

Dai-Ming Tang

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/1022621/dai-ming-tang-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

121
papers

10,056
citations

51
h-index

100
g-index

123
ext. papers

11,484
ext. citations

12
avg, IF

5.97
L-index

#	Paper	IF	Citations
121	General Synthesis of Layered Rare-Earth Hydroxides (RE = Sm, Eu, Gd, Tb, Dy, Ho, Er, Y) and Direct Exfoliation into Monolayer Nanosheets with High Color Purity. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 10135-10143	6.4	3
120	Exfoliated Ferrierite-Related Unilamellar Nanosheets in Solution and Their Use for Preparation of Mixed Zeolite Hierarchical Structures. <i>Journal of the American Chemical Society</i> , 2021 , 143, 11052-11062	16.4	5
119	In Situ Assembly of MoS _x Thin-Film through Self-Reduction on p-Si for Drastic Enhancement of Photoelectrochemical Hydrogen Evolution. <i>Advanced Functional Materials</i> , 2021 , 31, 2007071	15.6	9
118	1000 Wh L lithium-ion batteries enabled by crosslink-shrunk tough carbon encapsulated silicon microparticle anodes. <i>National Science Review</i> , 2021 , 8, nwab012	10.8	16
117	Three-in-one cathode host based on Nb ₃ O ₈ /graphene superlattice heterostructures for high-performance LiB batteries. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 9952-9960	13	6
116	Stable single atomic silver wires assembling into a circuitry-connectable nanoarray. <i>Nature Communications</i> , 2021 , 12, 1191	17.4	3
115	Low-energy electron inelastic mean free path and elastic mean free path of graphene. <i>Applied Physics Letters</i> , 2021 , 118, 053104	3.4	0
114	Efficient and selective photocatalytic CH ₄ conversion to CH ₃ OH with O ₂ by controlling overoxidation on TiO ₂ . <i>Nature Communications</i> , 2021 , 12, 4652	17.4	24
113	One-dimensional van der Waals heterostructures: Growth mechanism and handedness correlation revealed by nondestructive TEM. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	13
112	A universal strategy boosting photoelectrochemical water oxidation by utilizing MXene nanosheets as hole transfer mediators. <i>Applied Catalysis B: Environmental</i> , 2021 , 297, 120268	21.8	9
111	Semiconductor nanochannels in metallic carbon nanotubes by thermomechanical chirality alteration.. <i>Science</i> , 2021 , 374, 1616-1620	33.3	8
110	On/Off Boundary of Photocatalytic Activity between Single- and Bilayer MoS ₂ . <i>ACS Nano</i> , 2020 , 14, 6663-6672	16.7	16
109	A controllable and efficient method for the fabrication of a single HfC nanowire field-emission point electron source aided by low keV FIB milling. <i>Nanoscale</i> , 2020 , 12, 16770-16774	7.7	7
108	Liquid dispersions of zeolite monolayers with high catalytic activity prepared by soft-chemical exfoliation. <i>Science Advances</i> , 2020 , 6, eaay8163	14.3	18
107	CoNiFe Layered Double Hydroxide/RuO ₂ Nanosheet Superlattice as Carbon-Free Electrocatalysts for Water Splitting and Li-O Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 33083-33093	9.5	18
106	One-dimensional van der Waals heterostructures. <i>Science</i> , 2020 , 367, 537-542	33.3	119
105	Synthesis of Co(II)-Fe(III) Hydroxide Nanocones with Mixed Octahedral/Tetrahedral Coordination toward Efficient Electrocatalysis. <i>Chemistry of Materials</i> , 2020 , 32, 4232-4240	9.6	17

