Umit Bilge Demirci

List of Publications by Year
in descending order

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153	6,874	53660	69108
papers	citations	45 h-index	77 g-index

165	165	165	4730
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sodium borohydride versus ammonia borane, in hydrogen storage and direct fuel cell applications. Energy and Environmental Science, 2009, 2, 627.	15.6	343
2	Direct liquid-feed fuel cells: Thermodynamic and environmental concerns. Journal of Power Sources, 2007, 169, 239-246.	4.0	318
3	Theoretical means for searching bimetallic alloys as anode electrocatalysts for direct liquid-feed fuel cells. Journal of Power Sources, 2007, 173, 11-18.	4.0	254
4	Sodium Borohydride Hydrolysis as Hydrogen Generator: Issues, State of the Art and Applicability Upstream from a Fuel Cell. Fuel Cells, 2010, 10, 335-350.	1.5	252
5	Ammonia borane, a material with exceptional properties for chemical hydrogen storage. International Journal of Hydrogen Energy, 2017, 42, 9978-10013.	3.8	226
6	Ten-year efforts and a no-go recommendation for sodium borohydride for on-board automotive hydrogen storage. International Journal of Hydrogen Energy, 2009, 34, 2638-2645.	3.8	211
7	Cobalt in NaBH4 hydrolysis. Physical Chemistry Chemical Physics, 2010, 12, 14651.	1.3	195
8	Hydrolysis of Ammonia Borane as a Hydrogen Source: Fundamental Issues and Potential Solutions Towards Implementation. ChemSusChem, 2011, 4, 1731-1739.	3.6	158
9	Bimetallic RuCo and RuCu catalysts supported on Î³-Al2O3. A comparative study of their activity in hydrolysis of ammonia-borane. International Journal of Hydrogen Energy, 2011, 36, 7051-7065.	3.8	139
10	Cobalt-based catalysts for the hydrolysis of NaBH4 and NH3BH3. Physical Chemistry Chemical Physics, 2014, 16, 6872.	1.3	132
11	Boron-based hydrides for chemical hydrogen storage. International Journal of Energy Research, 2013, 37, 825-842.	2.2	129
12	Hydrazine borane: synthesis, characterization, and application prospects in chemical hydrogen storage. Physical Chemistry Chemical Physics, 2012, 14, 1768-1777.	1.3	127
13	High-extent dehydrogenation of hydrazine borane N2H4BH3 by hydrolysis of BH3 and decomposition of N2H4. Energy and Environmental Science, 2011, 4, 3355.	15.6	123
14	Direct borohydride fuel cell: Main issues met by the membraneâ€“electrodes-assembly and potential solutions. Journal of Power Sources, 2007, 172, 676-687.	4.0	115
15	Chemical hydrogen storage: â€˜materialâ€™ gravimetric capacity versusâ€˜systemâ€™ gravimetric capacity. Energy and Environmental Science, 2011, 4, 3334.	15.6	105
16	Hydrogen release through catalyzed methanolysis of solid sodium borohydride. Energy and Environmental Science, 2010, 3, 1796.	15.6	96
17	How to Design Hydrogen Storage Materials? Fundamentals, Synthesis, and Storage Tanks. Advanced Sustainable Systems, 2019, 3, 1900043.	2.7	90
18	Reaction mechanisms of the hydrolysis of sodium borohydride: A discussion focusing on cobalt-based catalysts. Comptes Rendus Chimie, 2014, 17, 707-716.	0.2	89

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19	Spontaneous hydrolysis of sodium borohydride in harsh conditions. International Journal of Hydrogen Energy, 2011, 36, 224-233.	3.8	88
20	Langmuirâ€“Hinshelwood kinetic model to capture the cobalt nanoparticles-catalyzed hydrolysis of sodium borohydride over a wide temperature range. Catalysis Today, 2011, 170, 13-19.	2.2	86
21	Facile synthesis by polyol method of a ruthenium catalyst supported on Î³-Al2O3 for hydrolytic dehydrogenation of ammonia borane. Catalysis Today, 2011, 170, 85-92.	2.2	86
22	Deactivation and reactivation of cobalt in hydrolysis of sodium borohydride. International Journal of Hydrogen Energy, 2011, 36, 13669-13675.	3.8	85
