

# Dongshan Wei

## List of Publications by Year in descending order

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65  
papers

1,233  
citations

361045

20  
h-index

414034

32  
g-index

66  
all docs

66  
docs citations

66  
times ranked

1340  
citing authors

#	ARTICLE	IF	CITATIONS
1	Unforced translocation of a polymer chain through a nanopore: The solvent effect. Journal of Chemical Physics, 2007, 126, 204901.	1.2	76
2	Strong IR NLO Material Ba <sub>4</sub> MGa <sub>4</sub> Se <sub>10</sub> Cl <sub>2</sub> : Highly Improved Laser Damage Threshold via Dual Ion Substitution Synergy. Advanced Optical Materials, 2015, 3, 957-966.	3.6	75
3	Janus Group-III Chalcogenide Monolayers and Derivative Type-II Heterojunctions as Water-Splitting Photocatalysts with Strong Visible-Light Absorbance. Journal of Physical Chemistry C, 2018, 122, 27795-27802.	1.5	73
4	Peculiar electronic, strong in-plane and out-of-plane second harmonic generation and piezoelectric properties of atom-thick 1±-M <sub>2</sub> X <sub>3</sub> (M = Ga, In; X = S, Se): role of spontaneous electric dipole orientations. RSC Advances, 2017, 7, 55034-55043.	1.7	66
5	A simple molecular mechanics potential for 1/4m scale graphene simulations from the adaptive force matching method. Journal of Chemical Physics, 2011, 134, 184704.	1.2	51
6	Rapid and label-free detection and assessment of bacteria by terahertz time-domain spectroscopy. Journal of Biophotonics, 2016, 9, 1050-1058.	1.1	45
7	Temporal and Spatial Variability of Water Status in Plant Leaves by Terahertz Imaging. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 520-527.	2.0	45
8	Terahertz spectroscopy of oligonucleotides in aqueous solutions. Journal of Biomedical Optics, 2015, 20, 095009.	1.4	42
9	Layer-independent and layer-dependent nonlinear optical properties of two-dimensional GaX (X = S, Se). Tj ETQq1 1,0,784314 rgBT /C 1.3 40	1.3	40
10	Nondestructive Evaluation of Carbon Fiber Reinforced Polymer Composites Using Reflective Terahertz Imaging. Sensors, 2016, 16, 875.	2.1	35
11	Terahertz biosensing based on a polarization-insensitive metamaterial. IEEE Photonics Technology Letters, 2016, , 1-1.	1.3	34
12	Detection of DNA oligonucleotides with base mutations by terahertz spectroscopy and microstructures. PLoS ONE, 2018, 13, e0191515.	1.1	29
13	Thermal conductivities of graphyne nanotubes from atomistic simulations. Computational Materials Science, 2015, 106, 69-75.	1.4	27
14	Facile syntheses of 3-dimension graphene aerogel and nanowalls with high specific surface areas. Chemical Physics Letters, 2017, 677, 7-12.	1.2	26
15	Nondestructive examination of polymethacrylimide composite structures with terahertz time-domain spectroscopy. Polymer Testing, 2017, 57, 141-148.	2.3	24
16	Label-free protein detection using terahertz time-domain spectroscopy. Biomedical Optics Express, 2018, 9, 994.	1.5	24
17	Rapid and label-free metamaterial-based biosensor for fatty acid detection with terahertz time-domain spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 228, 117736.	2.0	24
18	A first-principles study on the electronic and optical properties of a type-II C <sub>2</sub> N/g-ZnO van der Waals heterostructure. Physical Chemistry Chemical Physics, 2021, 23, 3963-3973.	1.3	24

