

Rene Verel

List of Publications by Year in descending order

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78
papers

3,992
citations

126708

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118652

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89
docs citations

89
times ranked

4860
citing authors

#	ARTICLE	IF	CITATIONS
1	Soil phosphomonoesters in large molecular weight material comprise multiple components. Soil Science Society of America Journal, 2022, 86, 345-357.	1.2	1
2	The molecular size continuum of soil organic phosphorus and its chemical associations. Geoderma, 2022, 412, 115716.	2.3	5
3	Structure and Framework Association of Lewis Acid Sites in MOR Zeolite. Journal of the American Chemical Society, 2022, 144, 10377-10385.	6.6	23
4	Unraveling the molecular mechanism of MIL-53(Al) crystallization. Nature Communications, 2022, 13, .	5.8	22
5	Correlating the Structural Evolution of ZnO/Al ₂ O ₃ to Spinel Zinc Aluminate with its Catalytic Performance in Propane Dehydrogenation. Journal of Physical Chemistry C, 2021, 125, 14065-14074.	1.5	14
6	Reduction of Nitrogen Oxides by Hydrogen with Rhodium(I)–Platinum(II) Olefin Complexes as Catalysts. Angewandte Chemie - International Edition, 2021, 60, 25372-25380.	7.2	12
7	Methane Transformation over Copper-Exchanged Zeolites: From Partial Oxidation to C–C Coupling and Formation of Hydrocarbons. ACS Catalysis, 2021, 11, 12543-12556.	5.5	17
8	Pathways of Methane Transformation over Copper-Exchanged Mordenite as Revealed by In-Situ NMR and IR Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 910-918.	7.2	50
9	Pathways of Methane Transformation over Copper-Exchanged Mordenite as Revealed by In-Situ NMR and IR Spectroscopy. Angewandte Chemie, 2020, 132, 920-928.	1.6	34
10	Aluminum Redistribution in ZSM-5 Zeolite upon Interaction with Gaseous Halogens and Hydrogen Halides and Implications in Catalysis. Journal of Physical Chemistry C, 2020, 124, 722-733.	1.5	8
11	Atomic-Scale Insight into the Structure of Metastable $\text{In}^3\text{-Ga}_2\text{O}_3$ Nanocrystals and their Thermally-Driven Transformation to $\text{In}^2\text{-Ga}_2\text{O}_3$. Journal of Physical Chemistry C, 2020, 124, 20578-20588.	1.5	24
12	Oxidative dehydrogenation of propane on silica-supported vanadyl sites promoted with sodium metavanadate. Catalysis Science and Technology, 2020, 10, 7186-7193.	2.1	2
13	Lead-Halide Scalar Couplings in ^{207}Pb NMR of APbX_3 Perovskites ($\text{A} = \text{Cs}$, Methylammonium, Tl) ^{207}Pb NMR. Journal of Physical Chemistry C, 2020, 124, 10784-10794.	1.6	51
14	Transformation of titanium carbide into mesoporous titania for catalysed HBr oxidation. Catalysis Science and Technology, 2020, 10, 4072-4083.	2.1	2
15	Quantitative measures of ^{31}P in soil using solution ^{31}P NMR spectroscopy and spectral deconvolution fitting including a broad signal. Environmental Sciences: Processes and Impacts, 2020, 22, 1084-1094.	1.7	8
16	Bulk and Nanocrystalline Cesium Lead-Halide Perovskites as Seen by Halide Magnetic Resonance. ACS Central Science, 2020, 6, 1138-1149.	5.3	43
17	Reducibility and Dispersion Influence the Activity in Silica-Supported Vanadium-Based Catalysts for the Oxidative Dehydrogenation of Propane: The Case of Sodium Decavanadate. ACS Catalysis, 2020, 10, 2314-2321.	5.5	22
18	Identification of lower-order inositol phosphates (IP_5 and IP_6) and ^{31}P NMR spectroscopy. Biogeosciences, 2020, 17, 5079-5095.	1.3	7

