding and Joining</i> , 2020, 25, 112-118. | 1.5 | 13 |
| 43 | Threshold Switching in Single Metal-Oxide Nanobelt Devices Emulating an Artificial Nociceptor. <i>Advanced Electronic Materials</i> , 2020, 6, 1900595. | 2.6 | 35 |
| 44 | A Self-Powered Nanogenerator for the Electrical Protection of Integrated Circuits from Trace Amounts of Liquid. <i>Nano-Micro Letters</i> , 2020, 12, 5. | 14.4 | 20 |
| 45 | Maskless Patterning of Metal Outflow in Alternating Metal/Ceramic Multiple Nanolayers by Femtosecond Laser Irradiation. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1178-1189. | 1.5 | 5 |
| 46 | Heterogeneous stimuli induced nonassociative learning behavior in ZnO nanowire memristor. <i>Nanotechnology</i> , 2020, 31, 125201. | 1.3 | 14 |
| 47 | Role of spot weld electrode geometry on liquid metal embrittlement crack development. <i>Journal of Manufacturing Processes</i> , 2020, 49, 1-9. | 2.8 | 47 |
| 48 | Laser-induced Joining of Nanoscale Materials: Processing, Properties, and Applications. <i>Nano Today</i> , 2020, 35, 100959. | 6.2 | 25 |
| 49 | From Memristive Materials to Neural Networks. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 54243-54265. | 4.0 | 56 |
| 50 | Moisture-Enabled Electricity Generation: From Physics and Materials to Self-Powered Applications. <i>Advanced Materials</i> , 2020, 32, e2003722. | 11.1 | 175 |
| 51 | High-Performance Magnesium-Carbon Nanofiber Hygroelectric Generator Based on Interface-Mediation-Enhanced Capacitive Discharging Effect. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 24289-24297. | 4.0 | 25 |
| 52 | Passive Filters for Nonvolatile Storage Based on Capacitive-Coupled Memristive Effects in Nanolayered Organic-Inorganic Heterojunction Devices. <i>ACS Applied Nano Materials</i> , 2020, 3, 5045-5052. | 2.4 | 18 |
| 53 | Biomemristors as the next generation bioelectronics. <i>Nano Energy</i> , 2020, 75, 104938. | 8.2 | 110 |
| 54 | Nanojoining and tailoring of current-voltage characteristics of metal-P type semiconductor nanowire heterojunction by femtosecond laser irradiation. <i>Journal of Applied Physics</i> , 2020, 127, . | 1.1 | 5 |

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|----|--|-----|-----------|
| 55 | Role of Random and Coincidence Site Lattice Grain Boundaries in Liquid Metal Embrittlement of Iron (FCC)-Zn Couple. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 3938-3944. | 1.1 | 24 |
| 56 | Evolution of Transient Nature Nanoscale Softening During Martensite Tempering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 3772-3777. | 1.1 | 4 |
| 57 | A review on the laser welding of coated 22MnB5 press-hardened steel and its impact on the production of tailor-welded blanks. Science and Technology of Welding and Joining, 2020, 25, 447-467. | 1.5 | 44 |
| 58 | The Role of Internal Oxides on the Liquid Metal Embrittlement Cracking During Resistance Spot Welding of the Dual Phase Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 2180-2191. | 1.1 | 25 |
| 59 | The effect of silicon content on liquid-metal-embrittlement susceptibility in resistance spot welding of galvanized dual-phase steel. Journal of Manufacturing Processes, 2020, 57, 370-379. | 2.8 | 43 |
| 60 | Contact engineering of single core/shell SiC/SiO ₂ nanowire memory unit with high current tolerance using focused femtosecond laser irradiation. Nanoscale, 2020, 12, 5618-5626. | 2.8 | 11 |
| 61 | Effect of Laser Positioning on the Microstructure and Properties of NiTi-Copper Dissimilar Laser Welds. Journal of Materials Engineering and Performance, 2020, 29, 849-857. | 1.2 | 19 |
| 62 | Non-zero-crossing current-voltage hysteresis behavior in memristive system. Materials Today Advances, 2020, 6, 100056. | 2.5 | 37 |
| 63 | A Phenomenological Model of Resistance Spot Welding on Liquid Metal Embrittlement Severity Using Dynamic Resistance Measurement. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2020, 142, . | 1.3 | 12 |
