

# Hong Yang

## List of Publications by Year in descending order

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124  
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109321  
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docs citations

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times ranked

4778  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multifunctional, Bioinspired, and Moisture Responsive Graphene Oxide/Tapioca Starch Nanocomposites. <i>Advanced Materials Technologies</i> , 2022, 7, 2100447.	5.8	10
2	Facile and low-cost preparation of Co and N co-doped hierarchical porous carbon as a functional separator for Li-S batteries. <i>Electrochimica Acta</i> , 2022, 401, 139380.	5.2	11
3	Fe-Substituted Pt/HZSM-48 for Superior Selectivity of $i$ -C <sub>12</sub> in $n$ -Dodecane Hydroisomerization. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 1056-1065.	3.7	14
4	On the $\frac{1}{4}$ ders band formation and propagation in NiTi shape memory alloys. <i>Journal of Materials Science and Technology</i> , 2022, 116, 22-29.	10.7	20
5	Shear strain evolution during tension-induced $\frac{1}{4}$ ders-type deformation of polycrystalline NiTi plates. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 839, 142774.	5.6	8
6	Effect of laser scanning speed on the microstructure, phase transformation and mechanical property of NiTi alloys fabricated by LPBF. <i>Materials and Design</i> , 2022, 215, 110460.	7.0	30
7	Multistimulus-Responsive Graphene Oxide/Fe <sub>3</sub> O <sub>4</sub> /Starch Soft Actuators. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 16772-16779.	8.0	18
8	Bulky macroporous titanium silicalite-1 free of extraframework titanium for phenol hydroxylation. <i>Microporous and Mesoporous Materials</i> , 2022, 336, 111884.	4.4	3
9	Enhanced electrochemical performance of La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> cathode via Ba-doping for intermediate-temperature solid oxide fuel cells. <i>Nano Research</i> , 2022, 15, 3264-3272.	10.4	11
10	Design of highly stable metal/ZSM-5 catalysts for the shape-selective alkylation of toluene with methanol to $p$ -xylene. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3348-3358.	6.0	9
11	Improved Durability of High-Performance Intermediate-Temperature Solid Oxide Fuel Cells with a Ba-Doped La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> Cathode. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 33052-33063.	8.0	7
12	Facile preparation of nitrogen-doped hierarchical porous carbon as a sulfur cathode host for high performance lithium-sulfur batteries. <i>Microporous and Mesoporous Materials</i> , 2021, 312, 110749.	4.4	7
13	Controlled initiation and propagation of stress-induced martensitic transformation in functionally graded NiTi. <i>Journal of Alloys and Compounds</i> , 2021, 851, 156103.	5.5	27
14	Achieving ultra-large elastic strains in Nb thin films on NiTi phase-transforming substrate by the principle of lattice strain matching. <i>Materials and Design</i> , 2021, 197, 109257.	7.0	12
15	In-situ high energy X-ray diffraction study of microscopic deformation behavior of martensite variant reorientation in NiTi wire. <i>Applied Materials Today</i> , 2021, 22, 100904.	4.3	8
16	Kinetics simulation of propylene epoxidation over different Ti species in TS- $\delta$ . <i>AIChE Journal</i> , 2021, 67, e17261.	3.6	5
17	Grain Size Effect of the $\beta$ Phase Precipitation on Martensitic Transformation and Mechanical Properties of Ni-Mn-Sn-Fe Heusler Alloys. <i>Materials</i> , 2021, 14, 2339.	2.9	5
18	Transferring elastic strain in Mo/Nb/TiNi multilayer nanocomposites by the principle of lattice strain matching. <i>Composites Part B: Engineering</i> , 2021, 215, 108784.	12.0	11

