

Olga A Babanova

List of Publications by Year in descending order

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37
papers

1,320
citations

471509

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	Anion reorientations and cation diffusion in a carbon-substituted sodium <i>nido</i> -borate Na ₇ C ₂ B ₉ H ₁₂ : ¹ H and ²³ Na NMR studies. Zeitschrift Fur Physikalische Chemie, 2022, 236, 839-851.	2.8	3
2	Dynamical properties of lithium borohydride “ ammine composite LiBH ₄ ·NH ₃ : A nuclear magnetic resonance study. Journal of Alloys and Compounds, 2022, 894, 162446.	5.5	3
3	Na ⁺ diffusivity in carbon-substituted <i>nido</i> - and <i>closo</i> -hydroborate salts: Pulsed-field-gradient NMR studies of Na ₇ -CB ₁₀ H ₁₃ and Na ₂ (CB ₉ H ₁₀)(CB ₁₁ H ₁₂). Journal of Alloys and Compounds, 2021, 850, 156781.	5.5	9
4	NMR Study of the Dynamical Properties of LiLa(BH ₄) ₃ Br and LiLa(BH ₄) ₃ I. Applied Magnetic Resonance, 2021, 52, 595-606.	1.2	8
5	Lithium-ion diffusivity in complex hydrides: Pulsed-field-gradient NMR studies of LiLa(BH ₄) ₃ Cl, Li ₃ (NH ₂) ₂ I and Li-1-CB ₉ H ₁₀ . Solid State Ionics, 2021, 362, 115585.	2.7	7
6	Promoting Persistent Superionic Conductivity in Sodium Monocarba- <i>closo</i> -dodecaborate NaCB ₁₁ H ₁₂ via Confinement within Nanoporous Silica. Journal of Physical Chemistry C, 2021, 125, 16689-16699.	3.1	20
7	Structural and Dynamical Properties of Potassium Dodecahydro-monocarba- <i>closo</i> -dodecaborate: KCB ₁₁ H ₁₂ . Journal of Physical Chemistry C, 2020, 124, 17992-18002.	3.1	24
8	Anion and Cation Dynamics in Polyhydroborate Salts: NMR Studies. Molecules, 2020, 25, 2940.	3.8	23
9	Nuclear magnetic resonance study of atomic motion in the mixed borohydride-amide Li ₂ (BH ₄)(NH ₂). Journal of Alloys and Compounds, 2020, 823, 153821.	5.5	3
10	Low-Temperature Rotational Tunneling of Tetrahydroborate Anions in Lithium Benzimidazolate-Borohydride Li ₂ (blm)BH ₄ . Journal of Physical Chemistry C, 2019, 123, 20789-20799.	3.1	6
11	Comparison of anion and cation dynamics in a carbon-substituted <i>closo</i> -hydroborate salt: ¹ H and ²³ Na NMR studies of solid-solution Na ₂ (CB ₉ H ₁₀)(CB ₁₁ H ₁₂). Journal of Alloys and Compounds, 2019, 800, 247-253.	5.5	14
12	Nuclear magnetic resonance study of anion and cation dynamics in CsSiH ₃ . Journal of Alloys and Compounds, 2019, 781, 913-918.	5.5	4
13	Low-Temperature Rotational Tunneling of Tetrahydroborate Anions in Lithium Benzimidazolate-Borohydride Li(blm)BH. Journal of Physical Chemistry C, 2019, 123, .	3.1	0
14	Nuclear magnetic resonance study of hydrogen dynamics in Al(BH ₄) ₄ -based hypersalts M[Al(BH ₄) ₄] (M = Na, K, Rb, Cs). Journal of Alloys and Compounds, 2018, 745, 179-186.	5.5	2
15	Nuclear Magnetic Resonance Study of Anion and Cation Reorientational Dynamics in (NH ₄) ₂ B ₁₂ H ₁₂ . Journal of Physical Chemistry C, 2018, 122, 3256-3262.	3.1	8
16	Nature of Decahydro- <i>closo</i> -decaborate Anion Reorientations in an Ordered Alkali-Metal Salt: Rb ₂ B ₁₀ H ₁₀ . Journal of Physical Chemistry C, 2018, 122, 15198-15207.	3.1	9
17	Anion Disorder in K ₃ BH ₄ B ₁₂ H ₁₂ and Its Effect on Cation Mobility. Journal of Physical Chemistry C, 2017, 121, 5503-5514.	3.1	18
18	NMR Studies of Lithium Diffusion in Li ₃ (NH ₂) ₂ I Over Wide Range of Li ⁺ Jump Rates. Zeitschrift Fur Physikalische Chemie, 2017, 231, .	2.8	4

