

# Hongwei Liu

## List of Publications by Year in descending order

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116  
papers

5,667  
citations

87843

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82499

72  
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117  
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117  
docs citations

117  
times ranked

9936  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tuning photoresponse of graphene-black phosphorus heterostructure by electrostatic gating and photo-induced doping. Chinese Chemical Letters, 2022, 33, 368-373.	4.8	5
2	Generalized Pair Weights of Linear Codes and Linear Isomorphisms Preserving Pair Weights. IEEE Transactions on Information Theory, 2022, 68, 105-117.	1.5	5
3	Galois self-orthogonal constacyclic codes over finite fields. Designs, Codes, and Cryptography, 2022, 90, 2703-2733.	1.0	5
4	Potassium Iodide Doping Strategy for High-Efficiency Perovskite Solar Cells Revealed by Ultrafast Spectroscopy. Journal of Physical Chemistry Letters, 2022, 13, 711-717.	2.1	3
5	A simplified relationship between the modified O-lattice and the rotation matrix for generating the coincidence site lattice of an arbitrary Bravais lattice system. Acta Crystallographica Section A: Foundations and Advances, 2022, 78, 139-148.	0.0	2
6	Corrosion of aluminum alloy 7075 induced by marine Aspergillus terreus with continued organic carbon starvation. Npj Materials Degradation, 2022, 6, .	2.6	12
7	Simultaneously Improve Transferability and Discriminability for Adversarial Domain Adaptation. Entropy, 2022, 24, 44.	1.1	3
8	Correlated Dynamics of Free and Self-Trapped Excitons and Broadband Photodetection in $\text{BEA}_{2-x}\text{PbBr}_{4-x}$ Layered Crystals. Advanced Optical Materials, 2022, 10, .	3.6	5
9	Characterizations of the biomineralization film caused by marine Pseudomonas stutzeri and its mechanistic effects on X80 pipeline steel corrosion. Journal of Materials Science and Technology, 2022, 125, 15-28.	5.6	18
10	Evidence for the plant recruitment of beneficial microbes to suppress soil-borne pathogens. New Phytologist, 2021, 229, 2873-2885.	3.5	168
11	Nickel Metaphosphate as a Conversion Positive Electrode for Lithium-Ion Batteries. Batteries and Supercaps, 2021, 4, 195-204.	2.4	6
12	Preparation of Coating on the Titanium Surface by Micro-Arc Oxidation to Improve Corrosion Resistance. Coatings, 2021, 11, 230.	1.2	18
13	Direct numerical simulation of a supersonic turbulent boundary layer over a compression-decompression corner. Physics of Fluids, 2021, 33, .	1.6	21
14	Predicting Epitaxial Nanocrystal Morphology Governed by Interfacial Strain—The Case for NiO on SrTiO <sub>3</sub> . Journal of Physical Chemistry C, 2021, 125, 12827-12836.	1.5	1
15	The Thinnest Light Disk: Rewritable Data Storage and Encryption on WS <sub>2</sub> Monolayers. Advanced Functional Materials, 2021, 31, 2103140.	7.8	7
16	Spectroscopic Perception of Trap States on the Performance of Methylammonium and Formamidinium Lead Iodide Perovskite Solar Cells. Advanced Materials, 2021, 33, 2102241.	11.1	7
17	Performance Improvement of DAG-Aware Task Scheduling Algorithms with Efficient Cache Management in Spark. Electronics (Switzerland), 2021, 10, 1874.	1.8	5
18	The Thinnest Light Disk: Rewritable Data Storage and Encryption on WS <sub>2</sub> Monolayers (Adv.) Tj ETQq0,0,0 rgBT /Overlock 1	7.8	1

