# Chunlin Chen

List of Publications by Year
in descending order



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| 96 | 2,271 | 249298 | 312153 |
|---|---|---|---|
| papers | citations | 26 h-index | 41 g-index |

| 97 | 97 | 97 | 3521 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Atomic origin of magnetic coupling of antiphase boundaries in magnetite thin films. Journal of Materials Science and Technology, 2022, 107, 92-99. | 5.6 | 8 |
| 2 | Electronic and magnetic properties of sub-unit cell Î±-Fe2O3 films on the Î±-Al2O3 (0001) substrate. Computational Materials Science, 2022, 210, 111442. | 1.4 | 2 |
| 3 | Atomistic origin of high-concentration Ce3+ in {100}-faceted Cr-substituted CeO2 nanocrystals. Acta Materialia, 2021, 203, 116473. | 3.8 | 18 |
| 4 | Single-Dislocation Schottky Diodes. Nano Letters, 2021, 21, 5586-5592. | 4.5 | 5 |
| 5 | The Confined Interlayer Growth of Ultrathin Two-Dimensional Fe<sub>3</sub>O<sub>4</sub> Nanosheets with Enriched Oxygen Vacancies for Peroxymonosulfate Activation. ACS Catalysis, 2021, 11, 11256-11265. | 5.5 | 125 |
| 6 | Surfactant-mediated morphology evolution and self-assembly of cerium oxide nanocrystals for catalytic and supercapacitor applications. Nanoscale, 2021, 13, 10393-10401. | 2.8 | 11 |
| 7 | Ferroelectric domain structure and atomic-scale phase distribution in a Pb(Mg1/3Nb2/3)O3-PbTiO3 single crystal. Ceramics International, 2021, , . | 2.3 | 2 |
| 8 | Measuring phonon dispersion at an interface. Nature, 2021, 599, 399-403. | 13.7 | 47 |
| 9 | Spin Polarization-Assisted Dopant Segregation at a Coherent Phase Boundary. ACS Nano, 2021, 15, 19938-19944. | 7.3 | 6 |
| 10 | Ferroelectric Oxide Thin Film with an Out-of-Plane Electrical Conductivity. Nano Letters, 2020, 20, 1047-1053. | 4.5 | 5 |
| 11 | Strong metalâ€“metal interaction and bonding nature in metal/oxide interfaces with large mismatches. Acta Materialia, 2019, 179, 237-246. | 3.8 | 13 |
| 12 | Stabilizing the metastable superhard material wurtzite boron nitride by three-dimensional networks of planar defects. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11181-11186. | 3.3 | 19 |
| 13 | Multi-electron transfer enabled by topotactic reaction in magnetite. Nature Communications, 2019, 10, 1972. | 5.8 | 28 |
| 14 | Ceramic phases with one-dimensional long-range order. Nature Materials, 2019, 18, 19-23. | 13.3 | 18 |
| 15 | Direct Determination of Atomic Structure and Magnetic Coupling of Magnetite Twin Boundaries. ACS Nano, 2018, 12, 2662-2668. | 7.3 | 30 |
| 16 | Nanoindentation-induced phase transformation between SiC polymorphs. Materials Letters, 2018, 220, 152-155. | 1.3 | 5 |
| 17 | Exceptionally high nanoscale wear resistance of a Cu47Zr45Al8 metallic glass with native and artificially grown oxide. Intermetallics, 2018, 93, 312-317. | 1.8 | 31 |
| 18 | Precipitation of secondary phase in Mg-Zn-Gd alloy after room-temperature deformation and annealing. Journal of Materials Research and Technology, 2018, 7, 135-141. | 2.6 | 18 |