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19	Spectroscopic study of terahertz reflection and transmission properties of carbon-fiber-reinforced plastic composites. <i>Optical Engineering</i> , 2015, 54, 054106.	0.5	23
20	Accurate Determination of Geographical Origin of Tea Based on Terahertz Spectroscopy. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 172.	1.3	22
21	Transformation and dehydration kinetics of methylene blue hydrates detected by terahertz time-domain spectroscopy. <i>RSC Advances</i> , 2017, 7, 41667-41674.	1.7	21
22	Signal detection techniques for scattering-type scanning near-field optical microscopy. <i>Applied Spectroscopy Reviews</i> , 2018, 53, 806-835.	3.4	21
23	A melamine-based organic-inorganic hybrid material revealing excellent optical performance and moderate thermal stability. <i>Journal of Materials Chemistry C</i> , 2021, 9, 7452-7457.	2.7	21
24	Label-free detection of anti-estrogen receptor alpha and its binding with estrogen receptor peptide alpha by terahertz spectroscopy. <i>RSC Advances</i> , 2017, 7, 24338-24344.	1.7	20
25	Label-free sensing of the binding state of MUC1 peptide and anti-MUC1 aptamer solution in fluidic chip by terahertz spectroscopy. <i>Biomedical Optics Express</i> , 2017, 8, 4427.	1.5	20
26	Second harmonic generation property of monolayer TMDCs and its potential application in producing terahertz radiation. <i>Journal of Chemical Physics</i> , 2017, 147, 244701.	1.2	19
27	Dewetting Process of Polyelectrolyte Multilayer Films in Hot Water. <i>Macromolecular Rapid Communications</i> , 2006, 27, 11-14.	2.0	18
28	Photoacoustic imaging of microenvironmental changes in facial cupping therapy. <i>Biomedical Optics Express</i> , 2020, 11, 2394.	1.5	18
29	Molecular dynamics simulations of conformation and chain length dependent terahertz spectra of alanine polypeptides. <i>Molecular Simulation</i> , 2016, 42, 398-404.	0.9	17
30	Second-order nonlinear optical properties of bulk GeC polytypes, g-GeC and corresponding nanotubes: first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 2235-2244.	1.3	17
31	Molecular Dynamics Simulation of the Formation of Polymer Networks. <i>Macromolecular Theory and Simulations</i> , 2007, 16, 548-556.	0.6	16
32	Determination of Critical Micelle Concentrations of Surfactants by Terahertz Time-Domain Spectroscopy. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2016, 6, 532-540.	2.0	16
33	Detection of single-base mutation of DNA oligonucleotides with different lengths by terahertz attenuated total reflection microfluidic cell. <i>Biomedical Optics Express</i> , 2020, 11, 5362.	1.5	16
34	Temperature- and pH-dependent protein conformational changes investigated by terahertz dielectric spectroscopy. <i>Infrared Physics and Technology</i> , 2019, 98, 260-265.	1.3	15
35	Terahertz Spectroscopic Signatures of Microcystin Aptamer Solution Probed with a Microfluidic Chip. <i>Sensors</i> , 2019, 19, 534.	2.1	13
36	Two-dimensional type-II g-C <sub>3</sub> N <sub>4</sub> /SiP-GaS heterojunctions as water splitting photocatalysts: first-principles predictions. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 15649-15657.	1.3	12

