

# Lin He

## List of Publications by Year in descending order

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144  
papers

4,569  
citations

87888

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145  
docs citations

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times ranked

5935  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent progresses of quantum confinement in graphene quantum dots. <i>Frontiers of Physics</i> , 2022, 17, 1.	5.0	31
2	Creating custom-designed patterns of nanoscale graphene quantum dots. <i>2D Materials</i> , 2022, 9, 021002.	4.4	3
3	Coexistence of electron whispering-gallery modes and atomic collapse states in graphene/WSe <sub>2</sub> heterostructure quantum dots. <i>Nature Communications</i> , 2022, 13, 1597.	12.8	12
4	Tailoring the Energy Landscape of Graphene Nanostructures on Graphene and Manipulating Them Using Tilt Grain Boundaries. <i>Physical Review Applied</i> , 2022, 17, .	3.8	3
5	Origami-controlled strain engineering of tunable flat bands and correlated states in folded graphene. <i>Physical Review Materials</i> , 2022, 6, .	2.4	9
6	Realizing Valley-Polarized Energy Spectra in Bilayer Graphene Quantum Dots via Continuously Tunable Berry Phases. <i>Physical Review Letters</i> , 2022, 128, .	7.8	12
7	Lattice-Matched Metal-Semiconductor Heterointerface in Monolayer Cu <sub>2</sub> Te. <i>ACS Nano</i> , 2021, 15, 3415-3422.	14.6	19
8	Quantum Interferences of Pseudospin-Mediated Atomic-Scale Vortices in Monolayer Graphene. <i>Nano Letters</i> , 2021, 21, 2526-2531.	9.1	11
9	Temperature-sensitive spatial distribution of defects in PdSe <sub>2</sub> flakes. <i>Physical Review Materials</i> , 2021, 5, .	5.4	11
10	Control of the local magnetic states in graphene with voltage and gating. <i>Physical Review B</i> , 2021, 103, .	3.2	4
11	Enhanced Valley Polarization of Bilayer MoSe <sub>2</sub> with Variable Stacking Order and Interlayer Coupling. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 5879-5888.	4.6	11
12	Local measurements of tunneling magneto-conductance oscillations in monolayer, Bernal-stacked bilayer, and ABC-stacked trilayer graphene. <i>Science China: Physics, Mechanics and Astronomy</i> , 2021, 64, 1.	5.1	4
13	Spatial and magnetic confinement of massless Dirac fermions. <i>Physical Review B</i> , 2021, 104, .	3.2	8
14	Oscillations of the Spacing between van Hove Singularities Induced by sub-Ångstrom Fluctuations of Interlayer Spacing in Graphene Superlattices. <i>Physical Review Letters</i> , 2021, 127, 266801.	7.8	10
15	Electronic confinement in quantum dots of twisted bilayer graphene. <i>Physical Review B</i> , 2021, 104, .	3.2	3
16	Planar Hall effect induced by anisotropic orbital magnetoresistance in type-II Dirac semimetal PdTe <sub>2</sub> . <i>Journal of Physics Condensed Matter</i> , 2020, 32, 015702.	1.8	20
17	Tunable magnetism of a single-carbon vacancy in graphene. <i>Science Bulletin</i> , 2020, 65, 194-200.	9.0	30
18	Robust atomic-structure of the 6 Å <sup>-2</sup> reconstruction surface of Ge(110) protected by the electronically transparent graphene monolayer. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 22711-22718.	2.8	4

