

# Wencong He

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10038345/publications.pdf>

Version: 2024-02-01

23  
papers

1,754  
citations

331670

21  
h-index

610901

24  
g-index

24  
all docs

24  
docs citations

24  
times ranked

702  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Quantifying contact status and the air-breakdown model of charge-excitation triboelectric nanogenerators to maximize charge density. <i>Nature Communications</i> , 2020, 11, 1599.                 | 12.8 | 216       |
| 2  | High performance floating self-excited sliding triboelectric nanogenerator for micro mechanical energy harvesting. <i>Nature Communications</i> , 2021, 12, 4689.                                   | 12.8 | 186       |
| 3  | Ultrahigh Electricity Generation from Low-Frequency Mechanical Energy by Efficient Energy Management. <i>Joule</i> , 2021, 5, 441-455.  | 24.0 | 159       |
| 4  | Boosting output performance of sliding mode triboelectric nanogenerator by charge space-accumulation effect. <i>Nature Communications</i> , 2020, 11, 4277.   | 12.8 | 158       |
| 5  | Switched-capacitor-convertors based on fractal design for output power management of triboelectric nanogenerator. <i>Nature Communications</i> , 2020, 11, 1883.                                    | 12.8 | 154       |
| 6  | An Ultrarobust and High-Performance Rotational Hydrodynamic Triboelectric Nanogenerator Enabled by Automatic Mode Switching and Charge Excitation. <i>Advanced Materials</i> , 2022, 34, e2105882.  | 21.0 | 92        |
| 7  | A Nonencapsulative Pendulum-Like Paper-Based Hybrid Nanogenerator for Energy Harvesting. <i>Advanced Energy Materials</i> , 2019, 9, 1901149.   | 19.5 | 88        |
| 8  | Two voltages in contact-separation triboelectric nanogenerator: From asymmetry to symmetry for maximum output. <i>Nano Energy</i> , 2020, 69, 104452.   | 16.0 | 83        |
| 9  | Magnetic Array Assisted Triboelectric Nanogenerator Sensor for Real-Time Gesture Interaction. <i>Nano-Micro Letters</i> , 2021, 13, 51.   | 27.0 | 82        |
| 10 | An inverting TENG to realize the AC mode based on the coupling of triboelectrification and air-breakdown. <i>Energy and Environmental Science</i> , 2021, 14, 5395-5405.                            | 30.8 | 67        |
| 11 | Ultra-stability high-voltage triboelectric nanogenerator designed by ternary dielectric triboelectrification with partial soft-contact and non-contact mode. <i>Nano Energy</i> , 2021, 90, 106585. | 16.0 | 65        |
| 12 | Achieving Remarkable Charge Density via Self-Polarization of Polar High- $\kappa$ Material in a Charge-Excitation Triboelectric Nanogenerator. <i>Advanced Materials</i> , 2022, 34, e2109918.      | 21.0 | 63        |
| 13 | Giant performance improvement of triboelectric nanogenerator systems achieved by matched inductor design. <i>Energy and Environmental Science</i> , 2021, 14, 6627-6637.                            | 30.8 | 51        |
| 14 | A High-Performance Bidirectional Direct Current TENG by Triboelectrification of Two Dielectrics and Local Corona Discharge. <i>Advanced Energy Materials</i> , 2022, 12, .                          | 19.5 | 43        |
| 15 | Harvesting ambient mechanical energy by multiple mode triboelectric nanogenerator with charge excitation for self-powered freight train monitoring. <i>Nano Energy</i> , 2021, 90, 106543.          | 16.0 | 35        |
| 16 | Miura folding based charge-excitation triboelectric nanogenerator for portable power supply. <i>Nano Research</i> , 2021, 14, 4204-4210.  | 10.4 | 34        |
| 17 | Interface Static Friction Enabled Ultra-Durable and High Output Sliding Mode Triboelectric Nanogenerator. <i>Advanced Functional Materials</i> , 2022, 32, .  | 14.9 | 34        |
| 18 | Capturing Dissipation Charge in Charge Space Accumulation Area for Enhancing Output Performance of Sliding Triboelectric Nanogenerator. <i>Advanced Energy Materials</i> , 2022, 12, .              | 19.5 | 29        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Improving and Quantifying Surface Charge Density via Charge Injection Enabled by Air Breakdown. <i>Advanced Functional Materials</i> , 2022, 32, .  | 14.9 | 28        |
| 20 | An Ultrafast Self-charge Polarization Effect in Barium Titanate Filled Poly(Vinylidene Fluoride) Composite Film Enabled by Self-charge Excitation Triboelectric Nanogenerator. <i>Advanced Functional Materials</i> , 2022, 32, . | 14.9 | 28        |
| 21 | Constructing high output performance triboelectric nanogenerator via V-shape stack and self-charge excitation. <i>Nano Energy</i> , 2022, 96, 107068.   | 16.0 | 22        |
| 22 | Ultrahigh Performance Triboelectric Nanogenerator Enabled by Charge Transmission in Interfacial Lubrication and Potential Decentralization Design. <i>Research</i> , 2022, 2022, .  | 5.7  | 22        |
| 23 | A Non-encapsulated Polymorphous U-shaped Triboelectric Nanogenerator for Multiform Hydropower Harvesting. <i>Advanced Materials Technologies</i> , 2021, 6, 2001199.  | 5.8  | 12        |