Ching-Yuan Su

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2057758/publications.pdf

Version: 2024-02-01

103	7,364	136885	53190
papers	citations	32 h-index	85 g-index

104	104	104	12010
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Growth of Large-Area and Highly Crystalline MoS₂ Thin Layers on Insulating Substrates. Nano Letters, 2012, 12, 1538-1544.	4.5	1,749
2	High-Quality Thin Graphene Films from Fast Electrochemical Exfoliation. ACS Nano, 2011, 5, 2332-2339.	7.3	896
3	Electrical and Spectroscopic Characterizations of Ultra-Large Reduced Graphene Oxide Monolayers. Chemistry of Materials, 2009, 21, 5674-5680.	3.2	476
4	Direct Formation of Wafer Scale Graphene Thin Layers on Insulating Substrates by Chemical Vapor Deposition. Nano Letters, 2011, 11, 3612-3616.	4.5	302
5	Highly Efficient Restoration of Graphitic Structure in Graphene Oxide Using Alcohol Vapors. ACS Nano, 2010, 4, 5285-5292.	7.3	242
6	Mode locking of ceramic Nd:yttrium aluminum garnet with graphene as a saturable absorber. Applied Physics Letters, 2010, 96, .	1.5	234
7	Opening an Electrical Band Gap of Bilayer Graphene with Molecular Doping. ACS Nano, 2011, 5, 7517-7524.	7.3	222
8	Graphene synthesis by chemical vapor deposition and transfer by a roll-to-roll process. Carbon, 2010, 48, 3169-3174.	5.4	179
9	Ultra-large single-layer graphene obtained from solution chemical reduction and its electrical properties. Physical Chemistry Chemical Physics, 2010, 12, 2164.	1.3	176
10	Stable mode-locked fiber laser based on CVD fabricated graphene saturable absorber. Optics Express, 2012, 20, 2460.	1.7	174
11	Growth of large-sized graphene thin-films by liquid precursor-based chemical vapor deposition under atmospheric pressure. Carbon, 2011, 49, 3672-3678.	5.4	158
12	Fluorinated Graphene as High Performance Dielectric Materials and the Applications for Graphene Nanoelectronics. Scientific Reports, 2014, 4, 5893.	1.6	147
13	Towards the continuous production of high crystallinity graphene via electrochemical exfoliation with molecular in situ encapsulation. Nanoscale, 2015, 7, 15362-15373.	2.8	112
14	Converting Graphene Oxide Monolayers into Boron Carbonitride Nanosheets by Substitutional Doping. Small, 2012, 8, 1384-1391.	5.2	101
15	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.	8.2	101
16	Ultra-large suspended graphene as a highly elastic membrane for capacitive pressure sensors. Nanoscale, 2016, 8, 3555-3564.	2.8	100
17	Scale effects of graphene and graphene oxide coatings on pool boiling enhancement mechanisms. International Journal of Heat and Mass Transfer, 2017, 109, 357-366.	2.5	85
18	Revisiting grapheneâ€“polymer nanocomposite for enhancing anticorrosion performance: a new insight into interface chemistry and diffusion model. Nanoscale, 2018, 10, 12612-12624.	2.8	82

