

# Peter Ngene

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8948059/publications.pdf>

Version: 2024-02-01

52  
papers

2,532  
citations

218381

26  
h-index

189595

50  
g-index

53  
all docs

53  
docs citations

53  
times ranked

2226  
citing authors

#	ARTICLE	IF	CITATIONS
1	Materials for hydrogen-based energy storage – past, recent progress and future outlook. <i>Journal of Alloys and Compounds</i> , 2020, 827, 153548.	2.8	518
2	Reversible ammonia-based and liquid organic hydrogen carriers for high-density hydrogen storage: Recent progress. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 7746-7767.	3.8	166
3	LiBH <sub>4</sub> /SBA-15 Nanocomposites Prepared by Melt Infiltration under Hydrogen Pressure: Synthesis and Hydrogen Sorption Properties. <i>Journal of Physical Chemistry C</i> , 2010, 114, 6163-6168.	1.5	143
4	Reversibility of the hydrogen desorption from LiBH <sub>4</sub> : a synergetic effect of nanoconfinement and Ni addition. <i>Chemical Communications</i> , 2010, 46, 8201.	2.2	127
5	Complex hydrides for energy storage. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 7860-7874.	3.8	123
6	Reversibility of the hydrogen desorption from NaBH <sub>4</sub> by confinement in nanoporous carbon. <i>Energy and Environmental Science</i> , 2011, 4, 4108.	15.6	109
7	All-Solid-State Lithium-Sulfur Battery Based on a Nanoconfined LiBH <sub>4</sub> Electrolyte. <i>Journal of the Electrochemical Society</i> , 2016, 163, A2029-A2034.	1.3	90
8	Nanoconfined LiBH <sub>4</sub> and Enhanced Mobility of Li <sup>+</sup> and BH <sub>4</sub> <sup>-</sup> Studied by Solid-State NMR. <i>Journal of Physical Chemistry C</i> , 2012, 116, 22169-22178.	1.5	83
9	Seeing Hydrogen in Colors: Low-Cost and Highly Sensitive Eye Readable Hydrogen Detectors. <i>Advanced Functional Materials</i> , 2014, 24, 2374-2382.	7.8	78
10	Confinement Effects for Lithium Borohydride: Comparing Silica and Carbon Scaffolds. <i>Journal of Physical Chemistry C</i> , 2017, 121, 4197-4205.	1.5	64
11	The role of Ni in increasing the reversibility of the hydrogen release from nanoconfined LiBH <sub>4</sub> . <i>Faraday Discussions</i> , 2011, 151, 47.	1.6	61
12	Enhancing Li-Ion Conductivity in LiBH <sub>4</sub> -Based Solid Electrolytes by Adding Various Nanosized Oxides. <i>ACS Applied Energy Materials</i> , 2020, 3, 4941-4948.	2.5	61
13	Polymer-Induced Surface Modifications of Pd-based Thin Films Leading to Improved Kinetics in Hydrogen Sensing and Energy Storage Applications. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12081-12085.	7.2	53
14	Hydrogen Dynamics in Nanoconfined Lithiumborohydride. <i>Journal of Physical Chemistry C</i> , 2013, 117, 3789-3798.	1.5	51
15	Metal-hydrogen systems with an exceptionally large and tunable thermodynamic destabilization. <i>Nature Communications</i> , 2017, 8, 1846.	5.8	47
16	Full-cell hydride-based solid-state Li batteries for energy storage. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 7875-7887.	3.8	46
17	Room-Temperature Solid-State Lithium-Ion Battery Using a LiBH <sub>4</sub> -MgO Composite Electrolyte. <i>ACS Applied Energy Materials</i> , 2021, 4, 1228-1236.	2.5	45
18	Potassium hydride-intercalated graphite as an efficient heterogeneous catalyst for ammonia synthesis. <i>Nature Catalysis</i> , 2022, 5, 222-230.	16.1	37