| 64 | Reduction in liquid metal embrittlement cracking using weld current ramping. Welding in the World, Le Soudage Dans Le Monde, 2019, 63, 1583-1591. | 1.3 | 35 |
| 65 | Effect of Multiple Pulse Resistance Spot Welding Schedules on Liquid Metal Embrittlement Severity. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, . | 1.3 | 31 |
| 66 | A Unified Capacitive-Coupled Memristive Model for the Nonpinched Current-Voltage Hysteresis Loop. Nano Letters, 2019, 19, 6461-6465. | 4.5 | 128 |
| 67 | The Effect of Pulse Energy on the Defects and Microstructure of Electro-Spark-Deposited Inconel 718. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 4223-4231. | 1.1 | 11 |
| 68 | Large-Area Die-Attachment Sintered by Organic-Free Ag Sintering Material at Low Temperature. Journal of Electronic Materials, 2019, 48, 7562-7572. | 1.0 | 7 |
| 69 | Effect of internal oxidation on the weldability of CMnSi steels. Welding in the World, Le Soudage Dans Le Monde, 2019, 63, 1633-1639. | 1.3 | 5 |
| 70 | Two-photon absorption induced nanowelding for assembling ZnO nanowires with enhanced photoelectrical properties. Applied Physics Letters, 2019, 115, . | 1.5 | 16 |
| 71 | Highly focused femtosecond laser directed selective boron doping in single SiC nanowire device for n-p conversion. Applied Physics Letters, 2019, 115, . | 1.5 | 7 |
| 72 | Suppression of liquid metal embrittlement in resistance spot welding of TRIP steel. Science and Technology of Welding and Joining, 2019, 24, 579-586. | 1.5 | 19 |

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|----|---|------|-----------|
| 73 | Dynamic Tensile Behavior of Fiber Laser Welds of Medium Manganese Transformation-Induced Plasticity Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 3578-3588. | 1.1 | 9 |
| 74 | Ultrathin TiO _x Interface-Mediated ZnO Nanowire Memristive Devices Emulating Synaptic Behaviors. Advanced Electronic Materials, 2019, 5, 1900142. | 2.6 | 9 |
| 75 | Self-Powered, Rapid-Response, and Highly Flexible Humidity Sensors Based on Moisture-Dependent Voltage Generation. ACS Applied Materials & Interfaces, 2019, 11, 14249-14255. | 4.0 | 74 |
| 76 | Enhancement of mechanical and functional properties of welded NiTi by controlling nickel vapourisation. Science and Technology of Welding and Joining, 2019, 24, 706-712. | 1.5 | 19 |
| 77 | Experimental and Numerical Analysis of Liquid Metal Embrittlement Crack Location. Journal of Materials Engineering and Performance, 2019, 28, 2045-2052. | 1.2 | 31 |
| 78 | Cooperative Bilayer of Lattice-Disordered Nanoparticles as Room-Temperature Sinterable Nanoarchitecture for Device Integrations. ACS Applied Materials & Interfaces, 2019, 11, 16972-16980. | 4.0 | 30 |
| 79 | A Predictive Model for Thermal Conductivity of Nano-Ag Sintered Interconnect for a SiC Die. Journal of Electronic Materials, 2019, 48, 2811-2825. | 1.0 | 12 |
| 80 | Quantifying the link between crack distribution and resistance spot weld strength reduction in liquid metal embrittlement susceptible steels. Welding in the World, Le Soudage Dans Le Monde, 2019, 63, 807-814. | 1.3 | 40 |
| 81 | Plasmon-Induced Heterointerface Thinning for Schottky Barrier Modification of Core/Shell SiC/SiO ₂ Nanowires. ACS Applied Materials & Interfaces, 2019, 11, 9326-9332. | 4.0 | 16 |
| 82 | Impact of liquid metal embrittlement cracks on resistance spot weld static strength. Science and Technology of Welding and Joining, 2019, 24, 218-224. | 1.5 | 49 |
| 83 | Preparation of Oxidation-Resistant Ag-Cu Alloy Nanoparticles by Polyol Method for Electronic Packaging. Journal of Electronic Materials, 2019, 48, 1286-1293. | 1.0 | 16 |
| 84 | Oxygen vacancy migration/diffusion induced synaptic plasticity in a single titanate nanobelt. Nanoscale, 2018, 10, 6069-6079. | 2.8 | 30 |
| 85 | Influence of SC-HAZ microstructure on the mechanical behavior of Si-TRIP steel welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 718, 216-227. | 2.6 | 22 |
| 86 | Self-Powered Wearable Electronics Based on Moisture Enabled Electricity Generation. Advanced Materials, 2018, 30, e1705925. | 11.1 | 207 |
