

Pedro D D Vaz

List of Publications by Year in descending order

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201385

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97
times ranked

3640
citing authors

#	ARTICLE	IF	CITATIONS
1	Preparation and physicochemical characterization of Ag nanoparticles biosynthesized by <i>Lippia citriodora</i> (Lemon Verbena). <i>Colloids and Surfaces B: Biointerfaces</i> , 2010, 81, 67-73.	2.5	186
2	Inelastic neutron scattering study of reline: shedding light on the hydrogen bonding network of deep eutectic solvents. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 17998-18009.	1.3	132
3	Inside PEF: Chain Conformation and Dynamics in Crystalline and Amorphous Domains. <i>Macromolecules</i> , 2018, 51, 3515-3526.	2.2	110
4	Loading and delivery of sertraline using inorganic micro and mesoporous materials. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2007, 66, 357-365.	2.0	101
5	Engineering highly efficient Eu(III)-based tri-ureasil hybrids toward luminescent solar concentrators. <i>Journal of Materials Chemistry A</i> , 2013, 1, 7339.	5.2	95
6	Layered Double Hydroxide Nanoclusters: Aqueous, Concentrated, Stable, and Catalytically Active Colloids toward Green Chemistry. <i>ACS Nano</i> , 2016, 10, 5550-5559.	7.3	89
7	Molybdenum η^3 -Allyl Dicarboxylates as a New Class of Precursors for Highly Reactive Epoxidation Catalysts with <i>tert</i> -Butyl Hydroperoxide. <i>Organometallics</i> , 2007, 26, 5548-5556.	1.1	77
8	Heteropolynuclear Gold Complexes with Metallophilic Interactions: Modulation of the Luminescent Properties. <i>Inorganic Chemistry</i> , 2010, 49, 8255-8269.	1.9	63
9	C-H \cdots O hydrogen bonds in liquid cyclohexanone revealed by the $\nu_{\text{C=O}}$ splitting and the $\nu_{\text{C-H}}$ blue shift. <i>Journal of Raman Spectroscopy</i> , 2003, 34, 863-867.	1.2	57
10	Highly selective and recyclable MoO ₃ nanoparticles in epoxidation catalysis. <i>Applied Catalysis A: General</i> , 2015, 504, 344-350.	2.2	49
11	Vanadyl cationic complexes as catalysts in olefin oxidation. <i>Dalton Transactions</i> , 2015, 44, 5125-5138.	1.6	47
12	Heptacoordinate tricarbonyl Mo(II) complexes as highly selective oxidation homogeneous and heterogeneous catalysts. <i>Journal of Catalysis</i> , 2008, 256, 301-311.	3.1	46
13	Organometallic Mo complex anchored to magnetic iron oxide nanoparticles as highly recyclable epoxidation catalyst. <i>Journal of Organometallic Chemistry</i> , 2014, 760, 2-10.	0.8	42
14	Bio-inspired Mo(II) complexes as active catalysts in homogeneous and heterogeneous olefin epoxidation. <i>Applied Catalysis A: General</i> , 2010, 384, 84-93.	2.2	41
15	Highly enantioselective olefin epoxidation controlled by helical confined environments. <i>Journal of Catalysis</i> , 2014, 309, 21-32.	3.1	40
16	Hydrogen Bond Dynamics of C-H \cdots O Interactions: The Chloroform \cdots Acetone Case. <i>Chemistry - A European Journal</i> , 2010, 16, 9010-9017.	1.7	38
17	Photocatalytic degradation of rhodamine B using Mo heterogeneous catalysts under aerobic conditions. <i>Applied Catalysis B: Environmental</i> , 2012, 113-114, 180-191.	10.8	36
18	Mo(II) complexes: A new family of cytotoxic agents?. <i>Journal of Inorganic Biochemistry</i> , 2010, 104, 1171-1177.	1.5	34