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19	Spectroscopic Evidence for a Spin- and Valley-Polarized Metallic State in a Nonmagic-Angle Twisted Bilayer Graphene. <i>ACS Nano</i> , 2020, 14, 13081-13090.	14.6	10
20	Relativistic Artificial Molecules Realized by Two Coupled Graphene Quantum Dots. <i>Nano Letters</i> , 2020, 20, 6738-6743.	9.1	15
21	Experimental evidence for orbital magnetic moments generated by moiré-scale current loops in twisted bilayer graphene. <i>Physical Review B</i> , 2020, 102, .	3.2	38
22	Local Berry Phase Signatures of Bilayer Graphene in Intervalley Quantum Interference. <i>Physical Review Letters</i> , 2020, 125, 116804.	7.8	23
23	Correlation-induced valley splitting and orbital magnetism in a strain-induced zero-energy flatband in twisted bilayer graphene near the magic angle. <i>Physical Review B</i> , 2020, 102, .	3.2	26
24	Tunable Lattice Reconstruction, Triangular Network of Chiral One-Dimensional States, and Bandwidth of Flat Bands in Magic Angle Twisted Bilayer Graphene. <i>Physical Review Letters</i> , 2020, 125, 236102.	7.8	29
25	Enhancement of the Photoelectrocatalytic H <sub>2</sub> Evolution on a Rutile-TiO <sub>2</sub> (001) Surface Decorated with Dendritic MoS <sub>2</sub> Monolayer Nanoflakes. <i>ACS Applied Energy Materials</i> , 2020, 3, 5756-5764.	5.1	17
26	Coulomb interaction in quasibound states of graphene quantum dots. <i>Physical Review B</i> , 2020, 101, .	3.2	20
27	Valley Polarization and Inversion in Strained Graphene via Pseudo-Landau Levels, Valley Splitting of Real Landau Levels, and Confined States. <i>Physical Review Letters</i> , 2020, 124, 106802.	7.8	73
28	Spectroscopic characterization of Landau-level splitting and the intermediate $\nu=0$ phase in bilayer graphene. <i>Physical Review B</i> , 2020, 101, .	3.2	3
29	Enhancement of Rashba spin-orbit coupling by electron confinement at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interface. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 235003.	1.8	4
30	Nanoscale probing of broken-symmetry states in graphene induced by individual atomic impurities. <i>Physical Review B</i> , 2020, 101, .	3.2	7
31	Movable Valley Switch Driven by Berry Phase in Bilayer-Graphene Resonators. <i>Physical Review Letters</i> , 2020, 124, 166801.	7.8	20
32	Large linear magnetoresistance caused by disorder in WTe <sub>2</sub> thin film. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 355703.	1.8	7
33	Twistronics in graphene-based van der Waals structures. <i>Chinese Physics B</i> , 2020, 29, 117303.	1.4	23
34	Scanning tunneling microscopy study of the quasicrystalline 30° twisted bilayer graphene. <i>2D Materials</i> , 2019, 6, 045041.	4.4	26
35	Programmable graphene nanobubbles with three-fold symmetric pseudo-magnetic fields. <i>Nature Communications</i> , 2019, 10, 3127.	12.8	69
36	Controlled synthesis of 2D Mo <sub>2</sub> C/graphene heterostructure on liquid Au substrates as enhanced electrocatalytic electrodes. <i>Nanotechnology</i> , 2019, 30, 385601.	2.6	51

