

LuÃ-s M Mafra

List of Publications by Year in descending order

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93
papers

3,505
citations

109321

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149698

56
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102
all docs

102
docs citations

102
times ranked

4855
citing authors

#	ARTICLE	IF	CITATIONS
1	Elucidating the Germanium Distribution in ITQ-13 Zeolites by Density Functional Theory**. Chemistry - A European Journal, 2022, 28, .	3.3	3
2	Moisture effect on the separation of CO ₂ /CH ₄ mixtures with amine-functionalised porous silicas. Chemical Engineering Journal, 2022, 443, 136271.	12.7	8
3	Through-space hopping transport in an iodine-doped perylene-based metal-organic framework. Molecular Systems Design and Engineering, 2022, 7, 1065-1072.	3.4	2
4	Unravelling moisture-induced CO ₂ chemisorption mechanisms in amine-modified sorbents at the molecular scale. Journal of Materials Chemistry A, 2021, 9, 5542-5555.	10.3	28
5	Storage and delivery of H ₂ S by microporous and mesoporous materials. Microporous and Mesoporous Materials, 2021, 320, 111093.	4.4	8
6	2D Layered Dipeptide Crystals for Piezoelectric Applications. Advanced Functional Materials, 2021, 31, 2102524.	14.9	21
7	â€œHiddenâ€•CO ₂ in Amine-Modified Porous Silicas Enables Full Quantitative NMR Identification of Physi- and Chemisorbed CO ₂ Species. Journal of Physical Chemistry C, 2021, 125, 14797-14806.	3.1	10
8	What Is Being Measured with P-Bearing NMR Probe Molecules Adsorbed on Zeolites?. Journal of the American Chemical Society, 2021, 143, 13616-13623.	13.7	27
9	2D Layered Dipeptide Crystals for Piezoelectric Applications (Adv. Funct. Mater. 43/2021). Advanced Functional Materials, 2021, 31, 2170320.	14.9	2
10	Water-Soluble Polymeric Carbon Nitride Colloidal Nanoparticles for Highly Selective Quasi-Homogeneous Photocatalysis. Angewandte Chemie, 2020, 132, 495-503.	2.0	15
11	Water-Soluble Polymeric Carbon Nitride Colloidal Nanoparticles for Highly Selective Quasi-Homogeneous Photocatalysis. Angewandte Chemie - International Edition, 2020, 59, 487-495.	13.8	107
12	Nature of the multicomponent crystal of salicylic acid and 1,2-phenylenediamine. CrystEngComm, 2020, 22, 708-719.	2.6	4
13	Quantification of Brønsted Acid Sites in Zeolites by Water Desorption Thermogravimetry. European Journal of Inorganic Chemistry, 2020, 2020, 1860-1866.	2.0	3
14	Chirality-Dependent Growth of Self-Assembled Diphenylalanine Microtubes. Crystal Growth and Design, 2019, 19, 6414-6421.	3.0	38
15	Enhancing Adamantylamine Solubility through Salt Formation: Novel Products Studied by X-ray Diffraction and Solid-State NMR. Crystal Growth and Design, 2019, 19, 1860-1873.	3.0	19
16	Unravelling the Structure of Chemisorbed CO ₂ Species in Mesoporous Aminosilicas: A Critical Survey. Environmental Science & Technology, 2019, 53, 2758-2767.	10.0	36
17	¹ H- ³¹ P HETCOR NMR elucidates the nature of acid sites in zeolite HZSM-5 probed with trimethylphosphine oxide. Chemical Communications, 2019, 55, 12635-12638.	4.1	23
18	Hydrogen bonding networks in gabapentin protic pharmaceutical salts: NMR and in silico studies. Magnetic Resonance in Chemistry, 2019, 57, 243-255.	1.9	2

