Umit Bilge Demirci

List of Publications by Citations

147 papers	5,598 citations	40 h-index	69 g-index
165 ext. papers	6,269 ext. citations	6.8 avg, IF	6.54 L-index

#	Paper	IF	Citations
147	Sodium borohydride versus ammonia borane, in hydrogen storage and direct fuel cell applications. *Energy and Environmental Science*, **2009**, 2, 627	35.4	302
146	Direct liquid-feed fuel cells: Thermodynamic and environmental concerns. *Journal of Power Sources*, **2007**, 169, 239-246	8.9	279
145	Theoretical means for searching bimetallic alloys as anode electrocatalysts for direct liquid-feed fuel cells. *Journal of Power Sources*, **2007**, 173, 11-18	8.9	227
144	Sodium Borohydride Hydrolysis as Hydrogen Generator: Issues, State of the Art and Applicability Upstream from a Fuel Cell. *Fuel Cells*, **2010**, 10, 335-350	2.9	203
143	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	6.7	181
142	Cobalt in NaBH4 hydrolysis. *Physical Chemistry Chemical Physics*, **2010**, 12, 14651-65	3.6	172
141	Ammonia borane, a material with exceptional properties for chemical hydrogen storage. *International Journal of Hydrogen Energy*, **2017**, 42, 9978-10013	6.7	164
140	Hydrolysis of ammonia borane as a hydrogen source: fundamental issues and potential solutions towards implementation. *ChemSusChem*, **2011**, 4, 1731-9	8.3	143
139	Bimetallic RuCo and RuCu catalysts supported on Al2O3. A comparative study of their activity in hydrolysis of ammonia-borane. *International Journal of Hydrogen Energy*, **2011**, 36, 7051-7065	6.7	127
138	Boron-based hydrides for chemical hydrogen storage. *International Journal of Energy Research*, **2013**, 37, 825-842	4.5	115
137	High-extent dehydrogenation of hydrazine borane N2H4BH3 by hydrolysis of BH3 and decomposition of N2H4. *Energy and Environmental Science*, **2011**, 4, 3355	35.4	112
136	Direct borohydride fuel cell: Main issues met by the membrane–electrodes-assembly and potential solutions. *Journal of Power Sources*, **2007**, 172, 676-687	8.9	111
135	Hydrazine borane: synthesis, characterization, and application prospects in chemical hydrogen storage. *Physical Chemistry Chemical Physics*, **2012**, 14, 1768-77	3.6	108
134	Cobalt-based catalysts for the hydrolysis of NaBH4 and NH3BH3. *Physical Chemistry Chemical Physics*, **2014**, 16, 6872-85	3.6	106
133	Chemical hydrogen storage: material gravimetric capacity versus system gravimetric capacity. *Energy and Environmental Science*, **2011**, 4, 3334	35.4	99
132	Facile synthesis by polyol method of a ruthenium catalyst supported on Al2O3 for hydrolytic dehydrogenation of ammonia borane. *Catalysis Today*, **2011**, 170, 85-92	5.3	81
131	Kinetics of Ru-promoted sulphated zirconia catalysed hydrogen generation by hydrolysis of sodium tetrahydroborate. *Journal of Molecular Catalysis A*, **2008**, 279, 57-62		76

