

# Valerie Montouillout

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6524908/publications.pdf>

Version: 2024-02-01

71  
papers

3,020  
citations

136950

32  
h-index

168389

53  
g-index

72  
all docs

72  
docs citations

72  
times ranked

3585  
citing authors

#	ARTICLE	IF	CITATIONS
1	Titanium in GGBS-like calcium-magnesium-aluminosilicate glasses: Its role in the glass network, dissolution at alkaline pH and surface layer formation. <i>Journal of Non-Crystalline Solids</i> , 2022, 591, 121708.	3.1	2
2	Impact of trace metals Zn, Cu, Cd and Ni on the reactivity of OPC and GGBS-based hydraulic binders at early age for sediment stabilization. <i>Construction and Building Materials</i> , 2022, 346, 128406.	7.2	5
3	Experimental constraints on Li isotope fractionation during the interaction between kaolinite and seawater. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 292, 333-347.	3.9	30
4	Vitrification, crystallization behavior and structure of zinc aluminosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2021, 555, 120609.	3.1	10
5	Glass structure of industrial ground granulated blast furnace slags (GGBS) investigated by time-resolved Raman and NMR spectroscopies. <i>Journal of Materials Science</i> , 2021, 56, 17490-17504.	3.7	8
6	Structural evolution of high zirconia aluminosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2020, 539, 120050.	3.1	23
7	Hydration Properties and Interlayer Organization in Synthetic C-S-H. <i>Langmuir</i> , 2020, 36, 9449-9464.	3.5	28
8	Ionic conductivity and boron anomaly in binary lithium borate melts. <i>Journal of Non-Crystalline Solids</i> , 2020, 543, 120160.	3.1	12
9	Thermodynamic properties of mixed-layer illite-smectite by calorimetric methods: Acquisition of the enthalpies of mixing of illite and smectite layers. <i>Journal of Chemical Thermodynamics</i> , 2019, 138, 78-97.	2.0	3
10	Mechanism of Calcium Incorporation Inside Sol-Gel Silicate Bioactive Glass and the Advantage of Using Ca(OH) <sub>2</sub> over Other Calcium Sources. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 5906-5915.	5.2	25
11	Deconvolution method of <sup>29</sup> Si MAS NMR spectra applied to homogeneous and phase separated lanthanum aluminosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2019, 503-504, 352-365.	3.1	18
12	Biosourced analogs of elastomer-containing bitumen through hydrothermal liquefaction of <i>Spirulina</i> sp. microalgae residues. <i>Green Chemistry</i> , 2018, 20, 2337-2344.	9.0	17
13	Chemical durability of peraluminous glasses for nuclear waste conditioning. <i>Npj Materials Degradation</i> , 2018, 2, .	5.8	25
14	Thermodynamic properties of C-S-H, C-A-S-H and M-S-H phases: Results from direct measurements and predictive modelling. <i>Applied Geochemistry</i> , 2018, 92, 140-156.	3.0	72
15	Ionic conductivity of lithium borate glasses and local structure probed by high resolution solid-state NMR. <i>Journal of Non-Crystalline Solids</i> , 2018, 484, 57-64.	3.1	29
16	Theoretical isotopic fractionation between structural boron in carbonates and aqueous boric acid and borate ion. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 222, 117-129.	3.9	33
17	Design and properties of a novel radiopaque injectable apatitic calcium phosphate cement, suitable for image-guided implantation. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018, 106, 2786-2795.	3.4	11
18	The response of pre-osteoblasts and osteoclasts to gallium containing mesoporous bioactive glasses. <i>Acta Biomaterialia</i> , 2018, 76, 333-343.	8.3	49

