

# Yongfeng Shen

## List of Publications by Year in descending order

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63  
papers

6,938  
citations

159358

30  
h-index

118652

62  
g-index

67  
all docs

67  
docs citations

67  
times ranked

5687  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrahigh Strength and High Electrical Conductivity in Copper. <i>Science</i> , 2004, 304, 422-426.	6.0	2,665
2	Tensile properties of copper with nano-scale twins. <i>Scripta Materialia</i> , 2005, 52, 989-994.	2.6	503
3	Preparation and application of magnetic Fe <sub>3</sub> O <sub>4</sub> nanoparticles for wastewater purification. <i>Separation and Purification Technology</i> , 2009, 68, 312-319.	3.9	476
4	Strength, strain-rate sensitivity and ductility of copper with nanoscale twins. <i>Acta Materialia</i> , 2006, 54, 5421-5432.	3.8	448
5	Twinning and martensite in a 304 austenitic stainless steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 552, 514-522.	2.6	402
6	Effects of retained austenite volume fraction, morphology, and carbon content on strength and ductility of nanostructured TRIP-assisted steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 636, 551-564.	2.6	183
7	Stress relaxation and the structure size-dependence of plastic deformation in nanotwinned copper. <i>Acta Materialia</i> , 2009, 57, 5165-5173.	3.8	156
8	Tailoring size and structural distortion of Fe <sub>3</sub> O <sub>4</sub> nanoparticles for the purification of contaminated water. <i>Bioresource Technology</i> , 2009, 100, 4139-4146.	4.8	142
9	Interplay between grain structure, deformation mechanisms and austenite stability in phase-reversion-induced nanograined/ultrafine-grained austenitic ferrous alloy. <i>Acta Materialia</i> , 2015, 84, 339-348.	3.8	141
10	Strain rate sensitivity of Cu with nanoscale twins. <i>Scripta Materialia</i> , 2006, 55, 319-322.	2.6	126
11	Ultrafine-grained Al-0.2Sc-0.1Zr alloy: The mechanistic contribution of nano-sized precipitates on grain refinement during the novel process of accumulative continuous extrusion. <i>Acta Materialia</i> , 2015, 100, 247-255.	3.8	107
12	Softening behavior by excessive twinning and adiabatic heating at high strain rate in a Fe-20Mn-0.6C TWIP steel. <i>Acta Materialia</i> , 2016, 103, 229-242.	3.8	107
13	A high-strength, ductile Al-0.35Sc-0.2Zr alloy with good electrical conductivity strengthened by coherent nanosized-precipitates. <i>Journal of Materials Science and Technology</i> , 2017, 33, 215-223.	5.6	90
14	Multi-heterostructure and mechanical properties of N-doped FeMnCoCr high entropy alloy. <i>International Journal of Plasticity</i> , 2021, 139, 102965.	4.1	88
15	Deformation mechanisms of a 20Mn TWIP steel investigated by in situ neutron diffraction and TEM. <i>Acta Materialia</i> , 2013, 61, 6093-6106.	3.8	87
16	On deformation twinning in a 17.5% Mn TWIP steel: A physically based phenomenological model. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 1402-1408.	2.6	83
17	Suppression of twinning and phase transformation in an ultrafine grained 2 GPa strong metastable austenitic steel: Experiment and simulation. <i>Acta Materialia</i> , 2015, 97, 305-315.	3.8	79
18	A micro-alloyed ferritic steel strengthened by nanoscale precipitates. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 8150-8156.	2.6	74

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19	Recovery palladium, gold and platinum from hydrochloric acid solution using 2-hydroxy-4-sec-octanoyl diphenyl-ketoxime. Separation and Purification Technology, 2007, 56, 278-283.	3.9	62
20	Strengthening a fine-grained low activation martensitic steel by nanosized carbides. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 769, 138471.	2.6	56
21	Effects of Intercritical Annealing Temperature on Mechanical Properties of Fe-7.9Mn-0.14Si-0.05Al-0.07C Steel. Materials, 2014, 7, 7891-7906.	1.3	54
22	Mechanical properties of nanocrystalline nickel films deposited by pulse plating. Surface and Coatings Technology, 2008, 202, 5140-5145.	2.2	52
23	Grain refinement mechanism of Mg-3Sn-1Mn-1La alloy during accumulative hot rolling. Journal of Materials Science and Technology, 2021, 91, 251-261.	5.6	50
24	Synergy effect of multi-strengthening mechanisms in FeMnCoCrN HEA at cryogenic temperature. Journal of Materials Science and Technology, 2021, 86, 158-170.	5.6	48
25	Effects of cold rolling on microstructure and mechanical properties of Fe-30Mn-3Si-4Al-0.093C TWIP steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 561, 329-337.	2.6	46
26	Innovative processing of obtaining nanostructured bainite with high strength - high ductility combination in low-carbon-medium-Mn steel: Process-structure-property relationship. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 718, 267-276.	2.6	42
27	Improved ductility of a transformation-induced-plasticity steel by nanoscale austenite lamellae. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 583, 1-10.	2.6	41
28	The effect of strain rate on mechanical properties and microstructure of a metastable FeMnCoCr high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 776, 138982.	2.6	37
29	Nanoscale spheroidized cementite induced ultrahigh strength-ductility combination in innovatively processed ultrafine-grained low alloy medium-carbon steel. Scientific Reports, 2017, 7, 2679.	1.6	32
30	The significant impact of introducing nanosize precipitates and decreased effective grain size on retention of high toughness of simulated heat affected zone (HAZ). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 803, 140484.	2.6	32
31	High strength-superplasticity combination of ultrafine-grained ferritic steel: The significant role of nanoscale carbides. Journal of Materials Science and Technology, 2021, 83, 131-144.	5.6	32
32	Nanoscratching deformation and fracture toughness of electroless Ni-P coatings. Surface and Coatings Technology, 2010, 205, 632-640.	2.2	30
33	Micromechanical behavior of a fine-grained China low activation martensitic (CLAM) steel. Journal of Materials Science and Technology, 2019, 35, 1869-1876.	5.6	30
34	Suppression of Austenite Grain Coarsening by Using Nb-Ti Microalloying in High Temperature Carburizing of a Gear Steel. Advanced Engineering Materials, 2019, 21, 1900132.	1.6	27
35	Improving strength and ductility of low activation martensitic (LAM) steel by alloying with titanium and tempering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 799, 140152.	2.6	26
36	Improving mechanical properties and retained-austenite stability of a medium carbon Q&P steel by adjusting phase ratio. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142580.	2.6	23

