# Igor E Gabis

List of Publications by Year
in descending order



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|---|---|---|---|
| 36 papers | 681 citations | 623188 14 h-index | 552369 26 g-index |
| 36 all docs | 36 docs citations | 36 times ranked | 728 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Aluminum hydride as a hydrogen and energy storage material: Past, present and future. Journal of Alloys and Compounds, 2011, 509, S517-S528. | 2.8 | 194 |
| 2 | Kinetics of hydrogen evolution from MgH2: Experimental studies, mechanism and modelling. International Journal of Hydrogen Energy, 2010, 35, 9060-9069. | 3.8 | 89 |
| 3 | Alloys based on Group 5 metals for hydrogen purification membranes. Journal of Alloys and Compounds, 2015, 645, S36-S40. | 2.8 | 43 |
| 4 | Kinetics of dehydrogenation of MgH2 and AlH3. Journal of Alloys and Compounds, 2011, 509, S671-S674. | 2.8 | 39 |
| 5 | Kinetics of hydrogen desorption from the powders of metal hydrides. Journal of Alloys and Compounds, 2005, 404-406, 312-316. | 2.8 | 36 |
| 6 | Kinetics of decomposition of erbium hydride. Journal of Alloys and Compounds, 2003, 356-357, 353-357. | 2.8 | 29 |
| 7 | Study of the kinetics of hydrogen sorption and desorption from titanium. Journal of Alloys and Compounds, 2005, 404-406, 335-338. | 2.8 | 25 |
| 8 | Ultraviolet activation of thermal decomposition of Î±-alane. International Journal of Hydrogen Energy, 2012, 37, 14405-14412. | 3.8 | 23 |
| 9 | Decomposition kinetics of metal hydrides: Experiments and modeling. Journal of Alloys and Compounds, 2013, 580, S243-S246. | 2.8 | 22 |
| 10 | Influence of metal powder particle's shape on the kinetics of hydriding. International Journal of Hydrogen Energy, 2010, 35, 253-258. | 3.8 | 19 |
| 11 | Mathematical modelling of UH3 formation. International Journal of Hydrogen Energy, 2008, 33, 5589-5595. | 3.8 | 16 |
| 12 | A mechanism of ultraviolet activation of the Î±-AlH 3 decomposition. International Journal of Hydrogen Energy, 2014, 39, 15844-15850. | 3.8 | 16 |
| 13 | Hydrogen solubility in V85Ni15 alloy. International Journal of Hydrogen Energy, 2017, 42, 3058-3063. | 3.8 | 16 |
| 14 | Non-isothermal kinetics and in situ SR XRD studies of hydrogen desorption from dihydrides of binary Tiâ€“V alloys. International Journal of Hydrogen Energy, 2013, 38, 14704-14714. | 3.8 | 15 |
| 15 | Permeation of hydrogen through amorphous ferrum membrane. International Journal of Hydrogen Energy, 2001, 26, 457-460. | 3.8 | 13 |
| 16 | Modeling of metal hydride battery anodes at high discharge current densities and constant discharge currents. Electrochimica Acta, 2014, 147, 73-81. | 2.6 | 13 |
| 17 | Hydrogen permeability and structure of vanadium alloy membranes. Petroleum Chemistry, 2017, 57, 483-488. | 0.4 | 10 |
| 18 | Kinetics of Sorption and Release of Hydrogen by Nanoporous Carbon. Materials Science, 2000, 36, 499-505. | 0.3 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Lithiation Products of a Silicon Anode Based on Soft X-ray Emission Spectroscopy: A Theoretical Study. Journal of Physical Chemistry C, 2018, 122, 11096-11108. | 1.5 | 8 |
| 20 | Structure and hydrogen permeability of Vâ€“15Ni alloy. International Journal of Hydrogen Energy, 2019, 44, 27492-27498. | 3.8 | 7 |
| 21 | Kinetics of hydrogen liberation from stoichiometric and nonstoichiometric magnesium hydride. Materials Science, 2007, 43, 620-633. | 0.3 | 5 |
| 22 | Thermal- and photoactivation of aluminum hydride decomposition. Russian Journal of Physical Chemistry A, 2012, 86, 1736-1741. | 0.1 | 5 |
| 23 | Influence of kinetics of hydrogen transport in a metal hydride anode on the discharge properties of the Niâ€“MH batteries. Journal of Alloys and Compounds, 2015, 629, 242-246. | 2.8 | 5 |
| 24 | Luminescent properties of aluminum hydride. Journal of Luminescence, 2015, 166, 162-166. | 1.5 | 4 |
| 25 | Limiting role of desorption in hydrogen transport across a deposited beryllium film. Technical Physics, 1998, 43, 114-116. | 0.2 | 3 |
| 26 | Effect of Sorbed Hydrogen on the Conductivity of Nanoporous Carbon. Materials Science, 2002, 38, 570-575. | 0.3 | 3 |
| 27 | Activation of magnesium hydride by pressing with catalytic additives. Technical Physics Letters, 2017, 43, 190-193. | 0.2 | 3 |
| 28 | Soft X-ray Li-K and Si-L2, 3 Emission from Crystalline and Amorphous Lithium Silicides in Lithium-Ion Batteries Anode. Journal of the Electrochemical Society, 2019, 166, A5362-A5368. | 1.3 | 3 |
| 29 | Studying hydrogen permeability by method of concentration pulses. Journal of Alloys and Compounds, 2005, 404-406, 279-283. | 2.8 | 2 |
| 30 | Modeling high-temperature TDS-spectra peaks of metalâ€“hydrogen systems. Journal of Alloys and Compounds, 2005, 404-406, 332-334. | 2.8 | 2 |
| 31 | Mathematical model of metal-hydride hydrogen tank with quick sorption. Journal of Alloys and Compounds, 2011, 509, S809-S811. | 2.8 | 2 |
| 32 | Using the method of concentration waves for examining diffusion and capture of hydrogen in defective media. Soviet Materials Science, 1990, 25, 391-396. | 0.0 | 1 |
| 33 | Diffusion and penetration of hydrogen through a cobalt foil. Soviet Materials Science, 1992, 27, 333-334. | 0.0 | 1 |
| 34 | Penetration of hydrogen through multilayer metal membranes with thin separated layers. Soviet Materials Science, 1991, 26, 549-551. | 0.0 | 0 |
| 35 | Thermodesorption examination of interaction of hydrogen with traps in silver. Soviet Materials Science, 1992, 27, 596-598. | 0.0 | 0 |
| 36 | Mathematical model of metal-hydride phase change applied to Yttrium. Journal of Physics: Conference Series, 2013, 461, 012042. | 0.3 | 0 |