

# Alexey V Soloninin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1018484/publications.pdf>

Version: 2024-02-01

57  
papers

1,681  
citations

361045

20  
h-index

288905

40  
g-index

57  
all docs

57  
docs citations

57  
times ranked

1086  
citing authors

#	ARTICLE	IF	CITATIONS
1	Exceptional Superionic Conductivity in Disordered Sodium Decahydro- $\alpha$ -decaborate. <i>Advanced Materials</i> , 2014, 26, 7622-7626.	11.1	221
2	Liquid-Like Ionic Conduction in Solid Lithium and Sodium Monocarba-decaborates Near or at Room Temperature. <i>Advanced Energy Materials</i> , 2016, 6, 1502237.	10.2	190
3	Stabilizing Superionic-Conducting Structures via Mixed-Anion Solid Solutions of Monocarba-borate Salts. <i>ACS Energy Letters</i> , 2016, 1, 659-664.	8.8	147
4	Complex high-temperature phase transitions in $\text{Li}_2\text{B}_{12}\text{H}_{12}$ and $\text{Na}_2\text{B}_{12}\text{H}_{12}$ . <i>Journal of Solid State Chemistry</i> , 2014, 212, 81-91.	1.4	109
5	Nuclear Magnetic Resonance Study of Atomic Motion in $\text{A}_2\text{B}_{12}\text{H}_{12}$ ( $\text{A} = \text{Na}, \text{K}, \text{Rb}, \text{Cs}$ ): Anion Reorientations and $\text{Na}^+$ Mobility. <i>Journal of Physical Chemistry C</i> , 2013, 117, 25961-25968.	1.5	82
6	Nuclear Magnetic Resonance Studies of $\text{BH}_4$ Reorientations and Li Diffusion in $\text{LiLa}(\text{BH}_4)_3\text{Cl}$ . <i>Journal of Physical Chemistry C</i> , 2013, 117, 14965-14972.	1.5	79
7	Structural and Dynamical Properties of $\text{NaBH}_4$ and $\text{KBH}_4$ : NMR and Synchrotron X-ray Diffraction Studies. <i>Journal of Physical Chemistry C</i> , 2010, 114, 3712-3718.	1.5	70
8	Nuclear Magnetic Resonance Study of the Rotational Motion and the Phase Transition in $\text{LiBH}_4$ . <i>Journal of Physical Chemistry C</i> , 2008, 112, 18701-18705.	1.5	68
9	Nuclear Magnetic Resonance Study of Reorientational Motion in $\text{Mg}(\text{BH}_4)_2$ . <i>Journal of Physical Chemistry C</i> , 2010, 114, 12370-12374.	1.5	49
10	Anion Reorientations and Cation Diffusion in $\text{LiCB}_{11}\text{H}_{12}$ and $\text{NaCB}_{11}\text{H}_{12}$ : $^1\text{H}$ , $^7\text{Li}$ , and $^{23}\text{Na}$ NMR Studies. <i>Journal of Physical Chemistry C</i> , 2015, 119, 26912-26918.	1.5	45
11	Nuclear magnetic resonance study of Li and H diffusion in the high-temperature solid phase of $\text{LiBH}_4$ . <i>Journal of Solid State Chemistry</i> , 2009, 182, 2357-2361.	1.4	43
12	Hydrogen reaction kinetics of Mg-based alloys synthesized by mechanical milling. <i>Journal of Alloys and Compounds</i> , 2006, 425, 367-372.	2.8	41
13	Kinetics of interaction of Mg-based mechanically activated alloys with hydrogen. <i>Physics of Metals and Metallography</i> , 2006, 102, 421-431.	0.3	41
14	Nuclear Magnetic Resonance Studies of Reorientational Motion and Li Diffusion in $\text{LiBH}_4$ -LiI Solid Solutions. <i>Journal of Physical Chemistry C</i> , 2012, 116, 26177-26184.	1.5	40
15	Comparison of Anion Reorientational Dynamics in $\text{MCB}_9\text{H}_{10}$ and $\text{M}_2\text{B}_{10}\text{H}_{10}$ ( $\text{M} = \text{Li}, \text{Na}$ ) via Nuclear Magnetic Resonance and Quasielastic Neutron Scattering Studies. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1000-1012.	1.5	39
16	Pressure-Collapsed Amorphous $\text{Mg}(\text{BH}_4)_2$ : An Ultradense Complex Hydride Showing a Reversible Transition to the Porous Framework. <i>Journal of Physical Chemistry C</i> , 2014, 118, 23402-23408.	1.5	36
17	Nuclear magnetic resonance studies of atomic motion in borohydride-based materials: Fast anion reorientations and cation diffusion. <i>Journal of Alloys and Compounds</i> , 2015, 645, S428-S433.	2.8	34
18	Reorientational Motion in Alkali-Metal Borohydrides: NMR Data for $\text{RbBH}_4$ and $\text{CsBH}_4$ and Systematics of the Activation Energy Variations. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10305-10309.	1.5	33