130	Spontaneous hydrolysis of sodium borohydride in harsh conditions. *International Journal of Hydrogen Energy*, **2011**, 36, 224-233	6.7	72
129	Hydrogen release through catalyzed methanolysis of solid sodium borohydride. *Energy and Environmental Science*, **2010**, 3, 1796	35.4	71
128	Ru-based bimetallic alloys for hydrogen generation by hydrolysis of sodium tetrahydroborate. *Journal of Alloys and Compounds*, **2008**, 463, 107-111	5.7	71
127	Deactivation and reactivation of cobalt in hydrolysis of sodium borohydride. *International Journal of Hydrogen Energy*, **2011**, 36, 13669-13675	6.7	70
126	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	13.1	69
125	Hydrogen release by thermolysis of ammonia borane NH3BH3 and then hydrolysis of its by-product [BNHx]. *Journal of Power Sources*, **2011**, 196, 279-286	8.9	68
124	Cobalt (II) salts, performing materials for generating hydrogen from sodium borohydride. *International Journal of Hydrogen Energy*, **2009**, 34, 2631-2637	6.7	62
123	Acetic acid, a relatively green single-use catalyst for hydrogen generation from sodium borohydride. *International Journal of Hydrogen Energy*, **2009**, 34, 7231-7238	6.7	60
122	The synergistic effect of Rh-Ni catalysts on the highly-efficient dehydrogenation of aqueous hydrazine borane for chemical hydrogen storage. *Chemical Communications*, **2012**, 48, 11945-7	5.8	58
121	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	6.7	56
120	Hydrolysis of solid ammonia borane. *Journal of Power Sources*, **2010**, 195, 4030-4035	8.9	56
119	Room-temperature hydrogen release from activated carbon-confined ammonia borane. *International Journal of Hydrogen Energy*, **2012**, 37, 13437-13445	6.7	53
118	Langmuir–Hinshelwood kinetic model to capture the cobalt nanoparticles-catalyzed hydrolysis of sodium borohydride over a wide temperature range. *Catalysis Today*, **2011**, 170, 13-19	5.3	49
117	How to Design Hydrogen Storage Materials? Fundamentals, Synthesis, and Storage Tanks. *Advanced Sustainable Systems*, **2019**, 3, 1900043	5.9	48
116	Nickel-based bimetallic nanocatalysts in high-extent dehydrogenation of hydrazine borane. *International Journal of Hydrogen Energy*, **2012**, 37, 9722-9729	6.7	48
115	Hydrazine Borane and Hydrazinidoboranes as Chemical Hydrogen Storage Materials. *Energies*, **2015**, 8, 3118-3141	3.1	47
114	Enhanced hydrogen release by catalyzed hydrolysis of sodium borohydride-ammonia borane mixtures: a solution-state 11B NMR study. *Physical Chemistry Chemical Physics*, **2011**, 13, 3809-18	3.6	44
113	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	3.9	44

112	Reaction mechanisms of the hydrolysis of sodium borohydride: A discussion focusing on cobalt-based catalysts. *Comptes Rendus Chimie*, **2014**, 17, 707-716	2.7	43
111	Nickel- and platinum-containing core@shell catalysts for hydrogen generation of aqueous hydrazine borane. *Journal of Power Sources*, **2014**, 260, 77-81	8.9	42
110	Highly efficient acid-treated cobalt catalyst for hydrogen generation from NaBH4 hydrolysis. *International Journal of Hydrogen Energy*, **2009**, 34, 4780-4787	6.7	42
109	Overview of the relative greenness of the main hydrogen production processes. *Journal of Cleaner Production*, **2013**, 52, 1-10	10.3	41
108	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	7.9	41
107	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	9.6	40
106	Hollow core@mesoporous shell boron nitride nanopolyhedron-confined ammonia borane: a pure BNH composite for chemical hydrogen storage. *Journal of Materials Chemistry A*, **2014**, 2, 7717	13	40
105	Aluminum chloride for accelerating hydrogen generation from sodium borohydride. *Journal of Power Sources*, **2009**, 192, 310-315	8.9	40
104	Promoted sulphated-zirconia catalysed hydrolysis of sodium tetrahydroborate. *Catalysis Communications*, **2008**, 9, 1167-1172	3.2	40
103	Sodium tetrahydroborate as energy/hydrogen carrier, its history. *Comptes Rendus Chimie*, **2009**, 12, 943-950	2.7	39
102	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	6.7	39
101	Ex situ characterization of N2H4-, NaBH4- and NH3BH3-reduced cobalt catalysts used in NaBH4 hydrolysis. *Catalysis Today*, **2011**, 170, 3-12	5.3	38
100	Borates in hydrolysis of ammonia borane. *International Journal of Hydrogen Energy*, **2013**, 38, 7888-7895	6.7	37
99	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	6.7	37
98	High-yield synthesis of hollow boron nitride nano-polyhedrons. *Journal of Materials Chemistry*, **2011**, 21, 8694		37
97	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	6.7	36
96	Micro-/Mesoporous Platinum-SiCN Nanocomposite Catalysts (Pt@SiCN): From Design to Catalytic Applications. *Chemistry - A European Journal*, **2016**, 22, 15508-15512	4.8	36
95	Polymer-Derived Ceramics with engineered mesoporosity: From design to application in catalysis. *Surface and Coatings Technology*, **2018**, 350, 569-586	4.4	34

