Hyunjeong Kim

List of Publications by Year
in descending order

56 papers	1,653 citations	304743 22 h-index	289244 40 g-index
58 all docs	58 docs citations	58 times ranked	2674 citing authors

#	Article	IF	Citations
1	Magnesium- and intermetallic alloys-based hydrides for energy storage: modelling, synthesis and properties. Progress in Energy, 2022, 4, 032007.	10.9	29
2	Extremely Slow Diffusion of Argon Atoms in Clathrate Cages: Implications for Gas Storage in Solid Materials. ACS Sustainable Chemistry and Engineering, 2021, 9, 7479-7488.	6.7	8
3	Nanostructural Perspective for Destabilization of Mg Hydride Using the Immiscible Transition Metal Mn. Inorganic Chemistry, 2021, 60, 15024-15030.	4.0	5
4	Suppression of the Phase Coexistence of the fccâ€“fct Transition in Hafnium-Hydride Thin Films. Journal of Physical Chemistry Letters, 2021, 12, 10969-10974.	4.6	6
5	Hydrogenation Properties of Mg_{83.3}Cu_{7.2}Y_{9.5} with Long Period Stacking Ordered Structure and Formation of Polymorphic Î³-MgH₂. Inorganic Chemistry, 2020, 59, 14263-14274.	4.0	6
6	Unveiling Nanoscale Compositional and Structural Heterogeneities of Highly Textured Mg0.7Ti0.3Hy Thin Films. Inorganic Chemistry, 2020, 59, 6800-6807.	4.0	5
7	Metallurgical Synthesis of Mg2FexSi1â€“x Hydride: Destabilization of Mg2FeH6 Nanostructured in Templated Mg2Si. Inorganic Chemistry, 2020, 59, 2758-2764.	4.0	2
8	Destabilizing the Dehydrogenation Thermodynamics of Magnesium Hydride by Utilizing the Immiscibility of Mn with Mg. Inorganic Chemistry, 2019, 58, 14600-14607.	4.0	19
9	Interstitial-atom-induced phase transformation upon hydrogenation in vanadium. Journal of Alloys and Compounds, 2018, 750, 33-41.	5.5	7
10	Development of an in situ synchrotron X-ray total scattering setup under pressurized hydrogen gas. Journal of Applied Crystallography, 2018, 51, 796-801.	4.5	5
11	Structural Variation of Self-Organized Mg Hydride Nanoclusters in Immiscible Ti Matrix by Hydrogenation. Inorganic Chemistry, 2018, 57, 11831-11838.	4.0	11
12	Glassy Distribution of Bi³⁺/Bi⁵⁺ in Bi_{1â€“x}Pb_xNiO₃ and Negative Thermal Expansion Induced by Intermetallic Charge Transfer. Chemistry of Materials, 2016, 28, 6062-6067.	6.7	31
13	Controlling embedment and surface chemistry of nanoclusters in metalâ€“organic frameworks. Chemical Communications, 2016, 52, 5175-5178.	4.1	18
14	Chapter 7 Structure of Crystallographically Challenged Hydrogen Storage Materials from Total Scattering. , 2016, , 191-222.		0
15	Effect of a Quenching Rate on Hydrogen Storage Properties of V_{0.79}Ti_{0.2}Zr_{0.01}. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 131-136.	0.4	0
16	Observation of Transient Structural Changes on Hydrogen Absorption Process of LaNi_{4.75}Sn_{0.25} by Time Resolved X-Ray Diffraction. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 124-130.	0.4	4
17	Development of Zr_xTi_{1−x}Mn_{0.8}V_{0.2}Ni_{0.9}M_{0.1} (M=Ni, Al, Fe, Cu) Alloys for a Soft Actuator Using Hydrogen Storage Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 257-264.	0.4	2
18	Melting of Pb Charge Glass and Simultaneous Pbâ€“Cr Charge Transfer in PbCrO₃ as the Origin of Volume Collapse. Journal of the American Chemical Society, 2015, 137, 12719-12728.	13.7	45

