Professor Volodymyr A. Yartys

Scopus: H-index 33; i_{10}-index 101; 3646 citations (09/04/2019)
Google Scholar: H-index 39; i_{10}-index 108; 4722 citations (09/04/2019)

Scopus: H-index 35; i_{10}-index 105; 3952 citations (13/10/2019)
Google Scholar: H-index 39; i_{10}-index 115; 5080 citations (13/10/2019)

Scopus: H-index 35; i_{10}-index 106; 4048 citations (4/12/2019)
Google Scholar: H-index 39; i_{10}-index 117; 5244 citations (4/12/2019)

Scopus: H-index 35; i_{10}-index 106; 4053 citations (10/12/2019)
Google Scholar: H-index 40; i_{10}-index 117; 5284 citations (10/12/2019)

Scopus: H-index 36; i_{10}-index 109; 4134 citations (21/01/2020)
Google Scholar: H-index 41; i_{10}-index 121; 5407 citations (21/01/2020)

Scopus: H-index 36; i_{10}-index 109; 4144 citations (07/02/2020)
Google Scholar: H-index 41; i_{10}-index 122; 5438 citations (07/02/2020)

Scopus: H-index 36; i_{10}-index 113; 4335 citations (27/04/2020)
Google Scholar: H-index 41; i_{10}-index 128; 5666 citations (27/04/2020)

Scopus: H-index 36; i_{10}-index 113; 4437 citations (8/06/2020)
Google Scholar: H-index 42; i_{10}-index 132; 5825 citations (8/06/2020)

LIST OF PUBLICATIONS

(250 papers in peer reviewed scientific journals as of 8 June 2020)

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132. A.Szytula, O.Isnard, **V.A.Yartys**, A.B.Riabov. Magnetic structure of $HoNiSnD_{0.67}$.// International Symposium on Metal Hydrogen Systems. Fundamental and Applications. Cracow, Poland. September 6^{nd}-10^{th} 2004. Abstracts, 156.

133. V.A.Yartys. Novel intermetallic hydrides.// Rare Earths'04. Nara, Japan. 6-12 November 2004. Collected Abstracts.

134. J. P. Maehlen, **V. A.Yartys**.// Aluminum Trihydride Studied By Powder Synchrotron X-Ray Diffraction: Crystal Structure And Thermal Decomposition.// *Advanced Materials*

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135. **V.A.Yartys**, J.P.Maehlen. *In situ* SR diffraction studies of the phase-structural transformations in hydrogen storage materials. The Swiss-Norwegian Seminar Synchrotron Radiation in Studies of Nanoscaled Materials was held on June 22-23, 2006 at ESRF, Grenoble, France. Abstracts.

136. R.V. Denys, **V.A. Yartys**, M. Sato, R.G. Delaplane, A.B. Riabov.// Hydrogen Storage Properties and Structure of $La_{1-x}Mg_x(Ni_{1-y}[Mn,Al]_y)_3$ Intermetallics. International Symposium on Metal-Hydrogen Systems. October 1-6, 2006. Lahaina, Maui, Hawaii. Program and Abstracts. P-266 (p.73).

137. B.P.Tarasov, D.N.Borisov, P.V.Fursikov, V.N.Fokin, S.N.Klyamkin, M.V.Lototsky, **V.A.Yartys**, A. Schrøder Pedersen. // Mg-Mm-Ni Eutectic Alloy: Structure, Hydrogen Soption Properties and Performance in Hydrogen Storage Unit. International Symposium on Metal-Hydrogen Systems. October 1-6, 2006. Lahaina, Maui, Hawaii. Program and Abstracts. P-267 (p.73).

138. Y.Wu, J.K.Solberg, **V.A.Yartys**. The Effect of Solidification Rate on Microstructural Evolution and Hydrogen Storage Properties of the Melt-Spun Mg-20Ni-8Mm Alloy. International Symposium on Metal-Hydrogen Systems. October 1-6, 2006. Lahaina, Maui, Hawaii. Program and Abstracts. P-268 (p.74).