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37	Mo Concentration Controls the Morphological Transitions from Dendritic to Semicompact, and to Compact Growth of Monolayer Crystalline MoS <sub>2</sub> on Various Substrates. ACS Applied Materials & Interfaces, 2019, 11, 42751-42759.	8.0	30
38	Observation of phonon peaks and electron-phonon bound states in graphene. Physical Review B, 2019, 100, .	3.2	7
39	Scanning tunneling microscope study of quantum Hall isospin ferromagnetic states in the zero Landau level in a graphene monolayer. Physical Review B, 2019, 100, .	3.2	47
40	Magnetism near half-filling of a Van Hove singularity in twisted graphene bilayer. Physical Review B, 2019, 99, .	3.2	30
41	Nanoscale detection of valley-dependent spin splitting around atomic defects of graphene. 2D Materials, 2019, 6, 031005.	4.4	14
42	High-Magnetic-Field Tunneling Spectra of ABC -Stacked Trilayer Graphene on Graphite. Physical Review Letters, 2019, 122, 146802.	7.8	23
43	Imaging the dynamics of an individual hydrogen atom intercalated between two graphene sheets. Physical Review B, 2018, 97, .	3.2	7
44	Influence of In-Gap States on the Formation of Two-Dimensional Election Gas at ABO <sub>3</sub> /SrTiO <sub>3</sub> Interfaces. Scientific Reports, 2018, 8, 195.	3.3	6
45	Scanning tunneling microscopy and spectroscopy of twisted trilayer graphene. Physical Review B, 2018, 97, .	3.2	30
46	Generating atomically sharp p-n junctions in graphene and testing quantum electron optics on the nanoscale. Physical Review B, 2018, 97, .	3.2	39
47	Formation of Two-dimensional Electron Gas at Amorphous/Crystalline Oxide Interfaces. Scientific Reports, 2018, 8, 404.	3.3	22
48	Magnetic-field-controlled negative differential conductance in scanning tunneling spectroscopy of graphene p-n junction resonators. Physical Review B, 2018, 97, .	3.2	17
49	Spin-Polarized Semiconducting Band Structure of Monolayer Graphene on Ni(111). Physical Review Applied, 2018, 10, .	3.8	8
50	Interaction between in-gap states and carriers at the conductive interface between perovskite oxides. Journal of Physics Condensed Matter, 2018, 30, 405002.	1.8	0
51	Twisted graphene bilayer around the first magic angle engineered by heterostrain. Physical Review B, 2018, 98, .	3.2	70
52	Spatial confinement, magnetic localization, and their interactions on massless Dirac fermions. Physical Review B, 2018, 98, .	3.2	13
53	Modulating the Electronic Properties of Graphene by Self-Organized Sulfur Identical Nanoclusters and Atomic Superlattices Confined at an Interface. ACS Nano, 2018, 12, 10984-10991.	14.6	18
54	Large negative magnetoresistance driven by enhanced weak localization and Kondo effect at the interface of LaAlO <sub>3</sub> /SrTiO <sub>3</sub> and Fe-doped SrTiO <sub>3</sub>	3.2	18

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55	Tunneling Spectra of a Quasifreestanding Graphene Monolayer. Physical Review Applied, 2018, 9, .	3.8	25
56	High-resolution tunneling spectroscopy of ABA-stacked trilayer graphene. Physical Review B, 2018, 98, .	3.2	8
57	Conductivity and band alignment of LaCrO <sub>3</sub> /SrTiO <sub>3</sub> (111) heterostructure. Chinese Physics B, 2018, 27, 047301.	1.4	4
58	Controlling the dendritic structure and the photo-electrocatalytic properties of highly crystalline MoS <sub>2</sub> on sapphire substrate. 2D Materials, 2018, 5, 031015.	4.4	13
59	Two-dimensional spinodal interface in one-step grown graphene-molybdenum carbide heterostructures. Physical Review Materials, 2018, 2, .	2.4	9
60	Bound states in nanoscale graphene quantum dots in a continuous graphene sheet. Physical Review B, 2017, 95, .	3.2	24
61	Observation of chirality transition of quasiparticles at stacking solitons in trilayer graphene. Physical Review B, 2017, 95, .	3.2	17
62	Landau quantization of Dirac fermions in graphene and its multilayers. Frontiers of Physics, 2017, 12, 1.	5.0	52
63	Stacking transition in bilayer graphene caused by thermally activated rotation. 2D Materials, 2017, 4, 011013.	4.4	20
64	Splitting of Van Hove singularities in slightly twisted bilayer graphene. Physical Review B, 2017, 96, .	3.2	31
65	Scanning tunneling microscopy and spectroscopy of finite-size twisted bilayer graphene. Physical Review B, 2017, 96, .	3.2	11
66	Massless Dirac fermions trapping in a quasi-one-dimensional junction of a continuous graphene monolayer. Physical Review B, 2017, 95, .	3.2	10
67	One-step synthesis of van der Waals heterostructures of graphene and two-dimensional superconducting Mo <sub>2</sub> C. Physical Review B, 2017, 95, .	3.2	49
68	Temperature dependence of the conductive layer thickness at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> heterointerface. Physical Review B, 2017, 96, .	3.2	10
69	Dielectric Engineering of a Boron Nitride/Hafnium Oxide Heterostructure for High-Performance 2D Field Effect Transistors. Advanced Materials, 2016, 28, 2062-2069.	21.0	65
70	Wide-band-gap wrinkled nanoribbon-like structures in a continuous metallic graphene sheet. Physical Review B, 2016, 94, .	3.2	7
71	Scanning Tunneling Microscopy of the Magnetism of a Single Carbon Vacancy in Graphene. Physical Review Letters, 2016, 117, 166801.	7.8	122
72	Experimental observation of surface states and Landau levels bending in bilayer graphene. Physical Review B, 2016, 93, .	3.2	25

