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List of Publications by Year
in descending order

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85 papers	2,922 citations	159585 30 h-index	175258 52 g-index
85 all docs	85 docs citations	85 times ranked	2782 citing authors

#	Article	IF	Citations
1	Rethinking the molecular structures of W^{VI}O_x sites dispersed on titania: distinct mono-oxo configurations at 430 Â°C and temperature-dependent transformations. Dalton Transactions, 2022, 51, 7455-7475.	3.3	4
2	Advanced Synthesis and Characterization of Vanadia/Titania Catalysts through a Molecular Approach. Catalysts, 2021, 11, 322.	3.5	4
3	Molecular structure and termination configuration of Oxo-Re(VII) catalyst sites supported on Titania. Catalysis Today, 2020, 355, 665-677.	4.4	6
4	Proton-transfer in 1,1,3,3 tetramethyl guanidine by means of ultrasonic relaxation and Raman spectroscopies and molecular orbital calculations. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 229, 117958.	3.9	17
5	In Situ Raman Spectroscopy as a Tool for Discerning Subtle Structural Differences between Commercial (Ce,Zr)O2-Based OSC Materials of Identical Composition. Catalysts, 2020, 10, 462.	3.5	9
6	Tuning the configuration of dispersed oxometallic sites in supported transition metal oxide catalysts: A temperature dependent Raman study. Catalysis Today, 2019, 336, 74-83.	4.4	10
7	Dynamics and vibrational coupling of methyl acetate dissolved in ethanol. Chemical Physics, 2019, 522, 1-9.	1.9	19
8	Di-oxo and tri-oxo Re(VII)-oxosulfato complexes in the Re2O7-K2S2O7 molten system. Molecular structure, vibrational properties and temperature-dependent interconversion. Vibrational Spectroscopy, 2019, 100, 14-21.	2.2	4
9	A Novel Analysis of Transient Isothermal 18O Isotopic Exchange on Commercial CexZr1âˆ'xO2-Based OSC Materials. Topics in Catalysis, 2019, 62, 219-226.	2.8	20
10	Ceria nanoparticles shape effects on the structural defects and surface chemistry: Implications in CO oxidation by Cu/CeO2 catalysts. Applied Catalysis B: Environmental, 2018, 230, 18-28.	20.2	359
11	Heterogeneity of deposited phases in supported transition metal oxide catalysts: reversible temperature-dependent evolution of molecular structures and configurations. Physical Chemistry Chemical Physics, 2018, 20, 1742-1751.	2.8	10
12	Molten and glassy tellurium(IV) oxosulfato complexes in the TeO 2 â€“K 2 S 2 O 7 system studied by Raman spectroscopy: Stoichiometry, vibrational properties and molecular structure. Vibrational Spectroscopy, 2018, 97, 85-90.	2.2	2
13	Structural and Redox Properties of Ce_{1â€“x}Zr_xO_{2âˆ'Î´} and Ce_{0.8}Zr_{0.15}RE_{0.05}O_{2âˆ'Î´} (RE: La, Nd, Pr, Y) Solids Studied by High Temperature in Situ Raman Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 7931-7943.	3.1	61
14	Molecular structure and reactivity of titania-supported transition metal oxide catalysts synthesized by equilibrium deposition filtration for the oxidative dehydrogenation of ethane. Comptes Rendus Chimie, 2016, 19, 1226-1236.	0.5	5
15	Molybdena deposited on titania by equilibrium deposition filtration: structural evolution of oxoâ€“molybdenum(<scp>vi</scp>) sites with temperature. Physical Chemistry Chemical Physics, 2016, 18, 23980-23989.	2.8	17
16	Gold catalysts supported on Y-modified ceria for CO-free hydrogen production via PROX. Applied Catalysis B: Environmental, 2016, 188, 154-168.	20.2	47
17	Glass-forming ability of TeO2 and temperature induced changes on the structure of the glassy, supercooled, and molten states. Journal of Chemical Physics, 2015, 142, 154503.	3.0	40
18	Low-temperature waterâ€“gas shift on Pt/Ce0.5La0.5O2âˆ'Î´: Effect of support synthesis method. Catalysis Today, 2015, 242, 153-167.	4.4	18