139. S.Løken, J.K.Solberg, J.P.Mæhlen, R.V.Denys, M.V.Lototsky, **V.A.Yartys**, B.P.Tarasov. // Nanostructured Mg-Mm-Ni Hydrogen Storage Alloy: Structure-Properties Relationship. International Symposium on Metal-Hydrogen Systems. October 1-6, 2006. Lahaina, Maui, Hawaii. Program and Abstracts. P-289 (p.78).

140. M.V.Lototsky, **V.A.Y**artys, R.V.Denys, I.Yu.Zavaliy, J.P.Mæhlen.// Interrelation of Structural Characteristics and Hydrogenation/Dehydrogenation Behaviour in V-Ti-Zr b.c.c. Alloys. International Symposium on Metal-Hydrogen Systems. October 1-6, 2006. Lahaina, Maui, Hawaii. Program and Abstracts. P-264 (p.72).

141. J.P.Mæhlen, V.A.Yartys, R.V.Denys, M.Fichtner, Ch.Frommen, B.M.Bulychev, P.Pattison, H.Emerich.// Thermal Decomposition of Alane AlH_3 Studied by *in situ* Synchrotron X-ray Diffraction and Thermal Desorption Spectroscopy. International Symposium on Metal-Hydrogen Systems. October 1-6, 2006. Lahaina, Maui, Hawaii. Program and Abstracts. P-230 (p.65).

142. M.Sato, A.Furumoto, S.Kato, H.Chida, Y.Mashumura, H.H.Uchida, J.P.Mæhlen, V.A.Yartys.// Hydrogen Absorption Characteristics of YNiIn. International Symposium on Metal-Hydrogen Systems. October 1-6, 2006. Lahaina, Maui, Hawaii. Program and Abstracts. P-217 (p.62).

143. International Symposium Hydrogen Power Theoretical and Engineering Solutions HYPOTHESIS VII. El Castellano, Merida, Mexico. March 27-30, 2007. Book of Abstracts. V.A.Yartys, J.K.Solberg, R.V.Denys, J.P.Mæhlen, A.B.Riabov, M.V.Lototsky, Ying Wu, S.Løken, B.P.Tarasov, D.N.Borisov. Nanostructured hydrides of light metals for hydrogen storage. P.40.

144. V.A.Yartys. NORSTORE 2002-2007: 5 Years of Nordic and Regional Collaboration on Hydrogen Storage. NORSTORE 2007 Conference. Sigulda, Latvia, May 31-June 2, 2007). (Oral presentation).

145. V.A.Yartys and J.P.Mæhlen. Nanostructured hydrides of light elements for hydrogen storage and H storage units. NANOMAT conference. Bergen, June 2007. (Oral presentation).

146. V.A.Yartys, J.P.Mæhlen, A.Vik, A.Strand, R.V.Denys, M.V.Lototsky. Nano Science for New Advanced Metal-Hydrogen Systems Towards Applications. NANOMAT conference. Bergen, June 2007. (POSTER).

147. Proceedings of the 2nd International Hydrogen Energy Congress and Exhibition IHEC 2007 Istanbul, Turkey, 13-15 July 2007. Nanostructured Hydrides of Light Metals for Hydrogen Storage V.A.Yartys, J.K.Solberg, J.P. Maehlen, R.V.Denys, A.B.Riabov, M.V.Lototsky, Ying Wu, B.P.Tarasov. Collected abstracts. (Invited keynote lecture).

148. **V.A. Yartys**, A.B. Riabov, R.V. Denys . Crystal chemistry of anisotropic hydrides: novel materials with unusual structural behaviours. X International Conference on Crystal Chemistry of Intermetallic Compounds. Lviv, Ukraine, September 2007. (Invited Talk).

149. **V.A.Yartys**, J.P.Mæhlen, P.Pattison, T.Blach, E.Gray. In situ SR X-Ray and Neutron Diffraction Studies of Phase-Structural Transformations in Hydrogen Storage Materials. Swiss-Norwegian Seminar "In situ experiments at SNBL using high gas pressures". GRENOBLE, November 2007 (Oral presentation).

150. J.P.Maehlen, **V.A.Yartys**, R.V.Denys, A.A. Poletaev, I.E.Gabis and J.Graetz**.** Thermal decomposition of mechanochemically activated and Ti-catalyzed α-alane.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster M1-I-76.