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37	C and N doping in high-entropy alloys: A pathway to achieve desired strength-ductility synergy. <i>Applied Materials Today</i> , 2021, 25, 101162.	2.3	19
38	Tensile behaviors of IF steel with different cold-rolling reductions. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 496, 383-388.	2.6	18
39	Carbon content-tuned martensite transformation in low-alloy TRIP steels. <i>Scientific Reports</i> , 2019, 9, 7559.	1.6	18
40	Strengthening a medium-carbon steel to 2800â€MPa by tailoring nanosized precipitates and the phase ratio. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 759, 725-735.	2.6	17
41	Improved work hardening of a medium carbon-TRIP steel by partial decomposition of retained austenite. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 803, 140504.	2.6	17
42	Plastic Deformation in an Amorphous Ni-P Coating. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 1610-1620.	1.1	14
43	On the origin and contribution of extended kinks and jogs and stacking fault ribbons to deformation behavior in an ultrahigh strength cobalt-free maraging steel with high density of low lattice misfit precipitates. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 728, 208-217.	2.6	14
44	In situ neutron diffraction in quantifying deformation behaviors of nano-sized carbide strengthened UFG ferritic steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 726, 298-308.	2.6	13
45	Manganese controlled transformation and twinning of the nanoscale austenite in low-carbon-medium-Mn steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 829, 142162.	2.6	13
46	Simulations of texture evolution in heavily deformed bulk nanocrystalline nickel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 493, 86-92.	2.6	11
47	Improved Toughness of a Highâ€Strength Lowâ€Alloy Steel for Arctic Ship by Ni and Mo Addition. <i>Advanced Engineering Materials</i> , 2020, 22, 1901553.	1.6	10
48	Microstructural evolution and mechanical properties of a micro-alloyed low-density Îˆ-TRIP steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 848, 143430.	2.6	10
49	The significant impact of grain structure on large strain-rate sensitivity of ultrafine-grained low alloy steel under nanoscale deformation: Experimental and theoretical analysis. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 755, 138-146.	2.6	9
50	Hot-deformation induced static recrystallization and nano-MX precipitation in a low activation martensitic steel. <i>Journal of Nuclear Materials</i> , 2021, 556, 153190.	1.3	9
51	Nanosized precipitates activating ultrahigh strength of an ultrafine-grained ferritic steel during dynamic deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 841, 143040.	2.6	9
52	Abnormal chemical composition fluctuations in multi-principal-element alloys induced by simple cyclic deformation. <i>Journal of Materials Science and Technology</i> , 2022, 113, 287-295.	5.6	8
53	Microstructure and nanoindentation hardness of shot-peened ultrafine-grained low-alloy steel. <i>Journal of Iron and Steel Research International</i> , 2019, 26, 472-482.	1.4	7
54	Development of Low-Alloy Steels with High Strength and Good Ductility with the Aid of Nanoscale Troostite. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 1639-1649.	1.2	6

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55	Acicular martensite induced superior strength-ductility combination in a 20Cr2Ni2MoV steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 848, 143400.	2.6	6
56	<i>In-Situ</i> Neutron Diffraction Study of the Deformation Behaviour of Two High-Manganese Austenitic Steels. Materials Science Forum, 2011, 681, 474-479.	0.3	5
57	Activated dynamic strain aging of a TRIP590 Steel at 300 °C and low strain rate and relationship to structure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 645, 333-338.	2.6	5
58	Cumulative contribution of grain structure and twin boundaries on cyclic deformation behavior of a 20Mn-0.6C- TWIP steel: Experimental and theoretical analysis. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 767, 138415.	2.6	5
59	The Effect of Nano-precipitates on Strength in a Micro-alloyed Ferritic Steel. Materials Research Society Symposia Proceedings, 2011, 1296, 1.	0.1	4
60	Tailoring Strength and Ductility of a Cr-Containing High Carbon Steel by Cold-Working and Annealing. Materials, 2019, 12, 4136.	1.3	4
61	Study on Dynamic Mechanical Behaviors and $\dot{\epsilon}$ -C Constitutive Model of a Fine-Grained D6A Steel. Crystals, 2022, 12, 806.	1.0	2
62	High-Strength Low-Alloy Steel Strengthened by Multiply Nanoscale Microstructures. , 0, , 187-193.		0
63	Enhanced mechanical properties of a low-carbon martensitic steel by thermally stable Ni-rich austenite. Steel Research International, 0, , 2100562.	1.0	0