

# G J Shiflet

## List of Publications by Year in descending order

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66  
papers

3,250  
citations

201575

27  
h-index

143943

57  
g-index

68  
all docs

68  
docs citations

68  
times ranked

1993  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and Properties of Metallic Glasses That Contain Aluminum. <i>Science</i> , 1988, 241, 1640-1642.	6.0	517
2	Deformation-induced nanocrystal formation in shear bands of amorphous alloys. <i>Nature</i> , 1994, 367, 541-543.	13.7	488
3	Bainite viewed three different ways. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1990, 21, 1343-1380.	1.4	158
4	Atomic structure of amorphous $\text{Al}_{90}\text{Fe}_x\text{Ce}_{10-x}$ . <i>Journal of Materials Research</i> , 1990, 5, 2807-2812.	1.2	134
5	Mg-Ca-Zn Bulk Metallic Glasses with High Strength and Significant Ductility. <i>Journal of Materials Research</i> , 2005, 20, 1935-1938.	1.2	132
6	Tough Fe-based bulk metallic glasses. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	113
7	CaAl-based bulk metallic glasses with high thermal stability. <i>Applied Physics Letters</i> , 2004, 84, 37-39.	1.5	108
8	Formation of Bulk Metallic Glasses and Their Composites. <i>MRS Bulletin</i> , 2007, 32, 624-628.	1.7	100
9	On the effect of stress on nucleation and growth of precipitates in an Al-Cu-Mg-Ag alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1996, 27, 3431-3444.	1.1	96
10	Reassessment of Al-Ce and Al-Nd binary systems supported by critical experiments and first-principles energy calculations. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2005, 36, 3269-3279.	1.1	95
11	Mechanical properties of a new class of metallic glasses based on aluminum. <i>Journal of Applied Physics</i> , 1988, 64, 6863-6865.	1.1	90
12	Interfacial steps and growth mechanism in ferrous pearlites. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1991, 22, 1349-1365.	1.4	81
13	Formation of bulk metallic glasses in neodymium-based alloys. <i>Philosophical Magazine Letters</i> , 1994, 70, 371-377.	0.5	76
14	Focused ion-beam tomography. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004, 35, 1935-1943.	1.1	69
15	Growth and overall transformation kinetics above the bay temperature in Fe-C-Mo alloys. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1990, 21, 1413-1432.	1.4	67
16	The effect of cold work on the precipitation of $\theta$ and $\theta'$ in a ternary Al-Cu-Mg alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2003, 34, 2757-2769.	1.1	66
17	Alloy development for the enhanced stability of $\theta$ precipitates in Al-Cu-Mg-Ag alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006, 37, 1091-1105.	1.1	61
18	Poisson's Ratio and Intrinsic Plasticity of Metallic Glasses. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	61

#	ARTICLE	IF	CITATIONS
19	The pitsch-petch orientation relationship in ferrous pearlite at small undercooling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 2767-2781.	1.1	55
20	Three-dimensional reconstruction of Widmanstätten plates in Fe-12.3Mn-0.8C. Journal of Microscopy, 1997, 188, 36-41.	0.8	53
21	Topological and chemical ordering induced by Ni and Nd in Al <sub>87</sub> Ni <sub>7</sub> Nd <sub>6</sub> metallic glass. Physical Review B, 2004, 70, .	1.1	53
22	Indentation fracture toughness of amorphous steel. Journal of Materials Research, 2005, 20, 783-786.	1.2	51
23	Selected Corrosion Properties of a Novel Amorphous Al-Co-Ce Alloy System. Electrochemical and Solid-State Letters, 2005, 8, B1.	2.2	38
24	Structural relationship between icosahedral and Frank-Kasper phases of Al-Li-Cu. Philosophical Magazine Letters, 1987, 56, 63-68.	0.5	33
25	Local organization and atomic clustering in multicomponent amorphous steels. Physical Review B, 2008, 78, .	1.1	33
26	Enhanced bulk metallic glass formability by combining chemical compatibility and atomic size effects. Journal of Applied Physics, 2005, 97, 013512.	1.1	32
27	Fatigue behavior of an Fe <sub>48</sub> Cr <sub>15</sub> Mo <sub>14</sub> Er <sub>2</sub> C <sub>15</sub> B <sub>6</sub> amorphous steel. Journal of Materials Research, 2007, 22, 544-550.	1.2	30
28	Magnetic properties and thermal stability of (Fe,Co)-Mo-B-P-Si metallic glasses. Journal of Applied Physics, 2012, 111, .	1.1	27
29	Discussion of the bainite transformation in a silicon steel. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1985, 16, 457-466.	1.4	25
30	Growth of $\epsilon$ on dislocations in a dilute Al-Li alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 2073-2085.	1.1	22
31	Elastic properties of Ca-based metallic glasses predicted by first-principles simulations. Physical Review B, 2011, 84, .	1.1	21
32	Heterogeneous nucleation of $\epsilon$ on dislocations in a dilute aluminum-lithium alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 1599-1609.	1.1	19
33	Misfit accommodation by steps in cubic materials. Journal of Electronic Materials, 1991, 20, 785-791.	1.0	18
34	Stability investigation of a decagonal Al-Cu-Co quasicrystal. Philosophical Magazine Letters, 1991, 63, 211-216.	0.5	17
35	Growth kinetics and morphology of grain boundary ferrite allotriomorphs in an Fe-C-V alloy. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1985, 16, 521-527.	1.4	16
36	The interlamellar atomic habit plane in Cu-6% Be pearlite. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1988, 57, 457-466.	0.7	16

