Desheng Kong

List of Publications by Citations

78 papers	14,721 citations	44 h-index	84 g-index
84 ext. papers	16,204 ext. citations	12.9 avg, IF	6.51 L-index

#	Paper	IF	Citations
78	Synthesis of MoS2 and MoSe2 films with vertically aligned layers. *Nano Letters*, **2013**, 13, 1341-7	11.5	1746
77	CoSe2 nanoparticles grown on carbon fiber paper: an efficient and stable electrocatalyst for hydrogen evolution reaction. *Journal of the American Chemical Society*, **2014**, 136, 4897-900	16.4	1147
76	First-row transition metal dichalcogenide catalysts for hydrogen evolution reaction. *Energy and Environmental Science*, **2013**, 6, 3553	35.4	828
75	A transparent electrode based on a metal nanotrough network. *Nature Nanotechnology*, **2013**, 8, 421-5	28.7	749
74	Electrochemical tuning of vertically aligned MoS2 nanofilms and its application in improving hydrogen evolution reaction. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 19701-6	11.5	747
73	Aharonov-Bohm interference in topological insulator nanoribbons. *Nature Materials*, **2010**, 9, 225-9	27	660
72	Electrospun metal nanofiber webs as high-performance transparent electrode. *Nano Letters*, **2010**, 10, 4242-8	11.5	610
71	MoSe2 and WSe2 nanofilms with vertically aligned molecular layers on curved and rough surfaces. *Nano Letters*, **2013**, 13, 3426-33	11.5	579
70	Rapid water disinfection using vertically aligned MoS nanofilms and visible light. *Nature Nanotechnology*, **2016**, 11, 1098-1104	28.7	514
69	Electrochemical tuning of MoS2 nanoparticles on three-dimensional substrate for efficient hydrogen evolution. *ACS Nano*, **2014**, 8, 4940-7	16.7	487
68	Transition-metal doped edge sites in vertically aligned MoS2 catalysts for enhanced hydrogen evolution. *Nano Research*, **2015**, 8, 566-575	10	478
67	Improved lithium–sulfur batteries with a conductive coating on the separator to prevent the accumulation of inactive S-related species at the cathode–separator interface. *Energy and Environmental Science*, **2014**, 7, 3381-3390	35.4	425
66	Few-layer nanoplates of Bi 2 Se 3 and Bi 2 Te 3 with highly tunable chemical potential. *Nano Letters*, **2010**, 10, 2245-50	11.5	370
65	Electrochemical tuning of layered lithium transition metal oxides for improvement of oxygen evolution reaction. *Nature Communications*, **2014**, 5, 4345	17.4	350
64	Three-dimensional carbon nanotube-textile anode for high-performance microbial fuel cells. *Nano Letters*, **2011**, 11, 291-6	11.5	350
63	Improving lithium-sulphur batteries through spatial control of sulphur species deposition on a hybrid electrode surface. *Nature Communications*, **2014**, 5, 3943	17.4	341
62	Ambipolar field effect in the ternary topological insulator (Bi(x)Sb(1-x))2Te3 by composition tuning. *Nature Nanotechnology*, **2011**, 6, 705-9	28.7	311

