Gang Wang

List of Publications by Year
in descending order

77 papers	3,413 citations	159585 30 h-index	144013 57 g-index
77 all docs	77 docs citations	77 times ranked	4940 citing authors

#	Article	IF	Citations
1	Natural Graphene Plasmonic <scp>Nanoâ€Resonators</scp> for Highly Active <scp>Surfaceâ€Enhanced</scp> Raman Scattering Platforms. Energy and Environmental Materials, 2023, 6, .	12.8	2
2	Fine coverage and uniform phase distribution in 2D (PEA)2Cs3Pb4I13 solar cells with a record efficiency beyond 15%. Nano Energy, 2022, 92, 106790.	16.0	19
3	A fluorescence labelling and switchable nanosensor based on nitrogen-doped graphene quantum dots. Bulletin of Materials Science, 2022, 45, 1.	1.7	2
4	Graphene quantum dots assisted synthesis of highconcentration nitrogen doped graphene for infrared photodetectors. Diamond and Related Materials, 2022, 121, 108774.	3.9	3
5	Ordered Element Distributed C₃N Quantum Dots Manipulated Crystallization Kinetics for 2D CsPbI₃ Solar Cells with Ultraâ€High Performance. Small, 2022, 18, e2108090.	10.0	5
6	Investigation of a Highly Sensitive Surface-Enhanced Raman Scattering Substrate Formed by a Three-Dimensional/Two-Dimensional Graphene/Germanium Heterostructure. ACS Applied Materials & Interfaces, 2022, 14, 14764-14773.	8.0	3
7	A smartphone-integrated optical sensing platform based on Lycium ruthenicum derived carbon dots for real-time detection of Ag+. Science of the Total Environment, 2022, 825, 153913.	8.0	27
8	High-performance photodetectors based on Schottky junctions formed by vertical 2D-3D-2D graphene sandwich nanocavity and germanium substrate. Diamond and Related Materials, 2022, , 109043.	3.9	0
9	Dual-Enhanced Photodetectors Combining Graphene Plasmonic Nanoresonators With Germanium-on-Insulator Optical Cavities. IEEE Transactions on Electron Devices, 2022, 69, 3246-3250.	3.0	3
10	2D Graphene in Interface Engineering of 3D Grapheneâ€Based Thermal Management. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000576.	1.8	3
11	Perovskite quantum dots integrated with vertically aligned graphene toward ambipolar multifunctional photodetectors. Journal of Materials Chemistry C, 2021, 9, 609-619.	5.5	12
12	Multifunctional N-doped graphene quantum dots towards tetracycline detection, temperature sensing and high-performance WLEDs. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 405, 112977.	3.9	32
13	Dual-enhanced Raman scattering sensors incorporating graphene plasmonic nanoresonators. Journal of Materials Chemistry C, 2021, 9, 12768-12777.	5.5	2
14	High-performance near-infrared photodetectors based on C₃N quantum dots integrated with single-crystal graphene. Journal of Materials Chemistry C, 2021, 9, 1333-1338.	5.5	7
15	Hydrothermal synthesis of N, P co-doped graphene quantum dots for high-performance Fe3+ detection and bioimaging. Journal of Nanoparticle Research, 2021, 23, 1.	1.9	16
16	An Ultrasensitive Contact Lens Sensor Based On Selfâ€Assembly Graphene For Continuous Intraocular Pressure Monitoring. Advanced Functional Materials, 2021, 31, 2010991.	14.9	31
17	Intact Vertical 3Dâ€“0Dâ€“2D Carbonâ€Based pâ€“n Junctions for Use in Highâ€Performance Photodetectors. Advanced Optical Materials, 2021, 9, 2100387.	7.3	7
18	Sensitive, Reusable, Surface-Enhanced Raman Scattering Sensors Constructed with a 3D Graphene/Si Hybrid. ACS Applied Materials & Interfaces, 2021, 13, 23081-23091.	8.0	19