23	Controlled Synthesis of Ultrafine Surfactant-Free NiPt Nanocatalysts toward Efficient and Complete Hydrogen Generation from Hydrazine Borane at Room Temperature. ACS Catalysis, 2014, 4, 4261-4268.	5.5	83
24	Kinetics of Ru-promoted sulphated zirconia catalysed hydrogen generation by hydrolysis of sodium tetrahydroborate. Journal of Molecular Catalysis A, 2008, 279, 57-62.	4.8	81
25	Ru-based bimetallic alloys for hydrogen generation by hydrolysis of sodium tetrahydroborate. Journal of Alloys and Compounds, 2008, 463, 107-111.	2.8	81
26	Acetic acid, a relatively green single-use catalyst for hydrogen generation from sodium borohydride. International Journal of Hydrogen Energy, 2009, 34, 7231-7238.	3.8	77
27	Hydrogen release by thermolysis of ammonia borane NH3BH3 and then hydrolysis of its by-product [BNHx]. Journal of Power Sources, 2011, 196, 279-286.	4.0	76
28	The hydrogen cycle with the hydrolysis of sodium borohydride: A statistical approach for highlighting the scientific/technical issues to prioritize in the field. International Journal of Hydrogen Energy, 2015, 40, 2673-2691.	3.8	74
29	Cobalt (II) salts, performing materials for generating hydrogen from sodium borohydride. International Journal of Hydrogen Energy, 2009, 34, 2631-2637.	3.8	70
30	The synergistic effect of Rhâ€“Ni catalysts on the highly-efficient dehydrogenation of aqueous hydrazine borane for chemical hydrogen storage. Chemical Communications, 2012, 48, 11945.	2.2	66
31	Hydrolysis of solid ammonia borane. Journal of Power Sources, 2010, 195, 4030-4035.	4.0	60
32	Room-temperature hydrogen release from activated carbon-confined ammonia borane. International Journal of Hydrogen Energy, 2012, 37, 13437-13445.	3.8	57
33	Organosilicon polymer-derived mesoporous 3D silicon carbide, carbonitride and nitride structures as platinum supports for hydrogen generation by hydrolysis of sodium borohydride. International Journal of Hydrogen Energy, 2016, 41, 15477-15488.	3.8	57
34	Hydrazine Borane and Hydrazinidoboranes as Chemical Hydrogen Storage Materials. Energies, 2015, 8, 3118-3141.	1.6	56
35	Ammonia Borane: An Extensively Studied, Though Not Yet Implemented, Hydrogen Carrier. Energies, 2020, 13, 3071.	1.6	56
36	Silicon carbide-based membranes with high soot particle filtration efficiency, durability and catalytic activity for CO/HC oxidation and soot combustion. Journal of Membrane Science, 2016, 501, 79-92.	4.1	54

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37	Overview of the relative greenness of the main hydrogen production processes. Journal of Cleaner Production, 2013, 52, 1-10.	4.6	53
38	Effects of Pd Nanoparticle Size and Solution Reducer Strength on Pd/C Electrocatalyst Stability in Alkaline Electrolyte. Journal of the Electrochemical Society, 2016, 163, F781-F787.	1.3	53
39	Polymer-Derived Ceramics with engineered mesoporosity: From design to application in catalysis. Surface and Coatings Technology, 2018, 350, 569-586.	2.2	53
40	Nickel-based bimetallic nanocatalysts in high-extent dehydrogenation of hydrazine borane. International Journal of Hydrogen Energy, 2012, 37, 9722-9729.	3.8	51
41	About the Technological Readiness of the H₂ Generation by Hydrolysis of B(â^'N)â^'H Compounds. Energy Technology, 2018, 6, 470-486.	1.8	50
42	Sodium tetrahydroborate as energy/hydrogen carrier, its history. Comptes Rendus Chimie, 2009, 12, 943-950.	0.2	49
43	Cobalt, a reactive metal in releasing hydrogen from sodium borohydride by hydrolysis: A short review and a research perspective. Science China Chemistry, 2010, 53, 1870-1879.	4.2	49
44	Hollow core@mesoporous shell boron nitride nanopolyhedron-confined ammonia borane: a pure Bâ€“Nâ€“H composite for chemical hydrogen storage. Journal of Materials Chemistry A, 2014, 2, 7717.	5.2	49
