

# Peng Peng

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9314579/publications.pdf>

Version: 2024-02-01

74  
papers

3,170  
citations

147801  
31  
h-index

161849  
54  
g-index

74  
all docs

74  
docs citations

74  
times ranked

3589  
citing authors

#	ARTICLE	IF	CITATIONS
1	Black phosphorus ink formulation for inkjet printing of optoelectronics and photonics. Nature Communications, 2017, 8, 278.	12.8	311
2	Joining of Silver Nanomaterials at Low Temperatures: Processes, Properties, and Applications. ACS Applied Materials & Interfaces, 2015, 7, 12597-12618.	8.0	276
3	Microstructure, residual stress and tensile properties control of wire-arc additive manufactured 2319 aluminum alloy with laser shock peening. Journal of Alloys and Compounds, 2018, 747, 255-265.	5.5	245
4	Moisture-enabled Electricity Generation: From Physics and Materials to Self-Powered Applications. Advanced Materials, 2020, 32, e2003722.	21.0	175
5	Hydrothermal growth of free standing TiO <sub>2</sub> nanowire membranes for photocatalytic degradation of pharmaceuticals. Journal of Hazardous Materials, 2011, 189, 278-285.	12.4	150
6	Laser shock peening of laser additive manufactured Ti6Al4V titanium alloy. Surface and Coatings Technology, 2018, 349, 503-510.	4.8	131
7	Enhanced Transformation of Cr(VI) by Heterocyclic-N within Nitrogen-Doped Biochar: Impact of Surface Modulatory Persistent Free Radicals (PFRs). Environmental Science & Technology, 2020, 54, 8123-8132.	10.0	107
8	Effects of heat treatment combined with laser shock peening on wire and arc additive manufactured Ti17 titanium alloy: Microstructures, residual stress and mechanical properties. Surface and Coatings Technology, 2020, 396, 125908.	4.8	74
9	Effect of the size of silver nanoparticles on SERS signal enhancement. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	70
10	Microstructure and mechanical properties of fiber laser welded QP980 steel. Journal of Materials Processing Technology, 2018, 256, 229-238.	6.3	68
11	Room-temperature pressureless bonding with silver nanowire paste: towards organic electronic and heat-sensitive functional devices packaging. Journal of Materials Chemistry, 2012, 22, 12997.	6.7	66
12	Highly localized heat generation by femtosecond laser induced plasmon excitation in Ag nanowires. Applied Physics Letters, 2013, 102, .	3.3	60
13	Laser shock peening induced fatigue crack retardation in Ti-17 titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 737, 94-104.	5.6	60
14	Microstructural evolution and deformation behavior of fiber laser welded QP980 steel joint. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 717, 124-133.	5.6	56
15	Concurrent photocatalytic and filtration processes using doped TiO <sub>2</sub> coated quartz fiber membranes in a photocatalytic membrane reactor. Chemical Engineering Journal, 2017, 330, 531-540.	12.7	53
16	Reinforcement of Ag nanoparticle paste with nanowires for low temperature pressureless bonding. Journal of Materials Science, 2012, 47, 6801-6811.	3.7	51
17	Self-Oriented Nanojoining of Silver Nanowires via Surface Selective Activation. Particle and Particle Systems Characterization, 2013, 30, 420-426.	2.3	49
18	Microscopy study of snail trail phenomenon on photovoltaic modules. RSC Advances, 2012, 2, 11359.	3.6	48