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19	Defect-related dynamics of photoexcited carriers in 2D transition metal dichalcogenides. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 8222-8235.	1.3	13
20	Violence Recognition Based on Auditory-Visual Fusion of Autoencoder Mapping. <i>Electronics (Switzerland)</i> , 2021, 10, 2654.	1.8	6
21	Grazing Regulates the Spatial Heterogeneity of Soil Microbial Communities Within Ecological Networks. <i>Ecosystems</i> , 2020, 23, 932-942.	1.6	29
22	Observation of hydrogen trapping at dislocations, grain boundaries, and precipitates. <i>Science</i> , 2020, 367, 171-175.	6.0	275
23	Utilization of marigold ( <i>Tagetes erecta</i> ) flower fermentation wastewater as a fertilizer and its effect on microbial community structure in maize rhizosphere and non-rhizosphere soil. <i>Biotechnology and Biotechnological Equipment</i> , 2020, 34, 522-531.	0.5	1
24	Galvanic Corrosion Due to a Heterogeneous Sulfate Reducing Bacteria Biofilm. <i>Coatings</i> , 2020, 10, 1116.	1.2	6
25	Competition between Oxygen Curing and Ion Migration in MAPbI <sub>3</sub> Induced by Irradiation Exposure. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8477-8482.	2.1	5
26	Constructions of Optimal Codes With Hierarchical Locality. <i>IEEE Transactions on Information Theory</i> , 2020, 66, 7333-7340.	1.5	12
27	Understanding the link between solid/liquid interfaces and photoelectrochemical activity in novel thin-film photoanodes of preferentially oriented high-index rutile TiO <sub>2</sub> facets – A work inspired by Michel Chevreton's research on surface chemistry. <i>Journal of Catalysis</i> , 2020, 392, 186-196.	3.1	4
28	Genomics and LC-MS Reveal Diverse Active Secondary Metabolites in <i>Bacillus amyloliquefaciens</i> WS-8. <i>Journal of Microbiology and Biotechnology</i> , 2020, 30, 417-426.	0.9	7
29	Synergistic Inhibition Effect of Magnetic Field and Inhibitors against Carbon Steel Corrosion in CO <sub>2</sub> -Saturated Oilfield-Produced Water. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 17668-17674.	1.8	10
30	Dislocations and Te precipitates of Cd <sub>0.9</sub> Mn <sub>0.1</sub> Te: V crystal grown by Tellurium solution vertical Bridgman method. <i>Journal of Crystal Growth</i> , 2019, 513, 43-47.	0.7	6
31	Modulation of THz radiation via enhanced Dirac plasmon-dual phonon interaction. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	2
32	Non-destructive analysis on nano-textured surface of the vertical LED for light enhancement. <i>Ultramicroscopy</i> , 2019, 196, 1-9.	0.8	4
33	Defect-Induced Pt-Co-Se Coordinated Sites with Highly Asymmetrical Electronic Distribution for Boosting Oxygen-Involving Electrocatalysis. <i>Advanced Materials</i> , 2019, 31, e1805581.	11.1	168
34	Two or Few-Weight Trace Codes over $\mathbb{F}_q + u\mathbb{F}_q$ . <i>IEEE Transactions on Information Theory</i> , 2019, 65, 2696-2703.	1.5	14
35	Characterization of a gene regulating antibiotic production in <i>Bacillus subtilis</i> BSD-2. <i>Biotechnology and Biotechnological Equipment</i> , 2018, 32, 332-338.	0.5	2
36	A critical review on the carrier dynamics in 2D layered materials investigated using THz spectroscopy. <i>Optics Communications</i> , 2018, 406, 24-35.	1.0	22

