Hui Peng

List of Publications by Year
in descending order

82 papers	3,545 citations	147801 31 h-index	138484 58 g-index
83 all docs	83 docs citations	83 times ranked	4631 citing authors

#	Article	IF	Citations
1	Simple Aqueous Solution Route to Luminescent Carbogenic Dots from Carbohydrates. Chemistry of Materials, 2009, 21, 5563-5565.	6.7	770
2	Highly Efficient Self-Trapped Exciton Emission of a (MA)₄Cu₂Br₆ Single Crystal. Journal of Physical Chemistry Letters, 2020, 11, 4703-4710.	4.6	138
3	Label-free electrochemical DNA sensor based on functionalised conducting copolymer. Biosensors and Bioelectronics, 2005, 20, 1821-1828.	10.1	135
4	A Robust Artificial Synapse Based on Organic Ferroelectric Polymer. Advanced Electronic Materials, 2019, 5, 1800600.	5.1	129
5	Investigation of Optical and Photocatalytic Properties of Bismuth Nanospheres Prepared by a Facile Thermolysis Method. Journal of Physical Chemistry C, 2014, 118, 1155-1160.	3.1	123
6	Aggregation induced red shift emission of phosphorus doped carbon dots. RSC Advances, 2017, 7, 32225-32228.	3.6	113
7	Electrochemical detection of DNA hybridization amplified by nanoparticles. Biosensors and Bioelectronics, 2006, 21, 1727-1736.	10.1	107
8	Label-free detection of DNA hybridization based on a novel functionalized conducting polymer. Biosensors and Bioelectronics, 2007, 22, 1868-1873.	10.1	105
9	(Diisopropylammonium)₂MnBr₄: a multifunctional ferroelectric with efficient green-emission and excellent gas sensing properties. Chemical Communications, 2017, 53, 5954-5957.	4.1	91
10	Organic-inorganic hybrid manganese bromine single crystal with dual-band photoluminescence from polaronic and bipolaronic excitons. Nano Energy, 2021, 87, 106166.	16.0	85
11	Tuning the properties of luminescent nitrogen-doped carbon dots by reaction precursors. Carbon, 2016, 100, 386-394.	10.3	76
12	A Flexible Mott Synaptic Transistor for Nociceptor Simulation and Neuromorphic Computing. Advanced Functional Materials, 2021, 31, 2101099.	14.9	76
13	Characterization of Polyaniline Nanotubes Formed in the Presence of Amino Acids. Macromolecular Chemistry and Physics, 2007, 208, 1210-1217.	2.2	75
14	Polymeric Acid Doped Polyaniline Nanotubes for Oligonucleotide Sensors. Electroanalysis, 2007, 19, 870-875.	2.9	72
15	Porous V2O5 micro/nano-tubes: Synthesis via a CVD route, single-tube-based humidity sensor and improved Li-ion storage properties. Journal of Materials Chemistry, 2012, 22, 5013.	6.7	72
16	Ultralowâ€Power Machine Vision with Selfâ€Powered Sensor Reservoir. Advanced Science, 2022, 9, e2106092.	11.2	68
17	Highly Efficient Cool-White Photoluminescence of (Gua)₃Cu₂I₅ Single Crystals: Formation and Optical Properties. ACS Applied Materials & Interfaces, 2021, 13, 13443-13451.	8.0	63
18	ABTS^{â€¢+} scavenging activity of polypyrrole, polyaniline and poly(3,4â€ethylenedioxythiophene). Polymer International, 2011, 60, 69-77.	3.1	56