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73	Spatially resolving unconventional interface Landau quantization in a graphene monolayer-bilayer planar junction. Physical Review B, 2016, 93, .	3.2	18
74	Reply to "Comment on "Creating in-plane pseudomagnetic fields in excess of 1000 T by misoriented stacking in a graphene bilayer" Physical Review B, 2016, 93, .	3.2	1
75	Energy gaps of atomically precise armchair graphene sidewall nanoribbons. Physical Review B, 2016, 93, .	3.2	54
76	Observation of quantum Griffiths singularity and ferromagnetism at the superconducting interface. Physical Review B, 2016, 94, .	3.2	39
77	Direct imaging of topological edge states at a bilayer graphene domain wall. Nature Communications, 2016, 7, 11760.	12.8	155
78	Landau quantization in graphene monolayer, Bernal bilayer, and Bernal trilayer on graphite surface. Physical Review B, 2015, 91, .	3.2	60
79	Experimental evidence for non-Abelian gauge potentials in twisted graphene bilayers. Physical Review B, 2015, 92, .	3.2	66
80	Reconstruction of electrostatic field at the interface leads to formation of two-dimensional electron gas at multivalent interface. Physical Review B, 2015, 92, .	3.2	11
81	Detecting giant electron-hole asymmetry in a graphene monolayer generated by strain and charged-defect scattering via Landau level spectroscopy. Physical Review B, 2015, 92, .	3.2	37
82	Observation of unconventional splitting of Landau levels in strained graphene. Physical Review B, 2015, 92, .	3.2	53
83	Atomic resolution imaging of the two-component Dirac-Landau levels in a gapped graphene monolayer. Physical Review B, 2015, 92, .	3.2	29
84	Landau quantization and Fermi velocity renormalization in twisted graphene bilayers. Physical Review B, 2015, 92, .	3.2	63
85	Origin of room-temperature single-channel ballistic transport in zigzag graphene nanoribbons. Science China Materials, 2015, 58, 677-682.	6.3	5
86	Direct probing of the stacking order and electronic spectrum of rhombohedral trilayer graphene with scanning tunneling microscopy. Physical Review B, 2015, 91, .	3.2	28
87	Unveiling the structural origin of the high carrier mobility of a molecular monolayer on boron nitride. Physical Review B, 2014, 90, .	3.2	13
88	In-plane chiral tunneling and out-of-plane valley-polarized quantum tunneling in twisted graphene trilayer. Physical Review B, 2014, 90, .	3.2	7
89	Creating in-plane pseudomagnetic fields in excess of 1000 T by misoriented stacking in a graphene bilayer. Physical Review B, 2014, 89, .	3.2	30
90	Two-dimensional quasi-freestanding molecular crystals for high-performance organic field-effect transistors. Nature Communications, 2014, 5, 5162.	12.8	315