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37	Quantitative three-dimensional reconstruction of geometrically complex structures with nanoscale resolution. Review of Scientific Instruments, 2002, 73, 330-334.	0.6	16
38	Comparison of quasicrystalline (T2) and crystalline (R) structures in AlCuLi using high-resolution X-ray diffraction. Philosophical Magazine Letters, 1987, 56, 259-264.	0.5	15
39	Electronic structure of Fe-based amorphous alloys studied using electron-energy-loss spectroscopy. Physical Review B, 2008, 77, .	1.1	15
40	Local structure of Al-and Fe-based metallic glasses. Journal of Physics Condensed Matter, 2003, 15, S2357-S2364.	0.7	13
41	The cellular interlamellar and growth-front interphase boundaries in Cu-3 Wt pct Ti. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2507-2518.	1.1	12
42	Quasicrystalline grain boundary precipitates in aluminium alloys through solid-solid transformations. Journal of Microscopy, 1987, 146, 323-335.	0.8	9
43	Structures of shear planes, intersection areas and translation domains in the Al <sub>5</sub> CuLi <sub>3</sub> Frank-Kasper phase. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1991, 64, 483-493.	0.7	9
44	Synchrotron X-ray studies of diffuse scattering in an Al-Cu-Co two-dimensional decagonal quasicrystal. Philosophical Magazine Letters, 1992, 66, 241-251.	0.5	9
45	Influence of erbium on the electronic structure of Fe(65 $\hat{a}$ <sup>x</sup> )Mo <sub>14</sub> C <sub>15</sub> B <sub>6</sub> Er <sub>x</sub> (x=0,1,2) bulk metallic glasses. Journal of Applied Physics, 2009, 105, 023518.	1.1	9
46	Photoemission study of ternary to pentenary Fe-based metallic glasses: Chemical analysis of surface and bulk. Journal of Applied Physics, 2007, 102, 033501.	1.1	8
47	The effect of undercooling on the cellular precipitation reaction in Cu-3 Pct Ti. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 2101-2110.	1.1	7
48	Austenite decomposition to carbide-rich products in Fe-0.30C-6.3W. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 3619-3633.	1.1	7
49	Increasing Coating Functionality Using Nanodimensioned Materials. ACS Symposium Series, 2009, , 126-155.	0.5	6
50	Transitions in carbide morphology in a ternary Fe-C-W steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 2087-2100.	1.1	5
51	Strain distribution effects on the low-cycle fatigue behavior of Fe-C-Mo steels. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1991, 22, 675-683.	1.4	4
52	Three new types of shear plane in the Al <sub>5</sub> CuLi <sub>3</sub> crystal structure. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1992, 65, 1395-1405.	0.7	4
53	Native Oxide Chemistry of Amorphous Al <sub>90</sub> Fe <sub>7</sub> Ce <sub>3</sub> Alloy by Angle Resolved XPS. Surface Science Spectra, 1993, 2, 31-44.	0.3	4
54	Synthesis and Properties of Bulk Amorphous and Nanocrystalline Alloys. , 1995, , 43-52.		4

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55	Growth of Grain Boundary Precipitates as a Function of Misorientation in an Al-5 WT% Cu Alloy. Materials Research Society Symposia Proceedings, 1993, 319, 351.	0.1	3
56	Effect of the Supercooled Liquid Region on Al <sub>85</sub> Ni <sub>7</sub> Gd <sub>8</sub> Metallic Glass Crystallization Products. Materials Research Society Symposia Proceedings, 2002, 754, 1.	0.1	3
57	Analysis of the Cu-3 Wt pct Ti cellular interphase boundary by various models. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2495-2505.	1.1	3
58	Plastic Deformation-Induced Nanocrystalline Aluminum in Al-Based Amorphous Alloys. Materials Research Society Symposia Proceedings, 1993, 321, 251.	0.1	2
59	Correlation of amorphization effects in titanium solid solutions via mechanical milling and annealing. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 97-106.	0.7	2
60	Elastic Properties of Steps at Interphase Boundaries. Materials Research Society Symposia Proceedings, 1991, 238, 53.	0.1	1
61	Grain Boundary Precipitate Density as a Function of Time and Misorientation in an Al-5 WT% Cu Alloy. Materials Research Society Symposia Proceedings, 1993, 319, 357.	0.1	1
62	Bulk titanium-rich alloys containing nanoscale disordered regions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 1821-1824.	1.1	1
63	The Effects of Sc Alloying in Y56Al24Ni10Co10 Glasses on the Local Atomic Structure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1990-1993.	1.1	1
64	Phase Transitions in Al87Ni7Nd6. Materials Research Society Symposia Proceedings, 2003, 806, 374.	0.1	0
65	Fluctuations of the Local Atomic Environment with Chemical Alloying in Fe Bulk Metallic Glasses. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1481-1485.	1.1	0
66	Aluminum-Rich Metallic Glasses. , 1995, , 53-71.		0