151. Y. Wu, M.V. Lototsky, J.K. Solberg, **V. A Yartys**, W. Han, S.X. Zhou. Microstructure and novel hydrogen storage properties of melt-spun Mg-Ni-Mm alloys.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster M3-III-124.

152. T.Førde and **V.A.Yartys**. Theoretical and Experimental Studies of Metal Hydride Storage Units.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster F2-III-29.

153. B. P. Tarasov, P. V. Fursikov, M. S. Dulya, V. N. Fokin, M. K. Sakharov, and **V. A. Yartys.** Composites of α-AlH_3 with Vanadium and Titanium Hydrides and Lithium Amide. // International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster M2-II-110.

154. R.V.Denys, M.V.Lototsky, J.P.Mæhlen, A.A.Poletayev, J.K.Solberg, **V.A.Yartys**. Nanostructured Mg-based composites for H storage synthesised by reactive ball milling in hydrogen.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster M3-I-117.

155. M.Lototsky, M.Williams, A.Nechaev, V.Linkov, V.A.Yartys. Preparation and hydrogen sorption performances of AB_5 hydrogen storage alloy surface-modified with palladium.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster A3-II-11.

156. M.Williams, M.Lototsky, V.A.Yartys, J.K.Solberg, R.Denys. Structural and morphological features of AB_5 hydrogen storage alloy surface-modified with palladium.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster A3-II-8.

157. M.V.Lototsky, R.V.Denys, **V.A.Yartys**. Combustion-type hydrogenation of nanostructured Mg-based composites.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster M3-II-135.

158. J. Eriksen, J.P. Mæhlen, Ø. Ulleberg, and **V.A. Yartys**. Synthesis of Novel Nanostructured Metal Hydride Materials.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster F7-I-40.

159. **V.A.Yartys**, J.P.Maehlen, R.V.Denys, T.Blach, E Gray, and O.Isnard. *In situ* High-Pressure Studies of the Hydrogenation of Laves-type Intermetallics of Ti and Zr.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster M1-III-83.
160. **V.A.Yartys**, P.Vajeeston, P.Ravindran, A.B.Riabov, R.V.Denys, J.P.Maehlen, R.G.Delaplane and Masashi Sato. Structure-Bonding Interrelations in Novel Anisotropic Hydrides.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Oral Presentation F4-O-4.
161. R.V.Denys, A.B.Riabov, J.P.Maehlen, M.V.Lototsky, J.K.Solberg, **V.A.Yartys**. *In situ* synchrotron X-ray diffraction studies of hydrogenation – dehydrogenation in Mg-based nanocomposites.// International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. Reykjavik, Iceland. June 24-28, 2008. Poster M3-III-115.
162. **V.A.Yartys**, J.P.Mæhlen, R.V.Denys, P.Szymanski, T.Blach, E. Gray, O.Isnard, A.A. Poletaev, J.K.Solberg, I.E.Gabis and J.Graetz. Nanostructured Metal Hydrides For Vehicular Hydrogen Storage. Norwegian Hydrogen Seminar, Bergen, 26-26 September 2008. Oral presentation.
163. **V.A.Yartys**, J.P.Mæhlen, R.V.Denys, A.A. Poletaev, J.K.Solberg. Nanostructured metal hydrides for energy storage. Norwegian Synchrotron User Meeting. Lillehammer. 18-19 June 2009. Oral presentation.
164. **V.A.Yartys**, J.P.Mæhlen, R.V.Denys, A.A.Poletaev, J.K.Solberg, M.V.Lototsky. Nanostructured metal hydrides for energy storage.// NANOMAT Conference 2009. June 15-19 2009. Lillehammer. Poster presentation.
165. **V.A. Yartys**, R.V. Denys, J.P. Mæhlen, C. Webb, E. Gray, T. Blach, A.A. Poletaev, J.K. Solberg, O. Isnard. Nanostructured metal hydrides for hydrogen storage studied by *in situ* synchrotron and neutron diffraction.// 2010 MRS Spring Meeting. Symposium W: Diagnostics and Characterization of Energy Materials with Synchrotron and Neutron Radiation. San Francisco, 5-9 April 2010. Oral Presentation W4.1**.**
166. J. Graetz, J. Reilly, **V.A. Yartys**, J.P. Maehlen, B.M. Bulychev, V.E. Antonov, B.P.Tarasov, I.E. Gabis. Aluminum hydride as a hydrogen and energy storage material: past, present and future.// International Symposium on Metal-Hydrogen Systems. Fundamenals and Applications. Moscow, Russia. July 19-23, 2010. Part I. P.5. Invited plenary lecture.
167. M. Lototsky, M. Williams, Y. Klochko and **V.A. Yartys**. Surface-Modified Advanced Hydrogen Storage Alloys for Hydrogen Separation and Purification.// International Symposium on Metal-Hydrogen Systems. Fundamenals and Applications. Moscow, Russia. July 19-23, 2010. Part I. P.10. Invited lecture.
168. R.V. Denys and **V.A. Yartys**. Effect of Mg on structure and thermodynamics of La-Mg-Ni hydrides synthesised by hydrogen metallurgy and studied by *in situ* diffraction.// International Symposium on Metal-Hydrogen Systems. Fundamenals and Applications. Moscow, Russia. July 19-23, 2010. Part I. P.11. Invited lecture.
169. J.P. Maehlen, R.G.Delaplane, R.V. Denys, A.J. Ramirez-Cuesta, and **V.A. Yartys.** Vibrational properties of CeNiSn-Hydrides**. //** International Symposium on Metal-Hydrogen Systems. Fundamenals and Applications. Moscow, Russia. July 19-23, 2010. Part I. P.54. Oral presentation.
170. **V.A. Yartys**, R.V. Denys, J.P. Mæhlen, C. Webb, E. Gray, T. Blach, A.A. Poletaev, J.K. Solberg, O. Isnard. Nanostructured metal hydrides for hydrogen storage studied by *in situ* synchrotron and neutron diffraction.// International Symposium on Metal-Hydrogen Systems. Fundamenals and Applications. Moscow, Russia. July 19-23, 2010. Part I. P.121. Oral presentation.