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19	Detecting Proton Transfer in CO ₂ Species Chemisorbed on Amine-Modified Mesoporous Silicas by Using ¹³ C-NMR Chemical Shift Anisotropy and Smart Control of Amine Surface Density. <i>Chemistry - A European Journal</i> , 2018, 24, 10136-10145.	3.3	21
20	Amine functionalized porous silica for CO ₂ /CH ₄ separation by adsorption: Which amine and why. <i>Chemical Engineering Journal</i> , 2018, 336, 612-621.	12.7	75
21	Synthetic and Catalytic Potential of Amorphous Mesoporous Aluminosilicates Prepared by Postsynthetic Aluminations of Silica in Aqueous Media. <i>ChemCatChem</i> , 2018, 10, 1385-1397.	3.7	7
22	Revisiting the crystal structure of dickite: X-ray diffraction, solid-state NMR, and DFT calculations study. <i>American Mineralogist</i> , 2018, 103, 812-818.	1.9	4
23	Understanding Polymorphic Control of Pharmaceuticals Using Imidazolium-Based Ionic Liquid Mixtures as Crystallization Directing Agents. <i>Crystal Growth and Design</i> , 2017, 17, 428-432.	3.0	19
24	Microwave-assisted N,N-dialkylation of amine-functionalized periodic mesoporous phenylene-silica: An easy and fast way to design materials. <i>Microporous and Mesoporous Materials</i> , 2017, 249, 10-15.	4.4	11
25	Structure of Chemisorbed CO ₂ Species in Amine-Functionalized Mesoporous Silicas Studied by Solid-State NMR and Computer Modeling. <i>Journal of the American Chemical Society</i> , 2017, 139, 389-408.	13.7	107
26	A supramolecular strategy based on molecular dipole moments for high-quality covalent organic frameworks. <i>Chemical Communications</i> , 2016, 52, 7986-7989.	4.1	50
27	Can ionic liquids be the key for pharmaceutical polymorphic control? Gabapentin as a case study. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s360-s360.	0.1	0
28	Packing Interactions and Physicochemical Properties of Novel Multicomponent Crystal Forms of the Anti-Inflammatory Azelaic Acid Studied by X-ray and Solid-State NMR. <i>Crystal Growth and Design</i> , 2016, 16, 154-166.	3.0	30
29	Interaction of CO ₂ and CH ₄ with Functionalized Periodic Mesoporous Phenylene-Silica: Periodic DFT Calculations and Gas Adsorption Measurements. <i>Journal of Physical Chemistry C</i> , 2016, 120, 3863-3875.	3.1	41
30	Boron removal and reinsertion studies in 10B- ¹¹ B exchanged HAMS-1B (H-[B]-ZSM-5) borosilicate molecular sieves using solid-state NMR. <i>Journal of Catalysis</i> , 2016, 334, 14-22.	6.2	20
31	Combination of solid-state NMR, DFT and XRPD for determination of a theophylline:4-aminobenzoic acid cocrystal phase. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s491-s491.	0.1	0
32	Understanding packing interactions and physicochemical properties of novel multicomponent crystal forms of azelaic acid-based anti-inflammatory drugs combining X-ray and NMR. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s256-s257.	0.1	0
33	X-ray and NMR Crystallography Studies of Novel Theophylline Cocrystals Prepared by Liquid Assisted Grinding. <i>Crystal Growth and Design</i> , 2015, 15, 3674-3683.	3.0	57
34	Diazole-based powdered cocrystal featuring a helical hydrogen-bonded network: Structure determination from PXRD, solid-state NMR and computer modeling. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 65, 49-63.	2.3	28
35	Chitin-glucan complex production by <i>Komagataella pastoris</i> : Downstream optimization and product characterization. <i>Carbohydrate Polymers</i> , 2015, 130, 455-464.	10.2	55
36	Rationalizing the role of the anion in CO ₂ capture and conversion using imidazolium-based ionic liquid modified mesoporous silica. <i>RSC Advances</i> , 2015, 5, 64220-64227.	3.6	53