61	Rapid surface oxidation as a source of surface degradation factor for Bi2Se3. *ACS Nano*, **2011**, 5, 4698-703	16.7	279
60	Sulfur cathodes with hydrogen reduced titanium dioxide inverse opal structure. *ACS Nano*, **2014**, 8, 5249-56	16.7	273
59	Topological insulator nanowires and nanoribbons. *Nano Letters*, **2010**, 10, 329-33	11.5	263
58	Performance enhancement of metal nanowire transparent conducting electrodes by mesoscale metal wires. *Nature Communications*, **2013**, 4, 2522	17.4	244
57	Improving battery safety by early detection of internal shorting with a bifunctional separator. *Nature Communications*, **2014**, 5, 5193	17.4	233
56	Opportunities in chemistry and materials science for topological insulators and their nanostructures. *Nature Chemistry*, **2011**, 3, 845-9	17.6	199
55	Mechanically Durable and Highly Stretchable Transistors Employing Carbon Nanotube Semiconductor and Electrodes. *Advanced Materials*, **2016**, 28, 4441-8	24	191
54	Ultra-low carrier concentration and surface-dominant transport in antimony-doped Bi2Se3 topological insulator nanoribbons. *Nature Communications*, **2012**, 3, 757	17.4	175
53	Vertical heterostructure of two-dimensional MoS2 and WSe2 with vertically aligned layers. *Nano Letters*, **2015**, 15, 1031-5	11.5	168
52	Electrolessly deposited electrospun metal nanowire transparent electrodes. *Journal of the American Chemical Society*, **2014**, 136, 10593-6	16.4	158
51	Weak antilocalization in Bi2(Se(x)Te(1-x))3 nanoribbons and nanoplates. *Nano Letters*, **2012**, 12, 1107-11	11.5	154
50	Ultrathin topological insulator Bi2Se3 nanoribbons exfoliated by atomic force microscopy. *Nano Letters*, **2010**, 10, 3118-22	11.5	148
49	High-density chemical intercalation of zero-valent copper into Bi2Se3 nanoribbons. *Journal of the American Chemical Society*, **2012**, 134, 7584-7	16.4	122
48	Chemical intercalation of zerovalent metals into 2D layered Bi2Se3 nanoribbons. *Journal of the American Chemical Society*, **2012**, 134, 13773-9	16.4	117
47	Magnetic doping and kondo effect in bi(2)se(3) nanoribbons. *Nano Letters*, **2010**, 10, 1076-81	11.5	109
46	Static electricity powered copper oxide nanowire microbicidal electroporation for water disinfection. *Nano Letters*, **2014**, 14, 5603-8	11.5	91
45	Low reflectivity and high flexibility of tin-doped indium oxide nanofiber transparent electrodes. *Journal of the American Chemical Society*, **2011**, 133, 27-9	16.4	85
44	Optical transmission enhancement through chemically tuned two-dimensional bismuth chalcogenide nanoplates. *Nature Communications*, **2014**, 5, 5670	17.4	79

43	Capacitance Characterization of Elastomeric Dielectrics for Applications in Intrinsically Stretchable Thin Film Transistors. *Advanced Functional Materials*, **2016**, 26, 4680-4686	15.6	68
42	Two-dimensional chalcogenide nanoplates as tunable metamaterials via chemical intercalation. *Nano Letters*, **2013**, 13, 5913-8	11.5	60
41	Effects of magnetic doping on weak antilocalization in narrow Bi2Se3 nanoribbons. *Nano Letters*, **2012**, 12, 4355-9	11.5	59
40	Nickel Chains Assembled by Hollow Microspheres and Their Magnetic Properties. *Journal of Physical Chemistry C*, **2008**, 112, 6613-6619	3.8	57
39	Significance of the double-layer capacitor effect in polar rubbery dielectrics and exceptionally stable low-voltage high transconductance organic transistors. *Scientific Reports*, **2015**, 5, 17849	4.9	53
38	Ambipolar field effect in Sb-doped Bi2Se3 nanoplates by solvothermal synthesis. *Nano Letters*, **2013**, 13, 632-6	11.5	50
37	Partially-Screened Field Effect and Selective Carrier Injection at Organic Semiconductor/Graphene Heterointerface. *Nano Letters*, **2015**, 15, 7587-95	11.5	49
36	Biomass-Derived Carbon Paper to Sandwich Magnetite Anode for Long-Life Li-Ion Battery. *ACS Nano*, **2019**, 13, 11901-11911	16.7	45
35	Bright Stretchable Electroluminescent Devices based on Silver Nanowire Electrodes and High-k Thermoplastic Elastomers. *ACS Applied Materials & Interfaces*, **2018**, 10, 44760-44767	9.5	44
34	Stretchable High-Permittivity Nanocomposites for Epidermal Alternating-Current Electroluminescent Displays **2019**, 1, 511-518		41
33	Skin-inspired electronics: emerging semiconductor devices and systems. *Journal of Semiconductors*, **2020**, 41, 041601	2.3	33
32	Preparation and Characterization of Ring-Shaped Co Nanomaterials. *Chemistry of Materials*, **2008**, 20, 5163-5168	9.6	31
31	Fast-Response and Low-Hysteresis Flexible Pressure Sensor Based on Silicon Nanowires. *IEEE Electron Device Letters*, **2018**, 39, 1069-1072	4.4	26
30	Fully Screen-Printed, Multicolor, and Stretchable Electroluminescent Displays for Epidermal Electronics. *ACS Applied Materials & Interfaces*, **2020**, 12, 47902-47910	9.5	24
29	Printable Liquid Metal Microparticle Ink for Ultrastretchable Electronics. *ACS Applied Materials & Interfaces*, **2020**, 12, 50852-50859	9.5	23
28	A stretchable and breathable form of epidermal device based on elastomeric nanofibre textiles and silver nanowires. *Journal of Materials Chemistry C*, **2019**, 7, 9748-9755	7.1	21
27	Omnidirectional Printing of Soft Elastomer for Liquid-State Stretchable Electronics. *ACS Applied Materials & Interfaces*, **2019**, 11, 18590-18598	9.5	20
26	Ultrastretchable and Washable Conductive Microtextiles by Coassembly of Silver Nanowires and Elastomeric Microfibers for Epidermal HumanMachine Interfaces **2021**, 3, 912-920		20