| 87 | Effect of coating weight on fiber laser welding of Galvanneal-coated 22MnB5 press hardening steel. Surface and Coatings Technology, 2018, 337, 536-543. | 2.2 | 21 |
| 88 | UV-Induced Multilevel Current Amplification Memory Effect in Zinc Oxide Rods Resistive Switching Devices. Advanced Functional Materials, 2018, 28, 1706230. | 7.8 | 60 |
| 89 | Design guideline for intermetallic compound mitigation in Al-Mg dissimilar welding through addition of interlayer. International Journal of Advanced Manufacturing Technology, 2018, 94, 2667-2678. | 1.5 | 34 |
| 90 | Photocatalysis with easily recoverable linear engineered TiO ₂ nanomaterials to prevent the formation of disinfection byproducts in drinking water. Journal of Environmental Chemical Engineering, 2018, 6, 197-207. | 3.3 | 15 |

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|-----|---|------|-----------|
| 91 | Formation and Toughening Mechanisms of Dispersions in Interfacial Intermetallics of Dissimilar Laser Al/Steel Joints. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 4107-4114. | 1.2 | 8 |
| 92 | Solar photocatalysis with modified TiO ₂ photocatalysts: effects on NOM and disinfection byproduct formation potential. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 1361-1376. | 1.2 | 15 |
| 93 | Liquid metal embrittlement in laser beam welding of Zn-coated 22MnB5 steel. <i>Materials and Design</i> , 2018, 155, 375-383. | 3.3 | 61 |
| 94 | Tensile and Fatigue Properties of Single and Multiple Dissimilar Welded Joints of DP980 and HSLA. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 783-791. | 1.2 | 10 |
| 95 | Study and Applications of Dynamic Resistance Profiles During Resistance Spot Welding of Coated Hot-Stamping Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 745-758. | 1.1 | 17 |
| 96 | Reliable and Low-Power Multilevel Resistive Switching in TiO ₂ Nanorod Arrays Structured with a TiO _x Seed Layer. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 4808-4817. | 4.0 | 86 |
| 97 | Nanoscale Wire Bonding of Individual Ag Nanowires on Au Substrate at Room Temperature. <i>Nano-Micro Letters</i> , 2017, 9, 26. | 14.4 | 16 |
| 98 | Carbon nanowalls: A new material for resistive switching memory devices. <i>Carbon</i> , 2017, 120, 54-62. | 5.4 | 42 |
| 99 | Phase transformation of TiO ₂ nanoparticles by femtosecond laser ablation in aqueous solutions and deposition on conductive substrates. <i>Nanoscale</i> , 2017, 9, 6167-6177. | 2.8 | 24 |
| 100 | Fatigue behaviour of dissimilar Al 5052 and Mg AZ31 resistance spot welds with Sn-coated steel interlayer. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2017, 40, 1048-1058. | 1.7 | 19 |
| 101 | Improving the electrical contact at a Pt/TiO ₂ nanowire interface by selective application of focused femtosecond laser irradiation. <i>Nanotechnology</i> , 2017, 28, 405302. | 1.3 | 19 |
| 102 | Effect of the size of silver nanoparticles on SERS signal enhancement. <i>Journal of Nanoparticle Research</i> , 2017, 19, 1. | 0.8 | 70 |
| 103 | Concurrent photocatalytic and filtration processes using doped TiO ₂ coated quartz fiber membranes in a photocatalytic membrane reactor. <i>Chemical Engineering Journal</i> , 2017, 330, 531-540. | 6.6 | 53 |
| 104 | Sintering Bonding Process with Ag Nanoparticle Paste and Joint Properties in High Temperature Environment. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-8. | 1.5 | 25 |
| 105 | <i>In situ</i> nanojoining of Y- and T-shaped silver nanowires structures using femtosecond laser radiation. <i>Nanotechnology</i> , 2016, 27, 125201. | 1.3 | 40 |
| 106 | Plasmonic engineering of metal-oxide nanowire heterojunctions in integrated nanowire rectification units. <i>Applied Physics Letters</i> , 2016, 108, . | 1.5 | 23 |
| 107 | Photocatalytic decomposition of organic micropollutants using immobilized TiO ₂ having different isoelectric points. <i>Water Research</i> , 2016, 101, 351-361. | 5.3 | 63 |
