

# Ping Yang

## List of Publications by Year in descending order

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137  
papers

1,593  
citations

331670

21  
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501196

28  
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137  
all docs

137  
docs citations

137  
times ranked

1021  
citing authors

#	ARTICLE	IF	CITATIONS
1	First-principle study of optical properties of (N, Ga) codoped ZnO. Optics Communications, 2012, 285, 2660-2664.	2.1	65
2	Effect of triangular vacancy defect on thermal conductivity and thermal rectification in graphene nanoribbons. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 2141-2146.	2.1	37
3	The defect location effect on thermal conductivity of graphene nanoribbons based on molecular dynamics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 810-814.	2.1	36
4	Research on characteristics of interfacial heat transport between two kinds of materials using a mixed MD-FE model. Applied Physics A: Materials Science and Processing, 2008, 92, 329-335.	2.3	35
5	Experimental Approach and Evaluation on Dynamic Reliability of PBGA Assembly. IEEE Transactions on Electron Devices, 2009, 56, 2243-2249.	3.0	34
6	A fast algorithm for kinematic chain isomorphism identification based on dividing and matching vertices. Mechanism and Machine Theory, 2014, 72, 25-38.	4.5	34
7	Investigation on optoelectronic performances of Al, N codoped ZnO: First-principles method. Ceramics International, 2015, 41, 2446-2452.	4.8	34
8	Photoelectric properties of 2D ZnO, graphene, silicene materials and their heterostructures. Composites Part B: Engineering, 2022, 233, 109645.	12.0	33
9	Experimental and numerical approach on junction temperature of high-power LED. Microelectronics Reliability, 2014, 54, 926-931.	1.7	32
10	Thermal conductivity of graphene nanoribbons with defects and nitrogen doping. Reactive and Functional Polymers, 2014, 79, 29-35.	4.1	32
11	Surface sliding simulation in micro-gear train for adhesion problem and tribology design by using molecular dynamics model. Computational Materials Science, 2007, 38, 678-684.	3.0	31
12	Isomorphism identification for epicyclic gear mechanism based on mapping property and ant algorithm. Engineering With Computers, 2007, 23, 49-54.	6.1	30
13	Thermal Effects on LED Lamp With Different Thermal Interface Materials. IEEE Transactions on Electron Devices, 2016, 63, 4819-4824.	3.0	28
14	Factors influencing thermal transport across graphene/metal interfaces with van der Waals interactions. Nanoscale, 2019, 11, 14155-14163.	5.6	28
15	Investigation on the contact between graphdiyne and Cu (111) surface. Carbon, 2017, 117, 246-251.	10.3	26
16	An Improved Genetic Algorithm Approach on Mechanism Kinematic Structure Enumeration with Intelligent Manufacturing. Journal of Intelligent and Robotic Systems: Theory and Applications, 2018, 89, 343-350.	3.4	26
17	Numerical investigation on thermal conductivity and thermal rectification in graphene through nitrogen-doping engineering. Applied Physics A: Materials Science and Processing, 2013, 112, 759-765.	2.3	25
18	Effects of uniaxial stress on the electrical structure and optical properties of Al-doped n-type ZnO. Solar Energy, 2016, 140, 21-26.	6.1	24

