Yu Chen

List of Publications by Citations

48 papers	8,392 citations	36 h-index	49 g-index
49 ext. papers	9,378 ext. citations	15.1 avg, IF	5.79 L-index

#	Paper	IF	Citations
48	ELECTROCHEMISTRY. High-performance transition metal-doped Pt3Ni octahedra for oxygen reduction reaction. *Science*, **2015**, 348, 1230-4	33.3	1307
47	Lateral epitaxial growth of two-dimensional layered semiconductor heterojunctions. *Nature Nanotechnology*, **2014**, 9, 1024-30	28.7	858
46	Electroluminescence and photocurrent generation from atomically sharp WSe2/MoS2 heterojunction p-n diodes. *Nano Letters*, **2014**, 14, 5590-7	11.5	782
45	Vertically stacked multi-heterostructures of layered materials for logic transistors and complementary inverters. *Nature Materials*, **2013**, 12, 246-52	27	705
44	Chemical vapour deposition growth of large single crystals of monolayer and bilayer graphene. *Nature Communications*, **2013**, 4, 2096	17.4	422
43	Few-layer molybdenum disulfide transistors and circuits for high-speed flexible electronics. *Nature Communications*, **2014**, 5, 5143	17.4	329
42	Large area growth and electrical properties of p-type WSe2 atomic layers. *Nano Letters*, **2015**, 15, 709-13	11.5	287
41	Chemical vapor deposition growth of monolayer MoSe2 nanosheets. *Nano Research*, **2014**, 7, 511-517	10	285
40	High-frequency self-aligned graphene transistors with transferred gate stacks. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 11588-92	11.5	267
39	Nanoscale Joule heating and electromigration enhanced ripening of silver nanowire contacts. *ACS Nano*, **2014**, 8, 2804-11	16.7	251
38	High-yield chemical vapor deposition growth of high-quality large-area AB-stacked bilayer graphene. *ACS Nano*, **2012**, 6, 8241-9	16.7	215
37	A facile strategy to Pt3Ni nanocrystals with highly porous features as an enhanced oxygen reduction reaction catalyst. *Advanced Materials*, **2013**, 25, 2974-9	24	211
36	A rational design of cosolvent exfoliation of layered materials by directly probing liquid-solid interaction. *Nature Communications*, **2013**, 4, 2213	17.4	204
35	High-quality monolayer superconductor NbSe grown by chemical vapour deposition. *Nature Communications*, **2017**, 8, 394	17.4	199
34	Biomimetic synthesis of an ultrathin platinum nanowire network with a high twin density for enhanced electrocatalytic activity and durability. *Angewandte Chemie - International Edition*, **2013**, 52, 12577-81	16.4	164
33	Van der Waals stacked 2D layered materials for optoelectronics. *2D Materials*, **2016**, 3, 022001	5.9	161
32	A rational design of carbon-supported dispersive Pt-based octahedra as efficient oxygen reduction reaction catalysts. *Energy and Environmental Science*, **2014**, 7, 2957-2962	35.4	147