#	Article	IF	Citations
19	An air-stable artificial synapse based on a lead-free double perovskite Cs₂AgBiBr₆ film for neuromorphic computing. Journal of Materials Chemistry C, 2021, 9, 5706-5712.	5.5	56
20	Evolution of the structure and properties of mechanochemically synthesized pyrrolidine incorporated manganese bromide powders. Journal of Materials Chemistry C, 2020, 8, 6488-6495.	5.5	49
21	Selfâ€Assembled Hollow Polyaniline/Au Nanospheres Obtained by a Oneâ€Step Synthesis. Macromolecular Rapid Communications, 2008, 29, 598-603.	3.9	46
22	Bulk assembly of a 0D organic antimony chloride hybrid with highly efficient orange dual emission by self-trapped states. Journal of Materials Chemistry C, 2021, 9, 12184-12190.	5.5	43
23	Highly Stable Waterborne Luminescent Inks Based on MAPbBr₃@PbBr(OH) Nanocrystals for LEDs and Anticounterfeit Applications. ACS Applied Materials & Interfaces, 2021, 13, 20622-20632.	8.0	42
24	Understanding the Effect of Al Doping on the Electrochemical Performance Improvement of the LiMn₂O₄ Cathode Material. ACS Applied Materials & Interfaces, 2021, 13, 45446-45454.	8.0	42
25	A novel cationic conjugated polymer for homogeneous fluorescence-based DNA detection. Chemical Communications, 2006, , 3735.	4.1	39
26	Heterostructured MoS2@Bi2Se3 nanoflowers: A highly efficient electrocatalyst for hydrogen evolution. Journal of Catalysis, 2020, 381, 590-598.	6.2	39
27	Self-Assembly of Poly(o-methoxyaniline) Hollow Microspheres. Journal of Physical Chemistry C, 2009, 113, 9128-9134.	3.1	36
28	Organometal halide perovskite nanocrystals embedded in silicone resins with bright luminescence and ultrastability. Journal of Materials Chemistry C, 2017, 5, 12044-12049.	5.5	36
29	Plasmonic Au nanoparticle-decorated Bi2Se3 nanoflowers with outstanding electrocatalytic performance for hydrogen evolution. International Journal of Hydrogen Energy, 2019, 44, 30876-30884.	7.1	34
30	Artificial Synapse Based on Organicâ€“Inorganic Hybrid Perovskite with Electric and Optical Modulation. Advanced Electronic Materials, 2021, 7, 2100291.	5.1	34
31	Facile Synthesis of 3d Transition-Metal-Doped Î±-Co(OH)₂ Nanomaterials in Waterâ€“Methanol Mediated with Ammonia for Oxygen Evolution Reaction. ACS Omega, 2019, 4, 16612-16618.	3.5	33
32	Efficient two-terminal artificial synapse based on a network of functionalized conducting polymer nanowires. Journal of Materials Chemistry C, 2019, 7, 9933-9938.	5.5	32
33	Tuning the Crystal Structure and Luminescence of Pyrrolidinium Manganese Halides via Halide Ions. Crystal Research and Technology, 2019, 54, 1800236.	1.3	30
34	Stretchable and self-healable organometal halide perovskite nanocrystal-embedded polymer gels with enhanced luminescence stability. Nanophotonics, 2018, 7, 1949-1958.	6.0	27
35	Atomic insights into surface orientations and oxygen vacancies in the LiMn2O4 cathode for lithium storage. Journal of Alloys and Compounds, 2021, 870, 159387.	5.5	26
36	Facile synthesis of cobalt modified 2D titanium carbide with enhanced hydrogen evolution performance in alkaline media. International Journal of Hydrogen Energy, 2021, 46, 32536-32545.	7.1	26