45	Highly efficient acid-treated cobalt catalyst for hydrogen generation from NaBH4 hydrolysis. International Journal of Hydrogen Energy, 2009, 34, 4780-4787.	3.8	48
46	Nickel- and platinum-containing core@shell catalysts for hydrogen generation of aqueous hydrazine borane. Journal of Power Sources, 2014, 260, 77-81.	4.0	48
47	Microâ€/Mesoporous Platinumâ€“SiCN Nanocomposite Catalysts (Pt@SiCN): From Design to Catalytic Applications. Chemistry - A European Journal, 2016, 22, 15508-15512.	1.7	48
48	Boron Nitride for Hydrogen Storage. ChemPlusChem, 2018, 83, 893-903.	1.3	48
49	Enhanced hydrogen release by catalyzed hydrolysis of sodium borohydrideâ€“ammonia borane mixtures: a solution-state 11B NMR study. Physical Chemistry Chemical Physics, 2011, 13, 3809.	1.3	45
50	Promoted sulphated-zirconia catalysed hydrolysis of sodium tetrahydroborate. Catalysis Communications, 2008, 9, 1167-1172.	1.6	44
51	High-yield synthesis of hollow boron nitride nano-polyhedrons. Journal of Materials Chemistry, 2011, 21, 8694.	6.7	44
52	Transition metal-catalyzed dehydrogenation of hydrazine borane N2H4BH3 via the hydrolysis of BH3 and the decomposition of N2H4. International Journal of Hydrogen Energy, 2012, 37, 10758-10767.	3.8	44
53	Aluminum chloride for accelerating hydrogen generation from sodium borohydride. Journal of Power Sources, 2009, 192, 310-315.	4.0	43
54	Ex situ characterization of N2H4-, NaBH4- and NH3BH3-reduced cobalt catalysts used in NaBH4 hydrolysis. Catalysis Today, 2011, 170, 3-12.	2.2	43

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55	Borates in hydrolysis of ammonia borane. International Journal of Hydrogen Energy, 2013, 38, 7888-7895.	3.8	41
56	Monodisperse platinum nanoparticles supported on highly ordered mesoporous silicon nitride nanoblocks: superior catalytic activity for hydrogen generation from sodium borohydride. RSC Advances, 2015, 5, 58943-58951.	1.7	41
57	Copper-cobalt foams as active and stable catalysts for hydrogen release by hydrolysis of sodium borohydride. International Journal of Hydrogen Energy, 2016, 41, 8438-8448.	3.8	41
58	Preparation, Characterization, and Surface Modification of Periodic Mesoporous Siliconâ€“Aluminumâ€“Carbonâ€“Nitrogen Frameworks. Chemistry of Materials, 2013, 25, 3957-3970.	3.2	40
59	Cyclic Dehydrogenationâ€“(Re)Hydrogenation with Hydrogenâ€Storage Materials: An Overview. Energy Technology, 2015, 3, 100-117.	1.8	39
60	Hydrogen generation from a sodium borohydrideâ€“nickel core@shell structure under hydrolytic conditions. Nanoscale Advances, 2019, 1, 2707-2717.	2.2	39
61	Kinetic study of n-heptane conversion on sulfated zirconia-supported platinum catalyst: the metalâ€“proton adduct is the active site. Journal of Molecular Catalysis A, 2002, 188, 233-243.	4.8	37
62	Sodium Hydrazinidoborane: A Chemical Hydrogenâ€Storage Material. ChemSusChem, 2013, 6, 667-673.	3.6	37
63	Ammonia borane H 3 N BH 3 for solid-state chemical hydrogen storage: Different samples with different thermal behaviors. International Journal of Hydrogen Energy, 2016, 41, 15462-15470.	3.8	37
64	More reactive cobalt chloride in the hydrolysis of sodium borohydride. International Journal of Hydrogen Energy, 2009, 34, 9444-9449.	3.8	36
65	How green are the chemicals used as liquid fuels in direct liquid-feed fuel cells?. Environment International, 2009, 35, 626-631.	4.8	36
66	Ammonia borane thermolytic decomposition in the presence of metal (II) chlorides. International Journal of Hydrogen Energy, 2012, 37, 6749-6755.	3.8	36
67	Co-Î±Al2O3-Cu as shaped catalyst in NaBH4 hydrolysis. International Journal of Hydrogen Energy, 2010, 35, 6583-6591.	3.8	35