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37	Sulfonated Graphene Oxide as Effective Catalyst for Conversion of 5-(Hydroxymethyl)furfural into Biofuels. <i>ChemSusChem</i> , 2014, 7, 804-812.	6.8	90
38	Catalytic dehydration of fructose to HMF over sulfonic acid functionalized periodic mesoporous organosilicas: role of the acid density. <i>Catalysis Science and Technology</i> , 2014, 4, 2235-2240.	4.1	62
39	Solid acids with SO ₃ H groups and tunable surface properties: versatile catalysts for biomass conversion. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11813-11824.	10.3	98
40	Multinuclear solid-state NMR characterization of the Brønsted/Lewis acid properties in the BP HAMS-1B (H-[B]-ZSM-5) borosilicate molecular sieve using adsorbed TMPO and TBPO probe molecules. <i>Journal of Catalysis</i> , 2014, 316, 240-250.	6.2	46
41	Mesoporous carbon-silica solid acid catalysts for producing useful bio-products within the sugar-platform of biorefineries. <i>Green Chemistry</i> , 2014, 16, 4292-4305.	9.0	62
42	Thermal and mechanical stability of lanthanide-containing glass-ceramic sealants for solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2014, 2, 1834-1846.	10.3	31
43	Microwave assisted N-alkylation of amine functionalized crystal-like mesoporous phenylene-silica. <i>Dalton Transactions</i> , 2013, 42, 5631.	3.3	14
44	NMR Crystallography: Toward Chemical Shift-Driven Crystal Structure Determination of the Î²-Lactam Antibiotic Amoxicillin Trihydrate. <i>Crystal Growth and Design</i> , 2013, 13, 2390-2395.	3.0	45
45	Melilite glass-ceramic sealants for solid oxide fuel cells: effects of ZrO ₂ additions assessed by microscopy, diffraction and solid-state NMR. <i>Journal of Materials Chemistry A</i> , 2013, 1, 6471.	10.3	13
46	Identifying Selective Host-Guest Interactions Based on Hydrogen Bond Donor-Acceptor Pattern in Functionalized Al-MIL-53 Metal-Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2013, 117, 19991-20001.	3.1	38
47	KCa ₄ (BO ₃) ₃ :Ln ³⁺ (Ln = Dy, Eu, Tb) phosphors for near UV excited white-light-emitting diodes. <i>AIP Advances</i> , 2013, 3, .	1.3	53
48	Packing Interactions in Hydrated and Anhydrous Forms of the Antibiotic Ciprofloxacin: a Solid-State NMR, X-ray Diffraction, and Computer Simulation Study. <i>Journal of the American Chemical Society</i> , 2012, 134, 71-74.	13.7	128
49	Combining Multinuclear High-Resolution Solid-State MAS NMR and Computational Methods for Resonance Assignment of Glutathione Tripeptide. <i>Journal of Physical Chemistry A</i> , 2012, 116, 6711-6719.	2.5	40
50	Production of yeast chitin-glucan complex from biodiesel industry byproduct. <i>Process Biochemistry</i> , 2012, 47, 1670-1675.	3.7	39
51	Series of Metal Organic Frameworks Assembled from Ln(III), Na(I), and Chiral Flexible-Achiral Rigid Dicarboxylates Exhibiting Tunable UV-vis-IR Light Emission. <i>Inorganic Chemistry</i> , 2012, 51, 1703-1716.	4.0	63
52	Structural Characterization of Zeolites by Advanced Solid State NMR Spectroscopic Methods. <i>Annual Reports on NMR Spectroscopy</i> , 2012, 77, 259-351.	1.5	44
53	Co ^{II} /Zn ^{II} (<sc>L</sc>-Tyrosine) Magnetic Metal-Organic Frameworks. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 5259-5268.	2.0	18
54	Understanding the high catalytic activity of propylsulfonic acid-functionalized periodic mesoporous benzenesilicas by high-resolution ¹ H solid-state NMR spectroscopy. <i>Journal of Materials Chemistry</i> , 2012, 22, 7412.	6.7	31