104	2D Layered Double Hydroxide Nanosheets and Their Derivatives Toward Efficient Oxygen Evolution Reaction. <i>Nano-Micro Letters</i> , 2020 , 12, 86	19.5	71
103	A thick yet dense silicon anode with enhanced interface stability in lithium storage evidenced by in situ TEM observations. <i>Science Bulletin</i> , 2020 , 65, 1563-1569	10.6	13
102	Precise Identification of the Active Phase of Cobalt Catalyst for Carbon Nanotube Growth by Transmission Electron Microscopy. <i>ACS Nano</i> , 2020 ,	16.7	18
101	Electrical conduction and field emission of a single-crystalline GdBSi nanowire. <i>Nanoscale</i> , 2020 , 12, 18263-18268	7.7	18268
100	Sleep-Dependent Memory Consolidation in a Neuromorphic Nanowire Network. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 50573-50580	9.5	2
99	Significant off-stoichiometry effect leading to the N-type conduction and ferromagnetic properties in titanium doped Fe ₂ VAl thin films. <i>Acta Materialia</i> , 2020 , 200, 848-856	8.4	5
98	Stress dependence of indentation modulus for carbon fiber in polymer composite. <i>Science and Technology of Advanced Materials</i> , 2019 , 20, 412-420	7.1	11
97	Realization and direct observation of five normal and parametric modes in silicon nanowire resonators by in situ transmission electron microscopy. <i>Nanoscale Advances</i> , 2019 , 1, 1784-1790	5.1	2
96	Size Effects on the Mechanical Properties of Nanoporous Graphene Networks. <i>Advanced Functional Materials</i> , 2019 , 29, 1900311	15.6	13
95	Intrinsic and Defect-Related Elastic Moduli of Boron Nitride Nanotubes As Revealed by Transmission Electron Microscopy. <i>Nano Letters</i> , 2019 , 19, 4974-4980	11.5	3
94	Kinking effects and transport properties of coaxial BN-C nanotubes as revealed by in situ transmission electron microscopy and theoretical analysis. <i>APL Materials</i> , 2019 , 7, 101118	5.7	
93	Flexible layer-structured BiTe thermoelectric on a carbon nanotube scaffold. <i>Nature Materials</i> , 2019 , 18, 62-68	27	188
92	Tunable Mechanical and Electrical Properties of Coaxial BN-C Nanotubes. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019 , 13, 1800576	2.5	2
91	Vapour-liquid-solid growth of monolayer MoS nanoribbons. <i>Nature Materials</i> , 2018 , 17, 535-542	27	185
90	Caging tin oxide in three-dimensional graphene networks for superior volumetric lithium storage. <i>Nature Communications</i> , 2018 , 9, 402	17.4	186
89	Few-layer graphitic shells networked by low temperature pyrolysis of zeolitic imidazolate frameworks. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 520-529	7.8	6
88	N-doped carbon nanotubes containing a high concentration of single iron atoms for efficient oxygen reduction. <i>NPG Asia Materials</i> , 2018 , 10, e461-e461	10.3	72
87	Ultrahigh-performance transparent conductive films of carbon-welded isolated single-wall carbon nanotubes. <i>Science Advances</i> , 2018 , 4, eaap9264	14.3	111

86	Size-Dependent Grain-Boundary Structure with Improved Conductive and Mechanical Stabilities in Sub-10-nm Gold Crystals. <i>Physical Review Letters</i> , 2018 , 120, 186102	7.4	19
85	Chirality transitions and transport properties of individual few-walled carbon nanotubes as revealed by in situ TEM probing. <i>Ultramicroscopy</i> , 2018 , 194, 108-116	3.1	6
84	The effect of carbon support on the oxygen reduction activity and durability of single-atom iron catalysts. <i>MRS Communications</i> , 2018 , 8, 1158-1166	2.7	15
83	Growth of Black Phosphorus Nanobelts and Microbelts. <i>Small</i> , 2018 , 14, 1702501	11	11
82	Construction of a hierarchical 3D Co/N-carbon electrocatalyst for efficient oxygen reduction and overall water splitting. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 489-497	13	90
81	Achieving High Quantum Efficiency Narrow-Band $\text{BaSiO}_3:\text{Eu}^{2+}$ Phosphors for High-Brightness LCD Backlights by Reducing the Eu^{3+} Luminescence Killer. <i>Chemistry of Materials</i> , 2018 , 30, 494-505	9.6	157
80	Paper-Derived Flexible 3D Interconnected Carbon Microfiber Networks with Controllable Pore Sizes for Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 37046-37056	9.5	25
79	Flaky nano-crystalline SnSe thin films for photoelectrochemical current generation.. <i>RSC Advances</i> , 2018 , 8, 32157-32163	3.7	7
78	Chemically activating MoS via spontaneous atomic palladium interfacial doping towards efficient hydrogen evolution. <i>Nature Communications</i> , 2018 , 9, 2120	17.4	300
77	Tuning of the Optical, Electronic, and Magnetic Properties of Boron Nitride Nanosheets with Oxygen Doping and Functionalization. <i>Advanced Materials</i> , 2017 , 29, 1700695	24	109
76	Protrusions or Holes in graphene: which is the better choice for sodium ion storage?. <i>Energy and Environmental Science</i> , 2017 , 10, 979-986	35.4	140
75	New insights into the microstructure of translucent $\text{CaAlSiN}_3:\text{Eu}^{2+}$ phosphor ceramics for solid-state laser lighting. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 1042-1051	7.1	63
74	Nano-micro-porous skutterudites with 100% enhancement in ZT for high performance thermoelectricity. <i>Nano Energy</i> , 2017 , 31, 152-159	17.1	152
73	Hierarchically porous Fe-N-doped carbon nanotubes as efficient electrocatalyst for oxygen reduction. <i>Carbon</i> , 2016 , 109, 632-639	10.4	64
72	A 3D bi-functional porous N-doped carbon microtube sponge electrocatalyst for oxygen reduction and oxygen evolution reactions. <i>Energy and Environmental Science</i> , 2016 , 9, 3079-3084	35.4	212
71	Crystal structure, tunable emission and applications of $\text{Ca}_{1-x}\text{Al}_x\text{Si}_{1-x}\text{N}_3\text{O}_x:\text{RE}$ ($x = 0.22$, RE = Ce^{3+} , Eu^{2+}) solid solution phosphors for white light-emitting diodes. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 11219-11230	7.1	51
70	Template-free synthesis of boron nitride foam-like porous monoliths and their high-end applications in water purification. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 1469-1478	13	95
69	Scalable synthesis and excellent catalytic effect of hydrangea-like RuO_2 mesoporous materials for lithium-ion batteries. <i>Energy Storage Materials</i> , 2016 , 2, 8-13	19.4	36

