Wang-Yu Hu

List of Publications by Citations

388	6,195	39	58
papers	citations	h-index	g-index
402	7,281	3.6	6.08
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
388	Insights into Enhanced Visible-Light Photocatalytic Hydrogen Evolution of g-C3N4 and Highly Reduced Graphene Oxide Composite: The Role of Oxygen. *Chemistry of Materials*, **2015**, 27, 1612-1621	9.6	219
387	Size Effect on the Thermodynamic Properties of Silver Nanoparticles. *Journal of Physical Chemistry C*, **2008**, 112, 2359-2369	3.8	156
386	Analytic modified embedded atom potentials for HCP metals. *Journal of Physics Condensed Matter*, **2001**, 13, 1193-1213	1.8	142
385	Hydroxyapatite/titania sol-gel coatings on titanium-zirconium alloy for biomedical applications. *Acta Biomaterialia*, **2007**, 3, 403-10	10.8	128
384	Surface Segregation and Structural Features of Bimetallic AuPt Nanoparticles. *Journal of Physical Chemistry C*, **2010**, 114, 11026-11032	3.8	106
383	Point-defect properties in body-centered cubic transition metals with analytic EAM interatomic potentials. *Computational Materials Science*, **2002**, 23, 175-189	3.2	106
382	Two-Dimensional MoS2-Graphene-Based Multilayer van der Waals Heterostructures: Enhanced Charge Transfer and Optical Absorption, and Electric-Field Tunable Dirac Point and Band Gap. *Chemistry of Materials*, **2017**, 29, 5504-5512	9.6	99
381	Doping-induced enhancement of crystallinity in polymeric carbon nitride nanosheets to improve their visible-light photocatalytic activity. *Nanoscale*, **2019**, 11, 6876-6885	7.7	93
380	AuAg Bimetallic Nanoparticles: Surface Segregation and Atomic-Scale Structure. *Journal of Physical Chemistry C*, **2011**, 115, 11355-11363	3.8	92
379	Construction of g-C 3 N 4 /CeO 2 /ZnO ternary photocatalysts with enhanced photocatalytic performance. *Journal of Physics and Chemistry of Solids*, **2017**, 106, 1-9	3.9	83
378	An atomic study on the shock-induced plasticity and phase transition for iron-based single crystals. *International Journal of Plasticity*, **2014**, 59, 180-198	7.6	80
377	Facile in situ construction of mediator-free direct Z-scheme g-C3N4/CeO2 heterojunctions with highly efficient photocatalytic activity. *Journal Physics D: Applied Physics*, **2018**, 51, 275302	3	80
376	Surface-area-difference model for thermodynamic properties of metallic nanocrystals. *Journal Physics D: Applied Physics*, **2005**, 38, 1429-1436	3	76
375	Calculation of formation enthalpies and phase stability for RuAl alloys using an analytic embedded atom model. *Journal of Alloys and Compounds*, **1999**, 287, 159-162	5.7	71
374	Effects of Sr and Sn on microstructure and corrosion resistance of MgZrCa magnesium alloy for biomedical applications. *Materials & Design*, **2012**, 39, 379-383		65
373	Point-defect properties in HCP rare earth metals with analytic modified embedded atom potentials. *European Physical Journal B*, **2003**, 34, 429-440	1.2	63
372	Temperature dependence of atomic relaxation and vibrations for the vicinal Ni(9 7 7) surface: a molecular dynamics study. *Surface Science*, **2004**, 572, 439-448	1.8	62

