# Yang Cai

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1988223/publications.pdf

Version: 2024-02-01

| 26 | 289 | 840585 11 | 940416 16 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 26 | 26 | 26 | 259 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Penetration dynamics of steel spheres into a ballistic gelatin: Experiments, nondimensional analysis, and finite element modeling. International Journal of Impact Engineering, 2022, 162, 104144. | 2.4 | 7 |
| 2 | Deformation twinning to dislocation slip transition in single-crystal tantalum under dynamic compression. Journal of Materials Science, 2022, 57, 6026-6038. | 1.7 | 0 |
| 3 | Origins of plastic shock waves in single-crystal Cu. Journal of Applied Physics, 2022, 131, . | 1.1 | 4 |
| 4 | High-speed penetration dynamics of polycarbonate. International Journal of Mechanical Sciences, 2022, 223, 107250. | 3.6 | 9 |
| 5 | ACAT: A GPU-accelerated parallel code for constructing ultralarge Atomic Configurations with Arbitrary Texture. Computational Materials Science, 2021, 186, 109997. | 1.4 | 4 |
| 6 | Texture evolution in nanocrystalline Ta under shock compression. Journal of Applied Physics, 2021, 129, . | 1.1 | 2 |
| 7 | DATAD: a Python-based X-ray diffraction simulation code for arbitrary texture and arbitrary deformation. Journal of Applied Crystallography, 2021, 54, 686-696. | 1.9 | 4 |
| 8 | Impact-induced twinning and phase transition in a medium carbon steel. Journal of Alloys and Compounds, 2021, 881, 160421. | 2.8 | 4 |
| 9 | Compression and spallation properties of polyethylene terephthalate under plate impact loading. International Journal of Mechanical Sciences, 2021, 211, 106736. | 3.6 | 6 |
| 10 | Shock-induced twinning and texture in a mild carbon steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138832. | 2.6 | 6 |
| 11 | Texture evolution in nanocrystalline Cu under shock compression. Journal of Applied Physics, 2020, 127, . | 1.1 | 12 |
| 12 | Acoustic and double elastic shock waves in single-crystal graphene. Journal of Applied Physics, 2020, 127, 055101. | 1.1 | 7 |
| 13 | Resolving dynamic fragmentation of liquids at the nanoscale with ultrafast small-angle X-ray scattering. Journal of Synchrotron Radiation, 2019, 26, 1412-1421. | 1.0 | 3 |
| 14 | Spallation of polycarbonate under plate impact loading. Journal of Applied Physics, 2019, 126, . | 1.1 | 12 |
| 15 | Deducing density and strength of nanocrystalline Ta and diamond under extreme conditions from X-ray diffraction. Journal of Synchrotron Radiation, 2019, 26, 413-421. | 1.0 | 3 |
| 16 | Deformation and spallation of shock-loaded graphene: Effects of orientation and grain boundary. Carbon, 2018, 132, 520-528. | 5.4 | 21 |
| 17 | A loading-dependent model of critical resolved shear stress. International Journal of Plasticity, 2018, 109, 1-17. | 4.1 | 12 |
| 18 | Texture of nanocrystalline solids: atomic scale characterization and applications. Journal of Applied Crystallography, 2018, 51, 124-132. | 1.9 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Spin transition of ferropericlase under shock compression. AIP Advances, 2018, 8, 075028. | 0.6 | 3 |
| 20 | Spall strength of liquid copper and accuracy of the acoustic method. Journal of Applied Physics, 2017, 121, . | 1.1 | 27 |
| 21 | Second yield via dislocation-induced premelting in copper. Physical Review B, 2016, 93, . | 1.1 | 20 |
| 22 | Tensile Strength of Liquids: Equivalence of Temporal and Spatial Scales in Cavitation. Journal of Physical Chemistry Letters, 2016, 7, 806-810. | 2.1 | 17 |
| 23 | Homogeneous crystal nucleation in liquid copper under quasi-isentropic compression. Physical Review B, 2015, 92, . | 1.1 | 16 |
| 24 | Grain boundary orientation effects on deformation of Ta bicrystal nanopillars under high strain-rate compression. Journal of Applied Physics, 2014, 115, . | 1.1 | 21 |
| 25 | Cavitation in a metallic liquid: Homogeneous nucleation and growth of nanovoids. Journal of Chemical Physics, 2014, 140, 214317. | 1.2 | 28 |
| 26 | Shock response of single crystal and nanocrystalline pentaerythritol tetranitrate: Implications to hotspot formation in energetic materials. Journal of Chemical Physics, 2013, 139, 164704. | 1.2 | 34 |