

# Jun-Cheng E

## List of Publications by Year in descending order

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27  
papers

443  
citations

759055

12  
h-index

713332

21  
g-index

29  
all docs

29  
docs citations

29  
times ranked

409  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrafast visualization of incipient plasticity in dynamically compressed matter. Nature Communications, 2022, 13, 1055.	5.8	7
2	Effects of radiation damage and inelastic scattering on single-particle imaging of hydrated proteins with an X-ray Free-Electron Laser. Scientific Reports, 2021, 11, 17976.	1.6	7
3	Probing ultrafast laser plasma processes inside solids with resonant small-angle x-ray scattering. Physical Review Research, 2021, 3, .	1.3	4
4	Combined Single-Cell Manipulation and Chemomechanical Modeling to Probe Cell Migration Mechanism During Cell-to-Cell Interaction. IEEE Transactions on Biomedical Engineering, 2020, 67, 1474-1482.	2.5	3
5	Full strain tensor measurements with X-ray diffraction and strain field mapping: a simulation study. Journal of Synchrotron Radiation, 2020, 27, 646-652.	1.0	1
6	VINYL: The Virtual Neutron and x-ray Laboratory and its applications. , 2020, , .		2
7	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
8	<i>GAPD</i>: a GPU-accelerated atom-based polychromatic diffraction simulation code. Journal of Synchrotron Radiation, 2018, 25, 604-611.	1.0	20
9	Texture of nanocrystalline solids: atomic scale characterization and applications. Journal of Applied Crystallography, 2018, 51, 124-132.	1.9	7
10	Simulations of X-ray diffraction of shock-compressed single-crystal tantalum with synchrotron undulator sources. Journal of Synchrotron Radiation, 2018, 25, 748-756.	1.0	6
11	Deformation of metals under dynamic loading: Characterization via atomic-scale orientation mapping. Computational Materials Science, 2018, 153, 338-347.	1.4	12
12	Texture evolution of Cu nanopowder under uniaxial compression. Materialia, 2018, 1, 236-243.	1.3	6
13	<i>SLADS</i>: a parallel code for direct simulations of scattering of large anisotropic dense nanoparticle systems. Journal of Applied Crystallography, 2017, 50, 951-958.	1.9	10
14	Loading-path dependent deformation of nanocrystalline Ta under single- and double-shock, and quasi-isentropic compression. Journal of Applied Physics, 2017, 121, .	1.1	30
15	Crystallization of Lennard-Jones liquids under dynamic compression: Heterogeneous and homogeneous nucleation. Journal of Chemical Physics, 2017, 147, 244501.	1.2	1
16	Dynamic deformation and fracture of single crystal silicon: Fracture modes, damage laws, and anisotropy. Acta Materialia, 2016, 114, 136-145.	3.8	37
17	Dynamic crystal rotation resolved by high-speed synchrotron X-ray Laue diffraction. Journal of Synchrotron Radiation, 2016, 23, 712-717.	1.0	4
18	Deformation and fracture of explosion-welded Ti/Al plates: A synchrotron-based study. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 674, 308-317.	2.6	21

#	ARTICLE	IF	CITATIONS
19	Simultaneous, single-pulse, synchrotron x-ray imaging and diffraction under gas gun loading. Review of Scientific Instruments, 2016, 87, 053903.	0.6	21
20	Dynamic tensile deformation and damage of B4C-reinforced Al composites: Time-resolved imaging with synchrotron x-rays. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 664, 86-93.	2.6	16
21	Irradiation-initiated plastic deformation in prestrained single-crystal copper. Nuclear Instruments & Methods in Physics Research B, 2016, 368, 60-65.	0.6	10
22	Thermally driven grain boundary migration and melting in Cu. Journal of Chemical Physics, 2015, 142, 054706.	1.2	18
23	Dynamic fracture of C/SiC composites under high strain-rate loading: microstructures and mechanisms. Carbon, 2015, 91, 468-478.	5.4	52
24	Crystallization in supercooled liquid Cu: Homogeneous nucleation and growth. Journal of Chemical Physics, 2015, 142, 064704.	1.2	36
25	Shock-induced deformation of nanocrystalline Al: Characterization with orientation mapping and selected area electron diffraction. Journal of Applied Physics, 2015, 117, .	1.1	33
26	Shock response of He bubbles in single crystal Cu. Journal of Applied Physics, 2014, 116, .	1.1	37
27	Transient x-ray diffraction with simultaneous imaging under high strain-rate loading. Review of Scientific Instruments, 2014, 85, 113902.	0.6	35