Shuai Wei

List of Publications by Citations

29 papers	813 citations	16 h-index	28 g-index
30 ext. papers	974 ext. citations	8.1 avg, IF	4.42 L-index

#	Paper	IF	Citations
29	Liquid-liquid transition in a strong bulk metallic glass-forming liquid. *Nature Communications*, **2013**, 4, 2083	17.4	136
28	Femtosecond x-ray diffraction reveals a liquid-liquid phase transition in phase-change materials. *Science*, **2019**, 364, 1062-1067	33.3	84
27	Structural changes during a liquid-liquid transition in the deeply undercooled Zr58.5Cu15.6Ni12.8Al10.3Nb2.8 bulk metallic glass forming melt. *Physical Review B*, **2016**, 93,	3.3	58
26	Phase change alloy viscosities down to Tg using Adam-Gibbs-equation fittings to excess entropy data: A fragile-to-strong transition. *Journal of Applied Physics*, **2015**, 118, 034903	2.5	50
25	relaxation and low-temperature aging in a Au-based bulk metallic glass: From elastic properties to atomic-scale structure. *Physical Review B*, **2014**, 89,	3.3	50
24	Switching between Crystallization from the Glassy and the Undercooled Liquid Phase in Phase Change Material Ge Sb Te. *Advanced Materials*, **2019**, 31, e1900784	24	44
23	Linking structure to fragility in bulk metallic glass-forming liquids. *Applied Physics Letters*, **2015**, 106, 181901	3.4	40
22	Glass transition with decreasing correlation length during cooling of Fe50Co50 superlattice and strong liquids. *Nature Physics*, **2011**, 7, 178-182	16.2	40
21	Breakdown of the Stokes-Einstein relation above the melting temperature in a liquid phase-change material. *Science Advances*, **2018**, 4, eaat8632	14.3	35
20	Structural evolution on medium-range-order during the fragile-strong transition in Ge 15 Te 85. *Acta Materialia*, **2017**, 129, 259-267	8.4	32
19	The effect of low-temperature structural relaxation on free volume and chemical short-range ordering in a Au49Cu26.9Si16.3Ag5.5Pd2.3 bulk metallic glass. *Scripta Materialia*, **2015**, 103, 14-17	5.6	30
18	Glass Transitions, Semiconductor-Metal Transitions, and Fragilities in GeVTe (V=As, Sb) Liquid Alloys: The Difference One Element Can Make. *Physical Review Applied*, **2017**, 7,	4.3	29
17	Phase-change materials: The view from the liquid phase and the metallicity parameter. *MRS Bulletin* , **2019**, 44, 691-698	3.2	23
16	Structure of ZnCl Melt. Part II: Fragile-to-Strong Transition in a Tetrahedral Liquid. *Journal of Physical Chemistry B*, **2017**, 121, 11210-11218	3.4	22
15	3D pore structure characterization and hardness in a powder bed fusion-processed fully amorphous Zr-based bulk metallic glass. *Materials Characterization*, **2020**, 162, 110178	3.9	19
14	The impact of fragility on the calorimetric glass transition in bulk metallic glasses. *Intermetallics*, **2014**, 55, 138-144	3.5	19
13	The potential of chemical bonding to design crystallization and vitrification kinetics. *Nature Communications*, **2021**, 12, 4978	17.4	16

List of Publications

12	Uncovering relaxations in amorphous phase-change materials. *Science Advances*, **2020**, 6, eaay6726	14.3	13
11	Violation of the Stokes–Einstein relation in Ge2Sb2Te5, GeTe, Ag4In3Sb67Te26, and Ge15Sb85, and its connection to fast crystallization. *Acta Materialia*, **2020**, 195, 491-500	8.4	12
10	Control of effective cooling rate upon magnetron sputter deposition of glassy Ge15Te85. *Scripta Materialia*, **2020**, 178, 223-226	5.6	11
9	Liquid-liquid phase transitions in glass-forming systems and their implications for memory technology. *International Journal of Applied Glass Science*, **2020**, 11, 236-244	1.8	10
8	Glass-forming ability correlated with the liquid-liquid transition in Pd42.5Ni42.5P15 alloy. *Scripta Materialia*, **2021**, 193, 117-121	5.6	10
7	Connecting structural defects to tensile failure in a 3D-printed fully-amorphous bulk metallic glass. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2021**, 813, 141106	5.3	8
6	Approaching the Glass Transition Temperature of GeTe by Crystallizing Ge15Te85. *Physica Status Solidi - Rapid Research Letters*, **2021**, 15, 2000478	2.5	6
5	Glass transition of the phase change material AIST and its impact on crystallization. *Materials Science in Semiconductor Processing*, **2021**, 134, 105990	4.3	6
4	Thermodynamics and kinetics of glassy and liquid phase-change materials. *Materials Science in Semiconductor Processing*, **2021**, 135, 106094	4.3	5
3	The glass transition of water, insight from phase change materials. *Journal of Non-Crystalline Solids: X*, **2022**, 14, 100084	2.5	2
2	Fragile-to-Strong Transition in Phase-Change Material Ge 3 Sb 6 Te 5. *Advanced Functional Materials*,2202714	15.4	2
1	Anomalous liquids on a new landscape: From water to phase-change materials. *Journal of Non-Crystalline Solids: X*, **2022**, 100094	2.5	