#	ARTICLE	IF	CITATIONS
19	Investigation on field emission properties of N-doped graphene-carbon nanotube composites. Composites Part B: Engineering, 2015, 75, 250-255.	12.0	22
20	Investigation on electronic and magnetic properties of Co and Mn in ZnO with different doping types. Journal of Magnetism and Magnetic Materials, 2018, 461, 1-5.	2.3	22
21	Optoelectronic performances on different structures of Al-doped ZnO. Journal of the American Ceramic Society, 2018, 101, 5615-5626.	3.8	22
22	Thermal transport at 6H-SiC/graphene buffer layer/GaN heterogeneous interface. Applied Surface Science, 2021, 536, 147828.	6.1	22
23	Thermal properties of triangle nitrogen-doped graphene nanoribbons. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 1306-1311.	2.1	21
24	Influence of doped nitrogen and vacancy defects on the thermal conductivity of graphene nanoribbons. Journal of Molecular Modeling, 2013, 19, 4781-4788.	1.8	20
25	Thermal management performance of bent graphene nanoribbons. RSC Advances, 2013, 3, 17349.	3.6	20
26	Investigation on field emission properties of graphdiyne-BN composite. Journal of Molecular Structure, 2014, 1064, 32-36.	3.6	20
27	Tunable thermal property in edge hydrogenated AA-stacked bilayer graphene nanoribbons. Applied Surface Science, 2016, 362, 86-92.	6.1	20
28	Numerical analysis on meshing friction characteristics of nano-gear train. Tribology International, 2008, 41, 535-541.	5.9	18
29	Physical Mechanism of Interfacial Thermal Resistance in Electronic Packaging Based on a Mixed MD/FE Model. IEEE Transactions on Advanced Packaging, 2008, 31, 496-501.	1.6	18
30	Investigation on field emission properties of graphene-carbon nanotube composites. RSC Advances, 2014, 4, 19622.	3.6	18
31	Investigation on thermal conductivity of bilayer graphene nanoribbons. RSC Advances, 2014, 4, 54474-54479.	3.6	18
32	Two-Dimensional Hole-Array Grating-Coupling-Based Excitation of Bloch Surface Waves for Highly Sensitive Biosensing. Nanoscale Research Letters, 2019, 14, 319.	5.7	18
33	Thermal transport enhancement resolution for graphene/Si and graphene/SiC interfaces. International Journal of Thermal Sciences, 2022, 171, 107231.	4.9	18
34	An improved hybrid immune algorithm for mechanism kinematic chain isomorphism identification in intelligent design. Soft Computing, 2015, 19, 217-223.	3.6	17
35	Structure and interfacial properties investigation for ZnO/graphene interface. Materials Chemistry and Physics, 2019, 229, 1-5.	4.0	17
36	PROPERTY SIMULATION FOR NANO-SCALE INTERFACIAL FRICTION BETWEEN TWO KINDS OF MATERIAL IN MEMS BASED ON AN ATOMISTIC SIMPLIFIED MODEL. International Journal of Modern Physics B, 2007, 21, 3581-3590.	2.0	16

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37	A novel MD/FE coupled model for numerical investigation of interfacial thermal resistance in MEMS/NEMS packaging. <i>Composite Interfaces</i> , 2008, 15, 561-575.	2.3	16
38	Uniaxial stress influence on lattice, band gap and optical properties of n-type ZnO: first-principles calculations. <i>Chinese Physics B</i> , 2012, 21, 016803.	1.4	16
39	Random Vibration Analysis of Planetary Gear Trains. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2013, 135, .	1.6	16
40	Theoretical investigations of sp <sup>2</sup> hybridized capped graphyne nanotubes. <i>Chemical Engineering Science</i> , 2015, 134, 217-221.	3.8	16
41	A high-performance approach on mechanism isomorphism identification based on an adaptive hybrid genetic algorithm for digital intelligent manufacturing. <i>Engineering With Computers</i> , 2009, 25, 397-403.	6.1	15
42	Approach on thermoelectricity reliability of board-level backplane based on the orthogonal experiment design. <i>International Journal of Materials and Structural Integrity</i> , 2010, 4, 170.	0.1	15
43	Drive Characteristics of Viscous Oil Film Considering Temperature Effect. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2011, 133, .	1.5	15
44	Numerical investigation on thermal properties at Cu-Al interface in micro/nano manufacturing. <i>Applied Surface Science</i> , 2012, 258, 3975-3979.	6.1	15
45	Impact of high pressure on the optical and electrical properties of indium-doped n-type wurtzite zinc oxide according to first principles. <i>Materials Science in Semiconductor Processing</i> , 2014, 19, 66-71.	4.0	15
46	Study on interfacial interaction between Si and ZnO. <i>Ceramics International</i> , 2019, 45, 21894-21899.	4.8	15
47	Approach on the Life-Prediction of Solder Joint for Electronic Packaging Under Combined Loading. <i>IEEE Transactions on Reliability</i> , 2013, 62, 870-875.	4.6	14
48	Investigation on electronic and magnetic properties of (Fe, In) co-doped ZnO. <i>Journal of Alloys and Compounds</i> , 2017, 695, 1378-1382.	5.5	14
49	An overview of some key issues about micro/nano manufacturing. <i>International Journal of Materials and Structural Integrity</i> , 2008, 2, 363.	0.1	12
50	The electronic, optical and magnetic properties of Fe doped ZnO and (Fe, Al) co-doped ZnO from first-principles calculations. <i>International Journal of Materials and Structural Integrity</i> , 2015, 9, 151.	0.1	11
51	Approach using the electrical structure and optical properties of aluminium-doped zinc oxide for solar cells. <i>RSC Advances</i> , 2016, 6, 110943-110950.	3.6	11
52	Optoelectronic properties of AZO/ZnO bilayer. <i>Journal of Alloys and Compounds</i> , 2020, 816, 152531.	5.5	11
53	Thermal conductivity enhancement of defective graphene nanoribbons. <i>International Communications in Heat and Mass Transfer</i> , 2020, 117, 104735.	5.6	11
54	Study on photoelectric properties of Si supported ZnO. <i>Journal of Alloys and Compounds</i> , 2020, 843, 155909.	5.5	11