171. A.B.Riabov, R.V. Denys, J.P.Maehlen, **V.A. Yartys**. *In situ* synchrotron diffraction study of the $La_{0.5}Ce_{0.5}Ni_4Co - H_2$ system.// International Symposium on Metal-Hydrogen Systems. Fundamenals and Applications. Moscow, Russia. July 19-23, 2010. Part I. P.172. Poster presentation.

172. S. Suwarno, J.K.Solberg, **V.A. Yartys**. Hydrogenation and Microstructural Study of Melt-Spun $Ti_{0.8}V_{0.2}$.// International Symposium on Metal-Hydrogen Systems. Fundamenals and Applications. Moscow, Russia. July 19-23, 2010. Part II. P.349. Poster presentation.

173. A.A. Poletaev, R.V. Denys, J. K. Solberg , B.P. Tarasov , **V.A. Yartys**. Microstructural optimisation of $LaMg_{12}$ alloy for hydrogen storage.// International Symposium on Metal-Hydrogen Systems. Fundamenals and Applications. Moscow, Russia. July 19-23, 2010. Part II. P.365. Poster presentation.

174. M.Lototsky, M.Williams, J.Sibanyoni, J.K.Solberg, **V.A. Yartys** and R.Denys. Nanostructured Composites of Magnesium, Hydride-Forming Additives and Carbon for Hydrogen Storage.// International Symposium on Metal-Hydrogen Systems. Fundamenals and Applications. Moscow, Russia. July 19-23, 2010. Part II. P.373. Poster presentation.

175. Andrey Andreevich Poletaev, Roman Volodymyrovych Denys, Jan Ketil Solberg, **Volodymyr Yartys.** Hydrogenation behaviour and crystal structure of the $LaMg_{11}$ with a giant unit cell synthesized by hydrogen metallurgy.// Renewable Energy Research Conference 2010; 2010-06-07 - 2010-06-08. NTNU. Oral presentation.

176. **V.A. Yartys**. Structure-properties relationship in magnesium alloys for battery and high pressure applications.// Task 22 IEA HIA Expert Meeting, 16-20 January 2011. Fremantle, Australia.