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19	Vibrational dephasing and frequency shifts of hydrogen-bonded pyridineâ€“water complexes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 135, 31-38.	3.9	23
20	Unraveling the role of microenvironment and hydrodynamic forces on the vibrational relaxation rates of pyridineâ€“water complexes. Journal of Molecular Liquids, 2014, 198, 299-306.	4.9	11
21	Temperature-Dependent Evolution of the Molecular Configuration of Oxo-Tungsten(VI) Species Deposited on the Surface of Titania. Journal of Physical Chemistry C, 2014, 118, 11319-11332.	3.1	18
22	On the configuration, molecular structure and vibrational properties of MoOx sites on alumina, zirconia, titania and silica. Catalysis Science and Technology, 2013, 3, 1869.	4.1	59
23	Waterâ€“Gas Shift Reaction on Pt/Ce_{1â€“x}Ti_xO_{2â^Î´}: The Effect of Ce/Ti Ratio. Journal of Physical Chemistry C, 2013, 117, 25467-25477.	3.1	48
24	Liquid phase dynamics of molten M2S2O7 (M=K, Cs): A temperature dependent Raman spectroscopic study. Vibrational Spectroscopy, 2013, 65, 66-73.	2.2	12
25	Molybdenum(VI) Oxosulfato Complexes in MoO3â€“K2S2O7â€“K2SO4 Molten Mixtures: Stoichiometry, Vibrational Properties, and Molecular Structures. Journal of Physical Chemistry A, 2012, 116, 8861-8872.	2.5	14
26	Short-time microscopic dynamics of aqueous methanol solutions. Molecular Physics, 2012, 110, 3095-3102.	1.7	9
27	An operando Raman study of molecular structure and reactivity of molybdenum(vi) oxide supported on anatase for the oxidative dehydrogenation of ethane. Physical Chemistry Chemical Physics, 2012, 14, 2216-2228.	2.8	32
28	Distribution of tellurite polymorphs in the xM2Oâ€“(1â^'x)TeO2 (M=Li, Na, K, Cs, and Rb) binary glasses using Raman spectroscopy. Vibrational Spectroscopy, 2012, 59, 18-22.	2.2	32
29	Raman Spectroscopic Study of Tungsten(VI) Oxosulfato Complexes in WO₃â^'K₂S₂O₇â^'K₂SO₄ Molten Mixtures: Stoichiometry, Vibrational Properties, and Molecular Structure. Journal of Physical Chemistry A, 2011, 115, 4214-4222.	2.5	14
30	In Situ Raman and FTIR Spectroscopy of Molybdenum(VI) Oxide Supported on Titania Combined with ¹⁸O/¹⁶O Exchange: Molecular Structure, Vibrational Properties, and Vibrational Isotope Effects. Journal of Physical Chemistry C, 2011, 115, 2146-2154.	3.1	42
31	Structural characterization and catalytic properties of bis(1,1,3,3-tetramethylguanidinium) dichromate. Polyhedron, 2011, 30, 785-789.	2.2	4
32	Structural and vibrational properties of molybdena catalysts supported on alumina and zirconia studied by in situ Raman and FTIR spectroscopies combined with 18O/16O isotopic substitution. Catalysis Today, 2010, 158, 146-155.	4.4	18
33	Stoichiometry, Vibrational Modes, and Structure of Niobium(V) Oxosulfato Complexes in the Molten Nb₂O₅â^'K₂S₂O₇â^'K₂SO₄ System Studied by Raman Spectroscopy. Journal of Physical Chemistry A, 2010, 114, 7485-7493.	2.5	8
34	Interfacial Impregnation Chemistry in the Synthesis of Molybdenum Catalysts Supported on Titania. Journal of Physical Chemistry C, 2010, 114, 11868-11879.	3.1	31
35	Temperature â€“ dependent evolution of molecular configurations of oxomolybdenum species on MoO3/TiO2 catalysts monitored by in situ Raman spectroscopy. Studies in Surface Science and Catalysis, 2010, 175, 613-616.	1.5	6
36	Dinuclear complex formation in TaCl5â€“AlCl3 molten mixtures: Vibrational modes and thermodynamics. Vibrational Spectroscopy, 2009, 49, 258-264.	2.2	2

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37	Propane oxidative dehydrogenation over vanadia catalysts supported on mesoporous silicas with varying pore structure and size. Catalysis Today, 2009, 141, 245-253.	4.4	51
38	Cobalt oxide supported on alumina catalysts prepared by various methods for use in catalytic afterburner of PEM fuel cell. Catalysis Today, 2009, 143, 38-44.	4.4	46