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37	Janus XM-GaS (M=Si, Ge, Sn; X=N, P) monolayers: Multifunctional properties for photocatalysis, piezoelectricity and second harmonic generation. <i>Physica B: Condensed Matter</i> , 2020, 594, 412366.	1.3	12
38	InSe based Janus $\text{X}_2\text{Se}_2$ monolayers as water-splitting photocatalysts: Role of vacuum level difference. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 35271-35279.	3.8	10
39	Graphene: A partially ordered non-periodic solid. <i>Journal of Chemical Physics</i> , 2014, 141, 144701.	1.2	9
40	Photovoltaic Effect Related to Methylammonium Cation Orientation and Carrier Transport Properties in High-Performance Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 3563-3571.	4.0	9
41	Void and crack detection of polymethacrylimide foams based on terahertz time-domain spectroscopic imaging. <i>Journal of Sandwich Structures and Materials</i> , 2017, 19, 348-363.	2.0	8
42	Detection of gene mutation responsible for Huntington's disease by terahertz attenuated total reflection microfluidic spectroscopy. <i>Journal of Biophotonics</i> , 2021, 14, e202000315.	1.1	8
43	Image fusion based on multiscale transform and sparse representation to enhance terahertz images. <i>Optics Express</i> , 2020, 28, 25293.	1.7	8
44	Mimicking coarse-grained simulations without coarse-graining: Enhanced sampling by damping short-range interactions. <i>Journal of Chemical Physics</i> , 2010, 133, 084101.	1.2	7
45	Enhancement Effects of the Terahertz Near-Field Microscopy. <i>Applied Sciences (Switzerland)</i> , 2015, 5, 1745-1755.	1.3	7
46	Terahertz Spectroscopy and Imaging Detection of Defects in Civil Aircraft Composites. <i>Journal of Spectroscopy</i> , 2020, 2020, 1-8.	0.6	7
47	Study of Thermal Expansion Coefficient of Graphene via Raman Microspectroscopy: Revisited. <i>Small</i> , 2021, 17, e2006146.	5.2	7
48	Graphene Terahertz Amplitude Modulation Enhanced by Square Ring Resonant Structure. <i>IEEE Photonics Journal</i> , 2018, 10, 1-7.	1.0	6
49	Planar graphitic ZnS, buckling ZnS monolayers and rolled-up nanotubes as nonlinear optical materials: first-principles simulation. <i>RSC Advances</i> , 2019, 9, 25336-25344.	1.7	6
50	Struvite-type $\text{AMgPO}_4 \cdot 6\text{H}_2\text{O}$ (A = $\text{NH}_4$ , K): Two Natural Deep-Ultraviolet Transparent Nonlinear Optical Crystals. <i>Inorganic Chemistry</i> , 2021, 60, 8103-8110.	1.9	6
51	Terahertz spectroscopy detection of lithium citrate tetrahydrate and its dehydration kinetics. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 266, 120470.	2.0	6
52	Developing Industry-Level Terahertz Imaging Resolution Using Mathematical Model. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2021, 11, 583-590.	2.0	5
53	Interaction between metal nanotip and substrate under terahertz wave radiation. <i>Journal of Modern Optics</i> , 2015, 62, 644-648.	0.6	4
54	Terahertz biosensing of protein based on a metamaterial. , 2016, , .		3

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55	First-principles investigations on the ground-state bulk properties and lattice constant dependent half-metallic ferrimagnetism of $Mn_2NbSi$ full-Heusler compound. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26566.	1.0	3
56	A Polar Material with Facility of Crystal Growth and a Large Second-Harmonic Generation Response. <i>Crystal Growth and Design</i> , 2021, 21, 1734-1740.	1.4	3
57	Mechanical and nonlinear optical properties of two-dimensional $LiXY_2$ ( $X=Al, Ga, In; Y S, Se, Te$ ) monolayers. <i>Physica B: Condensed Matter</i> , 2022, 626, 413531.	1.3	3
58	Preparation, Characterization, and Terahertz Spectroscopy Characteristics of Reduced Graphene Oxide-Doped Epoxy Resin Coating. <i>Coatings</i> , 2021, 11, 1503.	1.2	3
59	Terahertz spectroscopy of citrate Salts: Effects of crystalline state and crystallization water. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 277, 121288.	2.0	3
60	Calculated Terahertz Spectra of Glycine Oligopeptide Solutions Confined in Carbon Nanotubes. <i>Polymers</i> , 2019, 11, 385.	2.0	1
61	Detection of Nano-particles Based on Machine Vision. , 2019, , .		1
62	An Optically Tunable THz Modulator Based on Nanostructures of Silicon Substrates. <i>Sensors</i> , 2020, 20, 2198.	2.1	1
63	Structural, elastic, and electronic properties of $MgB_2C_2$ under pressure from first-principles calculations. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26442.	1.0	1
64	Nondestructive Detection of Depth-Dependent Defects in Carbon-Fiber-Reinforced Polymer Composites by Terahertz Time-Domain Spectroscopy. <i>Russian Journal of Nondestructive Testing</i> , 2021, 57, 417-422.	0.3	1
65	Graphene-based Tunable Terahertz Metamaterial Absorber with High Absorptivity. , 2018, , .		0