68	CaAlSiN ₃ :Eu ²⁺ translucent ceramic: a promising robust and efficient red color converter for solid state laser displays and lighting. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 8197-8205	7.1	91
67	Al ₂ O ₃ /GAG:Ce composite phosphor ceramic: a thermally robust and efficient color converter for solid state laser lighting. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 8648-8654	7.1	141
66	Amorphization and Directional Crystallization of Metals Confined in Carbon Nanotubes Investigated by in Situ Transmission Electron Microscopy. <i>Nano Letters</i> , 2015 , 15, 4922-7	11.5	11
65	High-throughput fabrication of strutted graphene by ammonium-assisted chemical blowing for high-performance supercapacitors. <i>Nano Energy</i> , 2015 , 16, 81-90	17.1	71
64	In situ fabrication and optoelectronic analysis of axial CdS/p-Si nanowire heterojunctions in a high-resolution transmission electron microscope. <i>Nanotechnology</i> , 2015 , 26, 154001	3.4	14
63	Superior Performance of a LiO ₂ Battery with Metallic RuO ₂ Hollow Spheres as the Carbon-Free Cathode. <i>Advanced Energy Materials</i> , 2015 , 5, 1500294	21.8	122
62	Opto-mechano-electrical tripling in ZnO nanowires probed by photocurrent spectroscopy in a high-resolution transmission electron microscope. <i>Applied Physics Letters</i> , 2015 , 107, 091103	3.4	6
61	Halide-assisted atmospheric pressure growth of large WSe ₂ and WS ₂ monolayer crystals. <i>Applied Materials Today</i> , 2015 , 1, 60-66	6.6	294
60	Pollutant capturing SERS substrate: porous boron nitride microfibers with uniform silver nanoparticle decoration. <i>Nanoscale</i> , 2015 , 7, 18992-7	7.7	44
59	Integrating a Photocatalyst into a Hybrid Lithium-Sulfur Battery for Direct Storage of Solar Energy. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 9271-4	16.4	79
58	Integrating a Photocatalyst into a Hybrid Lithium-Sulfur Battery for Direct Storage of Solar Energy. <i>Angewandte Chemie</i> , 2015 , 127, 9403-9406	3.6	20
57	An oxygen cathode with stable full discharge-charge capability based on 2D conducting oxide. <i>Energy and Environmental Science</i> , 2015 , 8, 1992-1997	35.4	103
56	Comparative fracture toughness of multilayer graphenes and boronitrenes. <i>Nano Letters</i> , 2015 , 15, 689-94.5	94.5	53
55	Atomistic origins of high rate capability and capacity of N-doped graphene for lithium storage. <i>Nano Letters</i> , 2014 , 14, 1164-71	11.5	271
54	Photosensing performance of branched CdS/ZnO heterostructures as revealed by in situ TEM and photodetector tests. <i>Nanoscale</i> , 2014 , 6, 8084-90	7.7	59
53	Performance-improved LiO ₂ battery with Ru nanoparticles supported on binder-free multi-walled carbon nanotube paper as cathode. <i>Energy and Environmental Science</i> , 2014 , 7, 1648-1652	35.4	140
52	Study of the lithium/nickel ions exchange in the layered LiNi _{0.42} Mn _{0.42} Co _{0.16} O ₂ cathode material for lithium ion batteries: experimental and first-principles calculations. <i>Energy and Environmental Science</i> , 2014 , 7, 1068	35.4	151
51	Structural changes in iron oxide and gold catalysts during nucleation of carbon nanotubes studied by in situ transmission electron microscopy. <i>ACS Nano</i> , 2014 , 8, 292-301	16.7	42

