Christian Bonhomme

List of Publications by Year
in descending order

62	3,190	186265 28	149698 56
papers	citations	h-index	g-index

69	69	69	3664
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	First-Principles Calculation of NMR Parameters Using the Gauge Including Projector Augmented Wave Method: A Chemistâ€™s Point of View. Chemical Reviews, 2012, 112, 5733-5779.	47.7	446
2	Highly Porous Polyhedral Silsesquioxane Polymers. Synthesis and Characterization. Journal of the American Chemical Society, 1998, 120, 8380-8391.	13.7	373
3	Magnesium incorporation into hydroxyapatite. Biomaterials, 2011, 32, 1826-1837.	11.4	296
4	Combined First-Principles Computational and Experimental Multinuclear Solid-State NMR Investigation of Amino Acids. Journal of Physical Chemistry A, 2005, 109, 6960-6969.	2.5	169
5	A rare example of a porous Ca-MOF for the controlled release of biologically active NO. Chemical Communications, 2013, 49, 7773.	4.1	138
6	Solid-State NMR Characterization of the Surfactantâ'Silica Interface in Templated Silicas:Â Acidic versus Basic Conditions. Chemistry of Materials, 2007, 19, 1343-1354.	6.7	98
7	Advanced Solid State NMR Techniques for the Characterization of Solâ€“Gel-Derived Materials. Accounts of Chemical Research, 2007, 40, 738-746.	15.6	97
8	Combinedab initio computational and experimental multinuclear solid-state magnetic resonance study of phenylphosphonic acid. Magnetic Resonance in Chemistry, 2004, 42, 445-452.	1.9	88
9	New perspectives on calcium environments in inorganic materials containing calciumâ€“oxygen bonds: A combined computationalâ€“experimental 43Ca NMR approach. Chemical Physics Letters, 2008, 464, 42-48.	2.6	83
10	Recent NMR developments applied to organicâ€“inorganic materials. Progress in Nuclear Magnetic Resonance Spectroscopy, 2014, 77, 1-48.	7.5	78
11	Investigation of the Interface in Silica-Encapsulated Liposomes by Combining Solid State NMR and First Principles Calculations. Journal of the American Chemical Society, 2011, 133, 16815-16827.	13.7	69
12	⁸⁷Sr Solid-State NMR as a Structurally Sensitive Tool for the Investigation of Materials: Antiosteoporotic Pharmaceuticals and Bioactive Glasses. Journal of the American Chemical Society, 2012, 134, 12611-12628.	13.7	68
13	Interfacial Ca2+ environments in nanocrystalline apatites revealed by dynamic nuclear polarization enhanced 43Ca NMR spectroscopy. Nature Communications, 2017, 8, 14104.	12.8	55
14	Implementation of High Resolution ⁴³Ca Solid State NMR Spectroscopy: Toward the Elucidation of Calcium Sites in Biological Materials. Journal of the American Chemical Society, 2009, 131, 13430-13440.	13.7	54
15	Studies of octameric vinylsilasesquioxane by carbon-13 and silicon-29 cross polarization magic angle spinning and inversion recovery cross polarization nuclear magnetic resonance spectroscopy. Journal of the Chemical Society Dalton Transactions, 1997, , 1617-1626.	1.1	51
16	Unleashing the Potential of ¹⁷Oâ€...NMR Spectroscopy Using Mechanochemistry. Angewandte Chemie - International Edition, 2017, 56, 6803-6807.	13.8	47
17	Higher Magnetic Fields, Finer MOF Structural Information: ¹⁷O Solid-State NMR at 35.2 T. Journal of the American Chemical Society, 2020, 142, 14877-14889.	13.7	47
18	New perspectives in the PAW/GIPAW approach: JP-O-Si coupling constants, antisymmetric parts of shift tensors and NQR predictions. Magnetic Resonance in Chemistry, 2010, 48, S86-S102.	1.9	42