#	ARTICLE	IF	CITATIONS
19	Effect of laser shock processing on oxidation resistance of laser additive manufactured Ti6Al4V titanium alloy. Corrosion Science, 2020, 170, 108655.	6.6	48
20	Microstructure and mechanical properties of laser shock peened 38CrSi steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139486.	5.6	45
21	Microstructure and tensile behavior of fiber laser-welded blanks of DP600 and DP980 steels. Journal of Materials Processing Technology, 2016, 236, 73-83.	6.3	44
22	Preparation of nanoparticle and nanowire mixed pastes and their low temperature sintering. Journal of Alloys and Compounds, 2017, 690, 86-94.	5.5	43
23	<i>In situ</i> nanojoining of Y- and T-shaped silver nanowires structures using femtosecond laser radiation. Nanotechnology, 2016, 27, 125201.	2.6	40
24	Laser writing of Cu/Cu <sub>2</sub> O integrated structure on flexible substrate for humidity sensing. Applied Surface Science, 2019, 494, 684-690.	6.1	40
25	Zero-dimensional to three-dimensional nanojoining: current status and potential applications. RSC Advances, 2016, 6, 75916-75936.	3.6	37
26	Combining manufacturing of titanium alloy through direct energy deposition and laser shock peening processes. Materials and Design, 2021, 203, 109626.	7.0	37
27	Investigation for Synergies of Ionic Strength and Flow Velocity on Colloidal-Sized Microplastic Transport and Deposition in Porous Media Using the Colloidal AFM Probe. Langmuir, 2020, 36, 6292-6303.	3.5	36
28	Impact toughness and microstructural response of Ti-17 titanium alloy subjected to laser shock peening. Surface and Coatings Technology, 2017, 327, 32-41.	4.8	35
29	Dynamic response and residual stress fields of Ti6Al4V alloy under shock wave induced by laser shock peening. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 065016.	2.0	34
30	Chemical sintering of direct-written silver nanowire flexible electrodes under room temperature. Nanotechnology, 2017, 28, 285703.	2.6	34
31	Functionalization of silver nanowire surfaces with copper oxide for surface-enhanced Raman spectroscopic bio-sensing. Journal of Materials Chemistry, 2012, 22, 15495.	6.7	33
32	Fatigue of Ti-17 titanium alloy with hole drilled prior and post to laser shock peening. Optics and Laser Technology, 2019, 115, 166-170.	4.6	33
33	Laser weldability of TWIP980 with DP980/B1500HS/QP980 steels: Microstructure and mechanical properties. Optics and Laser Technology, 2020, 124, 105961.	4.6	32
34	Room-Temperature Joining of Silver Nanoparticles Using Potassium Chloride Solution for Flexible Electrode Application. Journal of Physical Chemistry C, 2018, 122, 2704-2711.	3.1	31
35	One-step selective laser patterning of copper/graphene flexible electrodes. Nanotechnology, 2019, 30, 185301.	2.6	30
36	Low-Temperature Sintering Bonding Using Silver Nanoparticle Paste for Electronics Packaging. Journal of Nanomaterials, 2015, 2015, 1-7.	2.7	29

#	ARTICLE	IF	CITATIONS
37	Design of a Yellow-Emitting Phosphor with Enhanced Red Emission via Valence State-control for Warm White LEDs Application. Scientific Reports, 2016, 6, 31199.	3.3	27
38	Electrical and Mechanical Properties of Ink Printed Composite Electrodes on Plastic Substrates. Applied Sciences (Switzerland), 2018, 8, 2101.	2.5	24
39	Microstructure- and Strain Rate-Dependent Tensile Behavior of Fiber Laser-Welded DP980 Steel Joint. Journal of Materials Engineering and Performance, 2016, 25, 668-676.	2.5	23
40	Photocatalytic Degradation of Microcystins by TiO <sub>2</sub> Using UV-LED Controlled Periodic Illumination. Catalysts, 2019, 9, 181.	3.5	22
41	Improvement in oxidation resistance of Ti <sub>2</sub> AlNb alloys at high temperatures by laser shock peening. Corrosion Science, 2021, 184, 109364.	6.6	22
42	Gradient microstructure evolution in laser shock peened Ti <sub>6</sub> Al <sub>4</sub> V titanium alloy. Surface and Coatings Technology, 2022, 437, 128378.	4.8	22
43	A Self-Powered Nanogenerator for the Electrical Protection of Integrated Circuits from Trace Amounts of Liquid. Nano-Micro Letters, 2020, 12, 5.	27.0	20
44	Improving the electrical contact at a Pt/TiO <sub>2</sub> nanowire interface by selective application of focused femtosecond laser irradiation. Nanotechnology, 2017, 28, 405302.	2.6	19
45	Friction Stir Spot Welding-Brazing of Al and Hot-Dip Aluminized Ti Alloy with Zn Interlayer. Metals, 2018, 8, 922.	2.3	19
46	The laser writing of highly conductive and anti-oxidative copper structures in liquid. Nanoscale, 2020, 12, 563-571.	5.6	19
47	HAZ Characterization and Mechanical Properties of QP980-DP980 Laser Welded Joints. Chinese Journal of Mechanical Engineering (English Edition), 2021, 34, .	3.7	18
48	Nanoscale Wire Bonding of Individual Ag Nanowires on Au Substrate at Room Temperature. Nano-Micro Letters, 2017, 9, 26.	27.0	16
49	Comparison of mechanical and corrosion properties of 7050 aluminum alloy after different laser shock peening. Optics and Laser Technology, 2022, 151, 108061.	4.6	14
50	Laser joining of Mo and Ta sheets with Ti <sub>6</sub> Al <sub>4</sub> V or Ni filler. Optics and Laser Technology, 2018, 106, 487-494.	4.6	13
51	Flexible Nonenzymatic Glucose Sensing with One-Step Laser-Fabricated Cu <sub>2</sub> O/Cu Porous Structure. Advanced Engineering Materials, 2021, 23, 2100192.	3.5	13
52	Direct laser writing of copper-graphene composites for flexible electronics. Optics and Lasers in Engineering, 2021, 142, 106605.	3.8	13
53	Effects of Laser Shock Processing on Fatigue Crack Growth in Ti-17 Titanium Alloy. Journal of Materials Engineering and Performance, 2017, 26, 813-821.	2.5	12
54	Near-ideal compressive strength of nanoporous silver composed of nanowires. Acta Materialia, 2019, 173, 163-173.	7.9	12

