

Weilu Gao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8683749/publications.pdf>

Version: 2024-02-01

52
papers

3,962
citations

236925

25
h-index

197818

49
g-index

53
all docs

53
docs citations

53
times ranked

6714
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Hall effect in gated single-wall carbon nanotube films. Scientific Reports, 2022, 12, 101. | 3.3 | 1 |
| 2 | Carbon Nanotube Devices for Quantum Technology. Materials, 2022, 15, 1535. | 2.9 | 22 |
| 3 | Physics-informed recurrent neural network for time dynamics in optical resonances. Nature Computational Science, 2022, 2, 169-178. | 8.0 | 7 |
| 4 | Graphene plasmonic spatial light modulator for reconfigurable diffractive optical neural networks. Optics Express, 2022, 30, 12712. | 3.4 | 6 |
| 5 | Colors of Single-Wall Carbon Nanotubes. Advanced Materials, 2021, 33, e2006395. | 21.0 | 18 |
| 6 | Carbon Nanotubes: Colors of Single-Wall Carbon Nanotubes (Adv. Mater. 8/2021). Advanced Materials, 2021, 33, 2170060. | 21.0 | 1 |
| 7 | Artificial Intelligence Accelerators Based on Graphene Optoelectronic Devices. Advanced Photonics Research, 2021, 2, 2100048. | 3.6 | 11 |
| 8 | Real-time multi-task diffractive deep neural networks via hardware-software co-design. Scientific Reports, 2021, 11, 11013. | 3.3 | 24 |
| 9 | Band structure dependent electronic localization in macroscopic films of single-chirality single-wall carbon nanotubes. Carbon, 2021, 183, 774-779. | 10.3 | 5 |
| 10 | Macroscopically aligned carbon nanotubes for flexible and high-temperature electronics, optoelectronics, and thermoelectrics. Journal Physics D: Applied Physics, 2020, 53, 063001. | 2.8 | 19 |
| 11 | Observation of Photoinduced Terahertz Gain in GaAs Quantum Wells: Evidence for Radiative Two-Exciton-to-Biexciton Scattering. Physical Review Letters, 2020, 125, 167401. | 7.8 | 3 |
| 12 | Ultrastrong light-matter coupling in semiconductors. Semiconductors and Semimetals, 2020, 105, 89-151. | 0.7 | 7 |
| 13 | Ultrahigh-Sensitivity Molecular Sensing with Carbon Nanotube Terahertz Metamaterials. ACS Applied Materials & Interfaces, 2020, 12, 40629-40634. | 8.0 | 55 |
| 14 | Terahertz Excitonics in Carbon Nanotubes: Exciton Autoionization and Multiplication. Nano Letters, 2020, 20, 3098-3105. | 9.1 | 21 |
| 15 | Recent Advances in Applications of Carbon Nanotubes for Desalination: A Review. Nanomaterials, 2020, 10, 1203. | 4.1 | 44 |
| 16 | Groove-Assisted Global Spontaneous Alignment of Carbon Nanotubes in Vacuum Filtration. Nano Letters, 2020, 20, 2332-2338. | 9.1 | 38 |
| 17 | Macroscopically Aligned Carbon Nanotubes as a Refractory Platform for Hyperbolic Thermal Emitters. ACS Photonics, 2019, 6, 1602-1609. | 6.6 | 35 |
| 18 | Solving the Thermoelectric Trade-Off Problem with Metallic Carbon Nanotubes. Nano Letters, 2019, 19, 7370-7376. | 9.1 | 50 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Science and applications of wafer-scale crystalline carbon nanotube films prepared through controlled vacuum filtration. Royal Society Open Science, 2019, 6, 181605. | 2.4 | 37 |
| 20 | Silicon Reconfigurable Electro-Optical Logic Circuit Enabled by a Single-Wavelength Light Input. IEEE Photonics Technology Letters, 2019, 31, 435-438. | 2.5 | 4 |
| 21 | Terahertz Faraday and Kerr rotation spectroscopy of $\text{Bi}_{1-x}\text{Sb}_x$ films in high magnetic fields up to 30 tesla. Physical Review B, 2019, 100, . | 3.2 | 15 |
| 22 | One-directional thermal transport in densely aligned single-wall carbon nanotube films. Applied Physics Letters, 2019, 115, . | 3.3 | 23 |
| 23 | Direct observation of cross-polarized excitons in aligned single-chirality single-wall carbon nanotubes. Physical Review B, 2019, 99, . | 3.2 | 15 |
| 24 | Observation of Narrow-Band Terahertz Gain in Two-Dimensional Magnetoexcitons. , 2019, , . | | 1 |
| 25 | Vacuum Bloch–Siegert shift in Landau polaritons with ultra-high cooperativity. Nature Photonics, 2018, 12, 324-329. | 31.4 | 98 |
| 26 | Continuous transition between weak and ultrastrong coupling through exceptional points in carbon nanotube microcavity exciton–polaritons. Nature Photonics, 2018, 12, 362-367. | 31.4 | 99 |