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37	Metamaterials based on the phase transition of VO <sub>2</sub> . Nanotechnology, 2018, 29, 024002.	1.3	90
38	One-dimensional nanostructures of II–VI ternary alloys: synthesis, optical properties, and applications. Nanoscale, 2018, 10, 17456-17476.	2.8	20
39	A quadrifunctional electrocatalyst of nickel/nickel oxide embedded N-graphene for oxygen reduction, oxygen evolution, hydrogen evolution and hydrogen peroxide oxidation reactions. Sustainable Energy and Fuels, 2018, 2, 2081-2089.	2.5	34
40	Nucleation driving force for $\gamma$ -assisted formation of $\beta$ and associated $\gamma$ morphology in $\beta$ -Ti alloys. Scripta Materialia, 2018, 155, 149-154.	2.6	31
41	Coordination of Atomic Co–Pt Coupling Species at Carbon Defects as Active Sites for Oxygen Reduction Reaction. Journal of the American Chemical Society, 2018, 140, 10757-10763.	6.6	464
42	A Defect-Driven Metal-free Electrocatalyst for Oxygen Reduction in Acidic Electrolyte. Chem, 2018, 4, 2345-2356.	5.8	292
43	New Constructions of MDS Codes With Complementary Duals. IEEE Transactions on Information Theory, 2018, 64, 5776-5782.	1.5	54
44	Full Electric Control of Exchange Bias at Room Temperature by Resistive Switching. Advanced Materials, 2018, 30, e1801885.	11.1	43
45	Microsteganography on WS <sub>2</sub> Monolayers Tailored by Direct Laser Painting. ACS Nano, 2017, 11, 713-720.	7.3	43
46	Atomic-scale investigation of a new phase transformation process in TiO <sub>2</sub> nanofibers. Nanoscale, 2017, 9, 4601-4609.	2.8	22
47	Enriched Fluorescence Emission from WS <sub>2</sub> Monoflake Empowered by Au Nanoexplorers. Advanced Optical Materials, 2017, 5, 1700156.	3.6	7
48	Crystallography of refractory metal nuggets in carbonaceous chondrites: A transmission Kikuchi diffraction approach. Geochimica Et Cosmochimica Acta, 2017, 216, 42-60.	1.6	7
49	In-situ high-resolution transmission electron microscopy investigation of grain boundary dislocation activities in a nanocrystalline CrMnFeCoNi high-entropy alloy. Journal of Alloys and Compounds, 2017, 709, 802-807.	2.8	53
50	Negative terahertz photoconductivity in 2D layered materials. Nanotechnology, 2017, 28, 464001.	1.3	21
51	Some Repeated-Root Constacyclic Codes Over Galois Rings. IEEE Transactions on Information Theory, 2017, 63, 6247-6255.	1.5	10
52	Amorphous Bimetallic Oxide–Graphene Hybrids as Bifunctional Oxygen Electrocatalysts for Rechargeable Zn–Air Batteries. Advanced Materials, 2017, 29, 1701410.	11.1	243
53	Exciton dynamics in tungsten dichalcogenide monolayers. Physical Chemistry Chemical Physics, 2017, 19, 17877-17882.	1.3	14
54	Laser cladding Al-based amorphous-nanocrystalline composite coatings on AZ80 magnesium alloy under water cooling condition. Journal of Alloys and Compounds, 2017, 690, 108-115.	2.8	94