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55	Aluminum and silver doped effects on the electrical structure and optical properties of SnO <sub>2</sub> . Journal of Physics and Chemistry of Solids, 2021, 148, 109763.	4.0	11
56	Design, test and modelling evaluation approach of a novel Si-oil shock absorber for protection of electronic equipment in moving vehicles. Mechanism and Machine Theory, 2008, 43, 18-32.	4.5	10
57	Matching design for multi-chip module packaging by considering thermal control. International Journal of Materials and Structural Integrity, 2008, 2, 207.	0.1	10
58	An improved artificial immune algorithm for mechanism kinematic chain isomorphism identification. International Journal of Materials and Structural Integrity, 2008, 2, 383.	0.1	10
59	A hybrid optimization approach for chip placement of multi-chip module packaging. Microelectronics Journal, 2009, 40, 1235-1243.	2.0	10
60	Numerical Evaluation on Heat Transport Characteristics Between Al <sub>2</sub> O <sub>3</sub> and ZnO Materials in Nanoscale Situation. ACS Applied Materials & Interfaces, 2012, 4, 158-162.	8.0	10
61	Thermal conductivity and thermal rectification in H-terminated graphene nanoribbons. RSC Advances, 2015, 5, 38001-38005.	3.6	10
62	Numerical study on photoelectric characteristics of Mo-doped SnO <sub>2</sub> . Superlattices and Microstructures, 2020, 138, 106387.	3.1	10
63	Nanoindentation Experimental Approach and Numerical Simulation of Al/Cr Bilayer Films. Composite Interfaces, 2011, 18, 615-626.	2.3	9
64	Optimal approach on net routing for VLSI physical design based on Tabu-ant colonies modeling. Applied Soft Computing Journal, 2014, 21, 376-381.	7.2	9
65	Vibrational fatigue and reliability of package-on-package stacked chip assembly. Microelectronics Journal, 2019, 92, 104609.	2.0	9
66	Failure analysis and reliability reinforcement on gold wire in high-power COB-LED under current and thermal shock combined loading. Applied Thermal Engineering, 2019, 150, 1046-1053.	6.0	9
67	Effects of defects on heat conduction of graphene/hexagonal boron nitride heterointerface. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126774.	2.1	9
68	Property approach of Si based ZnO films under thermal shock. Ceramics International, 2021, 47, 28985-28991.	4.8	9
69	Behavior of Nanocracks on Micro/Nano-Interfacial Structure Under Thermal Flux Conditions. Current Nanoscience, 2009, 5, 335-338.	1.2	9
70	Computer-aided design integration of a reinforced vibration isolator for electronic equipment's system based on experimental investigation. Structural and Multidisciplinary Optimization, 2008, 35, 489-498.	3.5	8
71	A systematic approach on computational analysis and optimization design: for a nonlinear coupling shock absorber. Engineering With Computers, 2008, 24, 87-96.	6.1	8
72	Numerical investigation on dynamic characteristics of BGA structural integrity by using finite element method. International Journal of Materials and Structural Integrity, 2008, 2, 280.	0.1	8