177. **V. A. Yartys**, Suwarno Suwarno, Y. Gosselin, J. K. Solberg, J.P. Maehlen, M. Williams, B. Krogh, B.Børresen, E. Rytter, E. O. Fernández. Selective hydrogen absorption from gaseous mixtures by the BCC Ti-V alloys. International Conference on Hydrogen Production ICH2P-11. Thessaloniki, Greece, June 2011. Oral presentation.

178. **V.A. Yartys.** 4th Chinese-Norwegian Symposium. "Novel Magnesium-based Nanomaterials for Hydrogen and Enegy Storage". Trondheim, Norway. August 2011. Oral presentation.

179. **V.A. Yartys.** NOVEL NANOMATERIALS FOR HYDROGEN AND ENERGY STORAGE. Conference "350 years of Lviv Franko National University", Lviv, Ukraine. 11 October 2011. Invited talk.

180. A.B. Riabov, **V.A. Yartys**, M. Latroche, F. Cuevas , R.V. Denys and W.-K. Hu. *In situ* PND studies of deuterium absorption-desorption in the La_2MgNi_9 metal hydride battery alloy.// Norwegian Synchrotron and Neutron Users Meeting (SYNKNOYT), 30-31 January 2012, Stavanger, Norway. Poster presentation.

181. Thomas Holm, **Volodymyr Yartys**, Jan Petter Mæhlen, Roman Denys, Christopher Nwakwuo and Jan Ketil Solberg. Rapidly Solidified La-Mg-Ni alloy for Ni-Metal Hydride batteries studied by Synchrotron X-ray Diffraction.// Norwegian Synchrotron and Neutron Users Meeting (SYNKNOYT), 30-31 January 2012, Stavanger, Norway. Oral presentation.

182. **Volodymyr Yartys**. Magnesium-based nanomaterials for hydrogen and energy storage.// MATERIALS CHALLENGES IN ALTERNATIVE AND RENEWABLE

ENERGY. February 26 – March 1, 2012. Hilton Clearwater Beach Resort, Clearwater, FL USA. Oral presentation.

183. **Volodymyr Yartys**. Magnesium-based nanomaterials for hydrogen and energy storage applications: structure-properties relationship.// Task 22 IEA HIA EXPERT MEETING. May 6 – 10, 2012. Palais Prinz Carl, Heidelberg, Germany. Oral presentation.

184. **Volodymyr Yartys**, Roman V. Denys and Weikang Hu. Magnesium-based nanomaterials for hydrogen and energy storage.// WHEC2012. 19th WORLD HYDROGEN ENERGY CONFERENCE 2012. June 3 – 7, 2012. TORONTO, CANADA. Oral presentation.

185. Christopher C. Nwakwuo, Thomas Holm, Roman V. Denys, Jan Petter Maehlen, Weikang Hu, Jan Ketil Solberg, **Volodymyr A. Yartys**. Structural properties of rapidly solidified La_2MgNi_9 battery electrode alloy.// MH2012, Kyoto, Japan, 21-26 October 2012. Poster. MoP-36. Collected Abstracts. P. 90.

186. A.B. Riabov, M. Latroche, F. Cuevas, R.V. Denys, Weikang Hu, **V.A. Yartys**. *In situ* PND studies of deuterium absorption-desorption in the La_2MgNi_9 metal hydride battery alloy.// MH2012, Kyoto, Japan, 21-26 October 2012. Poster. WeP-57. Collected Abstracts. P. 421.

187. Jan Petter Maehlen, **Volodymyr A. Yartys**, and Jon Eriksen. Development of the materials and metal hydride hydrogen compressors.// MH2012, Kyoto, Japan, 21-26 October 2012. Poster. WeP-80. Collected Abstracts. P. 444.

188. R.V. Denys, **V.A. Yartys**. Thermodynamics and Crystal Chemistry of the $RE_2MgNi_9H_{12-13}$ (RE=La and Nd) Hydrides.// MH2012, Kyoto, Japan, 21-26 October 2012. Poster. MoP-34. Collected Abstracts. P. 88.

