

# Xiao Liu

## List of Publications by Year in descending order

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28  
papers

1,082  
citations

687363

13  
h-index

580821

25  
g-index

28  
all docs

28  
docs citations

28  
times ranked

1079  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural tunability and origin of two-level systems in amorphous silicon. <i>Physical Review Materials</i> , 2022, 6, .	2.4	1
2	Origin of mechanical and dielectric losses from two-level systems in amorphous silicon. <i>Physical Review Materials</i> , 2021, 5, .	2.4	13
3	The effect of ultrasmall grain sizes on the thermal conductivity of nanocrystalline silicon thin films. <i>Communications Physics</i> , 2021, 4, .	5.3	15
4	Decoupling between propagating acoustic waves and two-level systems in hydrogenated amorphous silicon. <i>Physical Review B</i> , 2021, 104, .	3.2	2
5	Dielectric loss extraction for superconducting microwave resonators. <i>Applied Physics Letters</i> , 2020, 116, 194003.	3.3	15
6	Thermoelectric Properties of Nanocrystalline Silicon Films Prepared by Hot-Wire and Plasma-Enhanced Chemical-Vapor Depositions. <i>Journal of Electronic Materials</i> , 2019, 48, 5218-5225.	2.2	3
7	From amorphous to nanocrystalline: the effect of nanograins in an amorphous matrix on the thermal conductivity of hot-wire chemical-vapor deposited silicon films. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 085301.	1.8	10
8	Manipulation of Glassy State in Amorphous Selenium by Low-temperature Internal Friction Measurements. <i>Materials Research</i> , 2018, 21, .	1.3	0
9	An Overview of Research into Low Internal Friction Optical Coatings by the Gravitational Wave Detection Community. <i>Materials Research</i> , 2018, 21, .	1.3	6
10	Annealing and Extended Etching Improve a Torsional Resonator for Thin Film Internal Friction Measurements. <i>Materials Research</i> , 2018, 21, .	1.3	0
11	Substrate and annealing temperature dependent electrical resistivity of sputtered titanium nitride thin films. <i>Thin Solid Films</i> , 2018, 661, 78-83.	1.8	11
12	Thermal conductivity of amorphous and nanocrystalline silicon films prepared by hot-wire chemical-vapor deposition. <i>Physical Review B</i> , 2017, 96, .	3.2	25
13	Elastic Measurements of Amorphous Silicon Films at mK Temperatures. <i>Journal of Low Temperature Physics</i> , 2017, 187, 654-660.	1.4	5
14	Two-level systems in evaporated amorphous silicon. <i>Journal of Non-Crystalline Solids</i> , 2015, 426, 19-24.	3.1	29
15	Hydrogen-Free Amorphous Silicon with No Tunneling States. <i>Physical Review Letters</i> , 2014, 113, 025503.	7.8	67
16	An ultra-high $Q$ silicon compound cantilever resonator for Young's modulus measurements. <i>Review of Scientific Instruments</i> , 2013, 84, 075001.	1.3	8
17	Excess Specific Heat in Evaporated Amorphous Silicon. <i>Physical Review Letters</i> , 2013, 110, 135901.	7.8	65
18	Anomalously high thermal conductivity of amorphous Si deposited by hot-wire chemical vapor deposition. <i>Physical Review B</i> , 2010, 81, .	3.2	65

#	ARTICLE	IF	CITATIONS
19	High Thermal Conductivity of a Hydrogenated Amorphous Silicon Film. Physical Review Letters, 2009, 102, 035901.	7.8	73
20	Elastic Properties of Several Silicon Nitride Films. Materials Research Society Symposia Proceedings, 2007, 989, 1.	0.1	11
21	Internal friction of amorphous and nanocrystalline silicon at low temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 442, 307-313.	5.6	12
22	Thermoelastic loss observed in a high Q mechanical oscillator. Physica B: Condensed Matter, 2002, 316-317, 408-410.	2.7	23
23	Low-temperature thermal conductivity and acoustic attenuation in amorphous solids. Reviews of Modern Physics, 2002, 74, 991-1013.	45.6	323
24	On the modes and loss mechanisms of a high Q mechanical oscillator. Applied Physics Letters, 2001, 78, 1346-1348.	3.3	94
25	Low-energy excitations in amorphous films of silicon and germanium. Physical Review B, 1998, 58, 9067-9081.	3.2	39
26	Molecular Hydrogen in Hot-Wire Hydrogenated Amorphous Silicon. Materials Research Society Symposia Proceedings, 1998, 507, 595.	0.1	7
27	Amorphous Solid without Low Energy Excitations. Physical Review Letters, 1997, 78, 4418-4421.	7.8	157
28	An Ultra-High <i>Q</i> Silicon Cantilever Resonator for Thin Film Internal Friction and Young's Modulus Measurements. Solid State Phenomena, 0, 184, 325-330.	0.3	3