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73	Numerical and Test Evaluation on Adhesion Properties in Cr/Al Interface Film Structure. <i>Current Nanoscience</i> , 2011, 7, 288-293.	1.2	8
74	First-principle investigation of electronic structure and optical properties of In-doped wurtzite ZnO. <i>International Journal of Materials and Structural Integrity</i> , 2011, 5, 262.	0.1	8
75	Experimental and Numerical Evaluation on Optical Properties of Al-Doped ZnO Film Materials. <i>Journal of the American Ceramic Society</i> , 2014, 97, 3549-3554.	3.8	8
76	Mechanical characteristics of oil-damping shock absorber for protection of electronic-packaging components. <i>Tsinghua Science and Technology</i> , 2005, 10, 216-220.	6.1	7
77	Approach on Thermal Strain Behaviour of PBGA Solder Joints. <i>Strain</i> , 2009, 45, 527-534.	2.4	7
78	Numerical and experimental investigation for the effects of thermal loading on properties of nanoscale materials interface. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 6076-6081.	5.6	7
79	Effect of temperature and voltage on LED luminaries reliability. <i>International Journal of Materials and Structural Integrity</i> , 2012, 6, 270.	0.1	7
80	Comparisons of In/Al doped ZnO on the density of states based on first-principles. <i>International Journal of Materials and Structural Integrity</i> , 2013, 7, 270.	0.1	7
81	Numerical analysis on thermal characteristics for chip scale package by integrating 2D/3D models. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 2009, 22, 43-55.	1.9	6
82	Numerical investigation on the thermal conductive characteristics of the TiO <sub>2</sub> /ZnO bilayer films. <i>International Journal of Materials and Structural Integrity</i> , 2011, 5, 26.	0.1	6
83	Investigation of thermal property of triangle vacancy nitrogen-doping graphene nanoribbons. <i>Composite Interfaces</i> , 2019, 26, 127-139.	2.3	6
84	Numerical investigation on photoelectric properties of Nb,N Co-doped TiO <sub>2</sub> . <i>Superlattices and Microstructures</i> , 2019, 129, 130-138.	3.1	6
85	Numerical study on the field-emission properties of a graphene-C60 composite. <i>Journal of Computational Electronics</i> , 2019, 18, 130-137.	2.5	6
86	Interfacial thermal conductance of graphene/MoS <sub>2</sub> heterointerface. <i>Surfaces and Interfaces</i> , 2022, 28, 101640.	3.0	6
87	Effect of defects on heat transfer at the graphene/epoxy interface. <i>International Communications in Heat and Mass Transfer</i> , 2022, 131, 105846.	5.6	6
88	An intelligent multi-layer net routing method based on minimum spanning tree. <i>International Journal of Materials and Structural Integrity</i> , 2008, 2, 332.	0.1	5
89	The investigation on the electronic structures of hybrid GNR-ZnO. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 112, 357-362.	2.3	5
90	Probability increment based swarm optimization for combinatorial optimization with application to printed circuit board assembly. <i>Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM</i> , 2014, 28, 429-437.	1.1	5

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91	Computation of thermal properties of a copper-copper nano interface structure using a MD-ISE-FE method. International Journal of Heat and Mass Transfer, 2014, 78, 45-49.	4.8	5
92	Heat transfer regulation of hole defect graphene by nitrogen doping. Applied Physics A: Materials Science and Processing, 2015, 121, 549-553.	2.3	5
93	Random Vibration and Dynamic Analysis of a Planetary Gear Train in a Wind Turbine. Shock and Vibration, 2016, 2016, 1-10.	0.6	5
94	An exploratory review on some inorganic materials and structure of solar cells. International Journal of Materials and Structural Integrity, 2017, 11, 62.	0.1	5
95	Investigation on electronic and optical properties of Ga-Eu codoped ZnO. Chemical Physics, 2020, 536, 110826.	1.9	5
96	Electronic and Optical Properties of Al, Eu Single-Doped and Al-Eu Co-Doped ZnO. Jom, 2021, 73, 373-379.	1.9	5
97	The field emission properties from the pristine/B-doped graphene-C 70 composite. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 2004-2009.	2.1	5
98	Improving photoelectric properties by using Nb-doping on TiO <sub>2</sub> . Chemical Physics Letters, 2022, 803, 139830.	2.6	5
99	Design study of diplex multi-medium coupling isolator based on determinate excitation situation. International Journal of Materials and Structural Integrity, 2008, 2, 255.	0.1	4
100	Preparation and mechanical property test on Cu/Cr bilayer film. International Journal of Materials and Structural Integrity, 2010, 4, 25.	0.1	4
101	Taguchi-numerical approach on thermomechanical reliability for PBGA. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2011, 24, 437-447.	1.9	4
102	MD-ISE-FE Multiscale Modeling and Numerical Simulation of Thermal Conductivity of Cu Film Interface Structure. Advanced Materials Research, 0, 382, 242-246.	0.3	4
103	Effect of equilateral triangle vacancy defect on the thermal conductivity and thermal rectification of graphene: a molecular dynamics study. International Journal of Materials and Structural Integrity, 2013, 7, 131.	0.1	4
104	The investigation of field emission properties of defective graphene-carbon nanotube composite. International Journal of Materials and Structural Integrity, 2014, 8, 243.	0.1	4
105	Dynamic reliability approach of chip scale package assembly under vibration environment. Microelectronics International, 2014, 31, 71-77.	0.6	4
106	Fatigue Analysis on Thermal Characteristics for PBGA by Using Finite Element Method. Journal of Thermal Stresses, 2014, 37, 1052-1065.	2.0	4
107	An atomic-continuum multiscale modeling approach for interfacial thermal behavior between materials. Applied Mathematical Modelling, 2014, 38, 3373-3379.	4.2	4
108	Mechanical property of a graphene/silicon interface: an atomistic simulation research. International Journal of Materials and Structural Integrity, 2014, 8, 161.	0.1	4