31	Broadband and enhanced nonlinear optical response of MoS2/graphene nanocomposites for ultrafast photonics applications. *Scientific Reports*, **2015**, 5, 16372	4.9	147
30	Palladium-based nanostructures with highly porous features and perpendicular pore channels as enhanced organic catalysts. *Angewandte Chemie - International Edition*, **2013**, 52, 2520-4	16.4	135
29	Plasmonic and catalytic AuPd nanowheels for the efficient conversion of light into chemical energy. *Angewandte Chemie - International Edition*, **2013**, 52, 6063-7	16.4	135
28	Research advances in unsupported Pt-based catalysts for electrochemical methanol oxidation. *Journal of Energy Chemistry*, **2017**, 26, 1067-1076	12	124
27	Electric-field-induced strong enhancement of electroluminescence in multilayer molybdenum disulfide. *Nature Communications*, **2015**, 6, 7509	17.4	104
26	High density catalytic hot spots in ultrafine wavy nanowires. *Nano Letters*, **2014**, 14, 3887-94	11.5	93
25	Room-temperature 2D semiconductor activated vertical-cavity surface-emitting lasers. *Nature Communications*, **2017**, 8, 543	17.4	74
24	Growth of nickel silicides in Si and Si/SiOx core/shell nanowires. *Nano Letters*, **2010**, 10, 4721-6	11.5	68
23	A systematic study of atmospheric pressure chemical vapor deposition growth of large-area monolayer graphene. *Journal of Materials Chemistry*, **2012**, 22, 1498-1503		66
22	Detection of spin polarized carrier in silicon nanowire with single crystal MnSi as magnetic contacts. *Nano Letters*, **2010**, 10, 2281-7	11.5	63
21	Solution processable colloidal nanoplates as building blocks for high-performance electronic thin films on flexible substrates. *Nano Letters*, **2014**, 14, 6547-53	11.5	60
20	Monodisperse Cu@PtCu nanocrystals and their conversion into hollow-PtCu nanostructures for methanol oxidation. *Journal of Materials Chemistry A*, **2013**, 1, 14449	13	57
19	Metal-organic framework templated synthesis of ultrathin, well-aligned metallic nanowires. *ACS Nano*, **2015**, 9, 3044-9	16.7	54
18	Palladium-Based Nanostructures with Highly Porous Features and Perpendicular Pore Channels as Enhanced Organic Catalysts. *Angewandte Chemie*, **2013**, 125, 2580-2584	3.6	52
17	Epitaxial Synthesis of Monolayer PtSe Single Crystal on MoSe with Strong Interlayer Coupling. *ACS Nano*, **2019**, 13, 10929-10938	16.7	45
16	Large-Area Atomic Layers of the Charge-Density-Wave Conductor TiSe. *Advanced Materials*, **2018**, 30, 1704382	24	43
15	High Gain Submicrometer Optical Amplifier at Near-Infrared Communication Band. *Physical Review Letters*, **2015**, 115, 027403	7.4	38
14	The growth and applications of silicides for nanoscale devices. *Nanoscale*, **2012**, 4, 1412-21	7.7	37

13	Kinetic competition model and size-dependent phase selection in 1-D nanostructures. *Nano Letters*, **2012**, 12, 3115-20	11.5	37
12	The Advanced Designs of High-Performance Platinum-Based Electrocatalysts: Recent Progresses and Challenges. *Advanced Materials Interfaces*, **2018**, 5, 1800486	4.6	35
11	A versatile strategy to the selective synthesis of Cu nanocrystals and the in situ conversion to CuRu nanotubes. *Nanoscale*, **2013**, 5, 6284-90	7.7	32
10	Kinetic manipulation of silicide phase formation in Si nanowire templates. *Nano Letters*, **2013**, 13, 3703-8	11.5	29
9	Two-dimensional biomaterials: material science, biological effect and biomedical engineering applications. *Chemical Society Reviews*, **2021**, 50, 11381-11485	58.5	23
8	Crystallinity control of ferromagnetic contacts in stressed nanowire templates and the magnetic domain anisotropy. *Nano Letters*, **2012**, 12, 4341-8	11.5	12
7	Domain wall motion in synthetic Co2Si nanowires. *Nano Letters*, **2012**, 12, 1972-6	11.5	12
6	Phase control in solid state silicide nanowire formation. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2013**, 10, 1666-1669		10
5	High-performance electronics and optoelectronics of monolayer tungsten diselenide full film from pre-seeding strategy. *Informa Materia*, **2021**, 3, 1455	23.1	7
4	Degradable mesoporous semimetal antimony nanospheres for near-infrared II multimodal theranostics.. *Nature Communications*, **2022**, 13, 539	17.4	3
3	Gold clusters alloyed to nanoporous palladium surfaces as highly active bimetallic oxidation catalysts. *ChemSusChem*, **2013**, 6, 1868-72	8.3	2
2	Wang et al. Reply. *Physical Review Letters*, **2016**, 117, 219702	7.4	1
1	Nanoelectronic Devices from Nanowire Heterostructures. *ECS Transactions*, **2010**, 33, 3-11	1	