94	Preparation, Characterization, and Surface Modification of Periodic Mesoporous Silicon□Aluminum□Carbon□Nitrogen Frameworks. *Chemistry of Materials*, **2013**, 25, 3957-3970	9.6	34
93	Sodium hydrazinidoborane: a chemical hydrogen-storage material. *ChemSusChem*, **2013**, 6, 667-73	8.3	34
92	More reactive cobalt chloride in the hydrolysis of sodium borohydride. *International Journal of Hydrogen Energy*, **2009**, 34, 9444-9449	6.7	33
91	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	6.7	32
90	Co-□Al2O3-Cu as shaped catalyst in NaBH4 hydrolysis. *International Journal of Hydrogen Energy*, **2010**, 35, 6583-6591	6.7	32
89	Metal chloride-doped ammonia borane thermolysis: Positive effect on induction period as well as hydrogen and borazine release. *Thermochimica Acta*, **2010**, 509, 81-86	2.9	32
88	Kinetic study of n-heptane conversion on sulfated zirconia-supported platinum catalyst: the metal□proton adduct is the active site. *Journal of Molecular Catalysis A*, **2002**, 188, 233-243		32
87	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	3.7	31
86	About the Technological Readiness of the H2 Generation by Hydrolysis of B(□)□ Compounds. *Energy Technology*, **2018**, 6, 470-486	3.5	31
85	Ammonia borane decomposition in the presence of cobalt halides. *International Journal of Hydrogen Energy*, **2011**, 36, 12955-12964	6.7	31
84	How green are the chemicals used as liquid fuels in direct liquid-feed fuel cells?. *Environment International*, **2009**, 35, 626-31	12.9	31
83	Ammonia borane H3NBH3 for solid-state chemical hydrogen storage: Different samples with different thermal behaviors. *International Journal of Hydrogen Energy*, **2016**, 41, 15462-15470	6.7	28
82	Lithium Hydrazinidoborane: A Polymorphic Material with Potential for Chemical Hydrogen Storage. *Chemistry of Materials*, **2014**, 26, 3249-3255	9.6	26
81	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	6.7	26
80	Ammonia borane thermolytic decomposition in the presence of metal (II) chlorides. *International Journal of Hydrogen Energy*, **2012**, 37, 6749-6755	6.7	26
79	From Bifunctional Site to Metal□Proton Adduct Site in Alkane Reforming Reactions on Sulphated-Zirconia-Supported Pt or Pd or Ir Catalysts. *Catalysis Letters*, **2001**, 76, 45-51	2.8	25
78	Boron Nitride for Hydrogen Storage. *ChemPlusChem*, **2018**, 83, 893-903	2.8	25
77	Nanowires with controlled porosity for hydrogen production. *Journal of Materials Chemistry A*, **2013**, 1, 2133-2138	13	24