#	ARTICLE	IF	CITATIONS
19	Effect of composition on peraluminous glass properties: An application to HLW containment. <i>Journal of Nuclear Materials</i> , 2017, 483, 90-101.	2.7	12
20	A straightforward approach to enhance the textural, mechanical and biological properties of injectable calcium phosphate apatitic cements (CPCs): CPC/blood composites, a comprehensive study. <i>Acta Biomaterialia</i> , 2017, 62, 328-339.	8.3	15
21	Quantitative mineralogical mapping of hydrated low pH concrete. <i>Cement and Concrete Composites</i> , 2017, 83, 360-373.	10.7	12
22	Distribution of Water in Synthetic Calcium Silicate Hydrates. <i>Langmuir</i> , 2016, 32, 6794-6805.	3.5	72
23	Bioactive glass-gelatin hybrids: building scaffolds with enhanced calcium incorporation and controlled porosity for bone regeneration. <i>Journal of Materials Chemistry B</i> , 2016, 4, 2486-2497.	5.8	34
24	Characterization of boron incorporation and speciation in calcite and aragonite from co-precipitation experiments under controlled pH, temperature and precipitation rate. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 150, 299-313.	3.9	102
25	Crystal structure of magnesium silicate hydrates (M-S-H): The relation with 2:1 Mg-Si phyllosilicates. <i>Cement and Concrete Research</i> , 2015, 73, 228-237.	11.0	139
26	Alkylation of thiophenic compounds over heteropoly acid H <sub>3</sub> PW <sub>12</sub> O <sub>40</sub> supported on MgF <sub>2</sub> . <i>Applied Catalysis B: Environmental</i> , 2014, 152-153, 241-249.	20.2	25
27	Bioactive glass hybrids: a simple route towards the gelatin-SiO <sub>2</sub> -CaO system. <i>Chemical Communications</i> , 2014, 50, 8701.	4.1	16
28	Homogeneity of peraluminous SiO <sub>2</sub> -B <sub>2</sub> O <sub>3</sub> -Al <sub>2</sub> O <sub>3</sub> -Na <sub>2</sub> O-CaO-Nd <sub>2</sub> O <sub>3</sub> glasses: Effect of neodymium content. <i>Journal of Non-Crystalline Solids</i> , 2014, 405, 55-62.	3.1	21
29	Topological, Geometric, and Chemical Order in Materials: Insights from Solid-State NMR. <i>Accounts of Chemical Research</i> , 2013, 46, 1975-1984.	15.6	60
30	Synthesis and Structure Determination of CaSi <sub>1/3</sub> B <sub>2/3</sub> O <sub>8/3</sub> : A New Calcium Borosilicate. <i>Inorganic Chemistry</i> , 2013, 52, 4250-4258.	4.0	31
31	Direct evidence of the role of dispersed ceria on the activation of oxygen in NaX zeolite by coupling the 17O/16O isotopic exchange and 17O solid-state NMR. <i>Journal of Catalysis</i> , 2013, 300, 136-140.	6.2	7
32	Synthesis and Structure Resolution of RbLaF <sub>4</sub> . <i>Inorganic Chemistry</i> , 2012, 51, 2272-2282.	4.0	32
33	Raman and <sup>27</sup> Al NMR structure investigations of aluminate glasses: (1-x)Al <sub>2</sub> O <sub>3</sub> -x MO, with M=Ca, Sr,	3.1	82
34	Detection and use of small J couplings in solid state NMR experiments. <i>Comptes Rendus Chimie</i> , 2010, 13, 117-129.	0.5	59
35	Rearrangement of the structure during nucleation of a cordierite glass doped with TiO <sub>2</sub> . <i>Journal of Physics Condensed Matter</i> , 2010, 22, 185401.	1.8	13
36	Study of alkaline metal ions and glass-formers in glasses with advanced NMR methods and quantum mechanic calculations. <i>Journal of Non-Crystalline Solids</i> , 2010, 356, 187-200.	3.1	3

#	ARTICLE	IF	CITATIONS
37	Structural fluctuations and role of Ti as nucleating agent in an aluminosilicate glass. <i>Journal of Non-Crystalline Solids</i> , 2010, 356, 1368-1373.	3.1	37
38	Environment of titanium and aluminum in a magnesium alumino-silicate glass. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 375107.	1.8	22
39	1D to 3D NMR study of microporous aluminophosphate $AlPO_4$ . <i>Magnetic Resonance in Chemistry</i> , 2009, 47, 942-947.	1.9	36
40	High catalytic cracking activity of Al-MCM-41 type materials prepared from ZSM-5 zeolite crystals and fumed silica. <i>Applied Catalysis A: General</i> , 2008, 344, 61-69.	4.3	20
41	Structure and dynamics of oxide melts and glasses: A view from multinuclear and high temperature NMR. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 249-254.	3.1	59
42	Study of the alkaline environment in mixed alkali compositions by multiple-quantum magic angle nuclear magnetic resonance (MQMAS NMR). <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 333-340.	3.1	33
43	Electrical conductivity and $^{11}B$ NMR studies of sodium borosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 1664-1670.	3.1	44
44	Amorphous materials: Properties, structure, and durability: Structure of Mg- and Mg/Ca aluminosilicate glasses: $^{27}Al$ NMR and Raman spectroscopy investigations. <i>American Mineralogist</i> , 2008, 93, 1721-1731.	1.9	187
45	Local Al site distribution in aluminosilicate glasses by $^{27}Al$ MQMAS NMR. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 180-184.	3.1	121
46	Cation Sublattice Disorder Induced by Swift Heavy Ions in $MgAl_2O_4$ and $ZnAl_2O_4$ Spinel: $^{27}Al$ Solid-State NMR Study. <i>Journal of Physical Chemistry B</i> , 2007, 111, 12707-12714.	2.6	38
47	Synthesis, crystal structure and $^{71}Ga$ solid state NMR of a MOF-type gallium trimesate (MIL-96) with $^{1/4}$ -oxo bridged trinuclear units and a hexagonal 18-ring network. <i>Microporous and Mesoporous Materials</i> , 2007, 105, 111-117.	4.4	74
48	Through-bond homonuclear correlation experiments in solid-state NMR applied to quadrupolar nuclei in $Al-O-P-O-Al$ chains. <i>Chemical Communications</i> , 2006, , 1924-1925.	4.1	26
49	Characterisation, acidity and catalytic activity of Ga-SBA-15 materials prepared following different synthesis procedures. <i>Applied Catalysis A: General</i> , 2006, 309, 177-186.	4.3	52
50	Nature, Structure and Strength of the Acidic Sites of Amorphous Silica Alumina: An IR and NMR Study. <i>Journal of Physical Chemistry B</i> , 2006, 110, 15172-15185.	2.6	242
51	Toward a better description of gallo-phosphate materials in solid-state NMR: 1D and 2D correlation studies. <i>Magnetic Resonance in Chemistry</i> , 2006, 44, 770-775.	1.9	22
52	Synthesis and Characterization of Spinel-Type Gallia-Alumina Solid Solutions. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2005, 631, 2121-2126.	1.2	43
53	NMR and FTIR spectroscopic studies on the acidity of gallia-silica prepared by a sol-gel route. <i>Microporous and Mesoporous Materials</i> , 2004, 67, 259-264.	4.4	40
54	Accessibility of the acid sites in dealuminated small-pore mordenites studied by FTIR of co-adsorbed alkylpyridines and CO. <i>Microporous and Mesoporous Materials</i> , 2004, 71, 157-166.	4.4	125

