

# Pengkang Zhao

## List of Publications by Year in descending order

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51  
papers

867  
citations

471509

17  
h-index

526287

27  
g-index

52  
all docs

52  
docs citations

52  
times ranked

711  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and densification of (Zr-Hf-Nb-Ta)C-Co high entropy cermet prepared by pressureless melt infiltration using spark plasma sintering. <i>Journal of Alloys and Compounds</i> , 2022, 900, 163412.	5.5	11
2	Two-photon fluorescence imaging of mitochondrial viscosity with water-soluble pyridinium inner salts. <i>New Journal of Chemistry</i> , 2022, 46, 2487-2494.	2.8	3
3	Dual laser-beam synchronous self-fusion welding of Ti-6Al-4V titanium alloys T-joints based on prefabricated welding materials. <i>Journal of Materials Research and Technology</i> , 2022, 17, 2560-2576.	5.8	9
4	Microstructural evolution, mechanical properties, and FEM analysis of the residual stress of sapphire joints brazed with a novel borate glass. <i>Ceramics International</i> , 2021, 47, 6699-6710.	4.8	6
5	Effect of hydrogen addition on compression deformation behaviour of Ti-0.3Mo-0.8Ni alloy argon-arc welded joints. <i>Journal of Iron and Steel Research International</i> , 2021, 28, 621-628.	2.8	1
6	Recent Advances in Chemical Biology of Mitochondria Targeting. <i>Frontiers in Chemistry</i> , 2021, 9, 683220.	3.6	26
7	Effects of pin morphology on the interface defects of the FSWed lap joints of 2A12 aluminum alloy. <i>Journal of Manufacturing Processes</i> , 2021, 68, 128-140.	5.9	4
8	Antisolvent-free Fabrication of Efficient and Stable Sn-Pb Perovskite Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100675.	5.8	9
9	Microstructure and Mechanical Properties of Hydrogenated Ti-0.3Mo-0.8Ni Alloy Gas Tungsten Arc Welding Joints. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 1022-1029.	2.5	4
10	Two-photon fluorogenic probe for visualizing PGP-1 activity in inflammatory tissues and serum from patients. <i>Chemical Communications</i> , 2021, 57, 13186-13189.	4.1	3
11	Influences of welding parameters on axial force and deformations of micro pinless friction stir welding. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 106, 3273-3283.	3.0	9
12	Microstructural characterization and mechanical properties of micro friction stir welded dissimilar Al/Cu ultra-thin sheets. <i>Journal of Manufacturing Processes</i> , 2020, 60, 356-365.	5.9	32
13	Hot Deformation Behavior of Hydrogenated 0.21wt.%H Ti-0.3Mo-0.8Ni Alloy Welded Joints. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 4814-4821.	2.5	4
14	Effects of tool shoulder size on the thermal process and material flow behaviors in ultrasonic vibration enhanced friction stir welding. <i>Journal of Manufacturing Processes</i> , 2020, 53, 69-83.	5.9	28
15	Numerical and Experimental Investigation on Power Input during Linear Friction Welding Between TC11 and TC17 Alloys. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 2061-2072.	2.5	3
16	Microstructure, static and fatigue properties of refill friction stir spot welded 7075-T6 aluminium alloy using a modified tool. <i>Science and Technology of Welding and Joining</i> , 2019, 24, 587-600.	3.1	33
17	Role of tool design on thermal cycling and mechanical properties of a high-speed micro friction stir welded 7075-T6 aluminum alloy. <i>Journal of Manufacturing Processes</i> , 2019, 48, 145-153.	5.9	35
18	Effects of laser-textured surface pattern on the wetting behavior and composition optimization of brazing filler: experimental study and numerical simulation. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	2.3	6

