

# Wencheng Tang

## List of Publications by Year in descending order

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94  
papers

3,511  
citations

109311

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138468

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94  
all docs

94  
docs citations

94  
times ranked

2407  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-objective optimization of a 2-stage helical gear transmission system using NSGA-III. , 2022, , .		0
2	Effect of the Maxillary Sinus on Tooth Movement during Orthodontics Based on Biomechanical Responses of Periodontal Ligaments. Applied Sciences (Switzerland), 2022, 12, 4990.	2.5	4
3	Research on Battery State Identification Algorithm Based on Equivalent Model. , 2022, , .		1
4	In Situ TiC Particle-Reinforced FeCoCrNiCu High Entropy Alloy Matrix Composites by Induction Smelting. Transactions of the Indian Institute of Metals, 2021, 74, 267-272.	1.5	8
5	Development of Measuring Instrument for Inner and Outer Diameters of Bearing Seal Rings Based on Machine Vision. , 2021, , .		0
6	Load-displacement relationship model and measurement of deep groove ball bearing and 4-point contact ball bearing. Journal of Mechanical Science and Technology, 2021, 35, 3045-3058.	1.5	5
7	Semi-Empirical Prediction of Turned Surface Residual Stress for Inconel 718 Grounded in Experiments and Finite Element Simulations. Materials, 2021, 14, 3937.	2.9	5
8	Two-dimensional ZnO/BSe van der waals heterostructure used as a promising photocatalyst for water splitting: A DFT study. Journal of Alloys and Compounds, 2020, 812, 152049.	5.5	87
9	Theoretical prediction of two-dimensional ZnO/GaN van der Waals heterostructure as a photocatalyst for water splitting. Chemical Physics, 2020, 528, 110539.	1.9	73
10	Molecular doping of blue phosphorene: a first-principles investigation. Journal of Physics Condensed Matter, 2020, 32, 055501.	1.8	14
11	Modeling of the Distribution of Undeformed Chip Thickness Based on the Real Interference Depth of the Active Abrasive Grain. IEEE Access, 2020, 8, 101628-101647.	4.2	4
12	Exploration on the Design of Portable Blood Glucose Meter based on Kansei Engineering. , 2020, , .		0
13	Semi-Empirical Prediction of Residual Stress Distributions Introduced by Turning Inconel 718 Alloy Based on Lorentz Function. Materials, 2020, 13, 4341.	2.9	7
14	Remarkable Reduction of Interfacial Thermal Resistance in Nanophononic Heterostructures. Advanced Functional Materials, 2020, 30, 2004003.	14.9	37
15	High-efficiency photocatalyst for water splitting: a Janus MoSSe/XN (X=As, Sb, Bi, Ga, Al) van der Waals heterostructure. Journal Physics D: Applied Physics, 2020, 53, 185504.	2.8	110
16	A direct Z-scheme PtS <sub>2</sub> /arsenene van der Waals heterostructure with high photocatalytic water splitting efficiency. Nanoscale, 2020, 12, 17281-17289.	5.6	108
17	Online Estimation and Control for Feed Drive Systems With Unmeasurable Parameter Variations. IEEE Access, 2020, 8, 33966-33976.	4.2	5
18	Two-dimensional heterostructures for photocatalytic water splitting: a review of recent progress. Nano Futures, 2020, 4, 032006.	2.2	31