76	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	6.7	23
75	Cyclic Dehydrogenation(Re)Hydrogenation with Hydrogen-Storage Materials: An Overview. *Energy Technology*, **2015**, 3, 100-117	3.5	22
74	Cobalt-supported alumina as catalytic film prepared by electrophoretic deposition for hydrogen release applications. *Applied Surface Science*, **2010**, 256, 7684-7691	6.7	22
73	PdMnO2Fe2O3/C as electrocatalyst for the formic acid electrooxidation. *International Journal of Hydrogen Energy*, **2015**, 40, 6920-6926	6.7	21
72	Pt Catalysed Hydrogen Generation by Hydrolysis of Sodium Tetrahydroborate. *International Journal of Green Energy*, **2008**, 5, 148-156	3	21
71	Ammonia Borane Nanospheres for Hydrogen Storage. *ACS Applied Nano Materials*, **2019**, 2, 1129-1138	5.6	20
70	Hydrogen generation from a sodium borohydrideNickel core@shell structure under hydrolytic conditions. *Nanoscale Advances*, **2019**, 1, 2707-2717	5.1	19
69	Ammonia Borane: An Extensively Studied, Though Not Yet Implemented, Hydrogen Carrier. *Energies*, **2020**, 13, 3071	3.1	18
68	Nanostructured Boron Nitride: From Molecular Design to Hydrogen Storage Application. *Inorganics*, **2014**, 2, 396-409	2.9	18
67	PolyanilineTitania solid electrolyte for new generation photovoltaic single-layer devices. *Materials Chemistry and Physics*, **2012**, 133, 1040-1049	4.4	18
66	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	6.7	18
65	A preliminary study of sodium octahydrotriborate NaB3H8 as potential anodic fuel of direct liquid fuel cell. *Journal of Power Sources*, **2015**, 286, 10-17	8.9	17
64	Impact of H.I. Schlesinger's discoveries upon the course of modern chemistry on B(N)H hydrogen carriers. *International Journal of Hydrogen Energy*, **2017**, 42, 21048-21062	6.7	17
63	Mechanistic Insights into Dehydrogenation of Partially Deuterated Ammonia Borane NHBD Being Heating to 200 °C. *Inorganic Chemistry*, **2019**, 58, 489-494	5.1	17
62	Chemical vapor deposition growth of boron-carbon-nitrogen layers from methylamine borane thermolysis products. *Nanotechnology*, **2018**, 29, 025603	3.4	17
61	Robust 3D Boron Nitride Nanoscaffolds for Remarkable Hydrogen Storage Capacity from Ammonia Borane. *Energy Technology*, **2018**, 6, 570-577	3.5	16
60	Ubiquitous Borane Fuel Electrooxidation on Pd/C and Pt/C Electrocatalysts: Toward Promising Direct HydrazineBorane Fuel Cells. *ACS Catalysis*, **2018**, 8, 3150-3163	13.1	15
59	Key study on the potential of hydrazine bisborane for solid- and liquid-state chemical hydrogen storage. *Inorganic Chemistry*, **2015**, 54, 4574-83	5.1	14

58	Nanosizing Ammonia Borane with Nickel: A Path toward the Direct Hydrogen Release and Uptake of B?N?H Systems. *Advanced Sustainable Systems*, **2018**, 2, 1700122	5.9	14
57	Gaining insight into the catalytic dehydrogenation of hydrazine borane in water. *International Journal of Hydrogen Energy*, **2012**, 37, 15983-15991	6.7	14
56	Comments on the paper Electrooxidation of borohydride on platinum and gold electrodes: Implications for direct borohydride fuel cell 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	6.7	14
55	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	6.7	14
54	The highly stable aqueous solution of sodium dodecahydro-closo-dodecaborate Na2B12H12 as a potential liquid anodic fuel. *Applied Catalysis B: Environmental*, **2018**, 222, 1-8	21.8	13
53	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,	3.5	13
52	Sodium borohydride for the near-future energy: a ''rough diamond'' for Turkey. *Turkish Journal of Chemistry*, **2018**, 42,	1	13
51	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	21.8	12
50	Metal hydride hydrazine borane: Towards hydrazinidoboranes or composites as hydrogen carriers. *International Journal of Hydrogen Energy*, **2015**, 40, 14875-14884	6.7	12
49	Fluorinated cobalt for catalyzing hydrogen generation from sodium borohydride. *International Journal of Hydrogen Energy*, **2009**, 34, 5417-5421	6.7	12
48	By-Product Carrying Humidified Hydrogen: An Underestimated Issue in the Hydrolysis of Sodium Borohydride. *ChemSusChem*, **2016**, 9, 1777-80	8.3	11
47	11B MAS 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	1.8	10
46	Pure hydrogen-generating doped sodium hydrazinidoborane. *International Journal of Hydrogen Energy*, **2015**, 40, 7475-7482	6.7	10
45	Reaction intermediate/product-induced segregation in cobalt copper as the catalyst for hydrogen generation from the hydrolysis of sodium borohydride. *RSC Advances*, **2016**, 6, 102498-102503	3.7	10
44	Plasmon enhanced visible light photocatalytic activity in polymer-derived TiN/Si-O-C-N nanocomposites. *Materials and Design*, **2018**, 157, 87-96	8.1	10
43	Ammonia borane and hydrazine bis(borane) dehydrogenation mediated by an unsymmetrical (PNN) ruthenium pincer hydride: metal ligand cooperation for hydrogen production. *Sustainable Energy and Fuels*, **2019**, 3, 2583-2596	5.8	9
42	Amidoboranes and hydrazinidoboranes: State of the art, potential for hydrogen storage, and other prospects. *International Journal of Hydrogen Energy*, **2020**, 45, 30731-30755	6.7	9
41	Hydrazine borane-induced destabilization of ammonia borane, and vice versa. *Journal of Hazardous Materials*, **2014**, 278, 158-62	12.8	9