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55	Synthesis of an O-alkynyl-chitosan and its chemoselective conjugation with a PEG-like amino-azide through click chemistry. <i>Carbohydrate Polymers</i> , 2012, 87, 240-249.	10.2	83
56	Hydrothermal synthesis, crystal structures and photoluminescence properties of mixed europium-yttrium organic frameworks. <i>Journal of Solid State Chemistry</i> , 2012, 186, 165-170.	2.9	35
57	Strategies for copper bis(oxazoline) immobilization onto porous silica based materials. <i>Microporous and Mesoporous Materials</i> , 2012, 158, 26-38.	4.4	24
58	Adsorption and Activation of CO ₂ by Amine-Modified Nanoporous Materials Studied by Solid-State NMR and ¹³ CO ₂ Adsorption. <i>Chemistry of Materials</i> , 2011, 23, 1387-1395.	6.7	175
59	Layered double hydroxides with interlayer borate anions: A critical evaluation of synthesis methodology and pH-independent orientations in nano-galleries. <i>Applied Clay Science</i> , 2011, 51, 308-316.	5.2	58
60	Improving the 1H indirect dimension resolution of 2D CRAMPS NMR spectra: A simulation and experimental investigation. <i>Solid State Nuclear Magnetic Resonance</i> , 2011, 39, 81-87.	2.3	1
61	Metal Organic Frameworks Assembled from Y(III), Na(I), and Chiral Flexible-Achiral Rigid Dicarboxylates. <i>Inorganic Chemistry</i> , 2010, 49, 7917-7926.	4.0	34
62	Clean synthesis of molecular recognition polymeric materials with chiral sensing capability using supercritical fluid technology. Application as HPLC stationary phases. <i>Biosensors and Bioelectronics</i> , 2010, 25, 1742-1747.	10.1	59
63	3D-to-2D Stepwise Deconstruction of a Water Framework Templated by a Nanoporous Organic-Inorganic Hybrid Host. <i>Chemistry - A European Journal</i> , 2010, 16, 7741-7749.	3.3	14
64	Revisiting the Thermal Decomposition of Layered ³ Titanium Phosphate and Structural Elucidation of Its Intermediate Phases. <i>Inorganic Chemistry</i> , 2010, 49, 2630-2638.	4.0	17
65	Novel chiral MOFs constructed by both mixed metals and dicarboxylate ligands. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2010, 66, s260-s260.	0.3	0
66	A Simple Mechanochemical Route to Layered Double Hydroxides: Synthesis of Hydrotalcite-Like Mg ₃ Al ₂ (OH) ₆ LDH by Manual Grinding in a Mortar. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2009, 635, 1470-1475.	1.2	66
67	1H-to-1H double-quantum CRAMPS NMR at very-fast MAS ($\nu_{1/2}R=35\text{kHz}$): A resolution enhancement method to probe 1H-to-1H proximities in solids. <i>Journal of Magnetic Resonance</i> , 2009, 196, 88-91.	2.1	18
68	Assessing the performance of windowed 1H CRAMPS methods, on biological solids, at high-field and MAS up to 35kHz. <i>Journal of Magnetic Resonance</i> , 2009, 197, 20-27.	2.1	18
69	High-resolution 1H homonuclear dipolar recoupling NMR spectra of biological solids at MAS rates up to 67kHz. <i>Journal of Magnetic Resonance</i> , 2009, 199, 111-114.	2.1	62
70	Carboxylate-intercalated layered double hydroxides aged under microwave-hydrothermal treatment. <i>Journal of Solid State Chemistry</i> , 2009, 182, 18-26.	2.9	36
71	Yttrium-succinates coordination polymers: Hydrothermal synthesis, crystal structure and thermal decomposition. <i>Journal of Solid State Chemistry</i> , 2009, 182, 3365-3373.	2.9	12
72	Combining STMAS and CRAMPS NMR spectroscopy: High-resolution HETCOR NMR spectra of quadrupolar and 1H nuclei in solids. <i>Chemical Physics Letters</i> , 2009, 470, 337-341.	2.6	18