#	ARTICLE	IF	CITATIONS
19	NMR Study of Reorientational Motion in Alkaline-Earth Borohydrides: $\hat{I}^2$ and $\hat{I}^3$ Phases of $\text{Mg}(\text{BH}_4)_2$ and $\hat{I}^\pm$ and $\hat{I}^2$ Phases of $\text{Ca}(\text{BH}_4)_2$ . Journal of Physical Chemistry C, 2012, 116, 4913-4920.	1.5	33
20	Nuclear magnetic resonance studies of atomic motion in borohydrides. Journal of Alloys and Compounds, 2011, 509, S535-S539.	2.8	27
21	The anti-perovskite type hydride $\text{InPd}_3\text{H}_{0.89}$ . Journal of Solid State Chemistry, 2010, 183, 2461-2465.	1.4	19
22	Nuclear Magnetic Resonance Study of Atomic Motion in the Mixed Borohydride-“Amide” $\text{Na}_2(\text{BH}_4)(\text{NH}_2)$ . Journal of Physical Chemistry C, 2014, 118, 14805-14812.	1.5	19
23	Anion Disorder in $\text{K}_3\text{BH}_4\text{B}_{12}\text{H}_{12}$ and Its Effect on Cation Mobility. Journal of Physical Chemistry C, 2017, 121, 5503-5514.	1.5	18
24	Comparison of anion and cation dynamics in a carbon-substituted closo-hydroborate salt: $^1\text{H}$ and $^{23}\text{Na}$ NMR studies of solid-solution $\text{Na}_2(\text{CB}_9\text{H}_{10})(\text{CB}_{11}\text{H}_{12})$ . Journal of Alloys and Compounds, 2019, 800, 247-253.	2.8	14
25	Hydrogen diffusion in C15-type $\text{HfMo}_2\text{H}_{0.4}$ : nuclear magnetic resonance evidence of two frequency scales of H hopping. Journal of Physics Condensed Matter, 1999, 11, 10393-10400.	0.7	13
26	Nuclear magnetic resonance studies of ball-milled hydrides. Journal of Alloys and Compounds, 2007, 446-447, 489-494.	2.8	12
27	NMR evidence of two fractions of D atoms with different low-temperature mobilities in C15-type $\text{TaV}_2\text{D}_x$ and $\text{HfMo}_2\text{D}_x$ . Solid State Communications, 2002, 122, 497-501.	0.9	11
28	Effects of partial halide anion substitution on reorientational motion in $\text{NaBH}_4$ : A nuclear magnetic resonance study. Journal of Alloys and Compounds, 2015, 636, 293-297.	2.8	11
29	Nature of Decahydro-closo-decaborate Anion Reorientations in an Ordered Alkali-Metal Salt: $\text{Rb}_2\text{B}_{10}\text{H}_{10}$ . Journal of Physical Chemistry C, 2018, 122, 15198-15207.	1.5	9
30	NMR evidence of two frequency scales of hydrogen jump motion in Ti2Ni-type compounds $\text{Ti}_2\text{CoH}_x$ . Solid State Communications, 2004, 129, 315-318.	0.9	8
31	Hydrogen motion in C14-type $\text{HfCr}_2\text{H}_x$ : quasielastic neutron scattering and NMR studies. Journal of Physics Condensed Matter, 2005, 17, 5011-5025.	0.7	8
32	Hydrogen motion and site occupation in $\text{Ti}_2\text{CoH}_x(\text{D}_x)$ : NMR and neutron scattering studies. Physica B: Condensed Matter, 2007, 392, 353-360.	1.3	8
33	Hydrogen in nonstoichiometric cubic niobium carbides: Neutron vibrational spectroscopy and neutron diffraction studies. Journal of Alloys and Compounds, 2009, 478, 68-74.	2.8	8
34	Atomic Motion in the Complex Hydride $\text{Li}_3(\text{NH}_2)_2\text{I}$ : $^7\text{Li}$ and $^1\text{H}$ Nuclear Magnetic Resonance Studies. Journal of Physical Chemistry C, 2015, 119, 13459-13464.	1.5	8
35	Nuclear Magnetic Resonance Study of Anion and Cation Reorientational Dynamics in $(\text{NH}_4)_2\text{B}_{12}\text{H}_{12}$ . Journal of Physical Chemistry C, 2018, 122, 3256-3262.	1.5	8
36	NMR Study of the Dynamical Properties of $\text{LiLa}(\text{BH}_4)_3\text{Br}$ and $\text{LiLa}(\text{BH}_4)_3\text{I}$ . Applied Magnetic Resonance, 2021, 52, 595-606.	0.6	8