| 108 | Multilevel Memory: Plasmonic-Radiation-Enhanced Metal Oxide Nanowire Heterojunctions for Controllable Multilevel Memory (<i>Adv. Funct. Mater.</i> 33/2016). <i>Advanced Functional Materials</i> , 2016, 26, 6135-6135. | 7.8 | 1 |

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|-----|--|-----|-----------|
| 109 | Effects of tempering mode on the structural changes of martensite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 673, 467-475. | 2.6 | 76 |
| 110 | Photocatalytic decomposition of selected estrogens and their estrogenic activity by UV-LED irradiated TiO ₂ immobilized on porous titanium sheets via thermal-chemical oxidation. <i>Journal of Hazardous Materials</i> , 2016, 318, 541-550. | 6.5 | 50 |
| 111 | A comparative study of silver nanoparticles synthesized by arc discharge and femtosecond laser ablation in aqueous solution. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1. | 1.1 | 8 |
| 112 | Plasmonicâ€Radiationâ€Enhanced Metal Oxide Nanowire Heterojunctions for Controllable Multilevel Memory. <i>Advanced Functional Materials</i> , 2016, 26, 5979-5986. | 7.8 | 59 |
| 113 | Low temperature sintering of silver nanoparticle paste for electronic packaging. , 2016, , . | | 1 |
| 114 | Fusion zone microstructure evolution of fiber laser welded press-hardened steels. <i>Scripta Materialia</i> , 2016, 121, 18-22. | 2.6 | 63 |
| 115 | Thermomechanical fatigue of post-weld heat treated NiTi shape memory alloy wires. <i>International Journal of Fatigue</i> , 2016, 92, 1-7. | 2.8 | 21 |
| 116 | Single-step synthesis of graphene quantum dots by femtosecond laser ablation of graphene oxide dispersions. <i>Nanoscale</i> , 2016, 8, 8863-8877. | 2.8 | 54 |
| 117 | Nanostructure of immiscible Mgâ€Fe dissimilar weld without interfacial intermetallic transition layer. <i>Materials and Design</i> , 2016, 92, 445-449. | 3.3 | 22 |
| 118 | Investigation of splashing phenomena during the impact of molten sub-micron gold droplets on solid surfaces. <i>Soft Matter</i> , 2016, 12, 295-301. | 1.2 | 13 |
| 119 | Interfacial Nano-Mechanical Properties of Copper Joints Bonded with Silver Nanopaste near Room Temperature. <i>Materials Transactions</i> , 2015, 56, 1010-1014. | 0.4 | 2 |
| 120 | Joining of Silver Nanomaterials at Low Temperatures: Processes, Properties, and Applications. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 12597-12618. | 4.0 | 276 |
| 121 | Surface characterizations of laser modified biomedical grade NiTi shape memory alloys. <i>Materials Science and Engineering C</i> , 2015, 50, 367-378. | 3.8 | 50 |
| 122 | Sintering mechanisms and mechanical properties of joints bonded using silver nanoparticles for electronic packaging applications. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2015, 59, 427-432. | 1.3 | 24 |
| 123 | Recent progresses on hybrid microâ€nano filler systems for electrically conductive adhesives (ECAs) applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 4730-4745. | 1.1 | 52 |
| 124 | Assembly of silver nanoparticles on nanowires into ordered nanostructures with femtosecond laser radiation. <i>Applied Optics</i> , 2015, 54, 2524. | 0.9 | 12 |
| 125 | Electrical Conductive Adhesives Enhanced with Highâ€spectâ€atio Silver Nanobelts. <i>Macromolecular Materials and Engineering</i> , 2014, 299, 739-747. | 1.7 | 31 |
| 126 | Tensile properties of fiber laser welded joints of high strength low alloy and dual-phase steels at warm and low temperatures. <i>Materials & Design</i> , 2014, 56, 193-199. | 5.1 | 31 |

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|-----|--|------|-----------|
| 127 | Microstructure-properties correlation in fiber laser welding of dual-phase and HSLA steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 607, 445-453. | 2.6 | 79 |
| 128 | Mechanism of Secondary Hardening in Rapid Tempering of Dual-Phase Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 6153-6162. | 1.1 | 22 |
| 129 | Generation of oxygen vacancies in visible light activated one-dimensional iodine TiO ₂ photocatalysts. <i>RSC Advances</i> , 2014, 4, 36959-36966. | 1.7 | 233 |