#	Article	IF	Citations
37	Ion adsorption-induced reversible polarization switching of a van der Waals layered ferroelectric. Nature Communications, 2021, 12, 655.	12.8	25
38	High-stability fluorescent perovskites embedded in PbBrOH triggered by imidazole derivatives in water. Journal of Materials Chemistry C, 2020, 8, 5594-5599.	5.5	24
39	Synergistic effect of cobalt boride nanoparticles on MoS₂ nanoflowers for a highly efficient hydrogen evolution reaction in alkaline media. Nanoscale, 2020, 12, 10158-10165.	5.6	24
40	Dual self-trapped exciton emission of (TBA)₂Cu₂I₄: optical properties and high anti-water stability. Journal of Materials Chemistry C, 2021, 9, 16014-16021.	5.5	24
41	High-efficient yellow-green emission in (TDMP)MnBr4 single crystal with modulation of spin-phonon-charge interactions. Materials Today Physics, 2022, 25, 100703.	6.0	23
42	Water-soluble anionic poly(p-phenylene vinylenes) with high luminescence. Polymer Chemistry, 2013, 4, 2506.	3.9	22
43	Hydrogenation Dynamics of Electrically Controlled Metalâ€“Insulator Transition in Protonâ€Gated Transparent and Flexible WO 3 Transistors. Advanced Functional Materials, 2019, 29, 1902497.	14.9	21
44	Bulk assembly of a 0D organic tin(<scp>ii</scp>)chloride hybrid with high anti-water stability. Chemical Communications, 2021, 57, 8162-8165.	4.1	21
45	Crystal growth and dynamic ferroelectric hysteresis scaling behavior of molecular ferroelectric diisopropylammonium bromide. Journal of Crystal Growth, 2016, 438, 25-30.	1.5	19
46	Protonâ€Mediated Phase Control in Flexible and Transparent Mott Transistors. Advanced Electronic Materials, 2020, 6, 1900742.	5.1	19
47	Efficient overall water splitting using nickel boride-based electrocatalysts. International Journal of Hydrogen Energy, 2020, 45, 28616-28625.	7.1	19
48	Fully Lightâ€Modulated Organic Artificial Synapse with the Assistance of Ferroelectric Polarization. Advanced Electronic Materials, 2022, 8, .	5.1	19
49	An organicâ€“inorganic hybrid ferroelectric with strong luminescence and high Curie temperature. CrystEngComm, 2020, 22, 1436-1441.	2.6	18
50	Atomic Insights into Ti Doping on the Stability Enhancement of Truncated Octahedron LiMn2O4 Nanoparticles. Nanomaterials, 2021, 11, 508.	4.1	18
51	Blue emission from Sr0.98Ga2B2O7: 0.01Bi3+, 0.01Dy3+ phosphor with high quantum yield. Journal of Alloys and Compounds, 2019, 810, 151849.	5.5	17
52	Multifunctional Two-Terminal Optoelectronic Synapse Based on Zinc Oxide/Poly(3-hexylthiophene) Heterojunction for Neuromorphic Computing. ACS Applied Polymer Materials, 2022, 4, 5688-5695.	4.4	15
53	Transparent PVDFâ€TrFE/Graphene Oxide Ultrathin Films with Enhanced Energy Harvesting Performance. ChemistrySelect, 2017, 2, 7951-7955.	1.5	14
54	A Quasiâ€Twoâ€Dimensional Copper Based Organicâ€Inorganic Hybrid Perovskite with Reversible Thermochromism and Ferromagnetism. European Journal of Inorganic Chemistry, 2021, 2021, 4984-4989.	2.0	14