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19	Solid State NMR Investigation of Intact Human Bone Quality: Balancing Issues and Insight into the Structure at the Organicâ€“Mineral Interface. Journal of Physical Chemistry C, 2012, 116, 6320-6331.	3.1	42
20	The first direct probing of porosity on supported mesoporous silica thin films through hyperpolarised129Xe NMR. Chemical Communications, 2002, , 2476-2477.	4.1	41
21	First Principles Calculations of NMR Parameters in Biocompatible Materials Science: The Case Study of Calcium Phosphates, Î²- and Î³-Ca(PO3)2. Combination with MAS-J Experiments. Chemistry of Materials, 2007, 19, 6367-6369.	6.7	41
22	Whewellite, CaC2O4â‹…H2O: structural study by a combined NMR, crystallography and modelling approach. CrystEngComm, 2013, 15, 8840.	2.6	40
23	Hyperoxaluria is related to whewellite and hypercalciuria to weddellite: What happens when crystalline conversion occurs?. Comptes Rendus Chimie, 2016, 19, 1492-1503.	0.5	38
24	Studies of silicophosphate derivatives by 31Pâ†'29Si CP MAS NMR. Solid State Nuclear Magnetic Resonance, 2005, 27, 242-246.	2.3	37
25	Synthesis and Characterization of Crystalline Structures Based on Phenylboronate Ligands Bound to Alkaline Earth Cations. Inorganic Chemistry, 2011, 50, 7802-7810.	4.0	35
26	From crystalline to amorphous calcium pyrophosphates: A solid state Nuclear Magnetic Resonance perspective. Acta Biomaterialia, 2016, 31, 348-357.	8.3	33
27	Organosilicas based on purineâ€“pyrimidinebase pair assemblies: a solid state NMR point of view. Journal of Materials Chemistry, 2008, 18, 392-399.	6.7	32
28	DFT-NMR Investigation and ⁵¹V 3QMAS Experiments for Probing Surface OH Ligands and the Hydrogen-Bond Network in a Polyoxovanadate Cluster: The Case of Cs₄[H₂V₁₀O₂₈]Â·4H₂O. Journal of the American Chemical Society, 2010, 132, 4653-4668.	13.7	32
29	Characterisation of solâ€“gel derived titanium oxopolymers: first evidence of Tiâ€“OH groups through1Hâ€“17O CP NMR experiments. Journal of Materials Chemistry, 1998, 8, 985-989.	6.7	28
30	GIPAW (gauge including projected augmented wave) and local dynamics in 13C and 29Si solid state NMR: the study case of silsesquioxanes (RSiO1.5)8. Physical Chemistry Chemical Physics, 2009, 11, 6953.	2.8	27
31	Microfabricated Inserts for Magic Angle Coil Spinning (MACS) Wireless NMR Spectroscopy. PLoS ONE, 2012, 7, e42848.	2.5	27
32	Vibrational Signatures of Calcium Oxalate Polyhydrates. ChemistrySelect, 2018, 3, 8801-8812.	1.5	27
33	Structural study of calcium phosphonates: a combined synchrotron powder diffraction, solid-state NMR and first-principle calculations approach. CrystEngComm, 2013, 15, 8763.	2.6	26
34	Direct ¹⁷O Isotopic Labeling of Oxides Using Mechanochemistry. Inorganic Chemistry, 2020, 59, 13050-13066.	4.0	24
35	Hydroxyapatites: Key Structural Questions and Answers from Dynamic Nuclear Polarization. Analytical Chemistry, 2017, 89, 10201-10207.	6.5	23
36	Pushing the limits of sensitivity and resolution for natural abundance ⁴³Ca NMR using ultra-high magnetic field (35.2 T). Chemical Communications, 2018, 54, 9591-9594.	4.1	22