| 130 | Resistance spot welding of AZ series magnesium alloys: Effects of aluminum content on microstructure and mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 618, 323-334. | 2.6 | 47 |
| 131 | Effects of Interfacial Lattice Mismatching on Wetting of Ni-Plated Steel by Magnesium. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 5749-5766. | 1.1 | 14 |
| 132 | Decoupling of the softening processes during rapid tempering of a martensitic steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 615, 395-404. | 2.6 | 34 |
| 133 | Effects of concavity on tensile and fatigue properties in fibre laser welding of automotive steels. <i>Science and Technology of Welding and Joining</i> , 2014, 19, 60-68. | 1.5 | 37 |
| 134 | An Experimental Study of Transient Liquid Phase Bonding of the Ternary Ag-Au-Cu System Using Differential Scanning Calorimetry. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 3708-3720. | 1.1 | 17 |
| 135 | Effects of Heat Treatment on Grain-Boundary δ -Mg ₁₇ Al ₁₂ and Fracture Properties of Resistance Spot-Welded AZ80 Mg Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 3747-3756. | 1.1 | 16 |
| 136 | Thermo-chemical characterization of a Al nanoparticle and NiO nanowire composite modified by Cu powder. <i>Thermochimica Acta</i> , 2013, 572, 51-58. | 1.2 | 21 |
| 137 | Enhanced degradation of persistent pharmaceuticals found in wastewater treatment effluents using TiO ₂ nanobelt photocatalysts. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1. | 0.8 | 51 |
| 138 | Microstructure and fatigue properties of fiber laser welded dissimilar joints between high strength low alloy and dual-phase steels. <i>Materials & Design</i> , 2013, 51, 665-675. | 5.1 | 82 |
| 139 | Femtosecond laser induced surface melting and nanojoining for plasmonic circuits. <i>Proceedings of SPIE</i> , 2013, , . | 0.8 | 7 |
| 140 | Thermochemical Analysis of Phases Formed at the Interface of a Mg alloy-Ni-plated Steel Joint during Laser Brazing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 1937-1946. | 1.1 | 19 |
| 141 | Feasibility study of resistance spot welding of dissimilar Al/Mg combinations with Ni based interlayers. <i>Science and Technology of Welding and Joining</i> , 2013, 18, 541-550. | 1.5 | 59 |
| 142 | Highly localized heat generation by femtosecond laser induced plasmon excitation in Ag nanowires. <i>Applied Physics Letters</i> , 2013, 102, . | 1.5 | 60 |
| 143 | Nano Brazing of Pt-Ag Nanoparticles under Femtosecond Laser Irradiation. <i>Nano-Micro Letters</i> , 2013, 5, 88-92. | 14.4 | 11 |
| 144 | Palladium Nanoparticles Loaded on Carbon Modified TiO ₂ Nanobelts for Enhanced Methanol Electrooxidation. <i>Nano-Micro Letters</i> , 2013, 5, 202-212. | 14.4 | 69 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | Tensile and fatigue properties of fiber laser welded high strength low alloy and DP980 dual-phase steel joints. <i>Materials & Design</i> , 2013, 43, 373-383. | 5.1 | 112 |
| 146 | Self-Oriented Nanojoining of Silver Nanowires via Surface Selective Activation. <i>Particle and Particle Systems Characterization</i> , 2013, 30, 420-426. | 1.2 | 49 |
| 147 | Multiple Memory Shape Memory Alloys. <i>Advanced Engineering Materials</i> , 2013, 15, 386-393. | 1.6 | 70 |
| 148 | Predicting Transient Softening in the Sub-Critical Heat-Affected Zone of Dual-Phase and Martensitic Steel Welds. <i>ISIJ International</i> , 2013, 53, 110-118. | 0.6 | 24 |
| 149 | Metal–Metal Bonding Process Using Cu+Ag Mixed Nanoparticles. <i>Materials Transactions</i> , 2013, 54, 879-883. | 0.4 | 25 |
| 150 | Mechanism of Low Temperature Sintering-Bonding through <i>in-Situ&/i> Formation of Silver Nanoparticles Using Silver Oxide Microparticles. <i>Materials Transactions</i> , 2013, 54, 872-878. | 0.4 | 14 |
| 151 | Molecular Dynamics Simulation of Sintering and Surface Premelting of Silver Nanoparticles. <i>Materials Transactions</i> , 2013, 54, 884-889. | 0.4 | 49 |