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|---|---|---|---|
| 19 | Atomicâ€Scale Valence State Distribution inside Ultrafine CeO<sub>2</sub> Nanocubes and Its Size Dependence. Small, 2018, 14, e1802915. | 5.2 | 77 |
| 20 | Direct Imaging for Single Molecular Chain of Surfactant on CeO<sub>2</sub> Nanocrystals. Small, 2018, 14, e1801093. | 5.2 | 23 |
| 21 | Local chemical ordering within the incubation period as a trigger for nanocrystallization of a highly supercooled Ti-based liquid. Materials and Design, 2018, 156, 504-513. | 3.3 | 18 |
| 22 | Nucleation and thermal stability of an icosahedral nanophase during the early crystallization stage in Zr-Co-Cu-Al metallic glasses. Acta Materialia, 2017, 132, 298-306. | 3.8 | 36 |
| 23 | Solid-phase epitaxial film growth and optical properties of a ferroelectric oxide, Sr2Nb2O7. Journal of Applied Physics, 2017, 122, . | 1.1 | 9 |
| 24 | Deformation behavior and texture randomization of Mgâ€“Znâ€“Gd alloys reinforced with icosahedral quasicrystal. International Journal of Materials Research, 2017, 108, 455-464. | 0.1 | 2 |
| 25 | Atomic-Scale Origin of the Quasi-One-Dimensional Metallic Conductivity in Strontium Niobates with Perovskite-Related Layered Structures. ACS Nano, 2017, 11, 12519-12525. | 7.3 | 8 |
| 26 | Designing biocompatible Ti-based amorphous thin films with no toxic element. Journal of Alloys and Compounds, 2017, 707, 142-147. | 2.8 | 11 |
| 27 | In-Situ High-Resolution Transmission Electron Microscopy Investigation of Overheating of Cu Nanoparticles. Scientific Reports, 2016, 6, 19545. | 1.6 | 22 |
| 28 | Mathematical analysis and STEM observations of arrangement of structural units in ã€˚001ã€‰ symmetrical tilt grain boundaries. Microscopy (Oxford, England), 2016, 65, 479-487. | 0.7 | 11 |
| 29 | Eutectic crystallization during fracture of Zrâ€“Cuâ€“Coâ€“Al metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 657, 210-214. | 2.6 | 14 |
| 30 | Dislocations in icosahedral quasicrystalline phase embedded in hot-deformed Mg alloys. Journal of Alloys and Compounds, 2016, 658, 483-487. | 2.8 | 11 |
| 31 | Atomic Resolution Imaging of Enamel in Shark Teeth. Materia Japan, 2016, 55, 612-612. | 0.1 | 0 |
| 32 | Mathematical Analysis of Tilt Boundaries and STEM Observations. Materia Japan, 2016, 55, 582-582. | 0.1 | 0 |
| 33 | Atomic-scale observation of dynamical fluctuation and three-dimensional structure of gold clusters. Journal of Applied Physics, 2015, 117, . | 1.1 | 22 |
| 34 | Pseudo-binary electrolyte, LiBH<sub>4</sub>â€“LiCl, for bulk-type all-solid-state lithium-sulfur battery. Nanotechnology, 2015, 26, 254001. | 1.3 | 63 |
| 35 | Misfit accommodation mechanism at the heterointerface between diamond and cubic boron nitride. Nature Communications, 2015, 6, 6327. | 5.8 | 66 |
| 36 | A dewetting route to grow heterostructured nanoparticles based on thin film heterojunctions. Nanoscale, 2015, 7, 19977-19984. | 2.8 | 5 |

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|---|---|---|---|
| 37 | Atomistic origin of an ordered superstructure induced superconductivity in layered chalcogenides. Nature Communications, 2015, 6, 6091. | 5.8 | 47 |
| 38 | Bulk metallic glassy surface native oxide: Its atomic structure, growth rate and electrical properties. Acta Materialia, 2015, 97, 282-290. | 3.8 | 43 |
| 39 | Magnetoelectric quasi-(0-3) nanocomposite heterostructures. Nature Communications, 2015, 6, 6680. | 5.8 | 89 |
| 40 | Two-dimensional electron gas at the Ti-diffused BiFeO3/SrTiO3 interface. Applied Physics Letters, 2015, 107, . | 1.5 | 38 |
| 41 | Patterning Oxide Nanopillars at the Atomic Scale by Phase Transformation. Nano Letters, 2015, 15, 6469-6474. | 4.5 | 12 |
| 42 | Secondary phases in quasicrystal-reinforced Mgâ€“3.5Znâ€“0.6Gd Mg alloy. Materials Characterization, 2015, 108, 132-136. | 1.9 | 15 |
| 43 | HAADF STEM observation of the Au/CeO2 nanostructures. Materials Letters, 2015, 141, 31-34. | 1.3 | 7 |
| 44 | Atomic-scale structure and properties of highly stable antiphase boundary defects in Fe3O4. Nature Communications, 2014, 5, 5740. | 5.8 | 112 |
| 45 | Improved piezoelectricity of PVDF-HFP/carbon black composite films. Journal Physics D: Applied Physics, 2014, 47, 135302. | 1.3 | 73 |
| 46 | Atomic and electronic structure of the SrNbO3/SrNbO3.4 interface. Applied Physics Letters, 2014, 105, . | 1.5 | 18 |
| 47 | Controllable Synthesis of Ceria Nanoparticles with Uniform Reactive {100} Exposure Planes. Journal of Physical Chemistry C, 2014, 118, 4437-4443. | 1.5 | 29 |
| 48 | Full Determination of Individual Reconstructed Atomic Columns in Intermixed Heterojunctions. Nano Letters, 2014, 14, 6584-6589. | 4.5 | 1 |
| 49 | Synthesis and atomic-scale characterization of CeO2 nano-octahedrons. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 64, 218-223. | 1.3 | 16 |
| 50 | Interfacial defect complex at the MgO/SrTiO<sub>3</sub>heterojunction and its electronic impact. RSC Advances, 2014, 4, 51002-51007. | 1.7 | 11 |
| 51 | Facile synthesis of ceria nanospheres by Ce(OH)CO3 precursors. Materials Letters, 2014, 122, 90-93. | 1.3 | 30 |
| 52 | Formation mechanism of quasicrystals at the nanoscale during hot compression of Mg alloys. Scripta Materialia, 2014, 78-79, 61-64. | 2.6 | 21 |
| 53 | Nanoscale icosahedral quasicrystal phase precipitation mechanism during annealing for Mgâ€“Znâ€“Gd-based alloys. Materials Letters, 2014, 130, 236-239. | 1.3 | 20 |
| 54 | Fluorine in Shark Teeth: Its Direct Atomicâ€Resolution Imaging and Strengthening Function. Angewandte Chemie - International Edition, 2014, 53, 1543-1547. | 7.2 | 26 |

