Ching-Yuan Su

List of Publications by Citations

96 papers	6,034 citations	29 h-index	77 g-index
104 ext. papers	6,774 ext. citations	7.4 avg, IF	5.52 L-index

#	Paper	IF	Citations
96	Growth of large-area and highly crystalline MoS2 thin layers on insulating substrates. *Nano Letters*, **2012**, 12, 1538-44	11.5	1552
95	High-quality thin graphene films from fast electrochemical exfoliation. *ACS Nano*, **2011**, 5, 2332-9	16.7	765
94	Electrical and Spectroscopic Characterizations of Ultra-Large Reduced Graphene Oxide Monolayers. *Chemistry of Materials*, **2009**, 21, 5674-5680	9.6	425
93	Direct formation of wafer scale graphene thin layers on insulating substrates by chemical vapor deposition. *Nano Letters*, **2011**, 11, 3612-6	11.5	254
92	Highly efficient restoration of graphitic structure in graphene oxide using alcohol vapors. *ACS Nano* , **2010**, 4, 5285-92	16.7	227
91	Mode locking of ceramic Nd:yttrium aluminum garnet with graphene as a saturable absorber. *Applied Physics Letters*, **2010**, 96, 031106	3.4	216
90	Opening an electrical band gap of bilayer graphene with molecular doping. *ACS Nano*, **2011**, 5, 7517-24	16.7	191
89	Ultra-large single-layer graphene obtained from solution chemical reduction and its electrical properties. *Physical Chemistry Chemical Physics*, **2010**, 12, 2164-9	3.6	155
88	Graphene synthesis by chemical vapor deposition and transfer by a roll-to-roll process. *Carbon*, **2010**, 48, 3169-3174	10.4	155
87	Stable mode-locked fiber laser based on CVD fabricated graphene saturable absorber. *Optics Express*, **2012**, 20, 2460-5	3.3	137
86	Growth of large-sized graphene thin-films by liquid precursor-based chemical vapor deposition under atmospheric pressure. *Carbon*, **2011**, 49, 3672-3678	10.4	135
85	Fluorinated graphene as high performance dielectric materials and the applications for graphene nanoelectronics. *Scientific Reports*, **2014**, 4, 5893	4.9	114
84	Towards the continuous production of high crystallinity graphene via electrochemical exfoliation with molecular in situ encapsulation. *Nanoscale*, **2015**, 7, 15362-73	7.7	94
83	Converting graphene oxide monolayers into boron carbonitride nanosheets by substitutional doping. *Small*, **2012**, 8, 1384-91	11	87
82	High dispersion of 1-nm SnO2 particles between graphene nanosheets constructed using supercritical CO2 fluid for sodium-ion battery anodes. *Nano Energy*, **2016**, 28, 124-134	17.1	83
81	Ultra-large suspended graphene as a highly elastic membrane for capacitive pressure sensors. *Nanoscale*, **2016**, 8, 3555-64	7.7	76
80	Growth selectivity of hexagonal-boron nitride layers on Ni with various crystal orientations. *RSC Advances*, **2012**, 2, 111-115	3.7	66