25	Investigation of a Solution-Processable, Nonspecific Surface Modifier for Low Cost, High Work Function Electrodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 19658-64	9.5	19
24	Laser Sintering of Zn Microparticles and Its Application in Printable Biodegradable Electronics. *Advanced Electronic Materials*, **2019**, 5, 1800693	6.4	18
23	Soft elastomeric composite materials with skin-inspired mechanical properties for stretchable electronic circuits. *Lab on A Chip*, **2019**, 19, 2709-2717	7.2	18
22	Maskless Patterning of Biodegradable Conductors by Selective Laser Sintering of Microparticle Inks and Its Application in Flexible Transient Electronics. *ACS Applied Materials & Interfaces*, **2019**, 11, 45844-45852	9.5	18
21	Stretchable and Superwettable Colorimetric Sensing Patch for Epidermal Collection and Analysis of Sweat. *ACS Sensors*, **2021**, 6, 2261-2269	9.2	17
20	Intrinsically stretchable electronics with ultrahigh deformability to monitor dynamically moving organs.. *Science Advances*, **2022**, 8, eabl5511	14.3	17
19	Magnetization ground states and phase diagrams for a nanosized Co hollow sphere: An onion-type magnetization state. *Journal of Applied Physics*, **2008**, 104, 013923	2.5	12
18	Phase Separation of Dirac Electrons in Topological Insulators at the Spatial Limit. *Nano Letters*, **2017**, 17, 97-103	11.5	9
17	Crumpled MXene Electrodes for Ultrastretchable and High-Area-Capacitance Supercapacitors. *Nano Letters*, **2021**, 21, 7561-7568	11.5	9
16	Fully solution processed liquid metal features as highly conductive and ultrastretchable conductors. *Npj Flexible Electronics*, **2021**, 5,	10.7	9
15	Strain-invariant conductance in an elastomeric nanocomposite mesh conductor for stretchable electronics. *Journal of Materials Chemistry C*, **2020**, 8, 9440-9448	7.1	8
14	Metal Nanoparticle Harvesting by Continuous Rotating Electrodeposition and Separation. *Matter*, **2020**, 3, 1294-1307	12.7	8
13	Collective magnetization flux closure state with circular array of single-domained nanomagnets: Magnetization reversal and chirality control. *Journal of Applied Physics*, **2008**, 103, 114312	2.5	7
12	Use of an intermediate solid-state electrode to enable efficient hydrogen production from dilute organic matter. *Nano Energy*, **2017**, 39, 499-505	17.1	6
11	On the Working Mechanisms of Solid-State Double-Layer-Dielectric-Based Organic Field-Effect Transistors and Their Implication for Sensors. *Advanced Electronic Materials*, **2018**, 4, 1700326	6.4	6
10	Topological insulator nanostructures. *MRS Bulletin*, **2014**, 39, 873-879	3.2	5
9	Magnetism and the effect of anisotropy with a one-dimensional monatomic chain of cobalt using a Monte Carlo simulation. *Journal of Physics Condensed Matter*, **2007**, 19, 446207	1.8	5
8	Highly Permeable and Ultrastretchable Liquid Metal Micromesh for Skin-Attachable Electronics **2022**, 4, 634-641		5

7	An Ultrastretchable Reflective Electrode Based on a Liquid Metal Film for Deformable Optoelectronics **2021**, 3, 1104-1111		4
6	Multistage targeted "Photoactive neutrophil" for enhancing synergistic photo-chemotherapy. *Biomaterials*, **2021**, 279, 121224	15.6	3
5	An intrinsically stretchable aqueous Zn-MnO2 battery based on microcracked electrodes for self-powering wearable electronics. *Energy Storage Materials*, **2022**, 47, 386-393	19.4	3
4	A Printable and Conductive Yield-Stress Fluid as an Ultrastretchable Transparent Conductor.. *Research*, **2021**, 2021, 9874939	7.8	3
3	Giant Thermal Transport Tuning at a Metal/Ferroelectric Interface. *Advanced Materials*, **2021**, e2105778	24	2
2	Solution-based fabrication of mechanically transformative materials for implantable applications. *Biomaterials Science*, **2021**, 9, 6950-6956	7.4	1
1	Artificial Reflex Arc: An Environment-Adaptive Neuromorphic Camouflage Device. *IEEE Electron Device Letters*, **2021**, 42, 1224-1227	4.4	1