68	Metal chloride-doped ammonia borane thermolysis: Positive effect on induction period as well as hydrogen and borazine release. Thermochimica Acta, 2010, 509, 81-86.	1.2	35
69	Anchored cobalt film as stable supported catalyst for hydrolysis of sodium borohydride for chemical hydrogen storage. International Journal of Hydrogen Energy, 2011, 36, 14527-14533.	3.8	35
70	Ammonia Borane Nanospheres for Hydrogen Storage. ACS Applied Nano Materials, 2019, 2, 1129-1138.	2.4	35
71	Title is missing!. Catalysis Letters, 2001, 76, 45-51.	1.4	33
72	Ammonia borane decomposition in the presence of cobalt halides. International Journal of Hydrogen Energy, 2011, 36, 12955-12964.	3.8	33

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73	Bimetallic nickel-based nanocatalysts for hydrogen generation from aqueous hydrazine borane: Investigation of iron, cobalt and palladium as the second metal. International Journal of Hydrogen Energy, 2014, 39, 16919-16926.	3.8	30
74	Nanowires with controlled porosity for hydrogen production. Journal of Materials Chemistry A, 2013, 1, 2133-2138.	5.2	29
75	Lithium Hydrazinidoborane: A Polymorphic Material with Potential for Chemical Hydrogen Storage. Chemistry of Materials, 2014, 26, 3249-3255.	3.2	28
76	Highly active, robust and reusable micro-/mesoporous TiN/Si3N4 nanocomposite-based catalysts for clean energy: Understanding the key role of TiN nanoclusters and amorphous Si3N4 matrix in the performance of the catalyst system. Applied Catalysis B: Environmental, 2020, 272, 118975.	10.8	28
77	A bottom-up approach to prepare cobalt-based bimetallic supported catalysts for hydrolysis of ammonia borane. International Journal of Hydrogen Energy, 2013, 38, 5627-5637.	3.8	25
78	Ubiquitous Borane Fuel Electrooxidation on Pd/C and Pt/C Electrocatalysts: Toward Promising Direct Hydrazineâ€“Borane Fuel Cells. ACS Catalysis, 2018, 8, 3150-3163.	5.5	25
79	Mechanistic insights into the thermal decomposition of ammonia borane, a material studied for chemical hydrogen storage. Inorganic Chemistry Frontiers, 2021, 8, 1900-1930.	3.0	25
80	Cobalt-supported alumina as catalytic film prepared by electrophoretic deposition for hydrogen release applications. Applied Surface Science, 2010, 256, 7684-7691.	3.1	23
81	Pt Catalysed Hydrogen Generation by Hydrolysis of Sodium Tetrahydroborate. International Journal of Green Energy, 2008, 5, 148-156.	2.1	22
82	Pdâ€“MnO2â€“Fe2O3/C as electrocatalyst for the formic acid electrooxidation. International Journal of Hydrogen Energy, 2015, 40, 6920-6926.	3.8	22
83	Impact of H.I. Schlesinger's discoveries upon the course of modern chemistry on Bâ^'(Nâ^)H hydrogen carriers. International Journal of Hydrogen Energy, 2017, 42, 21048-21062.	3.8	22
84	Robust 3D Boron Nitride Nanoscaffolds for Remarkable Hydrogen Storage Capacity from Ammonia Borane. Energy Technology, 2018, 6, 570-577.	1.8	22
85	Chemical vapor deposition growth of boronâ€“carbonâ€“nitrogen layers from methylamine borane thermolysis products. Nanotechnology, 2018, 29, 025603.	1.3	21
86	Nickel-based catalysts for hydrogen evolution by hydrolysis of sodium borohydride: from structured nickel hydrazine nitrate complexes to reduced counterparts. International Journal of Hydrogen Energy, 2019, 44, 14207-14216.	3.8	21
87	A simple preparation method of sodium amidoborane, highly efficient derivative of ammonia borane dehydrogenating at low temperature. International Journal of Hydrogen Energy, 2011, 36, 7423-7430.	3.8	20
88	Polyanilineâ€“titania solid electrolyte for new generation photovoltaic single-layer devices. Materials Chemistry and Physics, 2012, 133, 1040-1049.	2.0	20
