# Qi Zhu

List of Publications by Year
in descending order



| 23 | 803 | 567281 15 | 642732 23 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 24 | 24 | 24 | 1040 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Growth of environmentally stable transition metal selenide films. Nature Materials, 2019, 18, 602-607. | 27.5 | 116 |
| 2 | In situ atomistic observation of disconnection-mediated grain boundary migration. Nature Communications, 2019, 10, 156. | 12.8 | 98 |
| 3 | Sandwich structure stabilized atomic Fe catalyst for highly efficient Fenton-like reaction at all pH values. Applied Catalysis B: Environmental, 2021, 282, 119551. | 20.2 | 93 |
| 4 | Dualâ€Additive Assisted Chemical Vapor Deposition for the Growth of Mnâ€Doped 2D MoS<sub>2</sub> with Tunable Electronic Properties. Small, 2020, 16, e1903181. | 10.0 | 54 |
| 5 | Metallic nanocrystals with low angle grain boundary for controllable plastic reversibility. Nature Communications, 2020, 11, 3100. | 12.8 | 53 |
| 6 | Defect-driven selective metal oxidation at atomic scale. Nature Communications, 2021, 12, 558. | 12.8 | 47 |
| 7 | Revealing extreme twin-boundary shear deformability in metallic nanocrystals. Science Advances, 2021, 7, eabe4758. | 10.3 | 46 |
| 8 | In situ atomistic observation of grain boundary migration subjected to defect interaction. Acta Materialia, 2020, 199, 42-52. | 7.9 | 46 |
| 9 | Enhancing the Strength of Graphene by a Denser Grain Boundary. ACS Nano, 2018, 12, 4529-4535. | 14.6 | 39 |
| 10 | Hierarchical twinning governed by defective twin boundary in metallic materials. Science Advances, 2022, 8, . | 10.3 | 33 |
| 11 | Twinning-assisted dynamic adjustment of grain boundary mobility. Nature Communications, 2021, 12, 6695. | 12.8 | 23 |
| 12 | Improved Na-storage cycling of amorphous-carbon-sheathed Ni3S2 arrays and investigation by in situ TEM characterization. Materials Today Energy, 2017, 5, 99-106. | 4.7 | 22 |
| 13 | Discrete twinning dynamics and size-dependent dislocation-to twin transition in body-centred cubic tungsten. Journal of Materials Science and Technology, 2022, 106, 33-40. | 10.7 | 19 |
| 14 | In situ atomistic observation of the deformation mechanism of Au nanowires with twinâ€“twin intersection. Journal of Materials Science and Technology, 2020, 53, 118-125. | 10.7 | 19 |
| 15 | Role of intersecting grain boundary on the deformation of twin-twin intersection. Scripta Materialia, 2020, 188, 184-189. | 5.2 | 15 |
| 16 | Free-Standing Two-Dimensional Gold Membranes Produced by Extreme Mechanical Thinning. ACS Nano, 2020, 14, 17091-17099. | 14.6 | 15 |
| 17 | Coordinated grain boundary deformation governed nanograin annihilation in shear cycling. Journal of Materials Science and Technology, 2021, 86, 180-191. | 10.7 | 14 |
| 18 | Twin-coupled shear bands in an ultrafine-grained CoCrFeMnNi high-entropy alloy deformed at 77K. Materials Research Letters, 2022, 10, 385-391. | 8.7 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Mechanical property of metallic nanowires: the shorter is stronger and ductile. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 733, 164-169. | 5.6 | 13 |
| 20 | A geometrical model for grain boundary migration mediated formation of multifold twins. International Journal of Plasticity, 2022, 148, 103128. | 8.8 | 12 |
| 21 | Atomistic dynamics of disconnection-mediated grain boundary plasticity: A case study of gold nanocrystals. Journal of Materials Science and Technology, 2022, 125, 182-191. | 10.7 | 9 |
| 22 | Inclination-governed deformation of dislocation-type grain boundaries. Journal of Materials Research, 2021, 36, 1306-1315. | 2.6 | 2 |
| 23 | Diffusive crack-grain interplay in freestanding nanocrystalline silver thin film. Materialia, 2021, 17, 101116. | 2.7 | 1 |