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19	Low-valent homobimetallic Rh complexes: influence of ligands on the structure and the intramolecular reactivity of Rh ^{II} intermediates. <i>Chemical Science</i> , 2019, 10, 7937-7945.	3.7	15
20	Substituent-controlled, mild oxidative fluorination of iodoarenes: synthesis and structural study of aryl I(III)- and I(V)-fluorides. <i>Chemical Science</i> , 2019, 10, 7251-7259.	3.7	21
21	The structural composition of soil phosphomonoesters as determined by solution ³¹ P NMR spectroscopy and transverse relaxation (T ₂) experiments. <i>Geoderma</i> , 2019, 345, 31-37.	2.3	16
22	Lanthanum vanadate catalysts for selective and stable methane oxybromination. <i>Journal of Catalysis</i> , 2018, 363, 69-80.	3.1	16
23	Elucidating the Distribution and Speciation of Boron and Cesium in BCsX Zeolite Catalysts for Styrene Production. <i>ChemPhysChem</i> , 2018, 19, 437-445.	1.0	12
24	Determining the predominant tautomeric structure of iodine-based group-transfer reagents by ¹⁷ O NMR spectroscopy. <i>Beilstein Journal of Organic Chemistry</i> , 2018, 14, 2289-2294.	1.3	0
25	CO ₂ to Methanol Hydrogenation on Zirconia-Supported Copper Nanoparticles: Reaction Intermediates and the Role of the Metal-Support Interface. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2318-2323.	7.2	435
26	CO ₂ to Methanol Hydrogenation on Zirconia-Supported Copper Nanoparticles: Reaction Intermediates and the Role of the Metal-Support Interface. <i>Angewandte Chemie</i> , 2017, 129, 2358-2363.	1.6	51
27	Influence of aluminates on the hydration kinetics of tricalcium silicate. <i>Cement and Concrete Research</i> , 2017, 100, 245-262.	4.6	146
28	Solid-State NMR: Surface Chemistry Applications. , 2017, , 121-127.		9
29	Selective Production of Carbon Monoxide via Methane Oxychlorination over Vanadyl Pyrophosphate. <i>Angewandte Chemie</i> , 2016, 128, 15848-15852.	1.6	3
30	Innenrücktitelbild: Selective Production of Carbon Monoxide via Methane Oxychlorination over Vanadyl Pyrophosphate (Angew. Chem. 50/2016). <i>Angewandte Chemie</i> , 2016, 128, 15909-15909.	1.6	0
31	Role of Tricoordinate Al Sites in CH ₃ ReO ₃ /Al ₂ O ₃ Olefin Metathesis Catalysts. <i>Journal of the American Chemical Society</i> , 2016, 138, 6774-6785.	6.6	42
32	Probing the molecular character of periodic mesoporous organosilicates via photoluminescence of Lewis acid-base adducts. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13746-13749.	1.3	3
33	Improved Supported Metal Oxides for the Oxidative Dehydrogenation of Propane. <i>Topics in Catalysis</i> , 2016, 59, 1545-1553.	1.3	27
34	The reactivity of acyl chlorides towards sodium phosphoethynolate, Na(OCP): a mechanistic case study. <i>Chemical Science</i> , 2016, 7, 6125-6131.	3.7	32
35	Selective Production of Carbon Monoxide via Methane Oxychlorination over Vanadyl Pyrophosphate. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15619-15623.	7.2	14
36	Elucidation of Anchoring and Restructuring Steps during Synthesis of Silica-Supported Vanadium Oxide Catalysts. <i>Chemistry of Materials</i> , 2016, 28, 5495-5504.	3.2	39

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37	Ligand ordering determines the catalytic response of hybrid palladium nanoparticles in hydrogenation. <i>Catalysis Science and Technology</i> , 2016, 6, 1621-1631.	2.1	45
38	Silica-Grafted SnIV Catalysts in Hydrogen-Transfer Reactions. <i>ChemCatChem</i> , 2015, 7, 3190-3190.	1.8	0
39	Aluminum Redistribution during the Preparation of Hierarchical Zeolites by Desilication. <i>Chemistry - A European Journal</i> , 2015, 21, 14156-14164.	1.7	44
40	Silica-Grafted Sn ^{IV} Catalysts in Hydrogen-Transfer Reactions. <i>ChemCatChem</i> , 2015, 7, 3270-3278.	1.8	24
41	Enhanced Two-Dimensional Dispersion of Group V Metal Oxides on Silica. <i>ACS Catalysis</i> , 2015, 5, 5787-5793.	5.5	75
42	Surface Chemistry of Hydrophobic Silica Aerogels. <i>Chemistry of Materials</i> , 2015, 27, 6737-6745.	3.2	100
43	Direct evidence of the effect of synthesis conditions on aluminum siting in zeolite ferrierite: A 27Al MQ MAS NMR study. <i>Microporous and Mesoporous Materials</i> , 2014, 193, 111-114.	2.2	30
44	Hydrophobization of Silica Aerogels: Insights from Quantitative Solid-State NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 25545-25554.	1.5	38
45	A continuous process for glyoxal valorisation using tailored Lewis-acid zeolite catalysts. <i>Green Chemistry</i> , 2014, 16, 1176-1186.	4.6	59
46	Thermal restructuring of silica-grafted CrO_2Cl and VOCl_2 species. <i>Dalton Transactions</i> , 2013, 42, 12725.	1.6	20
47	Thermal Restructuring of Silica-Grafted TiCl_x Species and Consequences for Epoxidation Catalysis. <i>Chemistry - A European Journal</i> , 2013, 19, 9849-9858.	1.7	25
48	Crystal and Electronic Structure of the Lithium-Rich Silver Silicide $\text{Li}_{12}\text{Ag}_{17}\text{Si}_4$ ($x=0.15$). <i>Chemistry - A European Journal</i> , 2013, 19, 16528-16531.	1.7	6
49	Aluminum coordination in rhyolite and andesite glasses and melts: Effect of temperature, pressure, composition and water content. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 77, 11-26.	1.6	38
50	Low-Temperature Preparation of Tailored Carbon Nanostructures in Water. <i>Nano Letters</i> , 2012, 12, 2573-2578.	4.5	34
51	Direct Electrophilic N-Trimethylfluoromethylation of Azoles by a Hypervalent Iodine Reagent. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6511-6515.	7.2	105
52	Properties of the DREAM scheme and its optimization for application to proteins. <i>Journal of Biomolecular NMR</i> , 2012, 53, 103-112.	1.6	23
53	A supplementary coil for 2H decoupling with commercial HCN MAS probes. <i>Journal of Magnetic Resonance</i> , 2012, 214, 76-80.	1.2	13
54	Probing Water Accessibility in HET-s(218-289) Amyloid Fibrils by Solid-State NMR. <i>Journal of Molecular Biology</i> , 2011, 405, 765-772.	2.0	33