79	Revisiting graphene-polymer nanocomposite for enhancing anticorrosion performance: a new insight into interface chemistry and diffusion model. *Nanoscale*, **2018**, 10, 12612-12624	7.7	65
78	Enhanced electrocatalytic activity of MoS(x) on TCNQ-treated electrode for hydrogen evolution reaction. *ACS Applied Materials & Interfaces*, **2014**, 6, 17679-85	9.5	65
77	Large-Scale Synthesis of Boron Nitride Nanotubes with Iron-Supported Catalysts. *Journal of Physical Chemistry C*, **2009**, 113, 14732-14738	3.8	58
76	Scale effects of graphene and graphene oxide coatings on pool boiling enhancement mechanisms. *International Journal of Heat and Mass Transfer*, **2017**, 109, 357-366	4.9	55
75	One-step formation of a single atomic-layer transistor by the selective fluorination of a graphene film. *Small*, **2014**, 10, 989-97	11	51
74	Flexible Electrochromic Devices Based on Optoelectronically Active Polynorbornene Layer and Ultratransparent Graphene Electrodes. *Macromolecules*, **2011**, 44, 9550-9555	5.5	44
73	Aqueous rechargeable dual-ion battery based on fluoride ion and sodium ion electrochemistry. *Journal of Materials Chemistry A*, **2018**, 6, 8244-8250	13	41
72	A Self-Aligned High-Mobility Graphene Transistor: Decoupling the Channel with Fluorographene to Reduce Scattering. *Advanced Materials*, **2015**, 27, 6519-25	24	40
71	Analysis of flavonoids by graphene-based surface-assisted laser desorption/ionization time-of-flight mass spectrometry. *Analyst, The*, **2012**, 137, 5809-16	5	39
70	Electrical probing of submicroliter liquid using graphene strip transistors built on a nanopipette. *Small*, **2012**, 8, 43-6	11	31
69	Ultra-low-edge-defect graphene nanoribbons patterned by neutral beam. *Carbon*, **2013**, 61, 229-235	10.4	31
68	An organic flow desalination battery. *Energy Storage Materials*, **2019**, 20, 203-207	19.4	30
67	A green, simple and cost-effective approach to synthesize high quality graphene by electrochemical exfoliation via process optimization. *RSC Advances*, **2015**, 5, 54762-54768	3.7	27
66	The field emission characteristics of carbon nanotubes coated by boron nitride film. *Diamond and Related Materials*, **2007**, 16, 1393-1397	3.5	27
65	High energy density of all-screen-printable solid-state microsupercapacitors integrated by graphene/CNTs as hierarchical electrodes. *Journal of Materials Chemistry A*, **2019**, 7, 12779-12789	13	26
64	Fully room-temperature IGZO thin film transistors adopting stacked gate dielectrics on flexible polycarbonate substrate. *Solid-State Electronics*, **2013**, 89, 194-197	1.7	26
63	Transfer printing of graphene strip from the graphene grown on copper wires. *Nanotechnology*, **2011**, 22, 185309	3.4	26
62	Selective Growth of Boron Nitride Nanotubes by the Plasma-Assisted and Iron-Catalytic CVD Methods. *Journal of Physical Chemistry C*, **2009**, 113, 14681-14688	3.8	25

61	A hybrid nanostructure of platinum-nanoparticles/graphitic-nanofibers as a three-dimensional counter electrode in dye-sensitized solar cells. *Chemical Communications*, **2011**, 47, 11528-30	5.8	24
60	Graphene as corrosion protection for metal foam flow distributor in proton exchange membrane fuel cells. *International Journal of Hydrogen Energy*, **2017**, 42, 22201-22207	6.7	22
59	Efficient heat dissipation of photonic crystal microcavity by monolayer graphene. *ACS Nano*, **2013**, 7, 10818-24	16.7	22
58	Facile synthesis of core-shell structured Si@graphene balls as a high-performance anode for lithium-ion batteries. *Nanoscale*, **2020**, 12, 9616-9627	7.7	21
57	Scalable Patterning of MoS2 Nanoribbons by Micromolding in Capillaries. *ACS Applied Materials & Interfaces*, **2016**, 8, 20993-1001	9.5	21
56	Manipulation of Heteroatom Substitution on Nitrogen and Phosphorus Co-Doped Graphene as a High Active Catalyst for Hydrogen Evolution Reaction. *Journal of Physical Chemistry C*, **2019**, 123, 22202-22211	3.8	21
55	Ultra-low-damage radical treatment for the highly controllable oxidation of large-scale graphene sheets. *Carbon*, **2014**, 73, 244-251	10.4	21
54	The hierarchical porosity of a three-dimensional graphene electrode for binder-free and high performance supercapacitors. *RSC Advances*, **2016**, 6, 8384-8394	3.7	20
53	Wide-range work-function tuning of active graphene transparent electrodes via hole doping. *RSC Advances*, **2016**, 6, 32746-32756	3.7	20
52	Controlled multimodal hierarchically porous electrode self-assembly of electrochemically exfoliated graphene for fully solid-state flexible supercapacitor. *Physical Chemistry Chemical Physics* , **2017**, 19, 30381-30392	3.6	19
51	Conversion of pristine and p-doped sulfuric-acid-treated single-walled carbon nanotubes to n-type materials by a facile hydrazine vapor exposure process. *Materials Chemistry and Physics*, **2012**, 134, 325-332	4.4	18
50	Highly concentrated carbonate electrolyte for Li-ion batteries with lithium metal and graphite anodes. *Journal of Power Sources*, **2020**, 450, 227657	8.9	18
49	Eco-Efficient Synthesis of Highly Porous CoCO Anodes from Supercritical CO for Li and Na Storage. *ChemSusChem*, **2017**, 10, 2464-2472	8.3	17
48	Integration of ammonia-plasma-functionalized graphene nanodiscs as charge trapping centers for nonvolatile memory applications. *Carbon*, **2017**, 113, 318-324	10.4	16
47	Chemically-treated single-walled carbon nanotubes as digitated penetrating electrodes in organic solar cells. *Journal of Materials Chemistry*, **2010**, 20, 7034		16
46	Scalable and Surfactant-Free Process for Single-Walled Carbon Nanotube Based Transparent Conductive Thin Films via Layer-by-Layer Assembly. *Journal of Physical Chemistry C*, **2010**, 114, 11588-11594	3.8	14
45	Block-Copolymer-Templated Hierarchical Porous Carbon Nanostructures with Nitrogen-Rich Functional Groups for Molecular Sensing. *ACS Applied Materials & Interfaces*, **2017**, 9, 31235-31244	9.5	13
44	Zinc-Air Battery-Based Desalination Device. *ACS Applied Materials & Interfaces*, **2020**, 12, 25728-25735	9.5	13