189. Suwarno Suwarno, Jan Ketil Solberg, Jan Petter Maehlen, Bente Krogh and **Volodymyr A. Yartys**. Ti-V Alloys for Selective Hydrogen Absorption.// MH2012, Kyoto, Japan, 21-26 October 2012. Poster. TuP-44. Collected Abstracts. P. 256.

190. Weikang Hu, Thomas Holm, Roman Denys, Jan Petter Maehlen and **Volodymyr Yartys**. Electrochemical charge-discharge properties of the La_2MgNi_9 anode for Ni-Metal Hydride batteries.// MH2012, Kyoto, Japan, 21-26 October 2012. Oral presentation. WeOA10. Collected Abstracts. P.320.

191. **V.A. Yartys**. Magnesium-Based Nanostructured Hydrides With Advanced H storage and Electrochemical Properties.// MH2012, Kyoto, Japan, 21-26 October 2012. Invited keynote lecture. TuOA09. Collected Abstracts. P.162.

192. Roman V. Denys, **Volodymyr A. Yartys**, and Colin J. Webb. $LaNi_5$-assisted hydrogenation of $MgNi_2$ in the hybrid structure of $LaMg_2Ni_9D_{9.5}$.// MH2012, Kyoto, Japan, 21-26 October 2012. Poster presentation. MoP38. Collected Abstracts. P.92.

193. Matylda N. Guzik, Stefano Deledda, Magnus H. Sørby, **Volodymyr Yartys** and Bjørn C. Hauback. Ball milling of Mg with Ti/Zr in a reactive hydrogen (deuterium) atmosphere.// MH2012, Kyoto, Japan, 21-26 October 2012. Oral presentation MoOA04. Collected Abstracts. P.40.

194. Volodymyr YARTYS. Mg-based nanocomposites for H Storage and metal hydride battery applications.// Task 32 IEA HIA expert kick-off meeting. April 21 – 25, 2013. Heraklion, Greece.

195. Volodymyr Yartys. Nanostructured RE-Mg-Ni Hydrides for Energy Storage: Structure-Properties Relationship.// GRC 2013 on Hydrogen-Metal Systems Hydrogen Interactions in Energy Storage. Progress in Interstitial Hydrides and Applications. July 14-19, 2013. Lucca (Barga), Italy. Invited talk.

196. Volodymyr Yartys. Mg-based nanocomposites for H Storage and metal hydride battery applications.// The Fifth World Hydrogen Technologies Convention (WHTC2013).
25th – 28th September 2013, Shanghai, China. Invited talk.

197. Volodymyr A. Yartys and Roman V. Denys. Nanostructured Mg-Based Hydrogen and Energy Storage Materials Probed by *in situ* Synchrotron and Neutron Powder Diffraction.// 8th Int. Symposium Hydrogen & Energy. 16-20 February 2014, Zhaoquing, China 2014. Invited talk.

198. Y.M. Shulga, V.A. Smirnov, S.A. Baskakov, A.S. Arbuzov, B.P. Tarasov and **V.A. Yartys.** Graphene-based materials for energy storage: synthesis and properties.// GRAPHENE 2014, 4th Edition. Toulouse, France, 6-9 May 2014. P.151.

199. Rune Wendelbo, Sameer Fotedar and **Volodymyr Yartys.** Reduced graphene oxide decoration with functional nanocrystals.// GRAPHENE 2014, 4th Edition. Toulouse, France, 6-9 May 2014. P.151.

200. M. Lototskyy, **V.A. Yartys**. Comparative analysis of the efficiencies of hydrogen storage systems utilising solid state H storage materials.// 14th International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. 20-25 July 2014. Manchester, U.K. Collected Abstracts. p.99.

201. **Volodymyr A. Yartys** and Roman V. Denys. Structure-properties relationship in nanostructured Mg-based hydrides for energy storage.// 14th International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. 20-25 July 2014. Manchester, U.K. Collected Abstracts. p.107. Invited talk.

202. M. Latroche, F. Cuevas, Weikang Hu, D. Scheptyakov, R.V. Denys and **V.A. Yartys**. Role of the rare earth composition on the performance of working metal-hydride electrodes in Ni-MH alkaline batteries.// 14th International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. 20-25 July 2014. Manchester, U.K. Collected Abstracts. p.121.