50	Growth of large-scale boron nanowire patterns with identical base-up mode and in situ field emission studies of individual boron nanowire. <i>Small</i> , 2014 , 10, 685-93	11	28
49	Li-O(2) battery based on highly efficient Sb-doped tin oxide supported Ru nanoparticles. <i>Advanced Materials</i> , 2014 , 26, 4659-64	24	127
48	Magnetically assembled Ni@Ag urchin-like ensembles with ultra-sharp tips and numerous gaps for SERS applications. <i>Small</i> , 2014 , 10, 2564-9	11	17
47	Nanomechanical cleavage of molybdenum disulphide atomic layers. <i>Nature Communications</i> , 2014 , 5, 3631	17.4	118
46	In Situ Transmission Electron Microscopy Studies of Carbon Nanotube Nucleation Mechanism and Carbon Nanotube-Clamped Metal Atomic Chains. <i>Springer Theses</i> , 2013 ,	0.1	1
45	Three-dimensional strutted graphene grown by substrate-free sugar blowing for high-power-density supercapacitors. <i>Nature Communications</i> , 2013 , 4, 2905	17.4	514
44	Towards ultrahigh volumetric capacitance: graphene derived highly dense but porous carbons for supercapacitors. <i>Scientific Reports</i> , 2013 , 3, 2975	4.9	467
43	Towards low temperature thermal exfoliation of graphite oxide for graphene production. <i>Carbon</i> , 2013 , 62, 11-24	10.4	108
42	Multi-walled carbon nanotube papers as binder-free cathodes for large capacity and reversible non-aqueous LiO ₂ batteries. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 13076	13	89
41	Ru/ITO: a carbon-free cathode for nonaqueous Li-O ₂ battery. <i>Nano Letters</i> , 2013 , 13, 4702-7	11.5	230
40	Transmission electron microscope as an ultimate tool for nanomaterial property studies. <i>Microscopy (Oxford, England)</i> , 2013 , 62, 157-75	1.3	7
39	Utilization of multiwalled boron nitride nanotubes for the reinforcement of lightweight aluminum ribbons. <i>Nanoscale Research Letters</i> , 2013 , 8, 3	5	39
38	Revealing the anomalous tensile properties of WS ₂ nanotubes by in situ transmission electron microscopy. <i>Nano Letters</i> , 2013 , 13, 1034-40	11.5	39
37	An ion-exchange route for the synthesis of hierarchical In ₂ S ₃ /ZnIn ₂ S ₄ bulk composite and its photocatalytic activity under visible-light irradiation. <i>Dalton Transactions</i> , 2013 , 42, 2687-90	4.3	75
36	Local Coulomb explosion of boron nitride nanotubes under electron beam irradiation. <i>ACS Nano</i> , 2013 , 7, 3491-7	16.7	33
35	Individual boron nanowire has ultra-high specific Young's modulus and fracture strength as revealed by in situ transmission electron microscopy. <i>ACS Nano</i> , 2013 , 7, 10112-20	16.7	27
34	In Situ TEM Method and Materials. <i>Springer Theses</i> , 2013 , 23-35	0.1	
33	Studying Nucleation Mechanism of Carbon Nanotubes by Using In Situ TEM. <i>Springer Theses</i> , 2013 , 37-54	0.1	