#	ARTICLE	IF	CITATIONS
37	Nuclear magnetic resonance study of hydrogen diffusion in A15-type Nb <sub>3</sub> AlH <sub>x</sub> . Journal of Physics Condensed Matter, 2000, 12, 9607-9616.	0.7	7
38	<sup>45</sup> ScNMR and high-resolution quasielastic neutron scattering studies of localized H(D) motion in $\text{Li}^{\pm}\text{ScH}_x(\text{D}_x)$ . Physical Review B, 2002, 66, .	1.1	7
39	Nuclear magnetic resonance study of hydrogen dynamics in Y(BH <sub>4</sub> ) <sub>3</sub> . Journal of Alloys and Compounds, 2013, 555, 209-212.	2.8	7
40	Low-Temperature Rotational Tunneling of Tetrahydroborate Anions in Lithium Benzimidazolate-Borohydride Li <sub>2</sub> (blm)BH <sub>4</sub> . Journal of Physical Chemistry C, 2019, 123, 20789-20799.	1.5	6
41	<sup>63</sup> Cu NMR spectra, magnetic susceptibility, and transmission electron microscopy of the rapidly quenched alloy Ti <sub>50</sub> Ni <sub>25</sub> Cu <sub>25</sub> . Physics of Metals and Metallography, 2010, 110, 582-587.	0.3	5
42	Nuclear Magnetic Resonance Study of Atomic Motion in Bimetallic Perovskite-Type Borohydrides A <sub>2</sub> (BH <sub>4</sub> ) <sub>3</sub> (A = K, Rb, or Cs). Journal of Physical Chemistry C, 2015, 119, 19689-19696.	1.5	5
43	Nuclear magnetic resonance studies of hydrogen motion in nanostructured Laves-phase hydrides ZrCr <sub>2</sub> H <sub>x</sub> and TaV <sub>2</sub> H <sub>x</sub> . Journal of Physics Condensed Matter, 2008, 20, 275239.	0.7	4
44	NMR Studies of Lithium Diffusion in Li <sub>3</sub> (NH <sub>2</sub> ) <sub>2</sub> I Over Wide Range of Li <sup>+</sup> Jump Rates. Zeitschrift Fur Physikalische Chemie, 2017, 231, .	1.4	4
45	Anion Mobility and Cation Diffusion in Alkali Metal Borohydrides. Physics of Metals and Metallography, 2019, 120, 41-49.	0.3	4
46	Nuclear magnetic resonance study of anion and cation dynamics in CsSiH <sub>3</sub> . Journal of Alloys and Compounds, 2019, 781, 913-918.	2.8	4
47	Hydrogen diffusivity and the anomalous transverse spin relaxation in C14-type HfCr <sub>2</sub> H <sub>x</sub> . Journal of Alloys and Compounds, 2009, 475, 16-20.	2.8	3
48	Nuclear Magnetic Resonance Study of Ball-Milled TiH <sub>2</sub> with C, B, and BN Additives. Journal of Physical Chemistry C, 2010, 114, 646-651.	1.5	3
49	Nuclear magnetic resonance study of atomic motion in the mixed borohydride-amide Li <sub>2</sub> (BH <sub>4</sub> )(NH <sub>2</sub> ). Journal of Alloys and Compounds, 2020, 823, 153821.	2.8	3
50	Studying nanocrystalline superconducting Nb <sub>3</sub> Sn layers in Nb/Cu-Sn composites of various design using NMR and magnetic susceptibility methods. Physics of Metals and Metallography, 2007, 104, 59-66.	0.3	2
51	Effect of mechanical milling on the mobility of hydrogen in the ZrTi <sub>2</sub> -H system stabilized by hydrogen: NMR data. Physics of Metals and Metallography, 2010, 110, 241-249.	0.3	2
52	Hydrogen in the Ti <sub>3</sub> Al intermetallic compound: Study by the NMR method. Physics of Metals and Metallography, 2017, 118, 183-189.	0.3	2
53	Nuclear magnetic resonance study of hydrogen dynamics in Al(BH <sub>4</sub> ) <sub>4</sub> -based hypersalts M[Al(BH <sub>4</sub> ) <sub>4</sub> ] (M = Na, K, Rb, Cs). Journal of Alloys and Compounds, 2018, 745, 179-186.	2.8	2
54	Nuclear magnetic resonance study of hydrogen mobility in LaY <sub>2</sub> Ni <sub>9</sub> H <sub>x</sub> and CeY <sub>2</sub> Ni <sub>9</sub> H <sub>x</sub> . Journal of Solid State Chemistry, 2009, 182, 586-591.	1.4	1

#	ARTICLE	IF	CITATIONS
55	Thermally unstable hydrides of titanium aluminide Ti3Al. Physics of Metals and Metallography, 2011, 111, 353-360.	0.3	1
56	Proton NMR study of $\delta$ -MnH0.06. Solid State Communications, 2004, 131, 115-119.	0.9	0
57	Positions and mobility of hydrogen atoms in Hf2CoH x (D x ) with a structure of the Ti2Ni type: Study by the NMR and neutron diffraction methods. Physics of Metals and Metallography, 2009, 107, 73-79.	0.3	0