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91	Tuning structures and electronic spectra of graphene layers with tilt grain boundaries. Physical Review B, 2014, 89, .	3.2	40
92	Carrier-mediated Kondo effect and Hall mobility by electrolyte gating in slightly doped anatase $\text{TiO}_2$ . Physical Review B, 2014, 90, .	3.2	8
93	Two-dimensional superconductivity at (110) $\text{LaAlO}_3/\text{SrTiO}_3$ interfaces. Applied Physics Letters, 2014, 105, .	3.3	42
94	Layer-Stacking Growth and Electrical Transport of Hierarchical Graphene Architectures. Advanced Materials, 2014, 26, 3218-3224.	21.0	39
95	Graphene: Layer-Stacking Growth and Electrical Transport of Hierarchical Graphene Architectures (Adv. Mater. 20/2014). Advanced Materials, 2014, 26, 3355-3355.	21.0	0
96	Graphene: Controlled Growth of Single-Crystal Twelve-Pointed Graphene Grains on a Liquid Cu Surface (Adv. Mater. 37/2014). Advanced Materials, 2014, 26, 6519-6519.	21.0	1
97	Creating One-Dimensional Nanoscale Periodic Ripples in a Continuous Mosaic Graphene Monolayer. Physical Review Letters, 2014, 113, 086102.	7.8	111
98	Angle-dependent van Hove singularities and their breakdown in twisted graphene bilayers. Physical Review B, 2014, 90, .	3.2	47
99	Controlled Growth of Single-Crystal Twelve-Pointed Graphene Grains on a Liquid Cu Surface. Advanced Materials, 2014, 26, 6423-6429.	21.0	55
100	Coupled spin and pseudomagnetic field in graphene nanoribbons. Physical Review B, 2013, 88, .	3.2	17
101	Strain and curvature induced evolution of electronic band structures in twisted graphene bilayer. Nature Communications, 2013, 4, 2159.	12.8	165
102	Hierarchy of graphene wrinkles induced by thermal strain engineering. Applied Physics Letters, 2013, 103, .	3.3	87
103	Superlattice Dirac points and space-dependent Fermi velocity in a corrugated graphene monolayer. Physical Review B, 2013, 87, .	3.2	60
104	Electronic structures of graphene layers on a metal foil: The effect of atomic-scale defects. Applied Physics Letters, 2013, 103, .	3.3	34
105	Coexistence of van Hove singularities and superlattice Dirac points in a slightly twisted graphene bilayer. Physical Review B, 2013, 87, .	3.2	35
106	Chiral Tunneling in a Twisted Graphene Bilayer. Physical Review Letters, 2013, 111, 066803.	7.8	64
107	Strain-induced one-dimensional Landau level quantization in corrugated graphene. Physical Review B, 2013, 87, .	3.2	80
108	Enhanced intervalley scattering of twisted bilayer graphene by periodic AB-stacked atoms. Physical Review B, 2012, 85, .	3.2	29

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109	Flat bands near Fermi level of topological line defects on graphite. Applied Physics Letters, 2012, 101, .	3.3	30
110	Stabilization variation of organic conductor surfaces induced by $\pi$ - $\pi$ stacking interactions. Chinese Physics B, 2012, 21, 056801.	1.4	0
111	Zero-bias anomaly in one-dimensional ultrathin metallic nanowires. AIP Advances, 2012, 2, .	1.3	7
112	Ultrathin $\pm$ -Fe <sub>2</sub> O <sub>3</sub> Nanoribbons and Their Moiré Patterns. Journal of Physical Chemistry C, 2012, 116, 6879-6883.	3.1	13
113	Single-layer behavior and slow carrier density dynamic of twisted graphene bilayer. Applied Physics Letters, 2012, 100, .	3.3	21
114	Angle-Dependent van Hove Singularities in a Slightly Twisted Graphene Bilayer. Physical Review Letters, 2012, 109, 126801.	7.8	222
115	Anomalous magnetic properties of 7-nm single-crystal Co <sub>3</sub> O <sub>4</sub> nanowires. Journal of Applied Physics, 2012, 111, 013910.	2.5	17
116	Observation of Landau-level-like quantization at 77 K along a strained-induced graphene ridge. Physical Review B, 2012, 85, .	3.2	60
117	Ultrathin Co <sub>3</sub> O <sub>4</sub> nanowires with high catalytic oxidation of CO. Chemical Communications, 2011, 47, 11279.	4.1	88
118	Ultrathin Au-Ag bimetallic nanowires with Coulomb blockade effects. Chemical Communications, 2011, 47, 5160.	4.1	69
119	Transition metal oxide nanowires synthesized by heating metal substrates. Materials Research Bulletin, 2011, 46, 2120-2124.	5.2	11
120	The Ho thickness dependence of spin-triplet supercurrents in Nb/Ho/Co/Ho/Nb films. Solid State Communications, 2011, 151, 651-652.	1.9	2
121	Zero-magnetization ferromagnet induced by hydrogenation. Solid State Communications, 2011, 151, 985-987.	1.9	5
122	Periodic magnetoresistance oscillations induced by superconducting vortices in single crystal Au nanowires. Nanotechnology, 2011, 22, 445704.	2.6	4
123	Effect of exchange-type zero-bias anomaly on single-electron tunneling of Au nanoparticles. Physical Review B, 2011, 84, .	3.2	3
124	Comment on "Coexistence of Coulomb Blockade and Zero Bias Anomaly in a Strongly Coupled Nanodot". Physical Review Letters, 2011, 107, 079701; author reply 079702.	7.8	4
125	Parallel versus antiparallel interfacial exchange coupling in ferromagnet/spin-glasses. Journal of Applied Physics, 2011, 109, 123915.	2.5	5
126	Competition of the antiferromagnetic superexchange with the ferromagnetic double exchange in dicobalt complexes. Applied Physics Letters, 2010, 97, .	3.3	7