#	Article	IF	Citations
19	Enhanced Electrocatalytic Activity of MoS_x on TCNQ-Treated Electrode for Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2014, 6, 17679-17685.	4.0	78
20	Growth selectivity of hexagonal-boron nitride layers on Ni with various crystal orientations. RSC Advances, 2012, 2, 111-115.	1.7	72
21	Aqueous rechargeable dual-ion battery based on fluoride ion and sodium ion electrochemistry. Journal of Materials Chemistry A, 2018, 6, 8244-8250.	5.2	63
22	Large-Scale Synthesis of Boron Nitride Nanotubes with Iron-Supported Catalysts. Journal of Physical Chemistry C, 2009, 113, 14732-14738.	1.5	61
23	Oneâ€Step Formation of a Single Atomicâ€Layer Transistor by the Selective Fluorination of a Graphene Film. Small, 2014, 10, 989-997.	5.2	59
24	A Selfâ€Aligned Highâ€Mobility Graphene Transistor: Decoupling the Channel with Fluorographene to Reduce Scattering. Advanced Materials, 2015, 27, 6519-6525.	11.1	47
25	An organic flow desalination battery. Energy Storage Materials, 2019, 20, 203-207.	9.5	47
26	Flexible Electrochromic Devices Based on Optoelectronically Active Polynorbornene Layer and Ultratransparent Graphene Electrodes. Macromolecules, 2011, 44, 9550-9555.	2.2	46
27	Analysis of flavonoids by graphene-based surface-assisted laser desorption/ionization time-of-flight mass spectrometry. Analyst, The, 2012, 137, 5809.	1.7	44
28	Facile synthesis of coreâ€“shell structured Si@graphene balls as a high-performance anode for lithium-ion batteries. Nanoscale, 2020, 12, 9616-9627.	2.8	43
29	Electrical Probing of Submicroliter Liquid Using Graphene Strip Transistors Built on a Nanopipette. Small, 2012, 8, 43-46.	5.2	38
30	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.	5.2	38
31	A green, simple and cost-effective approach to synthesize high quality graphene by electrochemical exfoliation via process optimization. RSC Advances, 2015, 5, 54762-54768.	1.7	36
32	An Exfoliationâ€“Evaporation Strategy To Regulate N Coordination Number of Co Single-Atom Catalysts for High-Performance Lithiumâ€“Sulfur Batteries. , 2022, 4, 1-10.		35
33	Ultra-low-edge-defect graphene nanoribbons patterned by neutral beam. Carbon, 2013, 61, 229-235.	5.4	33
34	Highly concentrated carbonate electrolyte for Li-ion batteries with lithium metal and graphite anodes. Journal of Power Sources, 2020, 450, 227657.	4.0	32
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.	4.0	32
36	Selective Growth of Boron Nitride Nanotubes by the Plasma-Assisted and Iron-Catalytic CVD Methods. Journal of Physical Chemistry C, 2009, 113, 14681-14688.	1.5	31

#	Article	IF	Citations
37	Pool Boiling Heat Transfer Enhanced by Fluorinated Graphene as Atomic Layered Modifiers. ACS Applied Materials & Interfaces, 2020, 12, 10233-10239.	4.0	31
38	Efficient Heat Dissipation of Photonic Crystal Microcavity by Monolayer Graphene. ACS Nano, 2013, 7, 10818-10824.	7.3	29
39	Wide-range work-function tuning of active graphene transparent electrodes via hole doping. RSC Advances, 2016, 6, 32746-32756.	1.7	29
40	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.	1.5	29
41	Zincâ€“Air Battery-Based Desalination Device. ACS Applied Materials & Interfaces, 2020, 12, 25728-25735.	4.0	29
42	Transfer printing of graphene strip from the graphene grown on copper wires. Nanotechnology, 2011, 22, 185309.	1.3	28
43	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.	2.0	28
44	Fully room-temperature IGZO thin film transistors adopting stacked gate dielectrics on flexible polycarbonate substrate. Solid-State Electronics, 2013, 89, 194-197.	0.8	28
45	Ultra-low-damage radical treatment for the highly controllable oxidation of large-scale graphene sheets. Carbon, 2014, 73, 244-251.	5.4	28
46	The field emission characteristics of carbon nanotubes coated by boron nitride film. Diamond and Related Materials, 2007, 16, 1393-1397.	1.8	27
47	Graphene as corrosion protection for metal foam flow distributor in proton exchange membrane fuel cells. International Journal of Hydrogen Energy, 2017, 42, 22201-22207.	3.8	27
48	Chemically-treated single-walled carbon nanotubes as digitated penetrating electrodes in organic solar cells. Journal of Materials Chemistry, 2010, 20, 7034.	6.7	26
49	A hybrid nanostructure of platinum-nanoparticles/graphitic-nanofibers as a three-dimensional counter electrode in dye-sensitized solar cells. Chemical Communications, 2011, 47, 11528.	2.2	26
50	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.	5.2	26
51	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.	1.5	23
52	Scalable Patterning of MoS₂ Nanoribbons by Micromolding in Capillaries. ACS Applied Materials & Interfaces, 2016, 8, 20993-21001.	4.0	23
53	The hierarchical porosity of a three-dimensional graphene electrode for binder-free and high performance supercapacitors. RSC Advances, 2016, 6, 8384-8394.	1.7	23
54	The composite electrode of Bi@carbon-texture derived from metal-organic frameworks for aqueous chloride ion battery. Ionics, 2020, 26, 2395-2403.	1.2	23