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|---|---|---|---|
| 55 | Atomic-Scale Observation of Migration and Coalescence of Au Nanoclusters on YSZ Surface by Aberration-Corrected STEM. Scientific Reports, 2014, 4, 5521. | 1.6 | 27 |
| 56 | Effect of Icosahedral Quasicrystalline Fraction and Extrusion Ratio on Microstructure, Mechanical Properties, and Anisotropy of Mg-Zn-Gd-Based Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2725-2734. | 1.1 | 22 |
| 57 | Excellent mechanical properties of an ultrafine-grained quasicrystalline strengthened magnesium alloy with multi-modal microstructure. Materials Letters, 2013, 107, 181-184. | 1.3 | 23 |
| 58 | Synthesis and characterization of CeO 2 nano-rods. Ceramics International, 2013, 39, 6607-6610. | 2.3 | 51 |
| 59 | Atomic-scale structure and electronic property of the La<sub>2</sub>FeCrO<sub>6</sub>/SrTiO<sub>3</sub> interface. Journal of Applied Physics, 2013, 114, 113705. | 1.1 | 6 |
| 60 | Hydrothermal synthesis of ceria hybrid architectures of nano-rods and nano-octahedrons. Materials Letters, 2013, 96, 210-213. | 1.3 | 13 |
| 61 | Effect of pretreatment and annealing on microstructure and mechanical properties of Mgâ€“1.5Znâ€“0.25Gd (at%) alloys reinforced with quasicrystal. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 581, 73-82. | 2.6 | 19 |
| 62 | Impact of NaF mineralizer on cerium-containing nanoparticles synthesized by hydrothermal process. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 48, 181-186. | 1.3 | 4 |
| 63 | Microstructures and grain boundaries of cubic boron nitrides. Diamond and Related Materials, 2013, 32, 27-31. | 1.8 | 21 |
| 64 | Immobilizing Carbon Nanotubes on SiC Foam as a Monolith Catalyst for Oxidative Dehydrogenation Reactions. ChemCatChem, 2013, 5, 1713-1717. | 1.8 | 25 |
| 65 | Facile synthesis of hybrid hexagonal CeF3 nano-disks on CeO2 frustum pyramids. Materials Letters, 2013, 92, 7-10. | 1.3 | 16 |
| 66 | Oxygen segregation at coherent grain boundaries of cubic boron nitride. Applied Physics Letters, 2013, 102, 091607. | 1.5 | 4 |
| 67 | High Crystallinity CuScO$_{2}$ Delafossite Films Exhibiting Ultraviolet Photoluminescence Grown by Vaporâ€“Liquidâ€“Solid Tri-phase Epitaxy. Applied Physics Express, 2012, 5, 011201. | 1.1 | 3 |
| 68 | Structural and electronic impact of SrTiO3 substrate on TiO2 thin films. Journal of Materials Science, 2012, 47, 5148-5157. | 1.7 | 11 |
| 69 | The effect of nanoquasicrystals on mechanical properties of as-extruded Mgâ€“Znâ€“Gd alloy. Materials Letters, 2012, 79, 281-283. | 1.3 | 42 |
| 70 | Quantitative analysis on size dependence of eutectic temperature of alloy nanoparticles in the Agâ€“Pb system. Applied Physics Letters, 2011, 98, 083108. | 1.5 | 19 |
| 71 | Comparative study on size dependence of melting temperatures of pure metal and alloy nanoparticles. Applied Physics Letters, 2011, 99, . | 1.5 | 17 |
| 72 | Deformation-induced Î±2â†' Î³ phase transformation in TiAl alloys. Materials Characterization, 2010, 61, 1029-1034. | 1.9 | 24 |