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73	Characterization of an extracellular polysaccharide produced by a Pseudomonas strain grown on glycerol. <i>Bioresource Technology</i> , 2009, 100, 859-865.	9.6	186
74	New Crystalline Layered Zinc Phosphate with 10-Membered-Ring Channels Perpendicular to Layers. <i>Inorganic Chemistry</i> , 2009, 48, 4598-4600.	4.0	19
75	A general nonaqueous route to crystalline alkaline earth aluminate nanostructures. <i>Nanoscale</i> , 2009, 1, 360.	5.6	29
76	Multi-functional rare-earth hybrid layered networks: photoluminescence and catalysis studies. <i>Journal of Materials Chemistry</i> , 2009, 19, 2618.	6.7	90
77	Structural characterization of two novel chiral Y(III)-MOFs. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009, 65, s299-s299.	0.3	0
78	Practical aspects of Leeâ€“Goldburg based CRAMPS techniques for high-resolution ¹ H NMR spectroscopy in solids: Implementation and applications. <i>Journal of Magnetic Resonance</i> , 2008, 194, 264-282.	2.1	51
79	Two novel supramolecular organicâ€“inorganic adducts containing dibenzo-30-crown-10 and H3PM12O40 (M=W or Mo). <i>Journal of Molecular Structure</i> , 2008, 888, 99-106.	3.6	14
80	Interconvertible Modular Framework and Layered Lanthanide(III)-Etidronic Acid Coordination Polymers. <i>Journal of the American Chemical Society</i> , 2008, 130, 150-167.	13.7	153
81	Characterization of Layered ³ Titanium Phosphate (C ₂ H ₅ NH ₃)[Ti(H _{1.5} PO ₄)(PO ₄) ₂ ·H ₂ O Intercalate: A Combined NMR, Synchrotron XRD, and DFT Calculations Study. <i>Chemistry of Materials</i> , 2008, 20, 3944-3953.	6.7	27
82	Photoluminescent Rare-Earth Based Biphenolate Lamellar Nanostructures. <i>Journal of Physical Chemistry C</i> , 2007, 111, 2539-2544.	3.1	37
83	Photoluminescent Lanthanideâ€“Organic 2D Networks:â€“ A Combined Synchrotron Powder X-ray Diffraction and Solid-State NMR Study. <i>Chemistry of Materials</i> , 2007, 19, 3527-3538.	6.7	67
84	Energy Transfer and Emission Quantum Yields of Organicâ€“Inorganic Hybrids Lacking Metal Activator Centers. <i>Journal of Physical Chemistry C</i> , 2007, 111, 3275-3284.	3.1	70
85	A pentanuclear oxovanadium(V) phosphate complex with phenanthroline. <i>Inorganic Chemistry Communication</i> , 2006, 9, 34-38.	3.9	10
86	Characterization of microporous aluminophosphate IST-1 using ¹ H Leeâ€“Goldburg techniques. <i>Journal of Magnetic Resonance</i> , 2006, 180, 236-244.	2.1	14
87	X-ray Diffraction and Solid-State NMR Studies of a Germanium Binuclear Complex. <i>Chemistry - A European Journal</i> , 2006, 12, 363-375.	3.3	17
88	Crystal Structure, Solid-State NMR Spectroscopic and Photoluminescence Studies of Organic-Inorganic Hybrid Materials (HL) ₆ [Ge ₆ (OH) ₆ (hedp) ₆ ·2(L)·nH ₂ O, L = hqn or phen. <i>European Journal of Inorganic Chemistry</i> , 2006, 2006, 4741-4751.	2.0	14
89	Hydrothermal synthesis, structural characterisation and magnetic behaviour of hybrid complexes of N-(phosphonomethyl)iminodiacetate. <i>Journal of Molecular Structure</i> , 2005, 754, 51-60.	3.6	21
90	Multiplex MQMAS NMR of quadrupolar nuclei. <i>Solid State Nuclear Magnetic Resonance</i> , 2005, 28, 13-21.	2.3	27

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91	[Co(H ₂ O) ₆]{[Co(C ₄ H ₄ N ₂)(H ₂ O) ₂][V ₂ O ₂ (pmda) ₂]}·2H ₂ O [H ₄ pmda is N-(phosphonomethyl)iminodiacetic acid]: the first two-dimensional hybrid framework containing [V ₂ O ₂ (pmda) ₂] ₄ building blocks. Acta Crystallographica Section E: Structure Reports Online, 2005, 61, m1628-m1632.	0.2	5
92	Optimised hydrothermal synthesis of multi-dimensional hybrid coordination polymers containing flexible organic ligands. Progress in Solid State Chemistry, 2005, 33, 113-125.	7.2	44
93	Structural Characterization of Layered β -Titanium Phosphate (C ₆ H ₁₃ NH ₃)[Ti(HPO ₄)(PO ₄)]·H ₂ O. Chemistry of Materials, 2005, 17, 6287-6294.	6.7	24