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55	In situ analysis of Refractory Metal Nuggets in carbonaceous chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 216, 61-81.	1.6	40
56	Constacyclic Symbol-Pair Codes: Lower Bounds and Optimal Constructions. <i>IEEE Transactions on Information Theory</i> , 2017, 63, 7661-7666.	1.5	44
57	<i>EDP2XRD</i> : a computer program for converting electron diffraction patterns into X-ray diffraction patterns. <i>Journal of Applied Crystallography</i> , 2016, 49, 636-641.	1.9	10
58	Comparing the Contribution of Visible-Light Irradiation, Gold Nanoparticles, and Titania Supports in Photocatalytic Nitroaromatic Coupling and Aromatic Alcohol Oxidation. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 628-634.	1.2	8
59	Distortion reduction in strong terahertz signals using broadband attenuators with flat transmittance. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 015501.	1.3	3
60	Phosphorene: Enhanced Photoresponse from Phosphorene-Suboxide Junction Fashioned by Focused Laser Micromachining ( <i>Adv. Mater.</i> 21/2016). <i>Advanced Materials</i> , 2016, 28, 4164-4164.	11.1	4
61	Enhanced Photoresponse from Phosphorene-Suboxide Junction Fashioned by Focused Laser Micromachining. <i>Advanced Materials</i> , 2016, 28, 4090-4096.	11.1	38
62	Complete genome sequence of <i>Bacillus subtilis</i> BSD-2, a microbial germicide isolated from cultivated cotton. <i>Journal of Biotechnology</i> , 2016, 230, 26-27.	1.9	21
63	The crystallography of C-centred monoclinic to body-centred tetragonal polymorphic phase transformation in mixed-phase TiO <sub>2</sub> (B) and anatase nanocomposite. <i>Scripta Materialia</i> , 2016, 119, 27-32.	2.6	11
64	Microstructure, crystallography of phase transformations and multiple precipitations in PH 15-7Mo stainless steel. <i>Journal of Alloys and Compounds</i> , 2016, 672, 386-392.	2.8	5
65	Light-Matter Interactions in Phosphorene. <i>Accounts of Chemical Research</i> , 2016, 49, 1806-1815.	7.6	97
66	Coherent-Interface-Assembled Ag <sub>2</sub> O-Anchored Nanofibrillated Cellulose Porous Aerogels for Radioactive Iodine Capture. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 29179-29185.	4.0	68
67	In situ observation and investigation on the formation mechanism of nanocavities in TiO <sub>2</sub> nanofibers. <i>CrystEngComm</i> , 2016, 18, 7772-7779.	1.3	3
68	Fluorescence Concentric Triangles: A Case of Chemical Heterogeneity in WS <sub>2</sub> Atomic Monolayer. <i>Nano Letters</i> , 2016, 16, 5559-5567.	4.5	76
69	Universal Approach for Predicting Crystallography of Heterogeneous Epitaxial Nanocrystals with Multiple Orientation Relationships. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 34844-34853.	4.0	6
70	Ultrahigh photoconductivity of bandgap-graded CdSxSe1-x nanowires probed by terahertz spectroscopy. <i>Scientific Reports</i> , 2016, 6, 27387.	1.6	15
71	Efficient Removal of Cationic and Anionic Radioactive Pollutants from Water Using Hydrotalcite-Based Getters. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 16503-16510.	4.0	40
72	Single crystal forms induced diverse interface structures in TiO <sub>2</sub> (B)/anatase dual-phase nanocomposites. <i>CrystEngComm</i> , 2016, 18, 2089-2097.	1.3	11