#	ARTICLE	IF	CITATIONS
19	Enhanced reversibility of H <sub>2</sub> sorption in nanoconfined complex metal hydrides by alkali metal addition. <i>Journal of Materials Chemistry</i> , 2012, 22, 13209.	6.7	32
20	Combined Effects of Anion Substitution and Nanoconfinement on the Ionic Conductivity of Li-Based Complex Hydrides. <i>Journal of Physical Chemistry C</i> , 2020, 124, 2806-2816.	1.5	32
21	Destabilization of Mg Hydride by Self-Organized Nanoclusters in the Immiscible Mg-Ti System. <i>Journal of Physical Chemistry C</i> , 2015, 119, 12157-12164.	1.5	30
22	Phase Behavior and Ion Dynamics of Nanoconfined LiBH <sub>4</sub> in Silica. <i>Journal of Physical Chemistry C</i> , 2019, 123, 25559-25569.	1.5	29
23	In situ X-ray Raman spectroscopy study of the hydrogen sorption properties of lithium borohydride nanocomposites. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 22651-22658.	1.3	28
24	Effect of Pore Confinement of LiNH <sub>2</sub> on Ammonia Decomposition Catalysis and the Storage of Hydrogen and Ammonia. <i>Journal of Physical Chemistry C</i> , 2016, 120, 27212-27220.	1.5	28
25	In situ X-ray Raman spectroscopy of LiBH <sub>4</sub> . <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 5581.	1.3	27
26	Optical hydrogen sensing with nanoparticulate Pd-Au films produced by spark ablation. <i>Sensors and Actuators B: Chemical</i> , 2015, 221, 290-296.	4.0	26
27	Reversible Li-insertion in nanoscaffolds: A promising strategy to alter the hydrogen sorption properties of Li-based complex hydrides. <i>Nano Energy</i> , 2016, 22, 169-178.	8.2	26
28	Effect of Pore Confinement of NaNH <sub>2</sub> and KNH <sub>2</sub> on Hydrogen Generation from Ammonia. <i>Journal of Physical Chemistry C</i> , 2019, 123, 21487-21496.	1.5	26
29	Li-Ion Diffusion in Nanoconfined LiBH <sub>4</sub> -Li/Al <sub>2</sub> O <sub>3</sub> : From 2D Bulk Transport to 3D Long-Range Interfacial Dynamics. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 38570-38583.	4.0	26
30	Metallic and complex hydride-based electrochemical storage of energy. <i>Progress in Energy</i> , 2022, 4, 032001.	4.6	26
31	The effect of nanoscaffold porosity and surface chemistry on the Li-ion conductivity of LiBH <sub>4</sub> -LiNH <sub>2</sub> /metal oxide nanocomposites. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20687-20697.	5.2	25
32	The influence of silica surface groups on the Li-ion conductivity of LiBH <sub>4</sub> /SiO <sub>2</sub> nanocomposites. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 22456-22466.	1.3	24
33	Hydrogen storage in complex hydrides: past activities and new trends. <i>Progress in Energy</i> , 2022, 4, 032009.	4.6	23
34	Ionic conductivity in complex metal hydride-based nanocomposite materials: The impact of nanostructuring and nanocomposite formation. <i>Journal of Alloys and Compounds</i> , 2022, 901, 163474.	2.8	22
35	Fiber optic hydrogen sensor for a continuously monitoring of the partial hydrogen pressure in the natural gas grid. <i>Sensors and Actuators B: Chemical</i> , 2014, 199, 127-132.	4.0	21
36	Enhanced Room-Temperature Ionic Conductivity of NaCB <sub>11</sub> H <sub>12</sub> via High-Energy Mechanical Milling. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 61346-61356.	4.0	21

#	ARTICLE	IF	CITATIONS
37	Promotion of Hydrogen Desorption from Palladium Surfaces by Fluoropolymer Coating. ChemCatChem, 2016, 8, 1646-1650.	1.8	19
38	Highly sensitive and selective visual hydrogen detectors based on $YxMg_{1-x}$ thin films. Sensors and Actuators B: Chemical, 2014, 203, 745-751.	4.0	17
39	Interface effects in $NaAlH_4$ -carbon nanocomposites for hydrogen storage. International Journal of Hydrogen Energy, 2014, 39, 10175-10183.	3.8	16
40	The hydrogen permeability of Pd-Cu based thin film membranes in relation to their structure: A combinatorial approach. International Journal of Hydrogen Energy, 2015, 40, 3932-3943.	3.8	16
41	Copper sulfide derived nanoparticles supported on carbon for the electrochemical reduction of carbon dioxide. Catalysis Today, 2021, 377, 157-165.	2.2	16
42	Conductor-Insulator Interfaces in Solid Electrolytes: A Design Strategy to Enhance Li-Ion Dynamics in Nanoconfined $LiBH_4/Al_2O_3$ . Journal of Physical Chemistry C, 2021, 125, 15052-15060.	1.5	14
43	Manganese oxide promoter effects in the copper-catalyzed hydrogenation of ethyl acetate. Journal of Catalysis, 2021, 394, 307-315.	3.1	13
44	Carbon supported lithium hydride nanoparticles: Impact of preparation conditions on particle size and hydrogen sorption. International Journal of Hydrogen Energy, 2017, 42, 5188-5198.	3.8	11
45	Structure Dependent Product Selectivity for $CO_2$ Electroreduction on ZnO Derived Catalysts. ChemCatChem, 2021, 13, 1998-2004.	1.8	9
46	Effects of $LiBF_4$ Addition on the Lithium-Ion Conductivity of $LiBH_4$ . Molecules, 2022, 27, 2187.	1.7	7
47	The Nature of Interface Interactions Leading to High Ionic Conductivity in $LiBH_4/SiO_2$ Nanocomposites. ACS Applied Energy Materials, 2022, 5, 8057-8066.	2.5	7
48	Charge-discharge-induced local strain distributions in a lithium amide-borohydride-iodide [ $LiBH_4-LiNH_2-LiI$ ] solid electrolyte. Journal of Energy Storage, 2022, 47, 103600.	3.9	5
49	Eye readable metal hydride based hydrogen tape sensor for health applications. Proceedings of SPIE, 2014, , .	0.8	3
50	Quasi-elastic neutron scattering studies on solid electrolytes for all-solid-state lithium batteries. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s74-s75.	0.0	0
51	(Invited) Light Metal Hydride Nanocomposites As Room Temperature Solid Electrolytes. ECS Meeting Abstracts, 2018, , .	0.0	0
52	Copper Sulfide Derived Nanoparticles Supported on Carbon for the Electrochemical Reduction of Carbon Dioxide. ECS Meeting Abstracts, 2020, MA2020-02, 3198-3198.	0.0	0