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19	Scalable and atom economic preparation of red-near-infrared emitted N-doped graphene quantum dots with a high quantum yield. Diamond and Related Materials, 2021, 116, 108395.	3.9	10
20	Bandgap engineering of two-dimensional C3N bilayers. Nature Electronics, 2021, 4, 486-494.	26.0	36
21	Solid-state fluorescent nitrogen doped graphene quantum dots with yellow emission for white light-emitting diodes. Synthetic Metals, 2021, 277, 116787.	3.9	13
22	Multifunctional red-emission graphene quantum dots with tunable light emissions for trace water sensing, WLEDs and information encryption. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 622, 126593.	4.7	18
23	Synthesis of multi-color fluorine and nitrogen co-doped graphene quantum dots for use in tetracycline detection, colorful solid fluorescent ink, and film. Journal of Colloid and Interface Science, 2021, 602, 689-698.	9.4	42
24	Boosting carrier transfer at flexible schottky junctions with moisture: A strategy for high-performance wearable direct-current nanogenerators. Nano Energy, 2021, 90, 106593.	16.0	14
25	Oxygen-etchant-promoted synthesis of vertically aligned graphene arrays in a Joule heater and defogger. Diamond and Related Materials, 2021, 120, 108697.	3.9	4
26	Resonant nanocavity-enhanced graphene photodetectors on reflecting silicon-on-insulator wafers. Applied Physics Letters, 2021, 119, .	3.3	6
27	Biomass-derived nitrogen doped graphene quantum dots with color-tunable emission for sensing, fluorescence ink and multicolor cell imaging. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 227, 117671.	3.9	49
28	Graphene Quantum Dots Promoted the Synthesis of Heavily n-Type Graphene for Near-Infrared Photodetectors. Journal of Physical Chemistry C, 2020, 124, 1674-1680.	3.1	7
29	Welding of reduced graphene oxide with high quality and sizeable lateral size by coupling reaction. Materials Letters, 2020, 261, 127010.	2.6	0
30	High-performance humidity sensor constructed with vertically aligned graphene arrays on silicon Schottky junctions. Materials Letters, 2020, 277, 128343.	2.6	11
31	Application of graphene nanowalls in an intraocular pressure sensor. Journal of Materials Chemistry B, 2020, 8, 8794-8802.	5.8	22
32	Role of interfacial 2D graphene in high performance 3D graphene/germanium Schottky junction humidity sensors. Journal of Materials Chemistry C, 2020, 8, 14196-14202.	5.5	6
33	Carbonâ€Based Quantum Dots with Solidâ€State Photoluminescent: Mechanism, Implementation, and Application. Small, 2020, 16, e2004621.	10.0	141
34	Selective homocysteine detection of nitrogen-doped graphene quantum dots: Synergistic effect of surface catalysis and photoluminescence sensing. Synthetic Metals, 2020, 267, 116432.	3.9	11
35	Distinct antibacterial activity of a vertically aligned graphene coating against Gram-positive and Gram-negative bacteria. Journal of Materials Chemistry B, 2020, 8, 6069-6079.	5.8	28
36	Interface Engineering-Assisted 3D-Graphene/Germanium Heterojunction for High-Performance Photodetectors. ACS Applied Materials & Interfaces, 2020, 12, 15606-15614.	8.0	33

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37	Graphene Quantum Dot-Decorated Vertically Oriented Graphene/Germanium Heterojunctions for Near-Infrared Photodetectors. ACS Applied Nano Materials, 2020, 3, 6915-6924.	5.0	21
38	Conductive graphene-based E-textile for highly sensitive, breathable, and water-resistant multimodal gesture-distinguishable sensors. Journal of Materials Chemistry A, 2020, 8, 14778-14787.	10.3	38
39	Polarizing Graphene Quantum Dots toward Long-Acting Intracellular Reactive Oxygen Species Evaluation and Tumor Detection. ACS Applied Materials & Interfaces, 2020, 12, 10781-10790.	8.0	21
40	Yellow emissive nitrogen-doped graphene quantum dots as a label-free fluorescent probe for Fe3+ sensing and bioimaging. Diamond and Related Materials, 2020, 104, 107749.	3.9	34
41	Facile and highly effective synthesis of nitrogen-doped graphene quantum dots as a fluorescent sensing probe for Cu2+ detection. Current Applied Physics, 2020, 20, 538-544.	2.4	38
42	Ultraviolet light-driven controllable doping of graphene quantum dots with tunable emission wavelength for fluorescence bio-imaging. Materials Letters, 2020, 266, 127468.	2.6	13
43	Seedâ€Initiated Synthesis and Tunable Doping Graphene for Highâ€Performance Photodetectors. Advanced Optical Materials, 2019, 7, 1901388.	7.3	7
44	Graphite-N Doped Graphene Quantum Dots as Semiconductor Additive in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 37796-37803.	8.0	61
45	Barrier-assisted ion beam synthesis of transfer-free graphene on an arbitrary substrate. Applied Physics Letters, 2019, 115, .	3.3	5
46	Controllable growth of vertically oriented graphene for high sensitivity gas detection. Journal of Materials Chemistry C, 2019, 7, 5995-6003.	5.5	32
47	Green preparation of lattice phosphorus doped graphene quantum dots with tunable emission wavelength for bio-imaging. Materials Letters, 2019, 242, 156-159.	2.6	28
48	Nitrogen-doped graphene quantum dots for 80% photoluminescence quantum yield for inorganic Î³-CsPbI‹sub›3‹/sub› perovskite solar cells with efficiency beyond 16%. Journal of Materials Chemistry A, 2019, 7, 5740-5747.	10.3	113
49	‹i›In situ‹/i› synthesis of monolayer graphene on silicon for near-infrared photodetectors. RSC Advances, 2019, 9, 37512-37517.	3.6	7
50	Electrochemical method for large size and few-layered water-dispersible graphene. Carbon, 2019, 143, 559-563.	10.3	21
51	Promising Fast Energy Transfer System Between Graphene Quantum Dots and the Application in Fluorescent Bioimaging. Langmuir, 2019, 35, 760-766.	3.5	29
52	Anode coverage for enhanced electrochemical oxidation: a green and efficient strategy towards water-dispersible graphene. Green Chemistry, 2018, 20, 1306-1315.	9.0	35
53	Facile and Highly Effective Synthesis of Controllable Lattice Sulfur-Doped Graphene Quantum Dots via Hydrothermal Treatment of Durian. ACS Applied Materials & Interfaces, 2018, 10, 5750-5759.	8.0	201
54	Exceptional cracking behavior in H-implanted Si/B-doped Si0.70Ge0.30/Si heterostructures. Applied Physics Express, 2018, 11, 011301.	2.4	2

