Feng Ding

List of Publications by Citations

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

323 papers	15,616 citations	66 h-index	114 g-index
351 ext. papers	17,991 ext. citations	10.5 avg, IF	6.88 L-index

#	Paper	IF	Citations
323	Chirality-specific growth of single-walled carbon nanotubes on solid alloy catalysts. *Nature*, **2014**, 510, 522-4	50.4	569
322	Mechanical exfoliation and characterization of single- and few-layer nanosheets of WSe_2, TaS_2, and $TaSe_2$. *Small*, **2013**, 9, 1974-81	11	449
321	Fast growth of inch-sized single-crystalline graphene from a controlled single nucleus on Cu-Ni alloys. *Nature Materials*, **2016**, 15, 43-7	27	441
320	Controlled nanocutting of graphene. *Nano Research*, **2008**, 1, 116-122	10	424
319	Synchronous immobilization and conversion of polysulfides on a VO2–VN binary host targeting high sulfur load Li–S batteries. *Energy and Environmental Science*, **2018**, 11, 2620-2630	35.4	327
318	Ultrafast epitaxial growth of metre-sized single-crystal graphene on industrial Cu foil. *Science Bulletin*, **2017**, 62, 1074-1080	10.6	326
317	Ultrafast growth of single-crystal graphene assisted by a continuous oxygen supply. *Nature Nanotechnology*, **2016**, 11, 930-935	28.7	277
316	Graphene nucleation on transition metal surface: structure transformation and role of the metal step edge. *Journal of the American Chemical Society*, **2011**, 133, 5009-15	16.4	273
315	Dislocation theory of chirality-controlled nanotube growth. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 2506-9	11.5	265
314	Synthesis of large single-crystal hexagonal boron nitride grains on Cu-Ni alloy. *Nature Communications*, **2015**, 6, 6160	17.4	258
313	Seamless stitching of graphene domains on polished copper (111) foil. *Advanced Materials*, **2015**, 27, 1376-82	24	253
312	Arrays of horizontal carbon nanotubes of controlled chirality grown using designed catalysts. *Nature*, **2017**, 543, 234-238	50.4	251
311	Epitaxial growth of a 100-square-centimetre single-crystal hexagonal boron nitride monolayer on copper. *Nature*, **2019**, 570, 91-95	50.4	247
310	The importance of strong carbon-metal adhesion for catalytic nucleation of single-walled carbon nanotubes. *Nano Letters*, **2008**, 8, 463-8	11.5	237
309	Thin film field-effect phototransistors from bandgap-tunable, solution-processed, few-layer reduced graphene oxide films. *Advanced Materials*, **2010**, 22, 4872-6	24	196
308	Role of hydrogen in graphene chemical vapor deposition growth on a copper surface. *Journal of the American Chemical Society*, **2014**, 136, 3040-7	16.4	193
307	Nucleation and Growth of Single-Walled Carbon Nanotubes: A Molecular Dynamics Study. *Journal of Physical Chemistry B*, **2004**, 108, 17369-17377	3.4	190

306	In situ observation of graphene sublimation and multi-layer edge reconstructions. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 10103-8	11.5	186
305	Vapour-liquid-solid growth of monolayer MoS nanoribbons. *Nature Materials*, **2018**, 17, 535-542	27	185
304	Recent progress and challenges in graphene nanoribbon synthesis. *ChemPhysChem*, **2013**, 14, 47-54	3.2	180
303	Edge-controlled growth and kinetics of single-crystal graphene domains by chemical vapor deposition. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 20386-91	11.5	180
302	Manageable N-doped graphene for high performance oxygen reduction reaction. *Scientific Reports*, **2013**, 3, 2771	4.9	168
301	Facile general strategy toward hierarchical mesoporous transition metal oxides arrays on three-dimensional macroporous foam with superior lithium storage properties. *Nano Energy*, **2015**, 13, 77-91	17.1	154
300	Edge structural stability and kinetics of graphene chemical vapor deposition growth. *ACS Nano*, **2012**, 6, 3243-50	16.7	154
299	Ultralarge elastic deformation of nanoscale diamond. *Science*, **2018**, 360, 300-302	33.3	151
298	Molecular dynamics study of the catalyst particle size dependence on carbon nanotube growth. *Journal of Chemical Physics*, **2004**, 121, 2775-9	3.9	148
297	In Situ Assembly of 2D Conductive Vanadium Disulfide with Graphene as a High-Sulfur-Loading Host for Lithium–Sulfur Batteries. *Advanced Energy Materials*, **2018**, 8, 1800201	21.8	146
296	Hydrogen storage by spillover on graphene as a phase nucleation process. *Physical Review B*, **2008**, 78,	3.3	143
295	Silane-catalysed fast growth of large single-crystalline graphene on hexagonal boron nitride. *Nature Communications*, **2015**, 6, 6499	17.4	141
294	Band Gap Tuning of Hydrogenated Graphene: H Coverage and Configuration Dependence. *Journal of Physical Chemistry C*, **2011**, 115, 3236-3242	3.8	139
293	Clustering of Sc on SWNT and Reduction of Hydrogen Uptake: Ab-Initio All-Electron Calculations. *Journal of Physical Chemistry C*, **2007**, 111, 17977-17980	3.8	139
292	Ultrathin graphdiyne film on graphene through solution-phase van der Waals epitaxy. *Science Advances*, **2018**, 4, eaat6378	14.3	134
291	Chemical vapor deposition growth of large-scale hexagonal boron nitride with controllable orientation. *Nano Research*, **2015**, 8, 3164-3176	10	131
290	Magic carbon clusters in the chemical vapor deposition growth of graphene. *Journal of the American Chemical Society*, **2012**, 134, 2970-5	16.4	124
289	Pseudoclimb and dislocation dynamics in superplastic nanotubes. *Physical Review Letters*, **2007**, 98, 075502	7.4	113