| 152 | Palladium Nanoparticles Loaded on Carbon Modified TiO ₂ Nanobelts for Enhanced Methanol Electrooxidation. <i>Nano-Micro Letters</i> , 2013, 5, 202. | 14.4 | 5 |
| 153 | Microstructure, hardness and tensile properties of fusion zone in laser welding of advanced high strength steels. <i>Canadian Metallurgical Quarterly</i> , 2012, 51, 328-335. | 0.4 | 15 |
| 154 | EFFECTS OF HOLDING TIME ON HAZ-SOFTENING IN RESISTANCE SPOT WELDED DP980 STEELS. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1485, 95-100. | 0.1 | 1 |
| 155 | Controlled joining of Ag nanoparticles with femtosecond laser radiation. <i>Journal of Applied Physics</i> , 2012, 112, . | 1.1 | 34 |
| 156 | Laser sintering of silver nanoparticle thin films: microstructure and optical properties. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 108, 685-691. | 1.1 | 85 |
| 157 | Microscopy study of snail trail phenomenon on photovoltaic modules. <i>RSC Advances</i> , 2012, 2, 11359. | 1.7 | 48 |
| 158 | Room-temperature pressureless bonding with silver nanowire paste: towards organic electronic and heat-sensitive functional devices packaging. <i>Journal of Materials Chemistry</i> , 2012, 22, 12997. | 6.7 | 66 |
| 159 | Functionalization of silver nanowire surfaces with copper oxide for surface-enhanced Raman spectroscopic bio-sensing. <i>Journal of Materials Chemistry</i> , 2012, 22, 15495. | 6.7 | 33 |
| 160 | Thiocarboxylate functionalization of silver nanoparticles: effect of chain length on the electrical conductivity of nanoparticles and their polymer composites. <i>Journal of Materials Chemistry</i> , 2012, 22, 20048. | 6.7 | 58 |
| 161 | Femtosecond laser welded nanostructures and plasmonic devices. <i>Journal of Laser Applications</i> , 2012, 24, . | 0.8 | 71 |
| 162 | Adsorption and Photocatalytic Degradation Kinetics of Pharmaceuticals by TiO ₂ Nanowires During Water Treatment. <i>Waste and Biomass Valorization</i> , 2012, 3, 443-449. | 1.8 | 71 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 163 | Reinforcement of Ag nanoparticle paste with nanowires for low temperature pressureless bonding. Journal of Materials Science, 2012, 47, 6801-6811. | 1.7 | 51 |
| 164 | Fiber Laser Welded AZ31 Magnesium Alloy: The Effect of Welding Speed on Microstructure and Mechanical Properties. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 2133-2147. | 1.1 | 41 |
| 165 | Improvement of Bondability by Depressing the Inhomogeneous Distribution of Nanoparticles in a Sintering Bonding Process with Silver Nanoparticles. Journal of Electronic Materials, 2012, 41, 1924-1930. | 1.0 | 27 |
| 166 | Polymer-Protected Cu-Ag Mixed NPs for Low-Temperature Bonding Application. Journal of Electronic Materials, 2012, 41, 1886-1892. | 1.0 | 40 |
| 167 | Crossed-Wire Laser Microwelding of Pt-10% Ir to 316 Low-Carbon Vacuum Melted Stainless Steel: Part I. Mechanism of Joint Formation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1223-1233. | 1.1 | 9 |
| 168 | Microstructure Refinement After the Addition of Titanium Particles in AZ31 Magnesium Alloy Resistance Spot Welds. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 598-609. | 1.1 | 15 |
| 169 | Crossed-Wire Laser Microwelding of Pt-10% Ir to 316 LVM Stainless Steel: Part II. Effect of Orientation on Joining Mechanism. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1234-1243. | 1.1 | 8 |
| 170 | Tensile Properties and Work Hardening Behavior of Laser-Welded Dual-Phase Steel Joints. Journal of Materials Engineering and Performance, 2012, 21, 222-230. | 1.2 | 62 |
| 171 | Preparation of PVP coated Cu NPs and the application for low-temperature bonding. Journal of Materials Chemistry, 2011, 21, 15981. | 6.7 | 183 |
| 172 | New process of electroplate Sn bumping on TSV without a PR mould for 3D-chip stacking. Metals and Materials International, 2011, 17, 631-635. | 1.8 | 2 |
| 173 | Microstructure and Mechanical Properties of Fiber-Laser-Welded and Diode-Laser-Welded AZ31 Magnesium Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1974-1989. | 1.1 | 70 |