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19	Nanocrystalline strain glass TiNiPt and its superelastic behavior. <i>Physical Review B</i> , 2021, 104, .	3.2	13
20	3D-Printing Damage-Tolerant Architected Metallic Materials with Shape Recoverability via Special Deformation Design of Constituent Material. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 39915-39924.	8.0	17
21	Effects of the Pore Structure and Acid-Base Property of X Zeolites on Side-Chain Alkylation of Toluene with Methanol. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 14381-14396.	3.7	8
22	Step-wise R phase transformation rendering high-stability two-way shape memory effect of a NiTiFe-Nb nanowire composite. <i>Acta Materialia</i> , 2021, 219, 117258.	7.9	10
23	Preparation of bioinspired graphene oxide/PMMA nanocomposite with improved mechanical properties. <i>Composites Science and Technology</i> , 2021, 216, 109046.	7.8	12
24	Co-Lattice Strain Matching-Enabled Nanocomposite Design to Harness the Exceptional Mechanical Properties of Nanomaterials in Bulk Forms. <i>Advanced Materials</i> , 2020, 32, e1904387.	21.0	13
25	Ab initio prediction of phase stability of martensitic structures in binary NiTi under hydrostatic tension. <i>Physica Scripta</i> , 2020, 95, 035701.	2.5	2
26	Structural evolution of topologically closed packed phase in a Ni-based single crystal superalloy. <i>Acta Materialia</i> , 2020, 185, 233-244.	7.9	35
27	High performance Nb/TiNi nanocomposites produced by packaged accumulative roll bonding. <i>Composites Part B: Engineering</i> , 2020, 202, 108403.	12.0	22
28	Highly stable TS-1 extrudates for 1-butene epoxidation through improving the heat conductivity. <i>Catalysis Science and Technology</i> , 2020, 10, 6152-6160.	4.1	9
29	Investigation of failure mechanisms of nacre at macro and nano scales. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 112, 104018.	3.1	12
30	In-situ synchrotron high energy X-ray diffraction study of micro-mechanical behaviour of R phase reorientation in nanocrystalline NiTi alloy. <i>Acta Materialia</i> , 2020, 194, 565-576.	7.9	34
31	Achieving 5.9% elastic strain in kilograms of metallic glasses: Nanoscopic strain engineering goes macro. <i>Materials Today</i> , 2020, 37, 18-26.	14.2	25
32	Monoclinic angle, shear response, and minimum energy pathways of NiTiCu martensite phases from ab initio calculations. <i>Acta Materialia</i> , 2019, 178, 59-67.	7.9	4
33	Determining intrinsic stress and strain state of fibre-textured thin films by X-ray diffraction measurements using combined asymmetrical and Bragg-Brentano configurations. <i>Materials and Design</i> , 2019, 181, 108063.	7.0	21
34	Experimental and numerical data for transformation propagation in NiTi shape memory structures. <i>Data in Brief</i> , 2019, 27, 104566.	1.0	3
35	A eutectic dual-phase design towards superior mechanical properties of heusler-type ferromagnetic shape memory alloys. <i>Acta Materialia</i> , 2019, 181, 278-290.	7.9	21
36	Computational and experimental analyses of martensitic transformation propagation in shape memory alloys. <i>Journal of Alloys and Compounds</i> , 2019, 806, 1522-1528.	5.5	16

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37	Role of hydrostatic pressure on the phase stability, the ground state, and the transformation pathways of NiTi alloy. Scripta Materialia, 2018, 151, 57-60.	5.2	14
38	Synthesis of 2D MFI zeolites in the form of self-interlocked nanosheet stacks with tuneable structural and chemical properties for catalysis. Applied Materials Today, 2018, 11, 22-33.	4.3	12
39	2D versus 3D MFI zeolite: The effect of Si/Al ratio on the accessibility of acid sites and catalytic performance. Materials Today Chemistry, 2018, 8, 1-12.	3.5	11
40	Microwave-Irradiation-Assisted Combustion toward Modified Graphite as Lithium Ion Battery Anode. ACS Applied Materials & Interfaces, 2018, 10, 909-914.	8.0	53
41	Dual Phase Synergy Enabled Large Elastic Strains of Nanoinclusions in a Dislocation Slip Matrix Composite. Nano Letters, 2018, 18, 2976-2983.	9.1	12
42	Growth Orientation Control of Co Nanowires Fabricated by Electrochemical Deposition Using Porous Alumina Templates. Crystal Growth and Design, 2018, 18, 479-487.	3.0	9
43	Surface oxidation of NiTi during thermal exposure in flowing argon environment. Materials and Design, 2018, 140, 123-133.	7.0	25
44	Surface oxidation of NiTi and its effects on thermal and mechanical properties. Intermetallics, 2018, 103, 52-62.	3.9	40
45	Phase Formation in Ti-Ni Binary System during Solid-State Synthesis. Shape Memory and Superelasticity, 2018, 4, 351-359.	2.2	4
46	High pyrolysis temperature biochars reduce nitrogen availability and nitrous oxide emissions from an acid soil. GCB Bioenergy, 2018, 10, 930-945.	5.6	22
47	Complex transformation field created by geometrical gradient design of NiTi shape memory alloy. Functional Materials Letters, 2017, 10, 1740011.	1.2	18
48	Experiments on deformation behaviour of functionally graded NiTi structures. Data in Brief, 2017, 13, 562-568.	1.0	14
49	NiTi-Enabled Composite Design for Exceptional Performances. Shape Memory and Superelasticity, 2017, 3, 67-81.	2.2	6
50	Effect of Cold Work and Partial Annealing on Thermomechanical Behaviour of Ti-50.5at%Ni. Shape Memory and Superelasticity, 2017, 3, 57-66.	2.2	18
51	In situ synchrotron high-energy X-ray diffraction study of microscopic deformation behavior of a hard-soft dual phase composite containing phase transforming matrix. Acta Materialia, 2017, 130, 297-309.	7.9	49
52	Functionally graded shape memory alloys: Design, fabrication and experimental evaluation. Materials and Design, 2017, 124, 225-237.	7.0	77
53	Characterization of hard- and softwood biochars pyrolyzed at high temperature. Environmental Geochemistry and Health, 2017, 39, 403-415.	3.4	37
54	A unique "fishtail-like" four-way shape memory effect of compositionally graded NiTi. Scripta Materialia, 2017, 127, 84-87.	5.2	32