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73	Interactions between lasers and two-dimensional transition metal dichalcogenides. <i>Chemical Society Reviews</i> , 2016, 45, 2494-2515.	18.7	61
74	Highly Ordered Single Crystalline Nanowire Array Assembled Three-Dimensional Nb <sub>3</sub> O <sub>7</sub> (OH) and Nb <sub>2</sub> O <sub>5</sub> Superstructures for Energy Storage and Conversion Applications. <i>ACS Nano</i> , 2016, 10, 507-514.	7.3	81
75	Degradation analysis of Alq <sub>3</sub> -based OLED from noise fluctuations with different driving modes. <i>Chemical Physics Letters</i> , 2015, 623, 68-71.	1.2	7
76	Laser Modified ZnO/CdSSe Core-Shell Nanowire Arrays for Micro-Steganography and Improved Photoconduction. <i>Scientific Reports</i> , 2015, 4, 6350.	1.6	8
77	Microlandscaping of Au Nanoparticles on Few-Layer MoS <sub>2</sub> Films for Chemical Sensing. <i>Small</i> , 2015, 11, 1792-1800.	5.2	113
78	Tuning and understanding the phase interface of TiO <sub>2</sub> nanoparticles for more efficient lithium ion storage. <i>Nanoscale</i> , 2015, 7, 12833-12838.	2.8	36
79	Surface-mediated selective photocatalytic aerobic oxidation reactions on TiO <sub>2</sub> nanofibres. <i>RSC Advances</i> , 2015, 5, 56820-56831.	1.7	11
80	Atomic Healing of Defects in Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2015, 15, 3524-3532.	4.5	194
81	Enhancement of the catalytic performance of a CNT supported Pt nanorod cluster catalyst by controlling their microstructure. <i>RSC Advances</i> , 2015, 5, 80176-80183.	1.7	3
82	In-situ synthesis of Ag nanoparticles by electron beam irradiation. <i>Materials Characterization</i> , 2015, 110, 1-4.	1.9	15
83	Bandgap Engineering of Phosphorene by Laser Oxidation toward Functional 2D Materials. <i>ACS Nano</i> , 2015, 9, 10411-10421.	7.3	126
84	Interpretation of the vacancy-ordering controlled growth morphology of Hg <sub>5</sub> In <sub>2</sub> Te <sub>8</sub> precipitates in Hg <sub>3</sub> In <sub>2</sub> Te <sub>6</sub> single crystals by TEM observation and crystallographic calculation. <i>Journal of Alloys and Compounds</i> , 2015, 622, 206-212.	2.8	8
85	Composition-dependent electron transport in CdS <sub>1-x</sub> Se <sub>x</sub> nanobelts: a THz spectroscopy study. <i>Optics Letters</i> , 2014, 39, 567.	1.7	8
86	Atomic Mechanism of Predictable Phase Transition in Dual-Phase H <sub>2</sub> Ti <sub>3</sub> O <sub>7</sub> /TiO <sub>2</sub> (B) Nanofiber: An In Situ Heating TEM Investigation. <i>Chemistry - A European Journal</i> , 2014, 20, 11313-11317.	1.7	16
87	Atomic-scale observation of parallel development of super elasticity and reversible plasticity in GaAs nanowires. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	26
88	Role of interface structure and chemistry in resistive switching of NiO nanocrystals on SrTiO <sub>3</sub> . <i>APL Materials</i> , 2014, 2, .	2.2	11
89	Enhanced photodynamic therapy of mixed phase TiO <sub>2</sub> (B)/anatase nanofibers for killing of HeLa cells. <i>Nano Research</i> , 2014, 7, 1659-1669.	5.8	65
90	Heterojunctions in g-C <sub>3</sub> N <sub>4</sub> /TiO <sub>2</sub> (B) nanofibres with exposed (001) plane and enhanced visible-light photoactivity. <i>Journal of Materials Chemistry A</i> , 2014, 2, 2071-2078.	5.2	241