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19	Visualisation and numerical simulation of material flow behaviour during high-speed FSW process of 2024 aluminium alloy thin plate. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 102, 1901-1912.	3.0	17
20	Effects of travel speed on mechanical properties of AA7075-T6 ultra-thin sheet joints fabricated by high rotational speed micro pinless friction stir welding. <i>Journal of Materials Processing Technology</i> , 2019, 265, 63-70.	6.3	36
21	Effect of high rotational speed on temperature distribution, microstructure evolution, and mechanical properties of friction stir welded 6061-T6 thin plate joints. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 96, 1823-1833.	3.0	33
22	Microstructure evolution and fracture behaviour of friction stir welded 6061-T6 thin plate joints under high rotational speed. <i>Science and Technology of Welding and Joining</i> , 2018, 23, 333-343.	3.1	23
23	Manufacture of biodegradable magnesium alloy by high speed friction stir processing. <i>Journal of Manufacturing Processes</i> , 2018, 36, 22-32.	5.9	45
24	Bonding mechanisms and electronic properties of HgIn <sub>2</sub> Te <sub>4</sub> with Au doping: First-principles study. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	1
25	High speed friction stir welding of ultra-thin AA6061-T6 sheets using different backing plates. <i>Journal of Manufacturing Processes</i> , 2018, 33, 219-227.	5.9	45
26	Calculation of welding tool pin width for friction stir welding of thin overlapping sheets. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 98, 1721-1731.	3.0	18
27	Effects of surface microstructure on the active element content and wetting behavior of brazing filler metal during brazing Ti <sub>3</sub> SiC <sub>2</sub> ceramic and Cu. <i>Vacuum</i> , 2018, 156, 256-263.	3.5	28
28	Microstructure Evolution and Mechanical Properties of High-Speed Friction Stir Welded Aluminum Alloy Thin Plate Joints. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 3590-3599.	2.5	10
29	Defect features, texture and mechanical properties of friction stir welded lap joints of 2A97 Al-Li alloy thin sheets. <i>Materials Characterization</i> , 2017, 125, 160-173.	4.4	39
30	Microstructure, texture and mechanical properties of friction stir welded butt joints of 2A97 Al Li alloy ultra-thin sheets. <i>Journal of Alloys and Compounds</i> , 2017, 692, 155-169.	5.5	41
31	Low cycle fatigue properties of linear friction welded joint of TC11 and TC17 titanium alloys. <i>Journal of Alloys and Compounds</i> , 2016, 675, 248-256.	5.5	33
32	Effects of interfacial reaction and atomic diffusion on the mechanical property of Ti <sub>3</sub> SiC <sub>2</sub> ceramic to Cu brazing joints. <i>Vacuum</i> , 2016, 130, 56-62.	3.5	36
33	An Effective Approach to Improving Cadmium Telluride (111)A Surface by Molecular-Beam-Epitaxy Growth of Tellurium Monolayer. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 726-735.	8.0	2
34	Measurement of core level and band offsets at the interface of ITO/Hg <sub>3</sub> In <sub>2</sub> Te <sub>6</sub> (110) heterojunction by synchrotron radiation photoelectron spectroscopy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2016, 207, 24-28.	1.7	4
35	The modification of electrical properties of Au/n-Hg <sub>3</sub> In <sub>2</sub> Te <sub>6</sub> Schottky contact by the introduction of ITO interlayer. <i>Current Applied Physics</i> , 2016, 16, 623-627.	2.4	2
36	Solder wetting behavior enhancement via laser-textured surface microcosmic topography. <i>Applied Surface Science</i> , 2016, 368, 208-215.	6.1	21

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37	Spectroscopic studies of CdTe(111) bulk and surface electronic structure. <i>Physical Review B</i> , 2015, 91, .	3.2	11
38	Radial Distribution Characteristics of Microstructure and Mechanical Properties of TiAl <sub>4</sub> Butt Joint by Rotary Friction Welding. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015, 28, 1291-1298.	2.9	10
39	Electronic structure of the quantum spin Hall parent compound CdTe and related topological issues. <i>Physical Review B</i> , 2014, 90, .	3.2	11
40	The effect of chemical polishing on the interface structure and electrical property of Au/Cd <sub>0.9</sub> Zn <sub>0.1</sub> Te contact. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 115, 1309-1316.	2.3	14
41	TEM study on HgIn <sub>2</sub> Te <sub>4</sub> precipitates in Hg <sub>3</sub> In <sub>2</sub> Te <sub>6</sub> crystals grown by the Bridgman method. <i>CrystEngComm</i> , 2014, 16, 7660-7666.	2.6	2
42	HRTEM study on the ordered phases in Hg <sub>3</sub> In <sub>2</sub> Te <sub>6</sub> crystals grown by Bridgman method. <i>CrystEngComm</i> , 2014, 16, 5073-5079.	2.6	4
43	The effect of fast annealing treatment on the interface structure and electrical properties of Au/Hg <sub>3</sub> In <sub>2</sub> Te <sub>6</sub> contact. <i>Journal of Materials Science</i> , 2014, 49, 6160-6166.	3.7	5
44	On the morphology and crystallography of Hg <sub>5</sub> In <sub>2</sub> Te <sub>8</sub> precipitation in Hg <sub>3</sub> In <sub>2</sub> Te <sub>6</sub> . <i>Journal of Alloys and Compounds</i> , 2014, 601, 298-306.	5.5	8
45	Effect of Ar <sup>+</sup> ion etching treatment on the surface work function of Hg <sub>3</sub> In <sub>2</sub> Te <sub>6</sub> wafer. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2013, 187, 49-52.	1.7	2
46	Influence of welding parameters and tool pin profile on microstructure and mechanical properties along the thickness in a friction stir welded aluminum alloy. <i>Materials &amp; Design</i> , 2013, 47, 599-606.	5.1	78
47	Growth and electron microscopy study of GaN/MgAl <sub>2</sub> O <sub>4</sub> heterostructures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 1302-1304.	1.8	10
48	Finite Element Simulation of Deformation Behavior in Friction Welding of Al-Cu-Mg Alloy. <i>Journal of Materials Engineering and Performance</i> , 2006, 15, 627-631.	2.5	13
49	Effects of external electric field on microstructure and property of friction welded joint between copper and stainless steel. <i>Journal of Materials Science</i> , 2006, 41, 4137-4142.	3.7	18
50	Photoluminescence analysis on the indium doped Cd <sub>0.9</sub> Zn <sub>0.1</sub> Te crystal. <i>Journal of Applied Physics</i> , 2006, 100, 013518.	2.5	19
51	Title is missing!. <i>Journal of Materials Science</i> , 2003, 38, 1147-1151.	3.7	2