371	First-principles study for vacancy-induced magnetism in nonmagnetic ferroelectric BaTiO3. *Physical Chemistry Chemical Physics*, **2009**, 11, 10934-8	3.6	61
370	Melting evolution and diffusion behavior of vanadium nanoparticles. *European Physical Journal B*, **2005**, 45, 547-554	1.2	59
369	Sol–gel derived hydroxyapatite/titania biocoatings on titanium substrate. *Materials Letters*, **2006**, 60, 1575-1578	3.3	58
368	Oxidation behavior of sputter-deposited NiCrAlY coating. *Surface and Coatings Technology*, **2003**, 165, 241-247	4.4	58
367	First-principles study of the origin of magnetism induced by intrinsic defects in monolayer MoS2. *Applied Surface Science*, **2016**, 361, 199-205	6.7	52
366	First-principles study of structural, electronic, and multiferroic properties in BiCoO3. *Journal of Chemical Physics*, **2007**, 126, 154708	3.9	52
365	Melting behaviors of nanocrystalline Ag. *Journal of Physical Chemistry B*, **2005**, 109, 20339-42	3.4	52
364	Calculation of thermodynamic properties of Mg-RE (RE = Sc, Y, Pr, Nd, Gd, Tb, Dy, Ho or Er) alloys by an analytic modified embedded atom method. *Journal Physics D: Applied Physics*, **2000**, 33, 711-718	3	52
363	Dual role of monolayer MoS2 in enhanced photocatalytic performance of hybrid MoS2/SnO2 nanocomposite. *Journal of Applied Physics*, **2016**, 119, 205704	2.5	49
362	Magnetoelectric effect and critical thickness for ferroelectricity in Co/BaTiO3/Co multiferroic tunnel junctions. *Journal of Applied Physics*, **2011**, 109, 114107	2.5	48
361	Doping-Induced Hydrogen-Bond Engineering in Polymeric Carbon Nitride To Significantly Boost the Photocatalytic H Evolution Performance. *ACS Applied Materials & Interfaces*, **2019**, 11, 17341-17349	9.5	46
360	Enhanced radiation tolerance of the Ni-Co-Cr-Fe high-entropy alloy as revealed from primary damage. *Acta Materialia*, **2020**, 196, 133-143	8.4	45
359	Generalized Synthetic Strategy for Amorphous Transition Metal Oxides-Based 2D Heterojunctions with Superb Photocatalytic Hydrogen and Oxygen Evolution. *Advanced Functional Materials*, **2021**, 31, 2009230	15.6	45
358	Structural damage and phase stability of Al0.3CoCrFeNi high entropy alloy under high temperature ion irradiation. *Acta Materialia*, **2020**, 188, 1-15	8.4	42
357	First-principles study of electronic and magnetic properties in Co doped BaTiO3. *European Physical Journal B*, **2015**, 88, 1	1.2	41
356	Chlorine doped graphitic carbon nitride nanorings as an efficient photoresponsive catalyst for water oxidation and organic decomposition. *Journal of Materials Science and Technology*, **2019**, 35, 2288-2296	9.1	40
355	Enhancement of the bioactivity of titanium oxide nanotubes by precalcification. *Materials Letters*, **2008**, 62, 3035-3038	3.3	40
354	Monte Carlo simulation of the surface segregation of Pt–Pd and Pt–Ir alloys with an analytic embedded-atom method. *Surface Science*, **2002**, 517, 177-185	1.8	40