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91	TiO <sub>2</sub> nanofibers of different crystal phases for transesterification of alcohols with dimethyl carbonate. <i>Applied Catalysis B: Environmental</i> , 2014, 150-151, 330-337.	10.8	32
92	Predictable and controllable dual-phase interfaces in TiO <sub>2</sub> (B)/anatase nanofibers. <i>Nanoscale</i> , 2014, 6, 14237-14243.	2.8	17
93	Highly sensitive and multispectral responsive phototransistor using tungsten-doped VO <sub>2</sub> nanowires. <i>Nanoscale</i> , 2014, 6, 7619-7627.	2.8	42
94	Control of Exposed Facet and Morphology of Anatase Crystals through TiO <sub>2</sub> F Precursor Synthesis and Impact of the Facet on Crystal Phase Transition. <i>Chemistry of Materials</i> , 2014, 26, 1014-1018.	3.2	25
95	Advances in Sustain Stable Voltage of Cr-Doped Li-Rich Layered Cathodes for Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2014, 161, A1723-A1730.	1.3	79
96	Mechanical characteristics of individual multi-layer graphene-oxide sheets under direct tensile loading. <i>Carbon</i> , 2014, 80, 279-289.	5.4	39
97	Visible Light-Driven Cross-Coupling Reactions at Lower Temperatures Using a Photocatalyst of Palladium and Gold Alloy Nanoparticles. <i>ACS Catalysis</i> , 2014, 4, 1725-1734.	5.5	181
98	Separate or Simultaneous Removal of Radioactive Cations and Anions from Water by Layered Sodium Vanadate-Based Sorbents. <i>Chemistry of Materials</i> , 2014, 26, 4788-4795.	3.2	65
99	Efficient photocatalytic Suzuki cross-coupling reactions on Au-Pd alloy nanoparticles under visible light irradiation. <i>Green Chemistry</i> , 2014, 16, 4272.	4.6	213
100	On the morphology and crystallography of Hg <sub>5</sub> In <sub>2</sub> Te <sub>8</sub> precipitation in Hg <sub>3</sub> In <sub>2</sub> Te <sub>6</sub> . <i>Journal of Alloys and Compounds</i> , 2014, 601, 298-306.	2.8	8
101	Preparation of Nitrogen-Doped TiO <sub>2</sub> /Graphene Nanohybrids and Application as Counter Electrode for Dye-Sensitized Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 2118-2124.	4.0	44
102	Hydrogenation Synthesis of Blue TiO <sub>2</sub> for High-Performance Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2014, 118, 8824-8830.	1.5	167
103	Improved Photoelectrical Properties of MoS <sub>2</sub> Films after Laser Micromachining. <i>ACS Nano</i> , 2014, 8, 6334-6343.	7.3	112
104	Graphene-based surface modification on layered Li-rich cathode for high-performance Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9954.	5.2	163
105	Silver oxide nanocrystals anchored on titanate nanotubes and nanofibers: promising candidates for entrapment of radioactive iodine anions. <i>Nanoscale</i> , 2013, 5, 11011.	2.8	64
106	High rate capability caused by surface cubic spinels in Li-rich layer-structured cathodes for Li-ion batteries. <i>Scientific Reports</i> , 2013, 3, 3094.	1.6	192
107	Composition-dependent ultra-high photoconductivity in ternary CdS x Se <sup>1-x</sup> nanobelts as measured by optical pump-terahertz probe spectroscopy. <i>Nano Research</i> , 2013, 6, 808-821.	5.8	23
108	ZnO Nanocones with High-Index {101̄...1} Facets for Enhanced Energy Conversion Efficiency of Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2013, 117, 13836-13844.	1.5	55

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109	Quantitative dopant distributions in GaAs nanowires using atom probe tomography. Ultramicroscopy, 2013, 132, 186-192.	0.8	29
110	Efficient catalysts of zeolite nanocrystals grown with a preferred orientation on nanofibers. Chemical Communications, 2013, 49, 9866.	2.2	8
111	Painting Anatase (TiO <sub>2</sub> ) Nanocrystals on Long Nanofibers to Prepare Photocatalysts with Large Active Surface for Dye Degradation and Organic Synthesis. ChemCatChem, 2013, 5, 2382-2388.	1.8	9
112	Direct Optical Tuning of the Terahertz Plasmonic Response of InSb Subwavelength Gratings. Advanced Optical Materials, 2013, 1, 128-132.	3.6	71
113	Vapor-Phase Hydrothermal Growth of Novel Segmentally Configured Nanotubular Crystal Structure. Small, 2013, 9, 3043-3050.	5.2	9
114	Transient Photoconductivity of Ternary CdSSe Nanobelts As Measured by Time-Resolved Terahertz Spectroscopy. Journal of Physical Chemistry C, 2013, 117, 12379-12384.	1.5	18
115	Defect Engineering in CdS <sub>x</sub> Se <sub>1-x</sub> Nanobelts: An Insight into Carrier Relaxation Dynamics via Optical Pump-Terahertz Probe Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 26036-26042.	1.5	23
116	Optical and electrical applications of ZnS <sub>x</sub> Se <sub>1-x</sub> nanowires-network with uniform and controllable stoichiometry. Nanoscale, 2012, 4, 976.	2.8	28