#	ARTICLE	IF	CITATIONS
19	Robust Controller Design for Ball Screw Drives with Varying Resonant Mode via $\mu$ -synthesis. , 2020, , .		2
20	A two-dimensional vertical van der Waals heterostructure based on g-GaN and Mg(OH) <sub>2</sub> used as a promising photocatalyst for water splitting: A first-principles calculation. Journal of Applied Physics, 2019, 126, .	2.5	59
21	First-principles study of two-dimensional van der Waals heterostructure based on ZnO and Mg(OH) <sub>2</sub> : A potential photocatalyst for water splitting. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 125916.	2.1	18
22	Electronic and optical properties of van der Waals vertical heterostructures based on two-dimensional transition metal dichalcogenides: First-principles calculations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 1487-1492.	2.1	60
23	Electronic and optical properties of van der Waals heterostructures of g-GaN and transition metal dichalcogenides. Applied Surface Science, 2019, 492, 513-519.	6.1	178
24	Using van der Waals heterostructures based on two-dimensional blue phosphorus and XC (X = Ge, Si) for water-splitting photocatalysis: a first-principles study. Physical Chemistry Chemical Physics, 2019, 21, 9949-9956.	2.8	66
25	Energy Storage System Controller Design for Suppressing Electromechanical Oscillation of Power Systems. Applied Sciences (Switzerland), 2019, 9, 1329.	2.5	2
26	Strain-enhanced properties of van der Waals heterostructure based on blue phosphorus and g-GaN as a visible-light-driven photocatalyst for water splitting. RSC Advances, 2019, 9, 4816-4823.	3.6	86
27	Effect analysis of grinding wheel under different dressing parameters on surface grinding quality. , 2019, , .		2
28	The Optimum Autofrettage and Fatigue Prediction Based on Finite-Element Method for High Pressure Cylinder. , 2019, , .		0
29	Semi-Empirical Prediction of Residual Stress Profiles in Machining IN718 Alloy Using Bimodal Gaussian Curve. Materials, 2019, 12, 3864.	2.9	6
30	A van der Waals Heterostructure Based on Graphene-like Gallium Nitride and Boron Selenide: A High-Efficiency Photocatalyst for Water Splitting. ACS Omega, 2019, 4, 21689-21697.	3.5	78
31	Transition metal doped puckered arsenene: Magnetic properties and potential as a catalyst. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 108, 153-159.	2.7	55
32	First-principle study of electronic and optical properties of two-dimensional materials-based heterostructures based on transition metal dichalcogenides and boron phosphide. Applied Surface Science, 2019, 476, 70-75.	6.1	154
33	Magnetism in non-metal atoms adsorbed graphene-like gallium nitride monolayers. Applied Surface Science, 2018, 427, 609-612.	6.1	79
34	Adsorption of Transition Metals on Black Phosphorene: a First-Principles Study. Nanoscale Research Letters, 2018, 13, 282.	5.7	79
35	Exceptional Optical Absorption of Buckled Arsenene Covering a Broad Spectral Range by Molecular Doping. ACS Omega, 2018, 3, 8514-8520.	3.5	107
36	Few-Layer PdSe <sub>2</sub> Sheets: Promising Thermoelectric Materials Driven by High Valley Convergence. ACS Omega, 2018, 3, 5971-5979.	3.5	87