| 174 | Mechanical and Functional Properties of Laser-Welded Ti-55.8% Ni Nitinol Wires. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 2166-2175. | 1.1 | 74 |
| 175 | Tempering of Martensite in Dual-Phase Steels and Its Effects on Softening Behavior. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3115-3129. | 1.1 | 156 |
| 176 | Effect of Chemistry on Nonisothermal Tempering and Softening of Dual-Phase Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3242-3248. | 1.1 | 39 |
| 177 | Silver Nanoparticle Paste for Low-Temperature Bonding of Copper. Journal of Electronic Materials, 2011, 40, 1394-1402. | 1.0 | 137 |
| 178 | Hydrothermal growth of free standing TiO ₂ nanowire membranes for photocatalytic degradation of pharmaceuticals. Journal of Hazardous Materials, 2011, 189, 278-285. | 6.5 | 150 |
| 179 | Resistance microwelding of 316L stainless steel wire to block. Science and Technology of Welding and Joining, 2011, 16, 546-552. | 1.5 | 6 |
| 180 | A New Non-PRM Bumping Process by Electroplating on Si Die for Three Dimensional Packaging. Materials Transactions, 2010, 51, 1887-1892. | 0.4 | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | Resistance-Spot-Welded AZ31 Magnesium Alloys: Part I. Dependence of Fusion Zone Microstructures on Second-Phase Particles. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 1511-1522. | 1.1 | 46 |
| 182 | Softening Kinetics in the Subcritical Heat-Affected Zone of Dual-Phase Steel Welds. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2348-2356. | 1.1 | 90 |
| 183 | The Mechanisms of Resistance Spot Welding of Magnesium to Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2651-2661. | 1.1 | 77 |
| 184 | Resistance Spot Welded AZ31 Magnesium Alloys, Part II: Effects of Welding Current on Microstructure and Mechanical Properties. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2642-2650. | 1.1 | 24 |
| 185 | Low temperature sintering of Ag nanoparticles for flexible electronics packaging. Applied Physics Letters, 2010, 97, . | 1.5 | 265 |
| 186 | Electromagnetic impact welding of Mg to Al sheets. Science and Technology of Welding and Joining, 2009, 14, 549-553. | 1.5 | 68 |
| 187 | Electrode worksheet interface behaviour during resistance spot welding of Al alloy 5182. Science and Technology of Welding and Joining, 2009, 14, 295-304. | 1.5 | 14 |
| 188 | Bonding Mechanisms in Resistance Microwelding of 316 Low-Carbon Vacuum Melted Stainless Steel Wires. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 910-919. | 1.1 | 14 |
| 189 | InÂitu Studies of the Effect of Ultrasound During Deformation on Residual Hardness of a Metal. Journal of Electronic Materials, 2009, 38, 647-654. | 1.0 | 15 |
| 190 | Comparison of Insulated with Bare Au Bonding Wire: HAZ Length, HAZ Breaking Force, and FAB Deformability. Journal of Electronic Materials, 2009, 38, 834-842. | 1.0 | 8 |
| 191 | Concurrent Optimization of Crescent Bond Pull Force and Tail Breaking Force in a Thermosonic Cu Wire Bonding Process. IEEE Transactions on Electronics Packaging Manufacturing, 2009, 32, 157-163. | 1.6 | 16 |
| 192 | Influence of superimposed ultrasound on deformability of Cu. Journal of Applied Physics, 2009, 106, . | 1.1 | 76 |
| 193 | Effects of superimposed ultrasound on deformation of gold. Journal of Applied Physics, 2009, 105, . | 1.1 | 65 |
| 194 | Transmission Electron Microscopy and Nanoindentation Study of the Weld Zone Microstructure of Diode-Laser-Joined Automotive Transformation-Induced Plasticity Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 593-603. | 1.1 | 14 |
| 195 | Influence of microstructure and weld size on the mechanical behaviour of dissimilar AHSS resistance spot welds. Science and Technology of Welding and Joining, 2008, 13, 769-776. | 1.5 | 121 |
| 196 | Effects of weld microstructure on static and impact performance of resistance spot welded joints in advanced high strength steels. Science and Technology of Welding and Joining, 2008, 13, 294-304. | 1.5 | 125 |