353	The application of the analytic embedded atom potentials to alkali metals. *Modelling and Simulation in Materials Science and Engineering*, **2002**, 10, 707-726	2	40
352	High-Throughput One-Photon Excitation Pathway in 0D/3D Heterojunctions for Visible-Light Driven Hydrogen Evolution. *Advanced Functional Materials*, **2021**, 31, 2100816	15.6	40
351	Uniaxial strain-modulated conductivity in manganite superlattice (LaMnO3/SrMnO3). *Applied Physics Letters*, **2011**, 98, 031910	3.4	39
350	Hot Corrosion of a Single Crystal Ni-Base Superalloy by Na-Salts at 900℃. *Oxidation of Metals*, **2006**, 65, 137-150	1.6	39
349	Ultra-thin tubular graphitic carbon Nitride-Carbon Dot lateral heterostructures: One-Step synthesis and highly efficient catalytic hydrogen generation. *Chemical Engineering Journal*, **2020**, 397, 125470	14.7	38
348	Molecular dynamics simulation of fatigue crack propagation in bcc iron under cyclic loading. *International Journal of Fatigue*, **2014**, 68, 253-259	5	38
347	Coupling between plasticity and phase transition of polycrystalline iron under shock compressions. *International Journal of Plasticity*, **2015**, 71, 218-236	7.6	38
346	Melting, melting competition, and structural transitions between shell-closed icosahedral and octahedral nickel nanoclusters. *Physical Review B*, **2006**, 73,	3.3	37
345	Acoustic-phonon transmission and thermal conductance in a double-bend quantum waveguide. *Journal of Applied Physics*, **2005**, 98, 093524	2.5	37
344	Critical thickness for ferroelectricity and magnetoelectric effect in multiferroic tunnel junction with symmetrical and asymmetrical electrodes. *European Physical Journal B*, **2013**, 86, 1	1.2	36
343	Energy dissipation and defect generation in nanocrystalline silicon carbide. *Physical Review B*, **2010**, 81,	3.3	36
342	First-principles calculation of the elastic constants, the electronic density of states and the ductility mechanism of the intermetallic compounds: YAg, YCu and YRh. *Physica B: Condensed Matter*, **2008**, 403, 3792-3797	2.8	36
341	Modified analytic EAM potentials for the binary immiscible alloy systems. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 355, 357-367	5.3	36
340	Isotype heterojunction g-C3N4/g-C3N4 nanosheets as 2D support to highly dispersed 0D metal oxide nanoparticles: Generalized self-assembly and its high photocatalytic activity. *Journal Physics D: Applied Physics*, **2019**, 52, 025501	3	36
339	New interatomic potentials of W, Re and W-Re alloy for radiation defects. *Journal of Nuclear Materials*, **2018**, 502, 141-153	3.3	35
338	Hydrogen storage properties of destabilized MgH2□i3AlH6 system. *International Journal of Hydrogen Energy*, **2010**, 35, 8122-8129	6.7	35
337	In-situ construction of 2D direct Z-scheme g-C3N4/g-C3N4 homojunction with high photocatalytic activity. *Journal of Materials Science*, **2018**, 53, 15882-15894	4.3	33
336	Strategy to boost catalytic activity of polymeric carbon nitride: synergistic effect of controllable in situ surface engineering and morphology. *Nanoscale*, **2019**, 11, 16393-16405	7.7	33

335	Long-Time Scale Molecular Dynamics Study of Diffusion Dynamics of Small Cu Clusters on Cu(111) Surface. *Journal of Physical Chemistry C*, **2008**, 112, 2074-2078	3.8	33
334	Diffusion of Co, Ru and Re in Ni-based superalloys: A first-principles study. *Journal of Alloys and Compounds*, **2014**, 588, 163-169	5.7	32
333	The improved electrochemical properties of novel La-Mg-Ni-based hydrogen storage composites. *Electrochimica Acta*, **2007**, 52, 6700-6706	6.7	30
332	Diffusion of small He clusters in bulk and grain boundaries in Fe. *Journal of Nuclear Materials*, **2013**, 442, S667-S673	3.3	29
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325	Penta-Graphene as a Potential Gas Sensor for NO Detection. *Nanoscale Research Letters*, **2019**, 14, 306	5	28
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323	Vacancy-induced magnetism in BaTiO3(001) thin films based on density functional theory. *Physical Chemistry Chemical Physics*, **2011**, 13, 4738-45	3.6	26
322	Molecular dynamics simulation of polycrystalline molybdenum nanowires under uniaxial tensile strain: Size effects. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 3030-3036	3	26
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320	Elastic constants and thermodynamic properties of Mg-Pr, Mg-Dy, Mg-Y intermetallics with atomistic simulations. *Journal Physics D: Applied Physics*, **2007**, 40, 7584-7592	3	26
319	Electronic properties and photoactivity of monolayer MoS2/fullerene van der Waals heterostructures. *RSC Advances*, **2016**, 6, 43228-43236	3.7	26
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315	Substrate Dependence of Growth Configurations for Co□u Bimetallic Clusters. *Crystal Growth and Design*, **2012**, 12, 2978-2985	3.5	25
314	Hierarchical Self-assembly of Well-Defined Louver-Like P-Doped Carbon Nitride Nanowire Arrays with Highly Efficient Hydrogen Evolution. *Nano-Micro Letters*, **2020**, 12, 52	19.5	24
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312	Atomistic simulation of the segregation profiles in Mo□e random alloys. *Surface Science*, **2003**, 543, 95-102	1.8	24
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310	Atomistic studies of shock-induced plasticity and phase transition in iron-based single crystal with edge dislocation. *International Journal of Plasticity*, **2019**, 114, 215-226	7.6	24
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