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55	SrO-Al ₂ O ₃ mixed oxides: A promising class of catalysts for oxidative coupling of methane. <i>Journal of Catalysis</i> , 2011, 281, 241-253.	3.1	31
56	A Proton-Detected 4D Solid-State NMR Experiment for Protein Structure Determination. <i>ChemPhysChem</i> , 2011, 12, 915-918.	1.0	160
57	Protocols for the Sequential Solid-State NMR Spectroscopic Assignment of a Uniformly Labeled 25 kDa Protein: HET-s(1-227). <i>ChemBioChem</i> , 2010, 11, 1543-1551.	1.3	126
58	Direct Detection of ³ h^{i>}N² Hydrogen-Bond Scalar Couplings in Proteins by Solid-State NMR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 9322-9325.	7.2	51
59	Characterization of different water pools in solid-state NMR protein samples. <i>Journal of Biomolecular NMR</i> , 2009, 45, 319-327.	1.6	239
60	Polymorphism in an Amyloid-Like Fibril-Forming Model Peptide. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 5842-5845.	7.2	53
61	Polarization Transfer over the Water-Protein Interface in Solids. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 5851-5854.	7.2	44
62	Atomic Models of De Novo Designed cc ² -Met Amyloid-Like Fibrils. <i>Journal of Molecular Biology</i> , 2008, 376, 898-912.	2.0	34
63	²⁹ Si NMR spectroscopy of silica glass: T1 relaxation and constraints on the Si-O-Si bond angle distribution. <i>Chemical Geology</i> , 2008, 256, 269-277.	1.4	65
64	The fold of Î±-synuclein fibrils. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 8637-8642.	3.3	499
65	EFFECT OF CLIMATE AND VEGETATION ON SOIL ORGANIC CARBON, HUMUS FRACTIONS, ALLOPHANES, IMOGOLITE, KAOLINITE, AND OXYHYDROXIDES IN VOLCANIC SOILS OF ETNA (SICILY). <i>Soil Science</i> , 2007, 172, 673-691.	0.9	46
66	Structural control on bulk melt properties: Single and double quantum ²⁹ Si NMR spectroscopy on alkali-silicate glasses. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 6002-6018.	1.6	89
67	Improved resolution in ¹³ C solid-state spectra through spin-state-selection. <i>Journal of Magnetic Resonance</i> , 2007, 184, 322-329.	1.2	27
68	Amyloids and Prions: structure, conformations and conformational transitions as seen by NMR. <i>FASEB Journal</i> , 2007, 21, A96.	0.2	0
69	Polarization-Transfer Methods in Solid-State Magic-Angle-Spinning NMR: Adiabatic CN Pulse Sequences. <i>ChemPhysChem</i> , 2004, 5, 851-862.	1.0	13
70	Fast MAS Total Through-Bond Correlation Spectroscopy. <i>Journal of Magnetic Resonance</i> , 2001, 148, 459-464.	1.2	98
71	Adiabatic Dipolar Recoupling in Solid-State NMR: The DREAM Scheme. <i>Journal of Magnetic Resonance</i> , 2001, 150, 81-99.	1.2	189
72	INADEQUATE-CR Experiments in the Solid State. <i>Journal of Magnetic Resonance</i> , 1999, 140, 300-303.	1.2	44

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73	A homonuclear spin-pair filter for solid-state NMR based on adiabatic-passage techniques. Chemical Physics Letters, 1998, 287, 421-428.	1.2	128
74	The mechanism of the colour shift of astaxanthin in β -crustacyanin as investigated by ^{13}C MAS NMR and specific isotope enrichment. Pure and Applied Chemistry, 1997, 69, 2085-2090.	0.9	20
75	J cross polarization in magic-angle-spinning NMR. Chemical Physics Letters, 1997, 266, 465-472.	1.2	20
76	Adiabatic homonuclear polarization transfer in magic-angle-spinning solid-state NMR Presented in part at the 38th ENC conference, March 23-27, 1997, Orlando, Florida, USA.1. Chemical Physics Letters, 1997, 280, 31-39.	1.2	58
77	Reduction of Nitrogen Oxides by Hydrogen with Rh(I)-Pt(II) Olefin Complexes as Catalysts. Angewandte Chemie, 0, , .	1.6	3
78	Magnetic Resonance Spectroscopy of Bulk and Nanocrystalline Cesium Lead Halide Perovskites. , 0, , .		0