43	An Aqueous Rechargeable Fluoride Ion Battery with Dual Fluoride Electrodes. *Journal of the Electrochemical Society*, **2019**, 166, A2419-A2424	3.9	13
42	Solution-processed black phosphorus nanoflakes for integrating nonvolatile resistive random access memory and the mechanism unveiled. *Nanotechnology*, **2019**, 30, 445702	3.4	13
41	Direct synthesis of platelet graphitic-nanofibres as a highly porous counter-electrode in dye-sensitized solar cells. *Physical Chemistry Chemical Physics*, **2012**, 14, 4058-61	3.6	13
40	Planar Heterojunction Solar Cell Employing a Single-Source Precursor Solution-Processed SbS Thin Film as the Light Absorber. *ACS Omega*, **2019**, 4, 11380-11387	3.9	12
39	Spectroscopic and Electrical Characterizations of Low-Damage Phosphorous-Doped Graphene via Ion Implantation. *ACS Applied Materials & Interfaces*, **2019**, 11, 47289-47298	9.5	12
38	Tuning of Na+ Concentration in an Ionic Liquid Electrolyte to Optimize Solid Electrolyte Interphase at Microplasma-Synthesized Graphene Anode for Na-Ion Batteries. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 16682-16689	8.3	11
37	Pool Boiling Heat Transfer Enhanced by Fluorinated Graphene as Atomic Layered Modifiers. *ACS Applied Materials & Interfaces*, **2020**, 12, 10233-10239	9.5	11
36	Nanocatalyst-Assisted Fine Tailoring of Pore Structure in Holey-Graphene for Enhanced Performance in Energy Storage. *ACS Applied Materials & Interfaces*, **2019**, 11, 36560-36570	9.5	10
35	Manipulation of Nitrogen-Heteroatom Configuration for Enhanced Charge-Storage Performance and Reliability of Nanoporous Carbon Electrodes. *ACS Applied Materials & Interfaces*, **2020**, 12, 32797-32805	9.5	10
34	Thermally induced variation in redox chemical bonding structures of single-walled carbon nanotubes exposed to hydrazine vapor. *Carbon*, **2012**, 50, 1650-1658	10.4	10
33	Highly efficient electrocatalytic hydrogen production via MoSx/3D-graphene as hybrid electrode. *International Journal of Hydrogen Energy*, **2017**, 42, 22091-22099	6.7	9
32	The composite electrode of Bi@carbon-texture derived from metal-organic frameworks for aqueous chloride ion battery. *Ionics*, **2020**, 26, 2395-2403	2.7	9
31	Control of Graphene Heteroatoms in a Microball Composite Anode for High-Energy-Density Lithium-Ion Full Cells. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 18936-18946	8.3	8
30	Facile electrochemical preparation of hierarchical porous structures to enhance manganese oxide charge-storage properties in ionic liquid electrolytes. *Journal of Materials Chemistry A*, **2016**, 4, 4015-4018	13	8
29	Cleaning and Fluorination of Black Phosphorus for Enhanced Performance of Transistors with High Stability. *ACS Applied Materials & Interfaces*, **2020**, 12, 37375-37383	9.5	8
28	Sb nanoparticle decorated rGO as a new anode material in aqueous chloride ion batteries. *Nanoscale*, **2020**, 12, 12268-12274	7.7	7
27	MoS on Nitrogen-Doped Graphene for High-Efficiency Hydrogen Evolution Reaction: Unraveling the Mechanisms of Unique Interfacial Bonding for Efficient Charge Transport and Stability. *ACS Applied Materials & Interfaces*, **2020**, 12, 34825-34836	9.5	7
26	Flexible ammonia sensor integrated with polyaniline/zinc oxide/graphene composite membrane materials. *Japanese Journal of Applied Physics*, **2020**, 59, SIID04	1.4	6