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55	Stress serration and arch-shaped $\frac{1}{4}$ ders stress plateau behaviour of Ti-50.8 at% Ni wire prepared by selective electrical resistance over-aging. Smart Materials and Structures, 2016, 25, 115035.	3.5	7
56	Study on Synergistic Mechanism of Inhibitor Mixture Based on Electron Transfer Behavior. Scientific Reports, 2016, 6, 33252.	3.3	40
57	Synchrotron high energy X-ray diffraction study of microstructure evolution of severely cold drawn NiTi wire during annealing. Acta Materialia, 2016, 115, 35-44.	7.9	63
58	Effect of SiO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> ratio on the performance of nanocrystal ZSM-5 zeolite catalysts in methanol to gasoline conversion. Applied Catalysis A: General, 2016, 523, 312-320.	4.3	100
59	Biochar nutrient availability rather than its water holding capacity governs the growth of both C3 and C4 plants. Journal of Soils and Sediments, 2016, 16, 801-810.	3.0	33
60	Copper and zinc adsorption by softwood and hardwood biochars under elevated sulphate-induced salinity and acidic pH conditions. Chemosphere, 2016, 142, 64-71.	8.2	169
61	Microstructure, transformation behavior and mechanical properties of a (Ti <sub>50</sub> Ni <sub>38</sub> Cu <sub>12</sub> ) <sub>93</sub> Nb <sub>7</sub> alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 627, 348-350.	5.6	13
62	The transformation behavior of M-type barium ferrites due to Co-Ti substitution. Journal of Materials Science: Materials in Electronics, 2015, 26, 4668-4674.	2.2	11
63	Phase formation, magnetic properties and Raman spectra of Co-Ti co-substitution M-type barium ferrites. Applied Physics A: Materials Science and Processing, 2015, 119, 525-532.	2.3	24
64	Synthesis of inter-crystalline mesoporous ZSM-5 generated by self-interlocked MFI nanosheet stacks. RSC Advances, 2015, 5, 63765-63776.	3.6	13
65	Structural and magnetic properties of M-Ti (M=Al or Zn) co-substituted M-type barium ferrite by a novel sintering process. Journal of Materials Science: Materials in Electronics, 2015, 26, 1060-1065.	2.2	11
66	Changes in $\delta^{15}\text{N}$ in a soil-plant system under different biochar feedstocks and application rates. Biology and Fertility of Soils, 2014, 50, 275-283.	4.3	70
67	A phenomenological model of the mechanisms of lignocellulosic biomass pyrolysis processes. Computers and Chemical Engineering, 2014, 60, 231-241.	3.8	40
68	A facile synthesis strategy for structural property control of mesoporous alumina and its effect on catalysis for biodiesel production. Advanced Powder Technology, 2014, 25, 1220-1226.	4.1	27
69	Supercapacitor and nanoscale research towards electrochemical energy storage. International Journal of Smart and Nano Materials, 2013, 4, 2-26.	4.2	57
70	Ti-50.8at.% Ni wire with variable mechanical properties created by spatial electrical resistance over-aging. Journal of Alloys and Compounds, 2013, 577, S245-S250.	5.5	12
71	Phase selective route to Ni(OH) <sub>2</sub> with enhanced supercapacitance: Performance dependent hydrolysis of Ni(Ac) <sub>2</sub> at hydrothermal conditions. Electrochimica Acta, 2012, 78, 1-10.	5.2	83
72	First identification of primary nanoparticles in the aggregation of HMF. Nanoscale Research Letters, 2012, 7, 38.	5.7	24