| 197 | Effects of Welding Parameters on the Mechanical Performance of Laser Welded Nitinol. Materials Transactions, 2008, 49, 2702-2708. | 0.4 | 50 |
| 198 | Effect of Forging Force on Fatigue Behavior of Spot Welded Joints of Aluminum Alloy 5182. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2007, 129, 95-100. | 1.3 | 13 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Novel technique for laser lap welding of zinc coated sheet steels. Journal of Laser Applications, 2007, 19, 259-264. | 0.8 | 63 |
| 200 | Evolution of Cu/Al Intermetallic Compounds in the Copper Bump bonds during Aging Process. , 2007, , . | | 8 |
| 201 | The Feasibility of Au Ball Bonding on Sn-Plated Cu. Journal of Electronic Materials, 2007, 36, 682-689. | 1.0 | 2 |
| 202 | A study of transient liquid-phase bonding of Ag-Cu using differential scanning calorimetry. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 2493-2504. | 1.1 | 31 |
| 203 | Footprint study of ultrasonic wedge-bonding with aluminum wire on copper substrate. Journal of Electronic Materials, 2006, 35, 433-442. | 1.0 | 65 |
| 204 | Characteristics of Sn-Cu Solder Bump Formed by Electroplating for Flip Chip. IEEE Transactions on Electronics Packaging Manufacturing, 2006, 29, 10-16. | 1.6 | 23 |
| 205 | Effects of Au plating on dynamic resistance during small-scale resistance spot welding of thin Ni sheets. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 1901-1910. | 1.1 | 10 |
| 206 | Bonding mechanism in ultrasonic gold ball bonds on copper substrate. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 1279-1286. | 1.1 | 53 |
| 207 | Interfacial phenomena and joint strength in resistance microwelding of crossed Au-plated Ni wires. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 2717-2724. | 1.1 | 19 |
| 208 | Mechanism of resistance microwelding of crossed fine nickel wires. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 3165-3176. | 1.1 | 35 |
| 209 | Electrode pitting in resistance spot welding of aluminum alloy 5182. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 217-226. | 1.1 | 45 |
| 210 | Effects of TiC composite coating on electrode degradation in microresistance welding of nickel-plated steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 1501-1511. | 1.1 | 25 |
| 211 | Electrode sticking during micro-resistance welding of thin metal sheets. IEEE Transactions on Electronics Packaging Manufacturing, 2002, 25, 355-361. | 1.6 | 45 |
| 212 | Pulsed Nd:YAG laser welding of copper using oxygenated assist gases. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2019-2030. | 1.1 | 57 |
| 213 | A new hybrid process for surface modification by combining brush plating with nitrocarburizing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2240-2244. | 1.1 | 2 |
| 214 | Formation of a TiB ₂ -reinforced copper-based composite by mechanical alloying and hot pressing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 1275-1280. | 1.1 | 45 |
| 215 | Effects of au plating on small-scale resistance spot welding of thin-sheet nickel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2667-2676. | 1.1 | 40 |
| 216 | Weldability of thin sheet metals by small-scale resistance spot welding using high-frequency inverter and capacitor-discharge power supplies. Journal of Electronic Materials, 2001, 30, 1012-1020. | 1.0 | 35 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 217 | Analytical modeling of isothermal solidification during transient liquid phase (TLP) bonding. Journal of Materials Science Letters, 2001, 20, 841-844. | 0.5 | 47 |
| 218 | Microresistance spot welding of Kovar, steel, and nickel. Science and Technology of Welding and Joining, 2001, 6, 63-72. | 1.5 | 55 |
| 219 | Comparative study of small scale and "large scale" resistance spot welding. Science and Technology of Welding and Joining, 2001, 6, 273-280. | 1.5 | 65 |
| 220 | Weldability of thin sheet metals during small-scale resistance spot welding using an alternating-current power supply. Journal of Electronic Materials, 2000, 29, 1090-1099. | 1.0 | 62 |