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19	Synthesis and structural study of Ti-rich Mgâ€“Ti hydrides. Journal of Alloys and Compounds, 2014, 593, 132-136.	5.5	15
20	Degradation Mechanism against Hydrogenation Cycles in Mg_{2â€“x}Pr_xNi₄ (x = 0.6 and 1.0). Journal of Physical Chemistry C, 2014, 118, 6697-6705.	3.1	23
21	Reduction and unusual recovery in the reversible hydrogen storage capacity of V1â^'Ti during hydrogen cycling. International Journal of Hydrogen Energy, 2014, 39, 10546-10551.	7.1	13
22	Development of Ti–Zr–Mn Based Hydrogen Storage Alloys for a Soft Actuator. Materials Transactions, 2014, 55, 1168-1174.	1.2	8
23	Improving the Cyclic Stability of V–Ti–Mn bcc Alloys Using Interstitial Elements. Materials Transactions, 2014, 55, 1144-1148.	1.2	8
24	Origin of Degradation in the Reversible Hydrogen Storage Capacity of V1â€“xTixAlloys from the Atomic Pair Distribution Function Analysis. Journal of Physical Chemistry C, 2013, 117, 26543-26550.	3.1	50
25	Crystal Structure and Local Structure of Mg2â€“xPrxNi4(x= 0.6 and 1.0) Deuteride Using in Situ Neutron Total Scattering. Inorganic Chemistry, 2013, 52, 7010-7019.	4.0	28
26	Variation in the ratio of Mg2Co and MgCo2in amorphous-like mechanically alloyed MgxCo100â€“xusing atomic pair distribution function analysis. Zeitschrift FÃ¼r Kristallographie, 2012, 227, 299-303.	1.1	9
27	High-energy â€˜compositeâ€™ layered manganese-rich cathode materials via controlling Li2MnO3 phase activation for lithium-ion batteries. Physical Chemistry Chemical Physics, 2012, 14, 6584.	2.8	260
28	Novel Synthesis and Structural Analysis of Ferrihydrite. Inorganic Chemistry, 2012, 51, 6421-6424.	4.0	46
29	Local Structural Evolution of Mechanically Alloyed Mg₅₀Co₅₀ Using Atomic Pair Distribution Function Analysis. Journal of Physical Chemistry C, 2011, 115, 7723-7728.	3.1	17
30	Insight into the Hydrogenation Properties of Mechanically Alloyed Mg₅₀Co₅₀ from the Local Structure. Journal of Physical Chemistry C, 2011, 115, 20335-20341.	3.1	23
31	Structural Studies of Hydrogen Storage Alloys using X-ray/Neutron Diffraction and Total Scattering. Materials Research Society Symposia Proceedings, 2011, 1334, 20601.	0.1	0
32	Nyquist-Shannon sampling theorem applied to refinements of the atomic pair distribution function. Physical Review B, 2011, 84, .	3.2	62
33	Local structural investigation of SmFeAsO_{1 â^'x}F_xhigh temperature superconductors. Journal of Physics Condensed Matter, 2011, 23, 272201.	1.8	7
34	Growth of Crystalline Polyaminoborane through Catalytic Dehydrogenation of Ammonia Borane on FeB Nanoalloy. Chemistry - A European Journal, 2010, 16, 12814-12817.	3.3	40
35	BaHg2Tl2. An Unusual Polar Intermetallic Phase with Strong Differentiation between the Neighboring Elements Mercury and Thallium. Journal of the American Chemical Society, 2009, 131, 8677-8682.	13.7	16
36	Determination of Structure and Phase Transition of Light Element Nanocomposites in Mesoporous Silica: Case study of NH₃BH₃ in MCM-41. Journal of the American Chemical Society, 2009, 131, 13749-13755.	13.7	93

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37	Advances in total scattering analysis. Journal of Materials Chemistry, 2009, 19, 5078.	6.7	57
38	Local and average structures of the proton conducting Y-doped BaCeO3 from neutron diffraction and neutron pair distribution function analysis. Journal of Applied Physics, 2009, 105, .	2.5	18
39	Local and average structures of the spin-glass pyrochlore<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mtext>Y</mml:mtext><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mro neutron diffraction and neutron pair distribution function analysis. Physical Review B, 2009, 79, .	3.2	44
40	New Insight into the Properties of Protonâ€Conducting Oxides from Neutron Total Scattering. ChemPhysChem, 2008, 9, 2309-2312.	2.1	3
41	Study of the negative thermal expansion of cuprite-type structures by means of temperature-dependent pair distribution function analysis: Preliminary results. Journal of Physics and Chemistry of Solids, 2008, 69, 2182-2186.	4.0	11
42	Study of Local Structure in Selected Organicâ€“Inorganic Perovskites in the Pm3Ì…m Phase. Chemistry of Materials, 2008, 20, 1272-1277.	6.7	70
43	NanoscaleÎ±-structural domains in the phonon-glass thermoelectric materialÎ²âˆ’Zn4Sb3. Physical Review B, 2007, 75, .	3.2	30
44	Nature of the Monoclinic to Cubic Phase Transition in the Fast Oxygen Ion Conductor La2Mo2O9(LAMOX). Journal of the American Chemical Society, 2007, 129, 6903-6907.	13.7	84
45	Local Atomic Structure and Discommensurations in the Charge Density Wave ofCeTe3. Physical Review Letters, 2006, 96, 226401.	7.8	61
46	Mercury Binding Sites in Thiol-Functionalized Mesostructured Silica. Journal of the American Chemical Society, 2005, 127, 8492-8498.	13.7	130
47	Square Nets of Tellurium:Â Rare-Earth Dependent Variation in the Charge-Density Wave of RETe3(RE =) Tj ETQq1 1 0.784314 rgBT /Ov	13.7	99
48	Pinning action of correlated disorder against equilibrium properties ofHgBa2Ca2Cu3Ox. Physical Review B, 2004, 69, .	3.2	7
49	Self-organized current transport through low-angle grain boundaries inYBa2Cu3O7âˆ’Î´thin films studied magnetometrically. Physical Review B, 2004, 69, .	3.2	14
50	Diminished equilibrium magnetization in Hg-1223 and Tl-2212 superconductors with fission-generated columnar defects. Physica C: Superconductivity and Its Applications, 2003, 388-389, 733-734.	1.2	0
51	Vortex pinning in high-Tc materials via randomly oriented columnar defects, created by GeV proton-induced fission fragments. Physica C: Superconductivity and Its Applications, 2002, 378-381, 409-415.	1.2	8
52	Influence of randomly oriented columnar defects on the irreversible and reversible magnetization of Tl2Ba2CaCu2Oxsuperconductor. Superconductor Science and Technology, 2001, 14, 666-671.	3.5	10
53	High temporal stability of supercurrents in MgB2materials. Superconductor Science and Technology, 2001, 14, L17-L20.	3.5	48
54	Critical current density of YBa2Cu3O7âˆ’Î´ low-angle grain boundaries in self-field. Applied Physics Letters, 2001, 78, 2031-2033.	3.3	34

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55	Properties of polycrystalline Hg1â^'xBixBa2Ca2Cu3Oy superconductors. Physica B: Condensed Matter, 2000, 284-288, 1089-1090.	2.7	0
56	Current decay from quantum tunneling of vortices in Bi-2212 superconductors. Physica C: Superconductivity and Its Applications, 2000, 335, 170-174.	1.2	3