39	Thermodynamic Analysis of Reaction Equilibria in Ionic and Molecular Liquid Systems by High-Temperature Raman Spectroscopy. Applied Spectroscopy, 2009, 63, 1050-1056.	2.2	0
40	Molecular structure and activity of molybdena catalysts supported on zirconia for ethane oxidative dehydrogenation studied by operando Raman spectroscopy. Journal of Catalysis, 2008, 260, 178-187.	6.2	49
41	Thermal Dissociation of Molten KHSO₄: Temperature Dependence of Raman Spectra and Thermodynamics. Journal of Physical Chemistry B, 2008, 112, 11996-12000.	2.6	22
42	Support effects on structure and activity of molybdenum oxide catalysts for the oxidative dehydrogenation of ethane. Catalysis Today, 2007, 127, 139-147.	4.4	65
43	Vanadia-based SCR catalysts supported on tungstated and sulfated zirconia: Influence of doping with potassium. Journal of Catalysis, 2007, 251, 459-473.	6.2	91
44	Molecular structure and catalytic activity of V2O5/TiO2 catalysts for the SCR of NO by NH3: In situ Raman spectra in the presence of O2, NH3, NO, H2, H2O, and SO2. Journal of Catalysis, 2006, 239, 1-12.	6.2	174
45	Particle size effects on the reducibility of titanium dioxide and its relation to the waterâ€“gas shift activity of Pt/TiO2 catalysts. Journal of Catalysis, 2006, 240, 114-125.	6.2	245
46	An operando Raman study of structure and reactivity of alumina-supported molybdenum oxide catalysts for the oxidative dehydrogenation of ethane. Journal of Catalysis, 2006, 242, 16-25.	6.2	99
47	Establishing the gas phase dimerization of niobium(V) fluoride and tantalum(V) fluoride by quantitative Raman spectroscopy. Vibrational Spectroscopy, 2005, 37, 133-139.	2.2	12
48	Molecular structure and reactivity of vanadia-based catalysts for propane oxidative dehydrogenation studied by in situ Raman spectroscopy and catalytic activity measurements. Journal of Catalysis, 2004, 222, 293-306.	6.2	145
49	Vanadia?silica and vanadia?cesium?silica catalysts for oxidation of SO2. Journal of Catalysis, 2004, 225, 24-36.	6.2	13
50	Crystal Structure and Spectroscopic Properties of CsVO2SO4. Inorganic Chemistry, 2004, 43, 3697-3701.	4.0	21
51	Oxidation of sulfur dioxide over supported solid V2O5/SiO2 and supported molten salt V2O5?Cs2SO4/SiO2 catalysts: molecular structure and reactivity. Journal of Catalysis, 2004, 225, 337-337.	6.2	2
52	Selective catalytic reduction of NO with NH3 over mesoporous V2O5â€“TiO2â€“SiO2 catalysts. Journal of Catalysis, 2003, 217, 172-172.	6.2	60
53	Crystal Structure and Spectroscopic Properties of Na2K6(VO)2(SO4)7. Inorganic Chemistry, 2002, 41, 2417-2421.	4.0	15
54	Structure of Vanadium Oxosulfato Complexes in V2O5â^'M2S2O7â^'M2SO4 (M = K, Cs) Melts. A High Temperature Spectroscopic Study. Journal of Physical Chemistry B, 2002, 106, 49-56.	2.6	25

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55	NO reduction with NH3 over chromiaâ€“vanadia catalysts supported on TiO2: an in situ Raman spectroscopic study. Catalysis Today, 2002, 73, 255-262.	4.4	12
56	First In Situ Raman Study of Vanadium Oxide Based SO2 Oxidation Supported Molten Salt Catalysts. Catalysis Letters, 2002, 78, 209-214.	2.6	24
57	Rhenium(III) chloride vaporisation and vapor complexation in the rhenium(III) chlorideâ€“aluminium(III) chloride systemElectronic Supplementary Information available. See http://www.rsc.org/suppdata/cp/b1/b106326j/. Physical Chemistry Chemical Physics, 2001, 3, 5208-5212.	2.8	4
58	CoCl+: Unique in all of molten saltdom?. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2000, 31, 597-602.	2.1	0
59	SO2 and NOx emission abatement. Green Chemistry, 2000, 2, G26-G27.	9.0	0
60	Electrochemical and Spectroscopic Investigations of the â€‰Kâ€‰2â€‰SOâ€‰4â€‰â€â€‰â€‰Vâ€‰2â€‰Qâ€‰5 Molten Elec the Electrochemical Society, 1999, 146, 1060-1068.	2.9	3