| 27 | Intersubband plasmons in the quantum limit in gated and aligned carbon nanotubes. Nature Communications, 2018, 9, 1121. | 12.8 | 52 |
| 28 | Isotropic Seebeck coefficient of aligned single-wall carbon nanotube films. Applied Physics Letters, 2018, 113, . | 3.3 | 26 |
| 29 | Directional sensing based on flexible aligned carbon nanotube film nanocomposites. Nanoscale, 2018, 10, 14938-14946. | 5.6 | 37 |
| 30 | Modulation of Doped Multiple Quantum Wells of Aligned Single-Wall Carbon Nanotubes. Advanced Functional Materials, 2017, 27, 1606022. | 14.9 | 17 |
| 31 | Destabilization of Surfactant-Dispersed Carbon Nanotubes by Anions. Nanoscale Research Letters, 2017, 12, 81. | 5.7 | 6 |
| 32 | Tunable room-temperature single-photon emission at telecom wavelengths from sp^3 defects in carbon nanotubes. Nature Photonics, 2017, 11, 577-582. | 31.4 | 235 |
| 33 | Low-Dimensional Nanomaterials and Their Functional Architectures: Synthesis, Properties, and Applications. Journal of Nanomaterials, 2017, 2017, 1-2. | 2.7 | 4 |
| 34 | Wafer-scale monodomain films of spontaneously aligned single-walled carbon nanotubes. Nature Nanotechnology, 2016, 11, 633-638. | 31.5 | 292 |
| 35 | Stability of High-Density Two-Dimensional Excitons against a Mott Transition in High Magnetic Fields Probed by Coherent Terahertz Spectroscopy. Physical Review Letters, 2016, 117, 207402. | 7.8 | 12 |
| 36 | Discrimination of Transgenic Rice containing the Cry1Ab Protein using Terahertz Spectroscopy and Chemometrics. Scientific Reports, 2015, 5, 11115. | 3.3 | 35 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Facile Synthesis of Single Crystal Vanadium Disulfide Nanosheets by Chemical Vapor Deposition for Efficient Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2015, 27, 5605-5609. | 21.0 | 241 |
| 38 | Extraordinary sensitivity enhancement by metasurfaces in terahertz detection of antibiotics. <i>Scientific Reports</i> , 2015, 5, 8671. | 3.3 | 135 |
| 39 | Proposed high-speed micron-scale spatial light valve based on a silicon-graphene hybrid structure. <i>Optics Letters</i> , 2015, 40, 4480. | 3.3 | 9 |
| 40 | High-Voltage Breakdown and the Gunn Effect in GaAs/AlGaAs Nanoconstrictions. <i>IEEE Nanotechnology Magazine</i> , 2015, 14, 524-530. | 2.0 | 2 |
| 41 | An Atomically Layered InSe Avalanche Photodetector. <i>Nano Letters</i> , 2015, 15, 3048-3055. | 9.1 | 253 |
| 42 | High-Q terahertz Fano resonance with extraordinary transmission in concentric ring apertures. <i>Optics Express</i> , 2014, 22, 3747. | 3.4 | 17 |
| 43 | Efficient Modulation of 1.55 μ m Radiation with Gated Graphene on a Silicon Microring Resonator. <i>Nano Letters</i> , 2014, 14, 6811-6815. | 9.1 | 137 |
| 44 | Tailoring the Physical Properties of Molybdenum Disulfide Monolayers by Control of Interfacial Chemistry. <i>Nano Letters</i> , 2014, 14, 1354-1361. | 9.1 | 129 |
| 45 | Boron Nitrideâ€“Graphene Nanocapacitor and the Origins of Anomalous Size-Dependent Increase of Capacitance. <i>Nano Letters</i> , 2014, 14, 1739-1744. | 9.1 | 120 |
| 46 | Direct chemical conversion of graphene to boron- and nitrogen- and carbon-containing atomic layers. <i>Nature Communications</i> , 2014, 5, 3193. | 12.8 | 198 |
| 47 | Carbon Nanotube Terahertz Detector. <i>Nano Letters</i> , 2014, 14, 3953-3958. | 9.1 | 223 |
| 48 | High-Contrast Terahertz Wave Modulation by Gated Graphene Enhanced by Extraordinary Transmission through Ring Apertures. <i>Nano Letters</i> , 2014, 14, 1242-1248. | 9.1 | 214 |
| 49 | Excitation and Active Control of Propagating Surface Plasmon Polaritons in Graphene. <i>Nano Letters</i> , 2013, 13, 3698-3702. | 9.1 | 238 |
| 50 | Suspended Si ring resonator for mid-IR application. <i>Optics Letters</i> , 2013, 38, 1122. | 3.3 | 60 |
| 51 | Excitation of Plasmonic Waves in Graphene by Guided-Mode Resonances. <i>ACS Nano</i> , 2012, 6, 7806-7813. | 14.6 | 610 |
| 52 | High-sensitivity detection of trace imidacloprid and tetracycline hydrochloride by multi-frequency resonance metamaterials. <i>Journal of Food Measurement and Characterization</i> , 0, , 1. | 3.2 | 1 |