

# Tao Tang

## List of Publications by Year in descending order

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Version: 2024-02-01

38  
papers

540  
citations

687363

13  
h-index

677142

22  
g-index

38  
all docs

38  
docs citations

38  
times ranked

525  
citing authors

#	ARTICLE	IF	CITATIONS
1	Preparation technique and alloying effect of aluminide coatings as tritium permeation barriers: A review. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 3697-3707.	7.1	104
2	Synthesis and characterization of lithium silicate powders. <i>Fusion Engineering and Design</i> , 2009, 84, 2124-2130.	1.9	86
3	Evolution of the active species and catalytic mechanism of Ti doped NaAlH <sub>4</sub> for hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 6088-6095.	7.1	32
4	Highly effective hydrogen isotope separation through dihydrogen bond on Cu(I)-exchanged zeolites well above liquid nitrogen temperature. <i>Chemical Engineering Journal</i> , 2020, 391, 123485.	12.7	29
5	A new perspective on the process of intrinsic point defects in $\hat{\pm}\text{-Al}_{2}\text{O}_{3}$ . <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 29134-29141.	2.8	26
6	Facile synthesis of nanometer-sized NiFe layered double hydroxide/nitrogen-doped graphite foam hybrids for enhanced electrocatalytic oxygen evolution reactions. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 7956-7963.	7.1	24
7	Temperature-hydrogen pressure phase boundaries and corresponding thermodynamics for ZrCo H system. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 16169-16179.	7.1	20
8	Thickness impacts on permeation reduction factor of Er <sub>2</sub> O <sub>3</sub> hydrogen isotopes permeation barriers prepared by magnetron sputtering. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 3299-3306.	7.1	18
9	Effects of ball milling on hydrogen sorption properties and microstructure of ZrCo alloy. <i>Fusion Engineering and Design</i> , 2019, 138, 68-77.	1.9	18
10	Cr Effect on Hydrogen Interactions with Intrinsic Point Defects and Hydrogen Diffusion in $\hat{\pm}\text{-Al}_{2}\text{O}_{3}$ as Tritium Permeation Barriers. <i>Journal of Physical Chemistry C</i> , 2016, 120, 9535-9544.	3.1	15
11	Parameter optimization of ZrCo-H system for durable tritium storage and delivery system of ITER. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 8067-8077.	7.1	15
12	Novel nano-crystalline Er <sub>2</sub> O <sub>3</sub> hydrogen isotopes permeation barriers. <i>Journal of the European Ceramic Society</i> , 2017, 37, 249-254.	5.7	14
13	Fabrication of Al <sub>2</sub> O <sub>3</sub> /FeAl Coating as Tritium Permeation Barrier on Tritium Operating Component on Quasi-CFETR Scale. <i>Journal of Fusion Energy</i> , 2018, 37, 317-324.	1.2	14
14	Optimum preparation of Fe-Al/ $\hat{\pm}\text{-Al}_{2}\text{O}_{3}$ coating on 21-6-9 austenitic stainless steel. <i>Fusion Engineering and Design</i> , 2019, 148, 111280.	1.9	13
15	Hydrogen isotopes separation in Ag(I) exchanged ZSM-5 zeolite through strong chemical affinity quantum sieving. <i>Microporous and Mesoporous Materials</i> , 2021, 313, 110820.	4.4	13
16	Fe effect on the process of intrinsic point defects in $\hat{\pm}\text{-Al}_{2}\text{O}_{3}$ . <i>Journal of Materials Science</i> , 2018, 53, 11194-11203.	3.7	12
17	Hydrogen isotopes separation using frontal displacement chromatography: The influences of column temperature and gas flow rate. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 16675-16683.	7.1	10
18	Cathodic corrosion as a facile and universal method for the preparation of supported metal single atoms. <i>Nano Research</i> , 2022, 15, 1838-1844.	10.4	9