89	Novel Precursor-Derived Meso-/Macroporous TiO2/SiOC Nanocomposites with Highly Stable Anatase Nanophase Providing Visible Light Photocatalytic Activity and Superior Adsorption of Organic Dyes. Materials, 2018, 11, 362.	1.3	20
90	Plasmon enhanced visible light photocatalytic activity in polymer-derived TiN/Si-O-C-N nanocomposites. Materials and Design, 2018, 157, 87-96.	3.3	20

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91	Nanostructured Boron Nitride: From Molecular Design to Hydrogen Storage Application. Inorganics, 2014, 2, 396-409.	1.2	19
92	A preliminary study of sodium octahydrotriborate NaB3H8 as potential anodic fuel of direct liquid fuel cell. Journal of Power Sources, 2015, 286, 10-17.	4.0	19
93	Mechanistic Insights into Dehydrogenation of Partially Deuterated Ammonia Borane NH3BD3 Being Heating to 200 Â°C. Inorganic Chemistry, 2019, 58, 489-494.	1.9	19
94	Comments on the paper â€œElectrooxidation of borohydride on platinum and gold electrodes: Implications for direct borohydride fuel cellâ€•by E. Gyenge, Electrochim. Acta 49 (2004) 965: Thiourea, a poison for the anode metallic electrocatalyst of the direct borohydride fuel cell?. Electrochimica Acta, 2007, 52, 5119-5121.	2.6	18
95	Key Study on the Potential of Hydrazine Bisborane for Solid- and Liquid-State Chemical Hydrogen Storage. Inorganic Chemistry, 2015, 54, 4574-4583.	1.9	18
96	Amidoboranes and hydrazinidoboranes: State of the art, potential for hydrogen storage, and other prospects. International Journal of Hydrogen Energy, 2020, 45, 30731-30755.	3.8	18
97	Byâ€Product Carrying Humidified Hydrogen: An Underestimated Issue in the Hydrolysis of Sodium Borohydride. ChemSusChem, 2016, 9, 1777-1780.	3.6	17
98	Nanosizing Ammonia Borane with Nickel: A Path toward the Direct Hydrogen Release and Uptake of Bï£¿Nï£¿H Systems. Advanced Sustainable Systems, 2018, 2, 1700122.	2.7	17
99	Sodium borohydride for the near-future energy: a ''rough diamond'' for Turkey. Turkish Journal of Chemistry, 2018, 42, .	0.5	17
100	Nanosized ammonia borane for solid-state hydrogen storage: Outcomes, limitations, challenges and opportunities. International Journal of Hydrogen Energy, 2021, 46, 7351-7370.	3.8	17
101	The highly stable aqueous solution of sodium dodecahydro- closo -dodecaborate Na 2 B 12 H 12 as a potential liquid anodic fuel. Applied Catalysis B: Environmental, 2018, 222, 1-8.	10.8	15
102	Gaining insight into the catalytic dehydrogenation of hydrazine borane in water. International Journal of Hydrogen Energy, 2012, 37, 15983-15991.	3.8	14
103	Discrepancy in the thermal decomposition/dehydrogenation of ammonia borane screened byÂthermogravimetric analysis. International Journal of Hydrogen Energy, 2019, 44, 14201-14206.	3.8	14
104	Reaction intermediate/product-induced segregation in cobaltâ€“copper as the catalyst for hydrogen generation from the hydrolysis of sodium borohydride. RSC Advances, 2016, 6, 102498-102503.	1.7	13
105	¹¹ B MASâ€‰NMR Study of the Thermolytic Dehydrocoupling of Two Ammonia Boranes upon the Release of One Equivalent of H₂ at Isothermal Conditions. ChemistrySelect, 2017, 2, 9396-9401.	0.7	13
106	Closing the hydrogen cycle with the couple sodium borohydrideâ€•methanol, via the formation of sodium tetramethoxyborate and sodium metaborate. International Journal of Energy Research, 2020, 44, 11405-11416.	2.2	13
107	Fluorinated cobalt for catalyzing hydrogen generation from sodium borohydride. International Journal of Hydrogen Energy, 2009, 34, 5417-5421.	3.8	12
108	Metal hydrideâ€“hydrazine borane: Towards hydrazinidoboranes or composites as hydrogen carriers. International Journal of Hydrogen Energy, 2015, 40, 14875-14884.	3.8	12

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109	Hydrazine borane-induced destabilization of ammonia borane, and vice versa. Journal of Hazardous Materials, 2014, 278, 158-162.	6.5	11