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127	Hexagonal close-packed nickel or Ni <sub>3</sub> C?. Journal of Magnetism and Magnetic Materials, 2010, 322, 1991-1993.	2.3	51
128	The magnetic ordering temperature of Cu, Mn, and Fe elements in. Solid State Communications, 2010, 150, 187-188.	1.9	3
129	Origin of the anomalous size dependent blocking temperature of nanoparticles. Solid State Communications, 2010, 150, 743-745.	1.9	5
130	Scanning tunnelling microscope studies of angstrom-scale Co <sub>3</sub> O <sub>4</sub> nanowires. Nanotechnology, 2010, 21, 335605.	2.6	12
131	Comment on "Evidence for Quantization of Mechanical Rotation of Magnetic Nanoparticles". Physical Review Letters, 2010, 105, 049701; author reply 049702.	7.8	1
132	Comment on "Coexistence of ferromagnetism and superconductivity in Sn nanoparticles". Physical Review B, 2010, 82, .	3.2	1
133	Comment on "Diameter dependence of ferromagnetic spin moment in Au nanocrystals". Physical Review B, 2010, 81, .	3.2	10
134	Inhibited single-electron transfer by electronic band gap of two-dimensional Au quantum dot superlattice. Applied Physics Letters, 2010, 97, 113101.	3.3	7
135	Unexpected Magnetic Moments in Ultrafine Diamagnetic Systems. Journal of Physical Chemistry C, 2010, 114, 12487-12489.	3.1	5
136	Evidence for surface states in a single 3 nm diameter Co <sub>3</sub> O <sub>4</sub> nanowire. Applied Physics Letters, 2010, 96, 262106.	3.3	9
137	Weak ferromagnetism and spin-glass state with nanosized nickel carbide. Journal of Applied Physics, 2009, 105, 123923.	2.5	21
138	Ni/Ni <sub>3</sub> C Core-Shell Nanochains and Its Magnetic Properties: One-Step Synthesis at Low Temperature. Nano Letters, 2008, 8, 1147-1152.	9.1	99
139	Collective magnetization flux closure state with circular array of single-domain nanomagnets: Magnetization reversal and chirality control. Journal of Applied Physics, 2008, 103, 114312.	2.5	7
140	Anisotropy and magnetization reversal with chains of submicron-sized Co hollow spheres. Physical Review B, 2007, 75, .	3.2	20
141	Finite size effect on Néel temperature with Co <sub>3</sub> O <sub>4</sub> nanoparticles. Journal of Applied Physics, 2007, 102, .	2.5	87
142	Size-dependent magnetic properties of nickel nanochains. Journal of Physics Condensed Matter, 2007, 19, 036216.	1.8	39
143	Effect of temperature-dependent shape anisotropy on coercivity for aligned Stoner-Wohlfarth soft ferromagnets. Physical Review B, 2007, 75, .	3.2	41
144	Facile Synthesis of Monodisperse Mn <sub>3</sub> O <sub>4</sub> Tetragonal Nanoparticles and Their Large-Scale Assembly into Highly Regular Walls by a Simple Solution Route. Small, 2007, 3, 606-610.	10.0	99