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37	Development and parameter identification of a visco-hyperelastic model for the periodontal ligament. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 68, 210-215.	3.1	32
38	Fabrication of PDMS microfluidic devices with 3D wax jetting. RSC Advances, 2017, 7, 3313-3320.	3.6	45
39	The deformation analysis, prediction, and experiment verification for thin-wall part assembly based on the fractal theory model with WNNM. International Journal of Advanced Manufacturing Technology, 2017, 92, 4145-4159.	3.0	6
40	Tunable Schottky barrier in van der Waals heterostructures of graphene and g-GaN. Applied Physics Letters, 2017, 110, .	3.3	166
41	Electronic and magnetic properties of 4d series transition metal substituted graphene: A first-principles study. Carbon, 2017, 120, 265-273.	10.3	135
42	Electronic properties of blue phosphorene/graphene and blue phosphorene/graphene-like gallium nitride heterostructures. Physical Chemistry Chemical Physics, 2017, 19, 17324-17330.	2.8	180
43	Effects of structural imperfection on the electronic properties of graphene/WSe <sub>2</sub> heterostructures. Journal of Materials Chemistry C, 2017, 5, 10383-10390.	5.5	131
44	Weak C-H $\cdots$ F hydrogen bonds make a big difference in graphene/fluorographane and fluorographane/fluorographane bilayers. Physical Chemistry Chemical Physics, 2017, 19, 28127-28132.	2.8	41
45	Hydrogenated and halogenated blue phosphorene as Dirac materials: A first principles study. Applied Surface Science, 2017, 392, 46-50.	6.1	64
46	Structure Design and Research on Pipeline Robot of Variable Diameter. , 2017, , .		0
47	Bending Angle Prediction Model Based on BPNN-Spline in Air Bending Springback Process. Mathematical Problems in Engineering, 2017, 2017, 1-11.	1.1	8
48	RFID/ In-vehicle Sensors-Integrated Vehicle Positioning Strategy Utilising LSSVM and Federated UKF in a Tunnel. Journal of Navigation, 2016, 69, 845-868.	1.7	7
49	Processing and 3D printing of Gradient Heterogeneous Bio-Model Based on Computer Tomography Images. IEEE Access, 2016, 4, 8814-8822.	4.2	11
50	Magnetism in transition metal-substituted germanane: A search for room temperature spintronic devices. Journal of Applied Physics, 2016, 119, .	2.5	46
51	A fusion strategy for reliable vehicle positioning utilizing RFID and in-vehicle sensors. Information Fusion, 2016, 31, 76-86.	19.1	27
52	Tuning electronic and magnetic properties of blue phosphorene by doping Al, Si, As and Sb atom: A DFT calculation. Solid State Communications, 2016, 242, 36-40.	1.9	72
53	First principles study of silicene symmetrically and asymmetrically functionalized with halogen atoms. RSC Advances, 2016, 6, 95846-95854.	3.6	63
54	Electronic properties of Janus silicene: new direct band gap semiconductors. Journal Physics D: Applied Physics, 2016, 49, 445305.	2.8	51

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55	Transition metal doped arsenene: A first-principles study. Applied Surface Science, 2016, 389, 594-600.	6.1	102
56	The Layout Measurement Points Prediction and Flatness Calculation for the Antenna Plate After Welding Assembly Based on the RBF Neural Network Model. , 2016, , .		1
57	Experimental Analysis of the Elastic Modulus of Periodontal Ligament in Nanoindentation. , 2016, , .		0
58	DETERMINATION OF VISCOELASTIC PROPERTIES OF THE PERIODONTAL LIGAMENT USING NANOINDENTATION TESTING AND NUMERICAL MODELING. Journal of Mechanics in Medicine and Biology, 2016, 16, 1650089.	0.7	13
59	Adaptive sliding mode control of ball screw drive system with extended state observer. , 2016, , .		3
60	Mechanical responses of the periodontal ligament based on an exponential hyperelastic model: a combined experimental and finite element method. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 188-198.	1.6	32
61	A Local-to-Global Dimensional Error Calculation Framework for the Riveted Assembly Using Finite-Element Analysis. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	2.2	11
62	Electronic and magnetic behaviors of graphene with 5d series transition metal atom substitutions: A first-principles study. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 80, 142-148.	2.7	56
63	Halogenated arsenenes as Dirac materials. Applied Surface Science, 2016, 376, 286-289.	6.1	49
64	Magnetism in transition-metal-doped germanene: A first-principles study. Computational Materials Science, 2016, 118, 112-116.	3.0	69
65	Fabrication of paper micro-devices with wax jetting. RSC Advances, 2016, 6, 17921-17928.	3.6	13
66	Research of Digital Interface Layout Design based on Eye-tracking. MATEC Web of Conferences, 2015, 22, 01018.	0.2	2
67	Modeling analysis and experimental study for the friction of a ball screw. Mechanism and Machine Theory, 2015, 87, 57-69.	4.5	52
68	Interpolating gain-scheduled H <sub>∞</sub> loop shaping design for high speed ball screw feed drives. ISA Transactions, 2015, 55, 219-226.	5.7	16
69	Prediction of instantaneous milling force taking runout into account in peripheral milling of curved surface. International Journal of Advanced Manufacturing Technology, 2015, 79, 49-56.	3.0	15
70	First-principles study of the alkali earth metal atoms adsorption on graphene. Applied Surface Science, 2015, 356, 668-673.	6.1	90
71	A first-principles study of light non-metallic atom substituted blue phosphorene. Applied Surface Science, 2015, 356, 110-114.	6.1	95
72	Study on Event-Related Potential of Information Alarm in Monitoring Interface. Lecture Notes in Computer Science, 2015, , 54-65.	1.3	0