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37	High-resolution solid state NMR experiments for the characterization of calcium phosphate biomaterials and biominerals. Journal of Materials Research, 2011, 26, 2355-2368.	2.6	21
38	Denoising NMR time-domain signal by singular-value decomposition accelerated by graphics processing units. Solid State Nuclear Magnetic Resonance, 2014, 61-62, 28-34.	2.3	21
39	Boronate Ligands in Materials: Determining Their Local Environment by Using a Combination of IR/Solidâ€State NMR Spectroscopies and DFT Calculations. Chemistry - A European Journal, 2013, 19, 880-891.	3.3	19
40	Multinuclear Solid-State NMR Investigation of Hexaniobate and Hexatantalate Compounds. Inorganic Chemistry, 2016, 55, 5946-5956.	4.0	19
41	Denoising applied to spectroscopies â€“ part I: concept and limits. Applied Spectroscopy Reviews, 2019, 54, 602-630.	6.7	18
42	A soft-chemistry approach to the synthesis of amorphous calcium ortho/pyrophosphate biomaterials of tunable composition. Acta Biomaterialia, 2020, 103, 333-345.	8.3	18
43	Advances in Characterisation Methods for Sol-Gel Derived Materials: High Resolution Solid State Nuclear Magnetic Resonance. Journal of Sol-Gel Science and Technology, 2004, 31, 9-17.	2.4	17
44	Nanostructuring of Hybrid Silicas through a Selfâ€Recognition Process. Chemistry - A European Journal, 2009, 15, 5002-5005.	3.3	17
45	Morphology of Calcium Oxalate Polyhydrates: A Quantum Chemical and Computational Study. Crystal Growth and Design, 2020, 20, 3807-3815.	3.0	17
46	Recent directions in the solid-state NMR study of synthetic and natural calcium phosphates. Solid State Nuclear Magnetic Resonance, 2020, 107, 101663.	2.3	15
47	Unleashing the Potential of ¹⁷Oâ€…NMR Spectroscopy Using Mechanochemistry. Angewandte Chemie, 2017, 129, 6907-6911.	2.0	14
48	Exploring the Molecular Structure of Imidazoliumâ€“Silicaâ€Based Nanoparticle Networks by Combining Solidâ€State NMR Spectroscopy and Firstâ€Principles Calculations. Chemistry - A European Journal, 2014, 20, 15188-15196.	3.3	13
49	Calcium phosphates: First-principles calculations vs. solid-state NMR experiments. Comptes Rendus Chimie, 2008, 11, 398-406.	0.5	12
50	Structural elucidation of silica present in kidney stones coming from Burkina Faso. Comptes Rendus Chimie, 2016, 19, 1573-1579.	0.5	12
51	Influence of Ionic Additives on Triclinic Calcium Pyrophosphate Dihydrate Precipitation. Crystal Growth and Design, 2017, 17, 37-50.	3.0	10
52	Coordination Polymers Based on Alkylboronate Ligands: Synthesis, Characterization, and Computational Modelling. European Journal of Inorganic Chemistry, 2015, 2015, 1182-1191.	2.0	9
53	17 O solidâ€state NMR at ultrahigh magnetic field of 35.2ÂT: Resolution of inequivalent oxygen sites in different phases of MOF MILâ€53(Al). Magnetic Resonance in Chemistry, 2021, 59, 940-950.	1.9	9
54	Coordination Networks Based on Boronate and Benzoxaborolate Ligands. Crystals, 2016, 6, 48.	2.2	8

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55	⁸⁷Sr, ¹¹⁹Sn, ¹²⁷I Single and {¹H/¹⁹F}â€Double Resonance Solidâ€State NMR Experiments: Application to Inorganic Materials and Nanobuilding Blocks. ChemistrySelect, 2016, 1, 4509-4519.	1.5	8
56	Denoising applied to spectroscopies â€“ Part II: Decreasing computation time. Applied Spectroscopy Reviews, 2020, 55, 173-196.	6.7	8
57	Advances in the synthesis and structure of Î±-canaphite: a multitool and multiscale study. CrystEngComm, 2020, 22, 3130-3143.	2.6	8
58	A ⁴³Ca nuclear magnetic resonance perspective on octacalcium phosphate and its hybrid derivatives. Magnetic Resonance in Chemistry, 2021, 59, 1048-1061.	1.9	8
59	Investigating CaOx Crystal Formation in the Absence and Presence of Polyphenols under Microfluidic Conditions in Relation with Nephrolithiasis. Crystal Growth and Design, 2020, 20, 7683-7693.	3.0	6
60	Insight into the local environment of magnesium and calcium in low-coordination-number organo-complexes using ²⁵Mg and ⁴³Ca solid-state NMR: a DFT study. Acta Crystallographica Section C, Structural Chemistry, 2017, 73, 208-218.	0.5	4
61	A novel multinuclear solid-state NMR approach for the characterization of kidney stones. Magnetic Resonance, 2021, 2, 653-671.	1.9	4
62	Innentitelbild: Unleashing the Potential of ¹⁷Oâ€…NMR Spectroscopy Using Mechanochemistry (Angew. Chem. 24/2017). Angewandte Chemie, 2017, 129, 6780-6780.	2.0	0