203. I.E.Gabis, I.A.Chernov, R.V. Denys, M.A.Dobrotvorskiy, W. Hu, M.Latroche, A.P.Voyt, B.P. Tarasov, A.M.Yafyasov and **V.A.Yartys**. Influence of Kinetics of Hydrogen Transport in a Metal Hydride Anode on the Discharge Properties of the Electrodes of the Ni-MH Batteries.// 14th International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. 20-25 July 2014. Manchester, U.K. Collected Abstracts. p.123.

204. A.A.Volodin, R.V. Denys, G.A.Tsirlina, B.P. Tarasov, M. Fichtner, **V.A.Yartys**. Hydrogen Diffusion in $La_{1.5}Nd_{0.5}MgNi_9$ Alloy Electrodes of the Ni-MH Battery.// 14th International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. 20-25 July 2014. Manchester, U.K. Collected Abstracts. p.350.

205. B.P. Tarasov, V.N. Fokin, E.E. Fokina and **V.A. Yartys**. Synthesis of Hydrides by Interaction of Intermetallics with Ammonia.// 14th International Symposium on Metal-Hydrogen Systems. Fundamentals and Applciations. 20-25 July 2014. Manchester, U.K. Collected Abstracts. p.373.

206. P.V. Fursikov, O.P. Charkin, B.P. Tarasov and **V.A. Yartys**. Experimental and quantum chemical studies of hydrogen interaction with nanostructured composites and clusters based on light metals.// 14th International Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. 20-25 July 2014. Manchester, U.K. Collected Abstracts. p.373.

207. **V.A. Yartys**, V.E. Antonov, A.I. Beskrovnyi, J.-C. Crivello, R.V. Denys, V.K.Fedotov, V.I. Kulakov, M.A.Kuzovnikov, M. Latroche, Yu.G. Morozov, S.G. Sheverev and B.P. Tarasov. Hydrogen assisted phase transition in a trihydride $MgNi_2H_3$ synthesised at high H_2 pressures: thermodynamics, structure and chemical bonding.// 14th International

Symposium on Metal-Hydrogen Systems. Fundamentals and Applications. 20-25 July 2014. Manchester, U.K. Collected Abstracts. p.442.

208. N.A. Nazer, V.A. Yartys, R.V. Denys, P. Vie, M.S. Sørby, B.C. Hauback, L. Arnberg, M. Latroche, F. Cuevas, S. Forseth, D. Scheptyakov, H.Henry. In operando neutron diffraction study of a NMC Li ion battery.// Norwegian Synchrotron and Neutron User Meeting. Abstracts. 19-20 January 2015. Stavanger.

209. Nazia S. Nazer and Volodymyr A. Yartys. Li ion and metal hydride batteries studied in operando by neutron diffraction: a review.// Norwegian Synchrotron and Neutron User Meeting. Abstracts. 19-20 January 2015. Stavanger.

210. V.A. Yartys. Metal Hydride Based Energy Storage: From Materials to Systems. The 2nd International Conference on Mechanical Engineering – ICOME 2015**.** Mechanical Science and Technology for Sustainable Energy. Patra Jasa, Bali, Indonesia. 3-5 September 2015. Keynote lecture.

211. V.A. Yartys and R.V. Denys. Nanostructured metal hydrides for H storage and metal hydride batteries: the role of magnesium.// International Symposium Materials for Energy Storage and Convertion mESC-IS 2015. Ankara, Turkey. 7-0 September 2015. Abstracts. Invited talk.

212. Doğancan Sari, Fatif Pişkin, Volodymyr Yartys, Yener Kuru, Yunus Eren Kalay, Tayfur Öztürk. Combinatorial development of metal hydrides for thermal coupling of solid oxide fuel cells.// International Symposium Materials for Energy Storage and Conversion mESC-IS 2015. Ankara, Turkey. 7-9 September 2015. Abstracts. Poster.

213. Volodymyr A. Yartys. Magnesium based alloys as advanced anodes for the Ni-MH batteries: a review.// Norwegian Synchrotron and Neutron User Meeting. Abstracts. 19-20 January 2015. Stavanger.