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109	Mechanism isomorphism identification based on artificial fish swarm algorithm. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021, 235, 5421-5433.	2.1	4
110	A self-adaptive DBSCAN-based method for wafer bin map defect pattern classification. Microelectronics Reliability, 2021, 123, 114183.	1.7	4
111	An innovative design on mixed harmonic gear mechanism. International Journal of Materials and Structural Integrity, 2009, 3, 309.	0.1	3
112	Nano-indentation Test and Numerical Evaluation of Cu/Cr Interface Structure in Micro/Nano Manufacturing. Composite Interfaces, 2010, 17, 789-801.	2.3	3
113	The effect of N-doping on the electronic structure of graphene nanoribbon. International Journal of Materials and Structural Integrity, 2012, 6, 220.	0.1	3
114	Effect of the Growth Parameters on Nonlinear Optical Properties of ZnO Doped Nano Films. International Journal of Applied Ceramic Technology, 2015, 12, 399-402.	2.1	3
115	Study on electron state density and optical properties of IIIA main group element-doped ZnO. Modern Physics Letters B, 2020, 34, 2050127.	1.9	3
116	Numerical analysis for dynamic transmissibility of a mixed nonlinear shock absorber. Communications in Numerical Methods in Engineering, 2007, 23, 1121-1130.	1.3	2
117	A review on graph isomorphism identification of mechanism kinematic chain for intelligent and digital manufacturing. International Journal of Materials and Structural Integrity, 2010, 4, 99.	0.1	2
118	Numerical simulation of thermal properties at Cu/Al interfaces based on hybrid model. Engineering Computations, 2015, 32, 574-584.	1.4	2
119	A general boundary scan test system based on EDIF netlist file transfer to Protel netlist file. International Journal of Materials and Structural Integrity, 2016, 10, 70.	0.1	2
120	A discussion and prediction on thermal transfer of interface structure in micro/nano manufacturing. International Journal of Materials and Structural Integrity, 2017, 11, 16.	0.1	2
121	Investigation on field-emission properties of graphdiyne/ZnO composite. Modern Physics Letters B, 2018, 32, 1850285.	1.9	2
122	Parametric matching selection of multi-medium coupling shock absorber. Chinese Journal of Mechanical Engineering (English Edition), 2006, 19, 124.	3.7	2
123	Experimental and numerical approach on interfacial properties of W/Al bilayer films for electronic devices manufacturing. Composite Interfaces, 2014, 21, 507-520.	2.3	1
124	Experiment and Prediction on Thermal Conductivity of Al <sub>2</sub> O <sub>3</sub> /ZnO Nano Thin Film Interface Structure. Bulletin of Materials Science, 2014, 37, 449-454.	1.7	1
125	Experimental approach on interfacial properties for Cr/Al double nanometer films under different temperature environment mode. Composite Interfaces, 2015, 22, 281-290.	2.3	1
126	A review on design of interface structure in micro/nano manufacturing. International Journal of Materials and Structural Integrity, 2016, 10, 23.	0.1	1



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127	Study on the thermal conductivity of graphene/Si interface structure based on molecular dynamics. , 2016, , .		1
128	Thermal performance and fatigue life prediction of POP stacked chip assembly under thermal cycling load. Microelectronics International, 2020, 37, 165-171.	0.6	1
129	Approach on design of diplex multi-medium coupling isolator based on random excitation situation. International Journal of Materials and Structural Integrity, 2009, 3, 77.	0.1	0
130	MD-ISE-FE multi-scale modeling of interface structure in microelectronic devices. , 2011, , .		0
131	Test investigation on interfacial characteristics of Cr/Al nanofilms structure. Composite Interfaces, 2013, 20, 603-609.	2.3	0
132	Multiscale Investigation on Interfacial Properties of Cu/Al Structures in Electronic Packaging. Applied Mechanics and Materials, 0, 455, 60-65.	0.2	0
133	Mechanical characteristics comparison approach on metal “ matching nano-interface based on Cr in electronic packaging. Composite Interfaces, 2013, 20, 299-308.	2.3	0
134	Mechanical characteristics approach on W/Cr nano-interface structure. Composite Interfaces, 2016, 23, 549-556.	2.3	0
135	Thermal transport of graphene and graphene nanoribbon: a summary review. International Journal of Materials and Structural Integrity, 2017, 11, 193.	0.1	0
136	Nâ€Doped and Pâ€Doped Graphene on MgO (111): A Firstâ€Principles Study. Advanced Engineering Materials, 0, , 2100762.	3.5	0
137	Study on thermal properties of triangular graphene with different boundary types. , 2022, , 207213.		0