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19	Hydrogen isotopes separation validation of frontal displacement chromatography for various compositions of feed gas and tritium extraction simulation for TBM. International Journal of Hydrogen Energy, 2018, 43, 20750-20757.	7.1	7
20	Exploration and optimization of ZrCo(Ti) type film for high hydrogen density and thermal stability of the hydride. International Journal of Hydrogen Energy, 2020, 45, 15530-15540.	7.1	6
21	Supported Pd nanoclusters for the hydrogen mitigation application in severe accidents. Nuclear Engineering and Design, 2017, 316, 93-98.	1.7	5
22	Stability and clusterization of hydrogen-vacancy complexes in B2-FeAl: insight from hydrogen embrittlement. RSC Advances, 2017, 7, 11094-11100.	3.6	5
23	Structural and Kinetic Hydrogen Sorption Properties of $Zr_{0.8}Ti_{0.2}Co$ Alloy Prepared by Ball Milling. Scanning, 2018, 2018, 1-13.	1.5	5
24	Fabrication of Hydrophobic Ni Surface by Chemical Etching. Materials, 2019, 12, 3546.	2.9	5
25	Protium removal from deuterium-tritium mixture with displacement chromatography method: Experiments and simulations. International Journal of Hydrogen Energy, 2019, 44, 3824-3833.	7.1	5
26	Study of separation factor and product extraction ratio in hydrogen isotope separation with displacement chromatography. Fusion Engineering and Design, 2021, 165, 112246.	1.9	5
27	Hydrogen storage and heat transfer properties for large-capacity double thin-layered annulus ZrCo bed with secondary containment cavity. International Journal of Hydrogen Energy, 2022, 47, 8446-8456.	7.1	5
28	Experimental verification of hydrogen isotope enrichment process by dual-column pressure swing and temperature swing adsorption. Fusion Engineering and Design, 2021, 172, 112726.	1.9	4
29	<i>Ab Initio</i> Microkinetic Modelings of Molecular Reactions on Pd(100), Pd(110), and Pd(111) Surfaces: A $CO_2/CO$ Reduction Case Study. Journal of Physical Chemistry C, 2022, 126, 7468-7481.	3.1	4
30	Isotope effects in $Ti_{0.3}V_{0.4}Cr_{0.3}$ hydrogen system: The dependence of $\hat{H}^D$ on pressure, deuterium concentration and temperature. Journal of Alloys and Compounds, 2016, 683, 15-21.	5.5	2
31	H/He interaction with vacancy-type defects in $\hat{H}-Al_2O_3$ single crystals studied by positron annihilation. RSC Advances, 2016, 6, 18096-18101.	3.6	2
32	Nucleation and growth of H blisters in stacking fault on B2-FeAl {100} planes. RSC Advances, 2017, 7, 43933-43937.	3.6	2
33	Irradiation effects in H and He implanted B2 iron aluminide. Fusion Engineering and Design, 2019, 143, 207-211.	1.9	2
34	Tritium trapping and migration mechanisms in $Li_2O$ : a first-principles study. Physical Chemistry Chemical Physics, 2019, 21, 5474-5480.	2.8	1
35	The spectral background problem of portable fiber Raman instruments and a solution for the on-site detection of extremely weak signals. Review of Scientific Instruments, 2019, 90, 023101.	1.3	1
36	Effect of ambient humidity on deuterium release behavior in $Li_4SiO_4$ solid breeder. Journal of Nuclear Materials, 2021, 556, 153202.	2.7	1

#	ARTICLE	IF	CITATIONS
37	Graphene-Promoted Adhesion-Reduced Expansion of Discontinuous Palladium Nanowires upon Hydrogenation. ACS Applied Materials & Interfaces, 2022, 14, 33686-33693.	8.0	1
38	Relationship between Palladium Morphology and Thermodynamics in Palladium-Hydrogen System. Materials Science Forum, 2005, 475-479, 2485-2488.	0.3	0