32	Fabrication and Property Investigation of Carbon Nanotube-Clamped Metal Atomic Chains. <i>Springer Theses</i> , 2013 , 55-71	0.1	
31	Nanomaterial engineering and property studies in a transmission electron microscope. <i>Advanced Materials</i> , 2012 , 24, 177-94	24	41
30	Revealing the conversion mechanism of CuO nanowires during lithiation-delithiation by in situ transmission electron microscopy. <i>Chemical Communications</i> , 2012 , 48, 4812-4	5.8	141
29	Dense and vertically-aligned centimetre-long ZnS nanowire arrays: ionic liquid assisted synthesis and their field emission properties. <i>Nanoscale</i> , 2012 , 4, 2658-62	7.7	15
28	Synthesis, structural analysis and in situ transmission electron microscopy mechanical tests on individual aluminum matrix/boron nitride nanotube nanohybrids. <i>Acta Materialia</i> , 2012 , 60, 6213-6222	8.4	38
27	Heteroepitaxial growth of single-walled carbon nanotubes from boron nitride. <i>Scientific Reports</i> , 2012 , 2, 971	4.9	14
26	Growth of single-crystal Ca ₁₀ (Pt ₄ As ₈)(Fe _(1.8) Pt _(0.2) As ₂) ₅ nanowiskers with superconductivity up to 33 K. <i>Journal of the American Chemical Society</i> , 2012 , 134, 4068-71	16.4	10
25	Nanoscale bending of multilayered boron nitride and graphene ribbons: experiment and objective molecular dynamics calculations. <i>Physical Review Letters</i> , 2012 , 109, 025504	7.4	36
24	N-Doped Graphene-SnO ₂ Sandwich Paper for High-Performance Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2012 , 22, 2682-2690	15.6	479
23	Mechanical properties of Si nanowires as revealed by in situ transmission electron microscopy and molecular dynamics simulations. <i>Nano Letters</i> , 2012 , 12, 1898-904	11.5	126
22	Self-stacked Co ₃ O ₄ nanosheets for high-performance lithium ion batteries. <i>Chemical Communications</i> , 2011 , 47, 12280-2	5.8	113
21	Local temperature measurements on nanoscale materials using a movable nanothermocouple assembled in a transmission electron microscope. <i>Nanotechnology</i> , 2011 , 22, 485707	3.4	14
20	Mechanical properties of bamboo-like boron nitride nanotubes by in situ TEM and MD simulations: strengthening effect of interlocked joint interfaces. <i>ACS Nano</i> , 2011 , 5, 7362-8	16.7	53
19	A sandwich structure of graphene and nickel oxide with excellent supercapacitive performance. <i>Journal of Materials Chemistry</i> , 2011 , 21, 9014		115
18	Importance of oxygen in the metal-free catalytic growth of single-walled carbon nanotubes from SiO(x) by a vapor-solid-solid mechanism. <i>Journal of the American Chemical Society</i> , 2011 , 133, 197-9	16.4	110
17	Carbon nanotube-clamped metal atomic chain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 9055-9	11.5	34
16	Carbon-Nanotube-Array Double Helices. <i>Angewandte Chemie</i> , 2010 , 122, 3724-3727	3.6	20
15	Carbon-nanotube-array double helices. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 3642-5	16.4	90

14	Field Emission of Single-Layer Graphene Films Prepared by Electrophoretic Deposition. <i>Advanced Materials</i> , 2009 , 21, 1756-1760	24	562
13	Structural evolution of carbon microcoils induced by a direct current. <i>Carbon</i> , 2009 , 47, 670-674	10.4	11
12	Synthesis and Photoelectrochemical Property of Urchin-like Zn/ZnO CoreShell Structures. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 11035-11040	3.8	69
11	Synthesis of graphene sheets with high electrical conductivity and good thermal stability by hydrogen arc discharge exfoliation. <i>ACS Nano</i> , 2009 , 3, 411-7	16.7	702
10	Low-temperature exfoliated graphenes: vacuum-promoted exfoliation and electrochemical energy storage. <i>ACS Nano</i> , 2009 , 3, 3730-6	16.7	633
9	Enhancement of field emission of CNTs array by CO ₂ -assisted chemical vapor deposition. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 3046-51	1.3	6
8	Electron field emission of a nitrogen-doped TiO ₂ nanotube array. <i>Nanotechnology</i> , 2008 , 19, 025606	3.4	120
7	In situ electrical measurements of polytypic silver nanowires. <i>Nanotechnology</i> , 2008 , 19, 085711	3.4	33
6	Synthesis and Properties of Quasi-One-Dimensional Nitride Nanostructures 2008 , 149-177		
5	Growth of Magnetic Yard-Glass Shaped Boron Nitride Nanotubes with Periodic Iron Nanoparticles. <i>Advanced Functional Materials</i> , 2007 , 17, 3371-3376	15.6	45
4	Controlled synthesis of quasi-one-dimensional boron nitride nanostructures. <i>Journal of Materials Research</i> , 2007 , 22, 2809-2816	2.5	14
3	PLATELET BORON NITRIDE NANOWIRES. <i>Nano</i> , 2006 , 01, 65-71	1.1	7
2	On the Threshold Force for Chaotic Motions for a Forced Buckled Beam. <i>Journal of Applied Mechanics, Transactions ASME</i> , 1988 , 55, 190-196	2.7	39
1	High-throughput screening and machine learning for the efficient growth of high-quality single-wall carbon nanotubes. <i>Nano Research</i> , 1	10	1