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55	Electrochemical Cutting in Weak Aqueous Electrolytes: The Strategy for Efficient and Controllable Preparation of Graphene Quantum Dots. Langmuir, 2018, 34, 250-258.	3.5	71
56	Âµâ€Graphene Crosslinked CsPbI₃ Quantum Dots for High Efficiency Solar Cells with Much Improved Stability. Advanced Energy Materials, 2018, 8, 1800007.	19.5	198
57	Super-hydrophilicity of hydroxy modified poly(m-phenylenediamine) aerogel for separation of oil/water and biocompatibility. Materials Research Express, 2018, 5, 045301.	1.6	4
58	Interfacial monolayer graphene growth on arbitrary substrate by nickel-assisted ion implantation. Journal of Materials Science, 2018, 53, 2631-2637.	3.7	8
59	Seamless lateral graphene pâ€“n junctions formed by selective in situ doping for high-performance photodetectors. Nature Communications, 2018, 9, 5168.	12.8	71
60	Ambipolar Grapheneâ€“Quantum Dot Phototransistors with CMOS Compatibility. Advanced Optical Materials, 2018, 6, 1800985.	7.3	50
61	Selective supramolecular interaction of ethylenediamine functionalized graphene quantum dots: Ultra-sensitive photoluminescence detection for nickel ion in vitro. Synthetic Metals, 2018, 244, 106-112.	3.9	30
62	Direct integration of polycrystalline graphene on silicon as a photodetector via plasma-assisted chemical vapor deposition. Journal of Materials Chemistry C, 2018, 6, 9682-9690.	5.5	11
63	Insights into the Oxidation Mechanism of sp²â€“sp³ Hybrid Carbon Materials: Preparation of a Water-Soluble 2D Porous Conductive Network and Detectable Molecule Separation. Langmuir, 2017, 33, 913-919.	3.5	33
64	C₃Nâ€”A 2D Crystalline, Holeâ€Free, Tunableâ€Narrowâ€Bandgap Semiconductor with Ferromagnetic Properties. Advanced Materials, 2017, 29, 1605625.	21.0	350
65	Green, Rapid, and Universal Preparation Approach of Graphene Quantum Dots under Ultraviolet Irradiation. ACS Applied Materials & Interfaces, 2017, 9, 14470-14477.	8.0	99
66	Green and Mild Oxidation: An Efficient Strategy toward Water-Dispersible Graphene. ACS Applied Materials & Interfaces, 2017, 9, 2856-2866.	8.0	24
67	Kinetically Enhanced Bubble-Exfoliation of Graphite toward High-Yield Preparation of High-Quality Graphene. Chemistry of Materials, 2017, 29, 8578-8582.	6.7	45
68	A New Graphene Derivative: Hydroxylated Graphene with Excellent Biocompatibility. ACS Applied Materials & Interfaces, 2016, 8, 10226-10233.	8.0	59
69	Electron Injection of Phosphorus Doped gâ€C₃N₄ Quantum Dots: Controllable Photoluminescence Emission Wavelength in the Whole Visible Light Range with High Quantum Yield. Advanced Optical Materials, 2016, 4, 2095-2101.	7.3	86
70	Surface Modification of C₃N₄ through Oxygen-Plasma Treatment: A Simple Way toward Excellent Hydrophilicity. ACS Applied Materials & Interfaces, 2016, 8, 31419-31425.	8.0	66
71	Synthesis of Layerâ€Tunable Graphene: A Combined Kinetic Implantation and Thermal Ejection Approach. Advanced Functional Materials, 2015, 25, 3666-3675.	14.9	43
72	Negative induction effect of graphite N on graphene quantum dots: tunable band gap photoluminescence. Journal of Materials Chemistry C, 2015, 3, 8810-8816.	5.5	139

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73	A new mild, clean and highly efficient method for the preparation of graphene quantum dots without by-products. Journal of Materials Chemistry B, 2015, 3, 6871-6876.	5.8	120
74	Deep ultraviolet emission photoluminescence and high luminescece efficiency of ferric passivated graphene quantum dots: Strong negative inductive effect of Fe. Synthetic Metals, 2015, 209, 468-472.	3.9	31
75	Direct growth of single-layer graphene on Ni surface manipulated by Si barrier. Applied Physics Letters, 2014, 104, 213101.	3.3	2
76	Antibacterial activity of large-area monolayer graphene film manipulated by charge transfer. Scientific Reports, 2014, 4, 4359.	3.3	342
77	Direct Growth of Graphene Film on Germanium Substrate. Scientific Reports, 2013, 3, 2465.	3.3	181