110	Pure hydrogen-generating â€œdopedâ€•sodium hydrazinidoborane. International Journal of Hydrogen Energy, 2015, 40, 7475-7482.	3.8	11
111	Nanosizing ammonia borane with nickel â€“ An all-solid and all-in-one approach for H2 generation by hydrolysis. International Journal of Hydrogen Energy, 2018, 43, 14498-14506.	3.8	11
112	Ammonia borane and hydrazine bis(borane) dehydrogenation mediated by an unsymmetrical (PNN) ruthenium pincer hydride: metalâ€“ligand cooperation for hydrogen production. Sustainable Energy and Fuels, 2019, 3, 2583-2596.	2.5	11
113	Destabilization of Boron-Based Compounds for Hydrogen Storage in the Solid-State: Recent Advances. Energies, 2021, 14, 7003.	1.6	11
114	Volcano Plot for Bimetallic Catalysts in Hydrogen Generation by Hydrolysis of Sodium Borohydride. Journal of Chemical Education, 2017, 94, 1163-1166.	1.1	10
115	Sodium borohydride and propylene glycol, an effective combination for the generation of 2.3Âwt% of hydrogen. International Journal of Hydrogen Energy, 2018, 43, 7237-7244.	3.8	10
116	Aqueous hydrazine borane N2H4BH3 and nickel-based catalyst: An effective couple for the release of hydrogen in near-ambient conditions. Journal of the Energy Institute, 2018, 91, 845-855.	2.7	10
117	Diammonium tetraborate dihydrate as hydrolytic by-product of ammonia borane in aqueous alkaline conditions. International Journal of Hydrogen Energy, 2020, 45, 9927-9935.	3.8	10
118	Kinetic study of n-heptane conversion on palladium or iridium supported on sulphated zirconia. Journal of Molecular Catalysis A, 2007, 271, 216-220.	4.8	9
119	In situ thermodiffraction to monitor synthesis and thermolysis of hydrazine borane-based materials. Journal of Alloys and Compounds, 2016, 659, 210-216.	2.8	9
120	Borohydride-induced destabilization of hydrazine borane. International Journal of Hydrogen Energy, 2014, 39, 9321-9329.	3.8	8
121	In situ Synchrotron X-ray Thermodiffraction of Boranes. Crystals, 2016, 6, 16.	1.0	8
122	Instability of the CuCl2â€“NH3BH3 mixture followed by TGA and DSC. Thermochimica Acta, 2013, 567, 100-106.	1.2	7
123	A boron-11 NMR study of the stability of the alkaline aqueous solution of sodium borohydride that is both an indirect fuel and a direct fuel for low-temperature fuel cells. International Journal of Hydrogen Energy, 2022, 47, 23310-23315.	3.8	7
124	Hydrogen release from aqueous hydrazine bisborane. International Journal of Hydrogen Energy, 2018, 43, 1261-1270.	3.8	6
125	Fabrication and characterization of copper nanoparticles anchored on sulfonated reduced graphene oxide as effective catalyst for the reduction of Thioflavine-T cationic dye in aqueous medium. Materials Chemistry and Physics, 2022, 275, 125212.	2.0	6
126	Mechanistic insights of metal acetylacetonate-aided dehydrocoupling of liquid-state ammonia borane NH₃BH₃. Advances in Energy Research, 2016, 4, 177-187.	0.4	6

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127	Comments on â€œElectrocatalysts for the anodic oxidation of borohydridesâ€•by B.H. Liu, Z.P. Li, S. Suda [Electrochim. Acta 49 (2004) 3097]. Electrochimica Acta, 2007, 53, 737-739.	2.6	5
128	Boron-Based (Nano-)Materials: Fundamentals and Applications. Crystals, 2016, 6, 118.	1.0	5
129	Rubidium hydrazinidoborane: Synthesis, characterization and hydrogen release properties. International Journal of Hydrogen Energy, 2019, 44, 28252-28261.	3.8	5
130	A Series of Primary Alkylamine Borane Adducts C x H 2x+1 NH 2 BH 3 : Synthesis and Properties. ChemistrySelect, 2021, 6, 9853-9860.	0.7	5
131	Hydrolysis of the Borohydride Anion BH4â^': A 11B NMR Study Showing the Formation of Short-Living Reaction Intermediates including BH3OHâ^'. Molecules, 2022, 27, 1975.	1.7	5