40	Discrepancy in the thermal decomposition/dehydrogenation of ammonia borane screened by thermogravimetric analysis. *International Journal of Hydrogen Energy*, **2019**, 44, 14201-14206	6.7	9
39	Nanosizing ammonia borane with nickel □An all-solid and all-in-one approach for H2 generation by hydrolysis. *International Journal of Hydrogen Energy*, **2018**, 43, 14498-14506	6.7	9
38	Sodium borohydride and propylene glycol, an effective combination for the generation of 2.3□wt% of hydrogen. *International Journal of Hydrogen Energy*, **2018**, 43, 7237-7244	6.7	8
37	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	5.7	8
36	Borohydride-induced destabilization of hydrazine borane. *International Journal of Hydrogen Energy*, **2014**, 39, 9321-9329	6.7	8
35	Kinetic study of n-heptane conversion on palladium or iridium supported on sulphated zirconia. *Journal of Molecular Catalysis A*, **2007**, 271, 216-220		8
34	Mechanistic insights into the thermal decomposition of ammonia borane, a material studied for chemical hydrogen storage. *Inorganic Chemistry Frontiers*, **2021**, 8, 1900-1930	6.8	8
33	In situ thermodiffraction to monitor synthesis and thermolysis of hydrazine borane-based materials. *Journal of Alloys and Compounds*, **2016**, 659, 210-216	5.7	7
32	Instability of the CuCl2□NH3BH3 mixture followed by TGA and DSC. *Thermochimica Acta*, **2013**, 567, 100-106	2.9	7
31	Volcano Plot for Bimetallic Catalysts in Hydrogen Generation by Hydrolysis of Sodium Borohydride. *Journal of Chemical Education*, **2017**, 94, 1163-1166	2.4	7
30	In situ Synchrotron X-ray Thermodiffraction of Boranes. *Crystals*, **2016**, 6, 16	2.3	7
29	Mechanistic insights of metal acetylacetonate-aided dehydrocoupling of liquid-state ammonia borane NH3BH3. *Advances in Energy Research*, **2016**, 4, 177-187		6
28	Closing the hydrogen cycle with the couple sodium borohydride-methanol, via the formation of sodium tetramethoxyborate and sodium metaborate. *International Journal of Energy Research*, **2020**, 44, 11405-11416	4.5	6
27	Rubidium hydrazinidoborane: Synthesis, characterization and hydrogen release properties. *International Journal of Hydrogen Energy*, **2019**, 44, 28252-28261	6.7	5
26	Diammonium tetraborate dihydrate as hydrolytic by-product of ammonia borane in aqueous alkaline conditions. *International Journal of Hydrogen Energy*, **2020**, 45, 9927-9935	6.7	5
25	Hydrogen release from aqueous hydrazine bisborane. *International Journal of Hydrogen Energy*, **2018**, 43, 1261-1270	6.7	5
24	Nanosized ammonia borane for solid-state hydrogen storage: Outcomes, limitations, challenges and opportunities. *International Journal of Hydrogen Energy*, **2021**, 46, 7351-7370	6.7	5
23	Comments on □electrocatalysts for the anodic oxidation of borohydrides□by B.H. Liu, Z.P. Li, S. Suda [Electrochim. Acta 49 (2004) 3097]. *Electrochimica Acta*, **2007**, 53, 737-739	6.7	4