214. N.A. Nazer, V.A. Yartys, M. Latroche, F. Cuevas, S. Forseth, P. Vie, R.V. Denys, M.S. Sørby, B.C. Hauback, L. Arnberg, D. Scheptyakov, H.Henry. In operando neutron diffraction study of $LaNdMgNi_9$ as anode for metal hydride battery.// Norwegian Synchrotron and Neutron User Meeting. Abstracts. 19-20 January 2015. Stavanger.

215. Nazia S. Nazer, V.A. Yartys, M. Latroche, F. Cuevas, S. Forseth, P. Vie, R.V. Denys, M.S. Sørby, B.C. Hauback, L. Arnberg, D. Scheptyakov, H.Henry. In operando neutron diffraction study of commercial lithium-ion battery.// Norwegian Synchrotron and Neutron User Meeting. Abstracts. 19-20 January 2015. Stavanger.

216. ChuBin Wan, Roman V. Denys, Volodymyr A. Yartys. In situ studies of phase equilibria in the La-Mg-Ni alloys and their performance as anodes of the metal hydride battery. // Norwegian Synchrotron and Neutron User Meeting. Abstracts. 19-20 January 2015. Stavanger.

217. Volodymyr A. Yartys. Metal-Hydrogen Systems at High H_2 Pressures: New Materials and Metal Hydride Compressors.// Hydrides as Energy Materials HydEM 2016. Aarhus University, Denmark. 1-3 June 2016. Abstracts, p. 13. Invited talk.

218. Volodymyr A. Yartys. Nanostructured Magnesium-Based Hydrides for Hydrogen Based Energy Storage.//International Conference on Nanotechnology, Nanomaterials and Thin Films for Energy Applications. Liverpool, UK. 27-29 July 2016. Invited Oral Presentation.

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International Symposium on Metal-Hydrogen Systems MH2016, 7-12 August 2016, Interlaken, Switzerland. Abstracts, p.169. Invited oral presentation.

220. Serge Nyallang Nyamsi, Mykhaylo V. Lototskyy, Volodymyr A. Yartys. Metal Hydrides For Hydrogen And Thermal Energy Storage From Energy Balance Viewpoint.// 15th International Symposium on Metal-Hydrogen Systems MH2016, 7-12 August 2016, Interlaken, Switzerland. Abstracts, p.232. Oral presentation.

221. N. S. Nazer, R.V. Denys, V.A. Yartys, M. Latroche and F.Cuevas. *In operando* neutron diffraction studies of LaNdMgNi9 alloyas a metal hydride battery anode.// 15th International Symposium on Metal-Hydrogen Systems MH2016, 7-12 August 2016, Interlaken, Switzerland. Abstracts, p.269. Poster.

222. Nazia S. Nazer, Roman V. Denys, H.F. Andersen and Volodymyr A. Yartys. Magnesium silicide synthesized via hydrogen-driven chemical route and its electrochemical performance.// 15th International Symposium on Metal-Hydrogen Systems MH2016, 7-12 August 2016, Interlaken, Switzerland. Abstracts, p.277. Poster.

223. ChuBin Wan, Wei-Kang Hu, R.V. Denys and Volodymyr A. Yartys. *In-situ* Neutron Powder Diffraction studies of phase equilibria in La-Mg-Ni alloys and their electrochemical performance as anodes of the metal hydride battery.// 15th International Symposium on Metal-Hydrogen Systems MH2016, 7-12 August 2016, Interlaken, Switzerland. Abstracts, p.278. Poster.

224. R.V. Denys, M. Lotoskyy, J. Goh, F. Cummings and V.A. Yartys. An outstanding effect of graphite in nano-MgH_2-TiH_2 on the high temperature H charge-discharge performance.// 15th International Symposium on Metal-Hydrogen Systems MH2016, 7-12 August 2016, Interlaken, Switzerland. Abstracts, p.282. Poster.

225. Volodymyr A. Yartys. Magnesium-Based Materials for Hydrogen-Based Energy Storage: Challenges and Future Prospects.// 14th INTERNATIONAL SYMPOSIUM ON PHYSICS OF MATERIALS (ISPMA 14). Prague, 10.9. - 15.9. 2017.- Invited Plenary Talk.

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