#	Article	IF	Citations
55	Integration of ammonia-plasma-functionalized graphene nanodiscs as charge trapping centers for nonvolatile memory applications. Carbon, 2017, 113, 318-324.	5.4	22
56	Solution-processed black phosphorus nanoflakes for integrating nonvolatile resistive random access memory and the mechanism unveiled. Nanotechnology, 2019, 30, 445702.	1.3	22
57	Ecoâ€Efficient Synthesis of Highly Porous CoCO₃ Anodes from Supercritical CO₂ for Li⁺ and Na⁺ Storage. ChemSusChem, 2017, 10, 2464-2472.	3.6	21
58	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.	1.3	21
59	Multi-functionalized fluorinated graphene composite coating for achieving durable electronics: Ultralow corrosion rate and high electrical insulating passivation. Carbon, 2022, 195, 141-153.	5.4	21
60	Spectroscopic and Electrical Characterizations of Low-Damage Phosphorous-Doped Graphene via Ion Implantation. ACS Applied Materials & Interfaces, 2019, 11, 47289-47298.	4.0	20
61	In Situ Cleaning and Fluorination of Black Phosphorus for Enhanced Performance of Transistors with High Stability. ACS Applied Materials & Interfaces, 2020, 12, 37375-37383.	4.0	20
62	Sb nanoparticle decorated rGO as a new anode material in aqueous chloride ion batteries. Nanoscale, 2020, 12, 12268-12274.	2.8	20
63	MoS_x 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.	4.0	20
64	Thermally induced variation in redox chemical bonding structures of single-walled carbon nanotubes exposed to hydrazine vapor. Carbon, 2012, 50, 1650-1658.	5.4	19
65	Planar Heterojunction Solar Cell Employing a Single-Source Precursor Solution-Processed Sb₂S₃ Thin Film as the Light Absorber. ACS Omega, 2019, 4, 11380-11387.	1.6	19
66	An Aqueous Rechargeable Fluoride Ion Battery with Dual Fluoride Electrodes. Journal of the Electrochemical Society, 2019, 166, A2419-A2424.	1.3	19
67	Fluorinated graphene as a dual-functional anode to achieve dendrite-free and high-performance lithium metal batteries. Carbon, 2022, 197, 141-151.	5.4	19
68	Nanocatalyst-Assisted Fine Tailoring of Pore Structure in Holey-Graphene for Enhanced Performance in Energy Storage. ACS Applied Materials & Interfaces, 2019, 11, 36560-36570.	4.0	15
69	Ordered nano-structured mesoporous CMK-8 and other carbonaceous positive electrodes for rechargeable aluminum batteries. Chemical Engineering Journal, 2021, 417, 129131.	6.6	15
70	Tuning of Na+ Concentration in an Ionic Liquid Electrolyte to Optimize Solidâ€“Electrolyte Interphase at Microplasma-Synthesized Graphene Anode for Na-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2019, 7, 16682-16689.	3.2	14
71	Control of Graphene Heteroatoms in a Microball Si@Graphene Composite Anode for High-Energy-Density Lithium-Ion Full Cells. ACS Sustainable Chemistry and Engineering, 2020, 8, 18936-18946.	3.2	14
72	Direct synthesis of platelet graphitic-nanofibres as a highly porous counter-electrode in dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2012, 14, 4058.	1.3	13

