Yanqing Yang

List of Publications by Year
in descending order

84 papers	1,326 citations	331670 21 h-index	414414 32 g-index
85 all docs	85 docs citations	85 times ranked	1179 citing authors

#	Article	IF	Citations
1	Robust self-cleaning and micromanipulation capabilities of gecko spatulae and their bio-mimics. Nature Communications, 2015, 6, 8949.	12.8	124
2	Precipitation process along dislocations in Alâ€“Cuâ€“Mg alloy during artificial aging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 706-714.	5.6	71
3	Nano-scale precipitate evolution and mechanical properties of 7085 aluminum alloy during thermal exposure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 729, 411-422.	5.6	64
4	Adhesion and fracture toughness at Î±-Ti(0001)/TiC(111): A first-principles investigation. Applied Surface Science, 2013, 286, 240-248.	6.1	59
5	First-principles calculation on Î²-SiC(111)/Îµ-WC(0001) interface. Journal of Applied Physics, 2014, 115, .	2.5	39
6	First-principles calculation of W/WC interface: Atomic structure, stability and electronic properties. Applied Surface Science, 2015, 324, 205-211.	6.1	39
7	Development of CVD Ti-containing films. Progress in Materials Science, 2013, 58, 1490-1533.	32.8	38
8	Effects of substrate temperature on the structure, residual stress and nanohardness of Ti6Al4V films prepared by magnetron sputtering. Applied Surface Science, 2016, 370, 53-58.	6.1	36
9	HRTEM and HAADF-STEM tomography investigation of the heterogeneously formed S (Al₂CuMg) precipitates in Alâ€“Cuâ€“Mg alloy. Philosophical Magazine, 2013, 93, 1843-1858.	1.6	35
10	Surface gradient nanostructures in high speed machined 7055 aluminum alloy. Journal of Alloys and Compounds, 2017, 726, 367-377.	5.5	34
11	Effect of the interfacial reaction layer thickness on the thermal residual stresses in SiCf/Tiâ€“6Alâ€“4V composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 489, 178-186.	5.6	32
12	Effects of the coating system and interfacial region thickness on the thermal residual stresses in SiCf/Tiâ€“6Alâ€“4V composites. Materials & Design, 2009, 30, 718-722.	5.1	31
13	First-principles study of stability and properties on Î²-SiC/TiC(111) interface. Journal of Applied Physics, 2013, 114, .	2.5	31
14	Investigation of hardness and fracture toughness properties of Fe/VC multilayer coatings with coherent interfaces. Surface and Coatings Technology, 2016, 288, 179-184.	4.8	31
15	Observing the dynamic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si8.gif" overflow="scroll"><mml:mfenced close="}" open="{"><mml:mrow><mml:mn>10</mml:mn><mml:mover accent="true"><mml:mn>1</mml:mn><mml:mo stretchy="true">Â¯</mml:mo></mml:mover><mml:mn>1</mml:mn></mml:mrow></mml:mfenced></mml:math>twining process in pure Ti at atomic resolution. Scripta Materialia, 2017, 130, 139-143.	5.2	30
16	Microstructure, microtexture and precipitation in the ultrafine-grained surface layer of an Al-Zn-Mg-Cu alloy processed by sliding friction treatment. Materials Characterization, 2017, 123, 189-197.	4.4	30
17	Interfacial properties and electronic structure of Î²-SiC(111)/Îµ-Ti(0001): A first principle study. Journal of Applied Physics, 2013, 113, .	2.5	28
18	Theoretical calculations on the adhesion, stability, electronic structure and bonding of SiC/W interface. Applied Surface Science, 2014, 314, 896-905.	6.1	25