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|---|---|---|---|
| 73 | Effect of Pt on the electron-irradiation-induced decomposition of sapphire. Scripta Materialia, 2010, 63, 355-358. | 2.6 | 8 |
| 74 | Electron-irradiation-induced phase transformation in alumina. Scripta Materialia, 2010, 63, 1013-1016. | 2.6 | 18 |
| 75 | In situ observations of crystalline-to-liquid and crystalline-to-gas transitions of substrate-supported Ag nanoparticles. Applied Physics Letters, 2010, 96, . | 1.5 | 19 |
| 76 | Two-dimensional metallic tungsten nanowire network fabricated by electron-beam-induced deposition. Nanotechnology, 2010, 21, 285304. | 1.3 | 9 |
| 77 | Effects of temperature and electron energy on the electron-irradiation-induced decomposition of sapphire. Philosophical Magazine Letters, 2010, 90, 715-721. | 0.5 | 7 |
| 78 | In situTEM observation of the growth and decomposition of monoclinic W<sub>18</sub>O<sub>49</sub>nanowires. Nanotechnology, 2009, 20, 285604. | 1.3 | 22 |
| 79 | First-principles study of deformation-induced phase transformations in Tiâ€“Al intermetallics. Journal of Materials Research, 2009, 24, 1662-1666. | 1.2 | 8 |
| 80 | Orientation relationships between TiB (B27), B2, and Ti<sub>3</sub>Al phases. Journal of Materials Research, 2009, 24, 1688-1692. | 1.2 | 4 |
| 81 | In situ TEM observations of irradiation-induced phase change in tungsten. Journal of Materials Science, 2009, 44, 1965-1968. | 1.7 | 6 |
| 82 | In situTEM observation of decomposition of high-purity sapphire. Philosophical Magazine Letters, 2009, 89, 113-119. | 0.5 | 9 |
| 83 | High-resolution image simulation of overlap structures in TiAl alloy. Journal of Alloys and Compounds, 2009, 468, 179-186. | 2.8 | 14 |
| 84 | Silver nanowires with a monoclinic structure fabricated by a thermal evaporation method. Nanotechnology, 2009, 20, 405605. | 1.3 | 15 |
| 85 | Decomposition of primary MC carbide and its effects on the fracture behaviors of a cast Ni-base superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 485, 74-79. | 2.6 | 102 |
| 86 | Electron microscopy study of different stages of oxidation of Tiâ€47Alâ€2Nbâ€2Crâ€0.15B and Tiâ€45Alâ€15Nb at 900Â°C. Journal of Microscopy, 2008, 231, 124-133. | 0.8 | 0 |
| 87 | TEM observations of twin intersections in a Tiâ€“47Alâ€“2Crâ€“2Nbâ€“0.1Y alloy compressed at room temperature. Journal of Alloys and Compounds, 2008, 454, 201-205. | 2.8 | 4 |
| 88 | (S)TEM study of different stages of Tiâ€“45Alâ€“8Nbâ€“0.2Wâ€“0.2Bâ€“0.02Y alloy oxidation at 900Â°C. Corrosion Science, 2008, 50, 978-988. | 3.0 | 40 |
| 89 | Deformation-induced Î³ â†' DI-Î±<sub>2</sub> phase transformation occurring in the twin-intersection region of TiAl alloys. Journal of Materials Research, 2007, 22, 2416-2422. | 1.2 | 6 |
| 90 | The oxidation behavior of Tiâ€“46.5Alâ€“5Nb at 900Â°C. Intermetallics, 2007, 15, 989-998. | 1.8 | 31 |

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|---|---|---|---|
| 91 | TEM investigation of the oxide scale of Tiâ€“46.5Alâ€“5Nb at 900Â°C for 50h. Intermetallics, 2007, 15, 824-831. | 1.8 | 26 |
| 92 | Deformation-induced Î³â†”Îµ2 phase transformation in TiAl alloy compressed at room temperature. Intermetallics, 2007, 15, 722-726. | 1.8 | 15 |
| 93 | Effect of niobium on the oxidation behavior of TiAl. Journal of Materials Research, 2007, 22, 1486-1490. | 1.2 | 21 |
| 94 | Orientation relationship between TiB precipitate and Î³-TiAl phase. Scripta Materialia, 2007, 56, 441-444. | 2.6 | 27 |
| 95 | Phase transformation in the nitride layer during the oxidation of TiAl-based alloys. Scripta Materialia, 2007, 56, 773-776. | 2.6 | 13 |
| 96 | Effects of Long-Term Thermal Exposure on the Microstructure and Properties of a Cast Ni-Base Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 3014-3022. | 1.1 | 82 |