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73	Functionally graded NiTi strips prepared by laser surface anneal. Acta Materialia, 2012, 60, 1658-1668.	7.9	80
74	Hydrophobic precipitation of carbonaceous spheres from fructose by a hydrothermal process. Carbon, 2012, 50, 2155-2161.	10.3	95
75	Anodization process of Sn in oxalic acid at low applied voltages. Electrochimica Acta, 2012, 59, 441-448.	5.2	15
76	A unified thermodynamic theory for the formation of anodized metal oxide structures. Electrochimica Acta, 2012, 62, 424-432.	5.2	35
77	Compositionally graded NiTi plate prepared by diffusion annealing. Scripta Materialia, 2012, 67, 305-308.	5.2	33
78	Liquid-Solid Reactions and Microstructure of SiC-5120 Steel Composite Brake Material. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 658-664.	2.2	3
79	Martensitic and magnetic transformation behaviours in $\text{Mn}_{50}\text{Ni}_{42}\text{Sn}_8\text{Co}_x$ polycrystalline alloys. Journal of Applied Physics, 2011, 44, 385403.	2.8	10
80	Metallurgical origin of the effect of Fe doping on the martensitic and magnetic transformation behaviours of $\text{Ni}_{50}\text{Mn}_{40}\text{Sn}_{10}\text{Fe}_x$ magnetic shape memory alloys. Intermetallics, 2011, 19, 445-452.	3.9	42
81	Martensitic transformation and magnetic properties in ferromagnetic shape memory alloy $\text{Ni}_{43}\text{Mn}_{46}\text{Sn}_{11}\text{Six}$ . Intermetallics, 2011, 19, 1605-1611.	3.9	18
82	Effect of Co addition on martensitic phase transformation and magnetic properties of $\text{Mn}_{50}\text{Ni}_{40}\text{Sn}_{10}\text{Cox}$ polycrystalline alloys. Intermetallics, 2011, 19, 1839-1848.	3.9	39
83	Laser annealing of functionally graded NiTi thin plate. Scripta Materialia, 2011, 65, 1109-1112.	5.2	24
84	Preparation of nanoporous tin oxide by electrochemical anodization in alkaline electrolytes. Electrochimica Acta, 2011, 56, 8797-8801.	5.2	59
85	Formation mechanism of novel two-dimensional single crystalline dendritic copper plates in an aqueous environment. Acta Materialia, 2011, 59, 7177-7188.	7.9	6
86	Current oscillations during potentiostatic anodization of tin in alkaline electrolytes. Electrochimica Acta, 2011, 56, 7051-7057.	5.2	20
87	Preparation and rheology of biochar, lignite char and coal slurry fuels. Fuel, 2011, 90, 1689-1695.	6.4	74
88	Thermal arrest analysis of thermoelastic martensitic transformations in shape memory alloys. Journal of Materials Research, 2011, 26, 1243-1252.	2.6	4
89	Metamagnetic phase transformation in $\text{Mn}_{50}\text{Ni}_{37}\text{In}_{10}\text{Co}_3$ polycrystalline alloy. Applied Physics Letters, 2011, 98, .	3.3	40
90	MILD SOLUTION ROUTE TO MIXED-PHASE $\text{MnO}_2$ WITH ENHANCED ELECTROCHEMICAL CAPACITANCE. Functional Materials Letters, 2011, 04, 57-60.	1.2	45