132	Unraveling the mechanical behaviour of hydrazine borane (NH₂â€“NH₂â€“BH₃). Physical Chemistry Chemical Physics, 2018, 20, 2845-2850.	1.3	4
133	Calcium hydrazinidoborane: Synthesis, characterization, and promises for hydrogen storage. International Journal of Hydrogen Energy, 2020, 45, 2022-2033.	3.8	4
134	Anomalous Volume Changes in the Siliceous Zeolite Theta-1 TON due to Hydrogen Insertion under High-Pressure, High-Temperature Conditions. Journal of Physical Chemistry Letters, 2021, 12, 5059-5063.	2.1	4
135	Magnesium hydrazinidoborane: Synthesis, characterization and features for solid-state hydrogen storage. International Journal of Hydrogen Energy, 2021, 46, 33164-33175.	3.8	4
136	Copper-based MOF, Cu3(SDBA)2(HSDBA), as a catalyst for efficient reduction of 4-nitrophenol in the presence of sodium borohydride. Reaction Chemistry and Engineering, 0, , .	1.9	4
137	A skeletal rearrangement study of a carbon-13 labelled 3-methylpentane on doped sulphated zirconia catalysts. Journal of Molecular Catalysis A, 2006, 258, 46-58.	4.8	3
138	Formation mechanism of polyaniline selfâ€assembled needles and urchinâ€like structures assisted by magnesium oxide. Polymer International, 2015, 64, 505-512.	1.6	3
139	Lithium Hydrazinidoborane Ammoniate LiN2H3BH3Â·0.25NH3, a Derivative of Hydrazine Borane. Materials, 2017, 10, 750.	1.3	3
140	Alkaline aqueous solution of sodium decahydro-closo-decaborate Na2B10H10 as liquid anodic fuel. Renewable Energy, 2019, 143, 551-557.	4.3	3
141	Cesium hydrazinidoborane, the last of the alkali hydrazinidoboranes, studied as potential hydrogen storage material. International Journal of Hydrogen Energy, 2020, 45, 16634-16643.	3.8	3
142	Synthesis of n-dodecylamine borane C12H25NH2BH3, its stability against hydrolysis, and its characterization in THF. Journal of Molecular Structure, 2022, 1248, 131484.	1.8	3
143	Sodium borohydride hydrolysis-mediated hydrogenation of carbon dioxide, towards a two-step production of formic acid. International Journal of Hydrogen Energy, 2022, 47, 26490-26500.	3.8	3
144	Thermogravimetric analysis-based screening of metal (II) chlorides as dopants for the destabilization of solid-state hydrazine borane. Turkish Journal of Chemistry, 2015, 39, 984-997.	0.5	2

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145	Screening and scale-up of cerium oxide-based binary/ternary systems as oxidation catalysts. RSC Advances, 2016, 6, 27426-27433.	1.7	2
146	Supported nickel catalysts for the decomposition of hydrazine borane N₂H₄BH₃. Advances in Energy Research, 2013, 1, 1-12.	0.4	2
147	Isomerization of 3-methyl(3-13C)pentane over platinum supported sulphated zirconias: reaction mechanisms. Catalysis Letters, 2007, 114, 41-48.	1.4	1
148	Commentary about the number of electrons, really involved in the direct oxidation of borohydride catalysed by Ag and Ag-alloys, determined by Gyenge and co-authors. International Journal of Hydrogen Energy, 2008, 33, 2123-2124.	3.8	1
149	Assessing the Potential of Sodium 1-Oxa-nido-dodecaborate NaB₁₁H₁₂O for Energy Storage. ACS Omega, 2018, 3, 12878-12885.	1.6	1
150	The porous composite BN@SHS made of boron nitride, silica hollow spheres and Siâ€“Oâ€“B interface. Journal of Porous Materials, 2022, 29, 651-662.	1.3	1
151	Metal Oxides (such as Al₂O₃ and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 507 Td Borohydride NaBH₄. Advances in Science and Technology, 0, , .	0.2	0
152	BN Nanoceramics. , 2015, , 1-12.		0
153	Inorganic chemistry laboratory experiment on an energetic nickel (II) coordination compound, aimed at third-year undergraduate students. Chemistry Teacher International, 2021, 3, 91-97.	0.9	0