#	ARTICLE	IF	CITATIONS
55	Identification of tetrahedrally ordered Si <sup>IV</sup> –Al environments in molecular sieves by <sup>27</sup> Al- <sup>29</sup> Si REAPDOR NMR. <i>Chemical Physics Letters</i> , 2004, 390, 79-83.	2.6	10
56	Evidence for Discrepancy between the Surface Lewis Acid Site Strength and Infrared Spectra of Adsorbed Molecules: The Case of Boric Acid/Silica. <i>Journal of Physical Chemistry B</i> , 2004, 108, 16499-16507.	2.6	24
57	New Layered Calcium Organosilicate Hybrids with Covalently Linked Organic Functionalities. <i>Chemistry of Materials</i> , 2004, 16, 3955-3962.	6.7	82
58	Assembly of benzene-1,3,5-tris(methylenephosphonic acid) and guanidinium salt: Single crystal-X-ray characterisation and <sup>31</sup> P solid state NMR investigations. <i>New Journal of Chemistry</i> , 2004, 28, 1244-1249.	2.8	13
59	Palladium complex immobilised on zirconium-phosphite: characterisation by <sup>31</sup> P MAS NMR and TEM and behaviour towards reducing agents. <i>Journal of Molecular Structure</i> , 2003, 659, 135-142.	3.6	7
60	Continuous flow hyperpolarized <sup>129</sup> Xe-MAS NMR studies of microporous materials. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 4479-4483.	2.8	44
61	Unexpected similarities between the surface chemistry of cubic and hexagonal gallia polymorphs. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 1301-1305.	2.8	60
62	Self-Association Of Benzene-1,3,5-Tris-(Methylenephosphonic Acid): Evidence of Charge-Assisted Hydrogen Bonds. <i>Molecular Crystals and Liquid Crystals</i> , 2002, 389, 87-95.	0.9	11
63	Double-Resonance Decoupling for Resolution Enhancement of <sup>31</sup> P Solid-State MAS and <sup>27</sup> Al <sup>31</sup> P MQHETCOR NMR. <i>Solid State Nuclear Magnetic Resonance</i> , 2002, 22, 501-512.	2.3	52
64	A one step process for grafting organic pendants on alumina via the reaction of alumina and phosphonate under microwave irradiation. <i>Chemical Communications</i> , 2001, , 2060-2061.	4.1	22
65	of reference Ga <sup>III</sup> , Ga <sup>V</sup> , and Ga <sup>VI</sup> compounds by MAS and QPASS, extension of gallium/aluminum NMR parameter correlation. <i>Solid State Nuclear Magnetic Resonance</i> , 1999, 15, 159-169.	2.3	77
66	Characterization of MgAl <sub>2</sub> O <sub>4</sub> Precursor Powders Prepared by Aqueous Route. <i>Journal of the American Ceramic Society</i> , 1999, 82, 3299-3304.	3.8	71
67	Resolution enhancement in solid-state MQ-MAS experiments achieved by composite decoupling. <i>Magnetic Resonance in Chemistry</i> , 1998, 36, 956-959.	1.9	36
68	Towards higher resolution for quadrupolar nuclei in solid state NMR at very high field. <i>Comptes Rendus De L'Academie Des Sciences - Series IIc: Chemistry</i> , 1998, 1, 157-162.	0.1	6
69	QPASS: towards higher resolution in NMR of half integer quadrupolar nuclei with high quadrupolar couplings. <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , 1998, 95, 270-279.	0.2	4
70	Order-resolved sideband separation in magic angle spinning NMR of half integer quadrupolar nuclei. <i>Chemical Physics Letters</i> , 1997, 272, 295-300.	2.6	60
71	ODESSA, a New 1D NMR Exchange Experiment for Chemically Equivalent Nuclei in Rotating Solids. <i>Journal of Magnetic Resonance Series A</i> , 1996, 123, 7-15.	1.6	85