#	Article	IF	Citations
73	Highly efficient electrocatalytic hydrogen production via MoSx/3D-graphene as hybrid electrode. International Journal of Hydrogen Energy, 2017, 42, 22091-22099.	3.8	13
74	Block-Copolymer-Templated Hierarchical Porous Carbon Nanostructures with Nitrogen-Rich Functional Groups for Molecular Sensing. ACS Applied Materials & Interfaces, 2017, 9, 31235-31244.	4.0	13
75	Ultrastrong adhesion of fluorinated graphene on a substrate: In situ electrochemical conversion to ionic-covalent bonding at the interface. Carbon, 2020, 169, 248-257.	5.4	12
76	Investigation of Saturable and Reverse Saturable Absorptions for Graphene by Z-Scan Technique. IEEE Photonics Technology Letters, 2015, 27, 1791-1794.	1.3	11
77	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.	5.2	11
78	Flexible ammonia sensor integrated with polyaniline/zinc oxide/graphene composite membrane materials. Japanese Journal of Applied Physics, 2020, 59, SIID04.	0.8	11
79	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.	1.5	9
80	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, 400-408.	2.7	9
81	Large-area suspended graphene as a laser target to produce an energetic ion beam. High Power Laser Science and Engineering, 2017, 5, .	2.0	8
82	The electrochemical behaviors of NaF dual battery based on the hybrid electrodes of nano-bismuth@CNTs. Materials Letters, 2018, 233, 332-335.	1.3	8
83	High sensitivity and flexible fabric strain sensor based on electrochemical graphene. Japanese Journal of Applied Physics, 2021, 60, SCCD04.	0.8	8
84	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.	0.6	6
85	Graphene reduction dynamics unveiled. 2D Materials, 2015, 2, 031003.	2.0	6
86	Effect of substrate topography for graphene-based humidity sensors. Japanese Journal of Applied Physics, 2019, 58, SDDD04.	0.8	6
87	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.	3.3	6
88	Electrolyte Engineering: Optimizing Highâ€Rate Doubleâ€Layer Capacitances of Microporeâ€and Mesoporeâ€Rich Activated Carbon. ChemSusChem, 2017, 10, 3534-3539.	3.6	5
89	An aqueous rechargeable dual-ion hybrid battery based on Zn//LiTi₂(PO₄)₃ electrodes. Sustainable Energy and Fuels, 2020, 4, 2448-2452.	2.5	5
90	Electrical probing of multi-ions solution by using graphene-based sensor. , 2013, , .		4

#	Article	IF	Citations
91	Family of graphene-assisted resonant surface optical excitations for terahertz devices. Scientific Reports, 2016, 6, 35467.	1.6	4
92	Hydrous ruthenium oxide-tantalum pentoxide thin film electrodes prepared by thermal decomposition for electrochemical capacitors. Ceramics International, 2020, 46, 16636-16643.	2.3	4
93	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, .	0.6	3
94	The effects of chiral dopant and monomer concentration on the electro-optical characteristics of reverse-mode PSDFCT cells. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2015, 38, 101-108.	0.6	3
95	Black Phosphorus Nanosheet/Melamine Cyanurate Assemblies as Functional Active Layers for Artificial Synapse Memristors. ACS Applied Nano Materials, 2021, 4, 9584-9594.	2.4	3
96	Wrinkle-Free Graphene Films on Fluorinated Self-Assembled Monolayer-Modified Substrates for Enhancing the Electrical Performance of Transistors. ACS Applied Nano Materials, 2022, 5, 5793-5802.	2.4	3
97	Nitrogen-doped holey graphene additive for high-performance electric double-layer supercapacitors. Electrochimica Acta, 2022, 425, 140713.	2.6	2
98	Effects of Plasma Power and Plasma Sheath on Field Emission Properties of Carbon Nanotubes. Japanese Journal of Applied Physics, 2006, 45, 8406-8411.	0.8	1
99	The parametric study on anti-corrosion properties produced by electrochemically exfoliated. IOP Conference Series: Materials Science and Engineering, 2019, 494, 012015.	0.3	1
100	One-step formation of atomic-layered transistor by selective fluorination of graphene film. , 2013, , .		0
101	Flexible InGaZnO TFTs with stacked GeO<inf>2</inf>/TiO<inf>2</inf> gate dielectrics. , 2013, , .		0
102	Probing the transient fate of C-N bonding in hydrazine-treated carbon nanotubes by synchrotron photoelectron spectroscopy. Proceedings of SPIE, 2013, , .	0.8	0
103	Nanoelectronics Based on Fluorinated Graphene. , 2017, , 393-411.		0