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19	Comparison of Anion Reorientational Dynamics in $\text{MBCB}_{9/10}$ and $\text{M}_{2/10}\text{B}_{10}\text{H}_{10}$ ($\text{M} = \text{Li}, \text{Na}$) via Nuclear Magnetic Resonance and Quasielastic Neutron Scattering Studies. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1000-1012.	3.1	39
20	Liquid-Like Ionic Conduction in Solid Lithium and Sodium Monocarbide Decaborates Near or at Room Temperature. <i>Advanced Energy Materials</i> , 2016, 6, 1502237.	19.5	190
21	Stabilizing Superionic-Conducting Structures via Mixed-Anion Solid Solutions of Monocarbide-borate Salts. <i>ACS Energy Letters</i> , 2016, 1, 659-664.	17.4	147
22	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.	5.5	34
23	Atomic Motion in the Complex Hydride $\text{Li}_3(\text{NH}_2)_2\text{Li}$ and LiH Nuclear Magnetic Resonance Studies. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13459-13464.	3.1	8
24	Effects of partial halide anion substitution on reorientational motion in NaBH_4 : A nuclear magnetic resonance study. <i>Journal of Alloys and Compounds</i> , 2015, 636, 293-297.	5.5	11
25	Nuclear Magnetic Resonance Study of Atomic Motion in Bimetallic Perovskite-Type Borohydrides $\text{ACa}(\text{BH}_4)_3$ ($\text{A} = \text{K}, \text{Rb}, \text{or Cs}$). <i>Journal of Physical Chemistry C</i> , 2015, 119, 19689-19696.	3.1	5
26	Anion Reorientations and Cation Diffusion in $\text{LiCB}_{11}\text{H}_{12}$ and $\text{NaCB}_{11}\text{H}_{12}$: ^1H , ^7Li , and ^{23}Na NMR Studies. <i>Journal of Physical Chemistry C</i> , 2015, 119, 26912-26918.	3.1	45
27	Exceptional Superionic Conductivity in Disordered Sodium Decahydrodecaborate. <i>Advanced Materials</i> , 2014, 26, 7622-7626.	21.0	221
28	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.	2.9	109
29	Nuclear Magnetic Resonance Study of Atomic Motion in the Mixed Borohydride "Amide $\text{Na}_2(\text{BH}_4)(\text{NH}_2)$. <i>Journal of Physical Chemistry C</i> , 2014, 118, 14805-14812.	3.1	19
30	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 Na^+ Mobility. <i>Journal of Physical Chemistry C</i> , 2013, 117, 25961-25968.	3.1	82
31	NMR Study of Reorientational Motion in Alkaline-Earth Borohydrides: $\hat{\text{I}}^2$ and $\hat{\text{I}}^3$ Phases of $\text{Mg}(\text{BH}_4)_2$ and $\hat{\text{I}}^2$ and $\hat{\text{I}}^3$ Phases of $\text{Ca}(\text{BH}_4)_2$. <i>Journal of Physical Chemistry C</i> , 2012, 116, 4913-4920.	3.1	33
32	Reorientational Motion in Alkali-Metal Borohydrides: NMR Data for RbBH_4 and CsBH_4 and Systematics of the Activation Energy Variations. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10305-10309.	3.1	33
33	Nuclear magnetic resonance studies of atomic motion in borohydrides. <i>Journal of Alloys and Compounds</i> , 2011, 509, S535-S539.	5.5	27
34	Effect of mechanical milling on the mobility of hydrogen in the $\text{ZrTi}_2\text{-H}$ system stabilized by hydrogen: NMR data. <i>Physics of Metals and Metallography</i> , 2010, 110, 241-249.	1.0	2
35	Structural and Dynamical Properties of NaBH_4 and KBH_4 : NMR and Synchrotron X-ray Diffraction Studies. <i>Journal of Physical Chemistry C</i> , 2010, 114, 3712-3718.	3.1	70
36	Nuclear Magnetic Resonance Study of Reorientational Motion in $\hat{\text{I}}^2\text{-Mg}(\text{BH}_4)_2$. <i>Journal of Physical Chemistry C</i> , 2010, 114, 12370-12374.	3.1	49

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37	Nuclear Magnetic Resonance Study of Ball-Milled TiH ₂ with C, B, and BN Additives. Journal of Physical Chemistry C, 2010, 114, 646-651.	3.1	3