22	Calcium hydrazinidoborane: Synthesis, characterization, and promises for hydrogen storage. *International Journal of Hydrogen Energy*, **2020**, 45, 2022-2033	6.7	4
21	Formation mechanism of polyaniline self-assembled needles and urchin-like structures assisted by magnesium oxide. *Polymer International*, **2015**, 64, 505-512	3.3	3
20	Cesium hydrazinidoborane, the last of the alkali hydrazinidoboranes, studied as potential hydrogen storage material. *International Journal of Hydrogen Energy*, **2020**, 45, 16634-16643	6.7	3
19	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		3
18	A Series of Primary Alkylamine Borane Adducts CxH2x+1NH2BH3: Synthesis and Properties. *ChemistrySelect*, **2021**, 6, 9853-9860	1.8	3
17	Unraveling the mechanical behaviour of hydrazine borane (NH-NH-BH). *Physical Chemistry Chemical Physics*, **2018**, 20, 2845-2850	3.6	2
16	Lithium Hydrazinidoborane Ammoniate LiN□HBH□0.25NH□a Derivative of Hydrazine Borane. *Materials*, **2017**, 10,	3.5	2
15	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	1	2
14	Supported nickel catalysts for the decomposition of hydrazine borane N2H4BH3. *Advances in Energy Research*, **2013**, 1, 1-12		2
13	Destabilization of Boron-Based Compounds for Hydrogen Storage in the Solid-State: Recent Advances. *Energies*, **2021**, 14, 7003	3.1	2
12	Synthesis of n-dodecylamine borane C12H25NH2BH3, its stability against hydrolysis, and its characterization in THF. *Journal of Molecular Structure*, **2022**, 1248, 131484	3.4	2
11	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	4.4	2
10	Alkaline aqueous solution of sodium decahydro-closo-decaborate Na2B10H10 as liquid anodic fuel. *Renewable Energy*, **2019**, 143, 551-557	8.1	1
9	Isomerization of 3-methyl(3-13C)pentane over platinum supported sulphated zirconias: reaction mechanisms. *Catalysis Letters*, **2007**, 114, 41-48	2.8	1
8	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	6.7	1
7	The porous composite BN@SHS made of boron nitride, silica hollow spheres and Si□B interface. *Journal of Porous Materials*,1	2.4	1
6	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	6.4	1
5	Screening and scale-up of cerium oxide-based binary/ternary systems as oxidation catalysts. *RSC Advances*, **2016**, 6, 27426-27433	3.7	1

4	Assessing the Potential of Sodium 1-Oxa--dodecaborate NaBHO for Energy Storage. *ACS Omega*, **2018**, 3, 12878-12885	3.9	1
3	Magnesium hydrazinidoborane: Synthesis, characterization and features for solid-state hydrogen storage. *International Journal of Hydrogen Energy*, **2021**, 46, 33164-33175	6.7	1
2	Metal Oxides (such as Al2O3 and TiO2) as Catalyst Supports for Hydrogen Release by Hydrolysis of Sodium Borohydride NaBH4. *Advances in Science and Technology*, **2010**, 65, 209-214	0.1	
1	Inorganic chemistry laboratory experiment on an energetic nickel (II) coordination compound, aimed at third-year undergraduate students. *Chemistry Teacher International*, **2021**, 3, 91-97	1	