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73	A Hybrid Positioning Strategy for Vehicles in a Tunnel Based on RFID and In-Vehicle Sensors. Sensors, 2014, 14, 23095-23118.	3.8	27
74	Control of ball screw drives using adaptive backstepping sliding mode controller and minimum tracking error prefilter. , 2014, , .		2
75	Structural dynamic topology optimization based on dynamic reliability using equivalent static loads. Structural and Multidisciplinary Optimization, 2014, 49, 121-129.	3.5	20
76	Reliability-based topology optimization of interval parameters structures with dynamic response constraints. , 2014, , .		0
77	Dynamic contact stiffness analysis of a double-nut ball screw based on a quasi-static method. Mechanism and Machine Theory, 2014, 73, 76-90.	4.5	29
78	Three-dimensional precision analysis with rigid and compliant motions for sheet metal assembly. International Journal of Advanced Manufacturing Technology, 2014, 73, 805-819.	3.0	21
79	A non-probabilistic reliability-based topology optimization method based on equivalent loads. , 2014, , .		0
80	Color Saliency Research on Visual Perceptual Layering Method. Lecture Notes in Computer Science, 2014, , 86-97.	1.3	5
81	Study on Eye Movements of Information Omission/Misjudgment in Radar Situation-Interface. Lecture Notes in Computer Science, 2014, , 407-418.	1.3	10
82	Evaluating orthodontic force system in clinical condition with a numerical method. Meccanica, 2013, 48, 221-229.	2.0	2
83	A Simple Algebra for Fault Tree Analysis of Static and Dynamic Systems. IEEE Transactions on Reliability, 2013, 62, 846-861.	4.6	24
84	HYBRID MODELING AND ANALYSIS OF STRUCTURAL DYNAMIC OF A BALL SCREW FEED DRIVE SYSTEM. Mechanika, 2013, 19, .	0.5	19
85	Mechanical Responses of Periodontal Ligament under A Realistic Orthodontic Loading. Procedia Engineering, 2012, 31, 828-833.	1.2	11
86	Notice of Retraction: A Numerical Method for Quantitatively Evaluating Orthodontic Force System during Orthodontic Treatment. , 2011, , .		0
87	A New Hybrid Global Optimization Algorithm Based on Chaos Search and Complex Method. , 2010, , .		2
88	Obstacle-climbing performance simulation analysis of wheel-legged rover. , 2010, , .		2
89	Mechanism parameter fuzzy optimal design of lunar rover. , 2010, , .		1
90	Notice of Retraction: Mobile mechanism scheme design of wheel-legged lunar rover. , 2010, , .		0

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91	Hybrid Genetic Algorithm for Advanced Planning and Scheduling. , 2010, , .		1
92	Study on Stress Distribution in Periodontal Ligament of Impacted Tooth Based on Hyperelastic Model. , 2009, , .		1
93	A New-Style Bionic Walking Mechanism and Its Motion Simulation. , 2009, , .		7
94	Kinematics Model of Bionic Wheel-Legged Lunar Rover and Its Simulation Analysis. Lecture Notes in Computer Science, 2009, , 603-612.	1.3	6