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19	The thermal expansion behavior of unidirectional SiC fiber-reinforced Cuâ€“matrix composites. Scripta Materialia, 2008, 58, 401-404.	5.2	24
20	Effect of Mo coating on the interface and mechanical properties of SiC fiber reinforced Ti6Al4V composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 550, 286-292.	5.6	22
21	Deformation twinning in response to cracking in Al: An in situ TEM and molecular dynamics study. Scripta Materialia, 2018, 145, 28-32.	5.2	22
22	Microstructures and mechanical properties of hot-pressed MoSi2â€“matrix composites reinforced with SiC and ZrO2 particles. Composites Science and Technology, 2001, 61, 963-969.	7.8	21
23	Microstructure evolution of C/Mo double-coated SiC fiber reinforced Ti6Al4V composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 95-101.	5.6	21
24	Effect of amorphous carbon coatings on the mechanical behavior of silicon carbide nanowire. Journal of Applied Physics, 2012, 111, 094306.	2.5	18
25	Effect of Cu/Mo duplex coating on the interface and property of SiCf/Ti6Al4V composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 535, 6-11.	5.6	17
26	On the prebainitic phenomenon in some alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1994, 25, 1941-1946.	2.2	15
27	The phase, morphology and surface characterization of Tiâ€“Mo alloy films prepared by magnetron sputtering. RSC Advances, 2017, 7, 52595-52603.	3.6	15
28	Microstructure and mechanical property of high growth rate SiC via continuous hotâ€wire CVD. Journal of the American Ceramic Society, 2019, 102, 5656-5667.	3.8	15
29	Microstructure and thermal residual stress analysis of SiC fiber through Raman spectroscopy. Journal of Raman Spectroscopy, 2013, 44, 1306-1311.	2.5	14
30	SEM in situ study on the mechanical behaviour of SiCf/Ti composite subjected to axial tensile load. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 4507-4515.	5.6	13
31	Improving the mechanical properties of titanium films by texture strengthening. Materials Characterization, 2017, 127, 365-370.	4.4	13
32	Effect of nickel on the interface and mechanical properties of SiCf/Cu composites. Journal of Alloys and Compounds, 2009, 469, 237-243.	5.5	12
33	Microstructure, tensile strength and thermostability of W-core SiC fibers with or without carbon coating. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 647, 265-276.	5.6	12
34	Microstructure, hardness and toughness of boron carbide thin films deposited by pulse dc magnetron sputtering. Ceramics International, 2016, 42, 6342-6346.	4.8	12
35	Twinning-assisted void initiation and crack evolution in Cu thin film: An in situ TEM and molecular dynamics study. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 737, 336-340.	5.6	12
36	Mechanical and electrical properties of carbon nanotube-reinforced Al2O3 nanocomposites. Journal of Materials Science, 2020, 55, 8728-8740.	3.7	12

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37	Titanium interlayers as adhesion promoters for SiCf/Cu composites. Scripta Materialia, 2007, 56, 569-572.	5.2	11
38	An analysis of thermal residual stresses in SiCf/Cu composites when TiC or Ni as binder. Materials & Design, 2008, 29, 1755-1761.	5.1	11
39	Effect of C/Mo duplex coating on the interface and mechanical properties of SiCf/Ti6Al4V composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 566, 47-53.	5.6	11
40	The formation mechanism of plate in beta Cu-Zn and Cu-Zn-Al alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1994, 25, 2601-2608.	2.2	10
41	The effect of fabrication processes on the mechanical and interfacial properties of SiCf/Cuâ€“matrix composites. Composites Part A: Applied Science and Manufacturing, 2007, 38, 2102-2108.	7.6	10
42	EBSDL: a computer program for determining an unknown Bravais lattice using a single electron backscatter diffraction pattern. Journal of Applied Crystallography, 2014, 47, 1466-1468.	4.5	10
43	Interfacial reaction in SiCf/Ti-6Al-4V composite by using transmission electron microscopy. Materials Characterization, 2015, 109, 206-215.	4.4	10
44	Structure of Aâ€“C Type Intervariant Interface in Nonmodulated Martensite in a Niâ€“Mnâ€“Ga Alloy. ACS Applied Materials & Interfaces, 2016, 8, 16985-16996.	8.0	10
45	Molecular Dynamics Simulation of Nanoimprinting Under a High-Frequency Vibration Perturbation. Journal of Computational and Theoretical Nanoscience, 2012, 9, 35-40.	0.4	9
46	Grain refinement and texture evolution during high precision machining of a Ni-based superalloy. Philosophical Magazine, 2017, 97, 28-42.	1.6	9
47	The structural characterizations of Ti-17 alloy films prepared by magnetron sputtering. Applied Surface Science, 2018, 427, 774-781.	6.1	9
48	Evaluation of interfacial fracture toughness of SiC fibre reinforced titaniumâ€“matrix composite using pushout test. Materials Science and Technology, 2009, 25, 561-566.	1.6	8
49	Effect of Hot Isostatic Pressing Parameters on the Microstructures and Grain Growth Behavior of the Matrix of SiCf/Ti-6Al-4V Composites. Rare Metal Materials and Engineering, 2014, 43, 1839-1845.	0.8	8
50	Investigation of interfacial reaction product of SiCf/C/Mo/Ti6Al4V composite through Raman spectroscopy. Applied Physics Letters, 2014, 104, .	3.3	8
51	Raman investigation of defective SiC nanocrystals. Journal of Raman Spectroscopy, 2015, 46, 1225-1229.	2.5	8
52	The influence of interface reaction zone on interfacial fracture toughness of SiC fiber reinforced titanium matrix composites. Composite Interfaces, 2018, 25, 929-947.	2.3	8
53	Raman investigation of chemical reaction product in thermalâ€treated SiC_f/C/Mo/Ti6Al4V composite. Journal of Raman Spectroscopy, 2015, 46, 182-188.	2.5	7
54	A three-dimensional atomic scale simulations of CVD-SiC film growth in {111}, {110} and {100} family of planes. Computational Materials Science, 2011, 50, 2338-2346.	3.0	6