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91	Transformation temperatures and shape memory characteristics of a Ti-45Ni-5Cu(at %) alloy annealed by Joule heating. Physica Scripta, 2010, T139, 014068.	2.5	1
92	Lithium storage in hollow spherical ZnFe <sub>2</sub> O <sub>4</sub> as anode materials for lithium ion batteries. Electrochemistry Communications, 2010, 12, 847-850.	4.7	216
93	Thermal and stress-induced martensitic transformations in quaternary Ni <sub>50</sub> Mn <sub>37</sub> (In, Sb) <sub>13</sub> ferromagnetic shape memory alloys. Intermetallics, 2010, 18, 1690-1694.	3.9	16
94	Transformation intervals and elastic strain energies of B2-B19' martensitic transformation of NiTi. Intermetallics, 2010, 18, 2431-2434.	3.9	28
95	Reaction forming of silicon carbide ceramic using phenolic resin derived porous carbon preform. Journal of the European Ceramic Society, 2009, 29, 2395-2402.	5.7	48
96	Effect of ageing treatment on the deformation behaviour of Ti-50.9 at.% Ni. Acta Materialia, 2009, 57, 4773-4781.	7.9	56
97	Microstructure and magnetic properties of Ni-rich Ni <sub>54</sub> Mn <sub>25.7</sub> Ga <sub>20.3</sub> ferromagnetic shape memory alloy thin film. Journal of Magnetism and Magnetic Materials, 2008, 320, 1078-1082.	2.3	10
98	Effect of ageing treatment on the transformation behaviour of Ti-50.9at.% Ni alloy. Acta Materialia, 2008, 56, 736-745.	7.9	154
99	Electrochemical reduction of nano-SiO <sub>2</sub> in hard carbon as anode material for lithium ion batteries. Electrochemistry Communications, 2008, 10, 1876-1878.	4.7	300
100	Effect of annealing on deformation-induced martensite stabilisation of NiTi. Intermetallics, 2008, 16, 209-214.	3.9	37
101	Cyclic ageing of Ti-50.8at.% Ni alloy. Intermetallics, 2008, 16, 394-398.	3.9	21
102	Phase separation and magnetic properties of Co-Ni-Al ferromagnetic shape memory alloys. Intermetallics, 2008, 16, 447-452.	3.9	30
103	Strain dependence of the Clausius-Clapeyron relation for thermoelastic martensitic transformations in NiTi. Smart Materials and Structures, 2007, 16, S22-S27.	3.5	46
104	SEM observation of the "orange peel effect" of materials. Materials Letters, 2007, 61, 1433-1435.	2.6	12
105	Factors influencing the stress-induced fcc $\rightarrow$ hcp martensitic transformation in Co-32Ni single crystal. Acta Materialia, 2006, 54, 4895-4904.	7.9	18
106	Thermally induced fcc $\rightarrow$ hcp martensitic transformation in Co-Ni. Acta Materialia, 2005, 53, 3625-3634.	7.9	40
107	Stress-induced FCC $\rightarrow$ HCP martensitic transformation in CoNi. Journal of Alloys and Compounds, 2004, 368, 157-163.	5.5	47
108	Thermal analysis of the effect of aging on the transformation behaviour of Ti-50.9at.% Ni. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 360, 350-355.	5.6	27

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109	Lithium Intercalation into Mechanically Milled Natural Graphite: Electrochemical and Kinetic Characterization. Journal of the Electrochemical Society, 2002, 149, A1.	2.9	57
110	Effect of Ferroelastic Cycling via Martensite Reorientation on the Transformation Behaviour of Nickel-Titanium. Materials Transactions, 2002, 43, 792-797.	1.2	8
111	Symmetrical Cell for Electrochemical AC Impedance Studies of Lithium Intercalation into Graphite. Electrochemical and Solid-State Letters, 2001, 4, A89.	2.2	38
112	Effect of atmosphere on the mechanical milling of natural graphite. Carbon, 2000, 38, 2077-2085.	10.3	163
113	The concern of elasticity in stress-induced martensitic transformation in NiTi. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 260, 240-245.	5.6	73
114	Mechanically activated reduction of nickel oxide with graphite. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1998, 29, 449-455.	2.1	24
115	High coercivity Ba hexaferrite prepared by mechanical alloying. Journal of Alloys and Compounds, 1995, 221, 70-73.	5.5	58
116	Mechanochemical reduction of CuO by graphite. Scripta Metallurgica Et Materialia, 1995, 32, 681-684.	1.0	35
117	Mechanochemical Reduction of V <sub>2</sub> O <sub>5</sub> . Journal of Solid State Chemistry, 1994, 110, 136-141.	2.9	47
118	Combustion Reaction of Zinc Oxide with Magnesium during Mechanical Milling. Journal of Solid State Chemistry, 1993, 107, 258-263.	2.9	43
119	Reduction of tantalum chloride by magnesium during reaction milling. Journal of Materials Science Letters, 1993, 12, 1088-1091.	0.5	17
120	Synthesis of titanium oxynitride by mechanical milling. Journal of Materials Science, 1993, 28, 5663-5667.	3.7	28
121	Poly(ethylene oxide) electrolytes containing mixed salts. Journal of Polymer Science, Part B: Polymer Physics, 1993, 31, 157-163.	2.1	17
122	De-mixing of Nd <sub>2</sub> Fe <sub>14</sub> B during mechanical milling. Applied Physics Letters, 1992, 60, 833-834.	3.3	30
123	Poly(ethylene oxide)-Based Zn(II) Halide Electrolytes. Journal of the Electrochemical Society, 1992, 139, 1646-1654.	2.9	23
124	Conductivity in PEO-based Zn(II) polymer electrolytes. Solid State Ionics, 1990, 40-41, 663-665.	2.7	23