25	Large-area suspended graphene as a laser target to produce an energetic ion beam. *High Power Laser Science and Engineering*, **2017**, 5,	4.3	6
24	Graphene reduction dynamics unveiled. *2D Materials*, **2015**, 2, 031003	5.9	6
23	Scalable nanoimprint patterning of thin graphitic oxide sheets and in situ reduction. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2011**, 29, 011023	1.3	6
22	Designed Catalytic Protocol for Enhancing Hydrogen Evolution Reaction Performance of P, N-Co-Doped Graphene: The Correlation of Manipulating the Dopant Allocations and Heteroatomic Structure. *Journal of Physical Chemistry C*, **2020**, 124, 25701-25711	3.8	6
21	Ordered nano-structured mesoporous CMK-8 and other carbonaceous positive electrodes for rechargeable aluminum batteries. *Chemical Engineering Journal*, **2021**, 417, 129131	14.7	6
20	The advent of manganese-substituted sodium vanadium phosphate-based cathodes for sodium-ion batteries and their current progress: a focused review. *Journal of Materials Chemistry A*, **2022**, 10, 1022-1046	13	5
19	Ultrastrong adhesion of fluorinated graphene on a substrate: In situ electrochemical conversion to ionic-covalent bonding at the interface. *Carbon*, **2020**, 169, 248-257	10.4	5
18	Investigation of Saturable and Reverse Saturable Absorptions for Graphene by Z-Scan Technique. *IEEE Photonics Technology Letters*, **2015**, 27, 1791-1794	2.2	4
17	The electrochemical behaviors of NaF dual battery based on the hybrid electrodes of nano-bismuth@CNTs. *Materials Letters*, **2018**, 233, 332-335	3.3	4
16	Effect of substrate topography for graphene-based humidity sensors. *Japanese Journal of Applied Physics*, **2019**, 58, SDDD04	1.4	3
15	An aqueous rechargeable dual-ion hybrid battery based on Zn//LiTi2(PO4)3 electrodes. *Sustainable Energy and Fuels*, **2020**, 4, 2448-2452	5.8	3
14	Family of graphene-assisted resonant surface optical excitations for terahertz devices. *Scientific Reports*, **2016**, 6, 35467	4.9	3
13	Graphitic carbon film formation under Ni templates by radio-frequency sputtering for transparent electrode applications. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2011**, 29, 061202	1.3	3
12	An Exfoliation–Evaporation Strategy To Regulate N Coordination Number of Co Single-Atom Catalysts for High-Performance Lithium–Sulfur Batteries1-10		3
11	Multi-functionalized fluorinated graphene composite coating for achieving durable electronics: Ultralow corrosion rate and high electrical insulating passivation. *Carbon*, **2022**, 195, 141-153	10.4	3
10	Electrical probing of multi-ions solution by using graphene-based sensor **2013**,		2
9	Electrolyte Engineering: Optimizing High-Rate Double-Layer Capacitances of Micropore- and Mesopore-Rich Activated Carbon. *ChemSusChem*, **2017**, 10, 3534-3539	8.3	2
8	High sensitivity and flexible fabric strain sensor based on electrochemical graphene. *Japanese Journal of Applied Physics*, **2021**, 60, SCCD04	1.4	2

7	The effects of chiral dopant and monomer concentration on the electro-optical characteristics of reverse-mode PSDFCT cells **2015**, 38, 101-108		1
6	New insights into interface charge-transfer mechanism of copper-iron layered double hydroxide cathodic electrocatalyst in alkaline electrolysis. *Journal of Environmental Chemical Engineering*, **2022**, 10, 107287	6.8	1
5	Hydrous ruthenium oxide-tantalum pentoxide thin film electrodes prepared by thermal decomposition for electrochemical capacitors. *Ceramics International*, **2020**, 46, 16636-16643	5.1	1
4	The parametric study on anti-corrosion properties produced by electrochemically exfoliated. *IOP Conference Series: Materials Science and Engineering*, **2019**, 494, 012015	0.4	1
3	Black Phosphorus Nanosheet/Melamine Cyanurate Assemblies as Functional Active Layers for Artificial Synapse Memristors. *ACS Applied Nano Materials*, **2021**, 4, 9584-9594	5.6	1
2	Toward large-scale CVD graphene growth by enhancing reaction kinetics via an efficient interdiffusion mediator and mechanism study utilizing CFD simulations. *Journal of the Taiwan Institute of Chemical Engineers*, **2021**, 128, 400-400	5.3	0
1	Nanoelectronics Based on Fluorinated Graphene **2017**, 393-411		