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55	Fracture and toughening mechanisms in SiC nanofiber reinforced SiC matrix nanocomposites with amorphous carbon coatings. Computational Materials Science, 2014, 83, 255-260.	3.0	6
56	Rapid Water Harvesting and Nonthermal Drying in Humid Air by N-Doped Graphene Micropads. Langmuir, 2019, 35, 12389-12399.	3.5	6
57	Improvement of interfacial compatibility of SiCf/Ti-6Al-4V composites by applying fiber coating and heat treatment. Materials and Design, 2021, 210, 110042.	7.0	6
58	Growth kinetics and high-temperature tem in situ observation of bainite in a Cu-Zn alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1994, 25, 2609-2614.	2.2	5
59	Numerical simulation of densification during consolidation of titanium-matrix coated fibers. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1587-1590.	7.6	5
60	Grain-scale growth simulation of SiC film with the Chemical Vapor Deposition method. Computational Materials Science, 2012, 59, 128-132.	3.0	5
61	Twinning Behaviour in the Intermetallic Compound Al18Cr2Mg3. Acta Metallurgica Sinica (English) Tj ETQq1 1 0.784314 rgBT /Overlo	2.9	5
62	Raman Investigation of Interfacial Reaction Product of SiC_f/Ti43Al9V Composite. Journal of the American Ceramic Society, 2015, 98, 1937-1941.	3.8	5
63	Orientation relationships between nanotwins inside type II microtwins in Ni-Mn-Ga alloy. Journal of Alloys and Compounds, 2020, 821, 153479.	5.5	5
64	High ZT Value of Pure SnSe Polycrystalline Materials Prepared by High-Energy Ball Milling plus Hot Pressing Sintering. ACS Applied Materials & Interfaces, 2021, 13, 43011-43021.	8.0	5
65	Precession electron diffraction assisted orientation mapping of gradient nanostructure in a Ni-based superalloy. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012023.	0.6	4
66	Evaluation on the interfacial fracture toughness of fiber-reinforced titanium matrix composites by push out test. Composite Interfaces, 2016, 23, 557-569.	2.3	4
67	Effect of fiber volume fraction on longitudinal tensile properties of SiCf/Ti-6Al-4V composites. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 278-283.	1.0	4
68	Prediction of Limit Rotation Speeds of SiC_f/Ti Composite Rings by Finite Element Analysis. Advanced Engineering Materials, 2017, 19, 1600545.	3.5	4
69	In situ atomic-scale observation of a novel lattice reorienting process in pure Ti. Scripta Materialia, 2019, 166, 144-148.	5.2	4
70	Study on the Relationship between High Temperature Mechanical Properties and Precipitates Evolution of 7085 Al Alloy after Long Time Thermal Exposures. Metals, 2021, 11, 1483.	2.3	4
71	Microstructure and Grain Growth of the Matrix of SiCf/Ti-6Al-4V Composites Prepared by the Consolidation of Matrix-Coated Fibers in the Î±+Î² Phase Field. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 887-893.	2.2	3
72	Dislocation facilitated surface precipitation in an Alâ€“Cuâ€“Mg thin foil. Materials Characterization, 2019, 157, 109902.	4.4	3

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73	Atomistic simulations on nanoimprinting of copper by aligned carbon nanotube arrays under a high-frequency mechanical vibration. Nanotechnology, 2020, 31, 045303.	2.6	3
74	Displacive Mechanism of Bainitic Formation in Carbon-Depleted Region of Austenite. Materials Transactions, JIM, 1994, 35, 782-786.	0.9	2
75	C/Ti/Cu interfacial reaction in SiCf/Cu composites. Rare Metals, 2011, 30, 396-400.	7.1	2
76	Influence of CH3SiCl3 consistency on growth process of SiC film by kinetic monte carlo method. Journal Wuhan University of Technology, Materials Science Edition, 2012, 27, 871-875.	1.0	2
77	Formation of interfacial microstructures of Moâ€coating modified SiC_f/Mo/Tiâ€6Alâ€4V composites. Surface and Interface Analysis, 2013, 45, 667-671.	1.8	2
78	Study of matrix microstructure of SiC_f/Tiâ€“43Alâ€“9V composites. Materials Science and Technology, 2013, 29, 581-586.	1.6	1
79	New lightweight mirror billet: Connection of Î³-TiAl and K9 glass with Ti6Al4V foil as interlayer. Materials Science and Technology, 2013, 29, 250-254.	1.6	1
80	Studies on pre-bainitic transformation in Cuî—¸Znî—¸Alî—¸Mn alloy. Journal of Alloys and Compounds, 1994, 211-212, 198-200.	5.5	0
81	Local texture of three-stage CVD SiC fibre by precession electron diffraction (PED) and XRD. Materials Science and Technology, 2014, 30, 1751-1757.	1.6	0
82	Theoretical investigation on the adsorption and dissociation behaviors of TiCl4 on pyrolytic carbon surface. Applied Surface Science, 2018, 427, 156-165.	6.1	0
83	Experimental Characterization and Computational Modelling for Fatigue Behavior of a Ni-Based Single Crystal Alloy Considering Surface Roughness. Metals and Materials International, 2020, , 1.	3.4	0
84	Atomic Scale and 3D Characterization of the Heterogeneously Formed S (Al2CuMg) Precipitates at Dislocations in Al-Cu-Mg Alloy. , 2014, , 113-118.		0