#	Article	IF	Citations
55	Enhanced dielectric and electrical energy storage capability of polymers with combined azobenzene and triphenylamine side groups by ring-opening metathesis polymerization. Polymer, 2019, 184, 121886.	3.8	13
56	Formation and dispersion of organometal halide perovskite nanocrystals in various solvents. Journal of Colloid and Interface Science, 2018, 529, 575-581.	9.4	12
57	Highly Luminescent Copper(I) Halide Phosphors Encapsulated in Fumed Silica for Antiâ€Counterfeiting and Colorâ€Converting Applications. Advanced Optical Materials, 2022, 10, .	7.3	12
58	Luminescent Nanofluids of Organometal Halide Perovskite Nanocrystals in Silicone Oils with Ultrastability. ACS Applied Materials & Interfaces, 2018, 10, 27244-27251.	8.0	11
59	Luminescent CH₃NH₃PbBr₃/Î²â€Cyclodextrin Core/Shell Nanodots with Controlled Size and Ultrastability through Hostâ€Guest Interactions. ChemNanoMat, 2019, 5, 1311-1316.	2.8	11
60	Realization of 11.5% Efficiency Cu₂ZnSn(S,Se)₄ Thinâ€Film Solar Cells by Manipulating the Phase Structure of Precursor Films. Solar Rrl, 2021, 5, 2100216.	5.8	11
61	Size-controlled synthesis of hierarchical bismuth selenide nanoflowers and their photocatalytic performance in the presence of H2O2. Journal of Nanoparticle Research, 2018, 20, 1.	1.9	10
62	Two-terminal organic optoelectronic synapse based on poly(3-hexylthiophene) for neuromorphic computing. Organic Electronics, 2022, 100, 106390.	2.6	10
63	Ferroelectricity and antiferromagnetism in organicâ€“inorganic hybrid (1,4-bis(imidazol-1-ylmethyl)benzene)CuCl₄·H₂O. CrystEngComm, 2020, 22, 587-592.	2.6	9
64	Piezoelectric Nanogenerators Based on Helical Carbon Materials and Polyvinyledenedifluorideâ€“Trifluoroethylene Hybrids with Enhanced Energyâ€Harvesting Performance. Energy Technology, 2020, 8, 1901249.	3.8	9
65	Large-scale facile-synthesis and bistable emissions of one-dimensional organicâ€“inorganic C₄H₁₄N₂PbBr₄ metal halide crystals with bipolaronic states. New Journal of Chemistry, 2021, 45, 17247-17257.	2.8	9
66	H2O2 decomposition catalyzed by strontium cobaltites and their application in Rhodamine B degradation in aqueous medium. Journal of Materials Science, 2019, 54, 8216-8225.	3.7	7
67	Amorphous ZrO₂ Tunnel Junction Memristor With a Tunneling Electroresistance Ratio Above 400. IEEE Electron Device Letters, 2021, 42, 696-699.	3.9	6
68	Thermoinduced structural-transformation and luminescent conversion in hybrid manganese halides. Journal of Physics Condensed Matter, 2022, 34, 154001.	1.8	6
69	Facile synthesis of ultrastable organometal halide perovskite nanocomposites using superhydrophobic fumed silica as matrix. Materials Research Bulletin, 2020, 129, 110918.	5.2	4
70	One-pot synthesis of novel ligand-free tin(<scp>ii</scp>)-based hybrid metal halide perovskite quantum dots with high anti-water stability for solution-processed UVC photodetectors. Nanoscale, 2022, 14, 4170-4180.	5.6	4
71	DNA Sensors based on Conducting Polymers Functionalized with Conjugated Side Chain. , 2007, , .		3
72	Electric field control of magnetism in nickel with coaxial cylinder structure at room temperature by electric double layer gating. Journal of Materials Chemistry C, 2017, 5, 10609-10614.	5.5	3

#	Article	IF	Citations
73	Synthesis, Structure and Properties of Formamidineâ€templated Metal Formate Crystals. Crystal Research and Technology, 2017, 52, 1700195.	1.3	3
74	A Flexible Bilayer Actuator Based on Liquid Crystal Network and PVDFâ€“TrFE for Lowâ€Grade Waste Heat Harvesting. Energy Technology, 2020, 8, 2000612.	3.8	3
75	PN-junction diode behavior based on polyaniline nanotubes field effect transistor. Journal of Materials Science: Materials in Electronics, 2008, 19, 996-999.	2.2	2
76	Elastic flexibility of ferroelectric supramolecular co-crystals. Soft Materials, 2020, 18, 31-37.	1.7	2
77	Preparation of Î±-Co(OH)2@MWCNTs-COOH nanocomposites and their application for supercapacitors. Journal of Materials Science: Materials in Electronics, 2021, 32, 13941-13947.	2.2	2
78	Capping-ligand free grinding synthesis of luminescent lead halide perovskite nanocrystals. Materials Today Communications, 2021, 26, 101926.	1.9	1
79	Transparent Optoelectronic Synapse Based on a CuI Electrode for Arithmetic Operation. ACS Applied Electronic Materials, 2022, 4, 1989-1996.	4.3	1
80	Optoelectronic artificial synapses based on copper (II) phthalocyanine with modulated neuroplasticity. Journal of Materials Science: Materials in Electronics, 0, , .	2.2	1
81	Conjugated polymers as novel electrochemical and optical DNA sensors. , 2008, , .		0
82	Ferro-electric and magnetic properties in Bi₅Ti₃FeO₁₅ films by Mn doping. Journal of Materials Chemistry C, 2022, 10, 1003-1009.	5.5	0