61	Progress on the mechanistic understanding of SO2 oxidation catalysts. Catalysis Today, 1999, 51, 469-479.	4.4	92
62	Determination of Stoichiometry of Solutes in Molten Salt Solvents by Correlations of Relative Raman Band Intensities. Applied Spectroscopy, 1999, 53, 565-571.	2.2	12
63	Crystal Structure and Spectroscopic Characterization of a Green V(IV) Compound, Na8(VO)2(SO4)6.. Acta Chemica Scandinavica, 1999, 53, 15-23.	0.7	24
64	Vibrational modes and structure of vanadium(V) complexes in M2SO4â€“V2O5 (M=K or Cs) molten salt mixtures. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 3463-3469.	1.7	22
65	Catalytic Activity and Deactivation of SO2Oxidation Catalysts in Simulated Power Plant Flue Gases. Journal of Catalysis, 1997, 166, 16-24.	6.2	25
66	Vanadium (V) complexes in molten salts of interest for the catalytic oxidation of sulphur dioxide. Catalysis Letters, 1997, 48, 145-150.	2.6	32
67	Chapter 157 Halide vapors and vapor complexes. Fundamental Theories of Physics, 1996, 23, 435-496.	0.3	16
68	Deactivation and Compound Formation in Sulfuric-Acid Catalysts and Model Systems. Journal of Catalysis, 1995, 155, 32-42.	6.2	50
69	Synthesis, Crystal Structure Redetermination and Vibrational Spectra of beta-VOSO4.. Acta Chemica Scandinavica, 1995, 49, 703-708.	0.7	37
70	Vapour complexation and thermochemistry over NaI-TbI3 mixtures: a mass spectrometric investigation. Polyhedron, 1994, 13, 1639-1646.	2.2	7
71	Conductivity and Phase-Diagram of the SO2 Oxidation Catalyst Model System: M2S2O7-V2O5 (M=80% K) Tj ETQq1 1 0.784314 rgBT	6.2	25
72	Raman spectra of liquids and glasses in the RCl3î—¸AlCl3 (Rî—»Nd, Gd) systems. Journal of Non-Crystalline Solids, 1994, 180, 88-90.	3.1	12

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73	Synthesis and Crystal Structure of Na3V(SO4)3. Spectroscopic Characterization of Na3V(SO4)3 and NaV(SO4)2.. Acta Chemica Scandinavica, 1994, 48, 724-731.	0.7	30
74	Characterization of vapour complexes over molten POCl3-MCl3 (M = Al, Ga) mixtures: Raman spectra and thermodynamics. Polyhedron, 1993, 12, 771-782.	2.2	13
75	Raman spectroscopic characterization of high temperature MGaCl8 (M = Nb, Ta) dinuclear molecular complexes in the liquid and gaseous state. Polyhedron, 1993, 12, 2965-2971.	2.2	3
76	Crystal structure and spectroscopic characterization of cesium vanadium sulfate CsV(SO4)2. Evidence for an electronic Raman transition. Inorganic Chemistry, 1993, 32, 4714-4720.	4.0	30
77	Vaporization and vapor complexation in the gold(III) chloride-aluminum(III) chloride system. Inorganic Chemistry, 1992, 31, 1769-1773.	4.0	15
78	Oxide Complexes in Alkali--Alkaline-Earth Chloride Melts.. Acta Chemica Scandinavica, 1991, 45, 145-157.	0.7	59
79	The Crystal Structure of NaV(SO4)2.. Acta Chemica Scandinavica, 1991, 45, 961-964.	0.7	23
80	Crystal structure and vibrational spectra of disodium oxo(disulfato)vanadate. Inorganic Chemistry, 1990, 29, 3294-3298.	4.0	22
81	Formation of crystalline compounds and catalyst deactivation during SO2 oxidation in V2O5$z.sbnd;M2S2O7 (M = Na, K, Cs) melts. Journal of Catalysis, 1989, 119, 121-134.	6.2	55
82	In situ high temperature SERS study of Ag catalysts and electrodes during ethylene epoxidation. Journal of Catalysis, 1989, 117, 561-565.	6.2	20
83	Crystal structure and infrared and Raman spectra of potassium vanadyl sulfate (K4(VO)3(SO4)5). Inorganic Chemistry, 1989, 28, 1847-1853.	4.0	33
84	Evaluation of stoichiometric coefficients and thermodynamic functions of vapor complexes using Raman spectroscopy: the systems ZrX4-AlX3 (X = Br, Cl). The Journal of Physical Chemistry, 1989, 93, 415-421.	2.9	39
85	Raman spectroscopic studies of vapor complexation in the MCl4-POCl3 and MCl4-AlCl3 (M = Zr or Hf) binary systems. Polyhedron, 1986, 5, 1393-1403.	2.2	13