288	Facile synthesis of wide-bandgap fluorinated graphene semiconductors. *Chemistry - A European Journal*, **2011**, 17, 8896-903	4.8	112
287	Surface Monocrystallization of Copper Foil for Fast Growth of Large Single-Crystal Graphene under Free Molecular Flow. *Advanced Materials*, **2016**, 28, 8968-8974	24	110
286	Transition metal surface passivation induced graphene edge reconstruction. *Journal of the American Chemical Society*, **2012**, 134, 6204-9	16.4	110
285	Formation of Carbon Clusters in the Initial Stage of Chemical Vapor Deposition Graphene Growth on Ni(111) Surface. *Journal of Physical Chemistry C*, **2011**, 115, 17695-17703	3.8	109
284	Size dependence of the coalescence and melting of iron clusters: A molecular-dynamics study. *Physical Review B*, **2004**, 70,	3.3	108
283	Colossal grain growth yields single-crystal metal foils by contact-free annealing. *Science*, **2018**, 362, 1021-1025	33.9	107
282	Growing Uniform Graphene Disks and Films on Molten Glass for Heating Devices and Cell Culture. *Advanced Materials*, **2015**, 27, 7839-46	24	102
281	Chemically induced transformation of chemical vapour deposition grown bilayer graphene into fluorinated single-layer diamond. *Nature Nanotechnology*, **2020**, 15, 59-66	28.7	100
280	Highly Oriented Monolayer Graphene Grown on a Cu/Ni(111) Alloy Foil. *ACS Nano*, **2018**, 12, 6117-6127	16.7	100
279	Observational geology of graphene, at the nanoscale. *ACS Nano*, **2011**, 5, 1569-74	16.7	96
278	Molecular Dynamics Simulation of Chemical Vapor Deposition Graphene Growth on Ni (111) Surface. *Journal of Physical Chemistry C*, **2012**, 116, 6097-6102	3.8	93
277	How the Orientation of Graphene Is Determined during Chemical Vapor Deposition Growth. *Journal of Physical Chemistry Letters*, **2012**, 3, 2822-2827	6.4	91
276	How evaporating carbon nanotubes retain their perfection?. *Nano Letters*, **2007**, 7, 681-4	11.5	91
275	Efficient defect healing in catalytic carbon nanotube growth. *Physical Review Letters*, **2012**, 108, 245505	7.4	89
274	Regulating infrared photoresponses in reduced graphene oxide phototransistors by defect and atomic structure control. *ACS Nano*, **2013**, 7, 6310-20	16.7	89
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272	Greatly Enhanced Anticorrosion of Cu by Commensurate Graphene Coating. *Advanced Materials*, **2018**, 30, 1702944	24	85
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268	Prediction of Relative Permeability of Unsaturated Porous Media Based on Fractal Theory and Monte Carlo Simulation. *Energy & Fuels*, **2012**, 26, 6971-6978	4.1	79
267	How Graphene Islands Are Unidirectionally Aligned on the Ge(110) Surface. *Nano Letters*, **2016**, 16, 3160-5	11.5	78
266	The role of the catalytic particle temperature gradient for SWNT growth from small particles. *Chemical Physics Letters*, **2004**, 393, 309-313	2.5	76
265	In-situ PECVD-enabled graphene-V2O3 hybrid host for lithium‐sulfur batteries. *Nano Energy*, **2018**, 53, 432-439	17.1	76
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263	Formation and healing of vacancies in graphene chemical vapor deposition (CVD) growth. *Journal of the American Chemical Society*, **2013**, 135, 4476-82	16.4	73
262	Real time microscopy, kinetics, and mechanism of giant fullerene evaporation. *Physical Review Letters*, **2007**, 99, 175503	7.4	73
261	Theoretical study of the stability of defects in single-walled carbon nanotubes as a function of their distance from the nanotube end. *Physical Review B*, **2005**, 72,	3.3	73
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249	Mechanisms of Liquid-Phase Exfoliation for the Production of Graphene. *ACS Nano*, **2020**, 14, 10976-10985	16.7	59
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186	Interwall Friction and Sliding Behavior of Centimeters Long Double-Walled Carbon Nanotubes. *Nano Letters*, **2016**, 16, 1367-74	11.5	28
185	Large scale atomistic simulation of single-layer graphene growth on Ni(111) surface: molecular dynamics simulation based on a new generation of carbon-metal potential. *Nanoscale*, **2016**, 8, 921-9	7.7	28
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159	Impurity-induced formation of bilayered graphene on copper by chemical vapor deposition. *Nano Research*, **2016**, 9, 2803-2810	10	19
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155	Controlling the orientations of h-BN during growth on transition metals by chemical vapor deposition. *Nanoscale*, **2017**, 9, 3561-3567	7.7	18
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