#	ARTICLE	IF	CITATIONS
55	Titanium alloy components fabrication by laser depositing TA15 powders on TC17 forged plate: Microstructure and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 818, 141382.	5.6	12
56	SiC chip attachment sintered by nanosilver paste and their shear strength evaluation. Welding in the World, Le Soudage Dans Le Monde, 2019, 63, 1055-1063.	2.5	11
57	Contact engineering of single core/shell SiC/SiO <sub>2</sub> nanowire memory unit with high current tolerance using focused femtosecond laser irradiation. Nanoscale, 2020, 12, 5618-5626.	5.6	11
58	Self-generated Local Heating Induced Nanojoining for Room Temperature Pressureless Flexible Electronic Packaging. Scientific Reports, 2015, 5, 9282.	3.3	10
59	Laser-Patterned Copper Electrodes for Proximity and Tactile Sensors. Advanced Materials Interfaces, 2020, 7, 1901845.	3.7	10
60	Low-temperature sintering of silver patterns on polyimide substrate printed with particle-free ink. Nanotechnology, 2020, 31, 305301.	2.6	10
61	Effects of Heat Treatments on Microstructures and Mechanical Properties of Ti6Al4V Alloy Produced by Laser Solid Forming. Metals, 2021, 11, 346.	2.3	10
62	Fast X-ray Differential Phase Contrast Imaging with One Exposure and without Movements. Scientific Reports, 2019, 9, 1113.	3.3	8
63	Laser assisted ink-printing of copper oxide nanoplates for memory device. Materials Letters, 2020, 261, 127097.	2.6	7
64	Brazing of Ni-based single crystal superalloy with high carbon content $\hat{3}$ layer. Applied Surface Science, 2020, 514, 145936.	6.1	7
65	Laser modification of Au-CuO-Au structures for improved electrical and electro-optical properties. Nanotechnology, 2022, 33, 245205.	2.6	6
66	Laser Erasing and Rewriting of Flexible Copper Circuits. Nano-Micro Letters, 2021, 13, 184.	27.0	5
67	Transient Liquid Phase Bonding of Nickel-Base Single Crystal Alloy with a Novel Ni-Cr-Co-Mo-W-Ta-Re-B Amorphous Interlayer. High Temperature Materials and Processes, 2017, 36, 677-682.	1.4	4
68	Thermal Properties of Laser-Fabricated Copper-Carbon Composite Films on Polyimide Substrate. Advanced Engineering Materials, 2021, 23, 2100623.	3.5	4
69	Hardness Evolution and High Temperature Mechanical Properties of Laser Welded DP980 Steel Joints. High Temperature Materials and Processes, 2018, 37, 587-595.	1.4	3
70	Synthesis of Free-Standing Silver Foam via Oriented and Additive Nanojoining. ACS Applied Materials & Interfaces, 2021, 13, 38637-38646.	8.0	3
71	Formation of metal-semiconductor nanowire heterojunctions by nanosecond laser irradiation. AIP Advances, 2021, 11, .	1.3	3
72	Laser engineering of ITO/ZnO/ITO structures for photodetector applications. Journal of Laser Applications, 2022, 34, 032006.	1.7	3

#	ARTICLE	IF	CITATIONS
73	Effects of Laser Shock Processing on Impact Toughness of Ti-17 Titanium Alloy. High Temperature Materials and Processes, 2018, 37, 325-332.	1.4	2
74	Laser Fabricated Cu <sub>2</sub> O@CuO/Ag Nanocomposite Films for SERS Application**. ChemistrySelect, 2022, 7, .	1.5	2