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19	MoO ₂ nanoparticles as highly efficient olefin epoxidation catalysts. <i>Applied Catalysis A: General</i> , 2015, 504, 399-407.	2.2	32
20	Pyridine Carboxylate Complexes of Mo as Active Catalysts in Homogeneous and Heterogeneous Polymerization. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 2917-2925.	1.0	31
21	Towards the understanding of the spectroscopic behaviour of the C-H oscillator in C-H...O hydrogen bonds: the effect of solvent polarity. <i>Chemical Physics Letters</i> , 2004, 390, 358-361.	1.2	30
22	C-H...O Hydrogen Bonds in Small Ring Carbonyl Compounds: Vibrational Spectroscopy and Ab initio Calculations. <i>Structural Chemistry</i> , 2005, 16, 287-293.	1.0	30
23	Hepta-coordinate halocarbonyl molybdenum(II) and tungsten(II) complexes as heterogeneous polymerization catalysts. <i>Journal of Molecular Catalysis A</i> , 2006, 256, 90-98.	4.8	30
24	Immobilisation of rhodium acetonitrile complexes in ordered mesoporous silica. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 3098-3105.	1.3	29
25	Bioactive Pseudo-nucleosides Containing Thiazole, Thiazolidinone, and Tetrazole Rings. <i>Journal of Carbohydrate Chemistry</i> , 2005, 24, 275-296.	0.4	29
26	An Oligosilsesquioxane Cage Functionalized with Molybdenum(II) Organometallic Fragments. <i>Organometallics</i> , 2012, 31, 4495-4503.	1.1	28
27	Hydrogen Bond Dynamics of Cellulose through Inelastic Neutron Scattering Spectroscopy. <i>Biomacromolecules</i> , 2018, 19, 1305-1313.	2.6	28
28	Performance evaluation of mesoporous host materials in olefin epoxidation using Mo(II) and Mo(VI) active species - Inorganic vs. hybrid matrix. <i>Applied Catalysis A: General</i> , 2011, 408, 105-116.	2.2	27
29	Marine sponge melanin: a new source of an old biopolymer. <i>Structural Chemistry</i> , 2012, 23, 115-122.	1.0	26
30	Electron-Phonon Coupling in Luminescent Europium-Doped Hydride Perovskites Studied by Luminescence Spectroscopy, Inelastic Neutron Scattering, and First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 10501-10509.	1.5	26
31	Strong Experimental Evidence of CH...O Hydrogen Bonds in Cyclopentanone: The Splitting of the $\hat{1}/2(\text{CO})$ Mode Revisited. <i>Journal of Physical Chemistry A</i> , 2003, 107, 6301-6305.	1.1	25
32	Asymmetric synthesis of trans-4,5-dioxygenated cyclopentenone derivatives by organocatalyzed rearrangement of pyranones and enzymatic dynamic kinetic resolution. <i>Tetrahedron</i> , 2011, 67, 2779-2787.	1.0	25
33	Synthesis and catalytic properties of manganese(II) and oxovanadium(IV) complexes anchored to mesoporous MCM-41. <i>Microporous and Mesoporous Materials</i> , 2008, 112, 14-25.	2.2	24
34	Asymmetric Monomer, Amorphous Polymer? Structure-Property Relationships in 2,4-FDCA and 2,4-PEF. <i>Macromolecules</i> , 2020, 53, 1380-1387.	2.2	24
35	Pseudopolymorphism in Nickel(II) Complexes with 6-Methylpicolinate. Synthesis, Structural, Spectroscopic, Thermal, and Density Functional Theory Studies. <i>Crystal Growth and Design</i> , 2008, 8, 3465-3473.	1.4	23
36	Activity of Mo(II) allylic complexes supported in MCM-41 as oxidation catalysts precursors. <i>Microporous and Mesoporous Materials</i> , 2009, 117, 670-677.	2.2	23

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37	Synthesis of Purine Nucleosides from α -Glucuronic Acid Derivatives and Evaluation of Their Cholinesterase Inhibitory Activities. <i>European Journal of Organic Chemistry</i> , 2014, 2014, 2770-2779.	1.2	22
38	Electrochemical studies and potential anticancer activity in ferrocene derivatives. <i>Journal of Coordination Chemistry</i> , 2017, 70, 314-327.	0.8	22
39	Synthesis of Tetrahydronaphthalene Lignan Esters by Intramolecular Cyclization of Ethyl <i>p</i> -Azidophenyl-2-phenylalkanoates and Evaluation of the Growth Inhibition of Human Tumor Cell Lines. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 3175-3187.	2.9	21
40	The role of 4,7-disubstituted phenanthroline ligands in energy transfer of europium(III) complexes: a DFT study. <i>New Journal of Chemistry</i> , 2011, 35, 2435.	1.4	21
41	Advantageous delivery of nifedipine from inorganic materials showing increased solubility and biocompatibility. <i>Microporous and Mesoporous Materials</i> , 2014, 183, 192-200.	2.2	21
42	Exploring bulk and colloidal Mg/Al hydrotalcite-Au nanoparticles hybrid materials in aerobic olefin epoxidation. <i>Journal of Catalysis</i> , 2018, 358, 187-198.	3.1	21
43	Effect of Food Preparations on In Vitro Bioactivities and Chemical Components of <i>Fucus vesiculosus</i> . <i>Foods</i> , 2020, 9, 955.	1.9	21
44	Modelling the luminescence of extended solids: an example of a highly luminescent MCM-41 impregnated with a Eu^{3+} - β -diketonate complex. <i>Journal of Materials Chemistry C</i> , 2014, 2, 9701-9711.	2.7	20
45	Poly(4-styrene sulfonic acid)/bacterial cellulose membranes: Electrochemical performance in a single-chamber microbial fuel cell. <i>Bioresource Technology Reports</i> , 2020, 9, 100376.	1.5	20
46	$\text{C-H}\cdots\text{O}$ Hydrogen bonding in 4-phenyl-benzaldehyde: A comprehensive crystallographic, spectroscopic and computational study. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 3027.	1.3	19
47	Syntheses, X-ray Structures, Photochemistry, Redox Properties, and DFT Calculations of Interconvertible fac- and mer-[Mn(SPS)(CO) ₃] Isomers Containing a Flexible SPS-Based Pincer Ligand. <i>Inorganic Chemistry</i> , 2005, 44, 9213-9224.	1.9	19
48	Vibrational Study on the Local Structure of Post-Synthesis and Hybrid Mesoporous Materials: Are There Fundamental Distinctions?. <i>Chemistry - A European Journal</i> , 2007, 13, 7874-7882.	1.7	19
49	A green-emitting β -substituted β -diketonate Tb^{3+} phosphor for ultraviolet LED-based solid-state lighting. <i>Journal of Coordination Chemistry</i> , 2014, 67, 4076-4089.	0.8	19
50	Clays in Organic Synthesis - Preparation and Catalytic Applications. <i>Current Organic Synthesis</i> , 2012, 9, 670-694.	0.7	18
51	Wittig Reaction: Domino Olefination and Stereoselectivity DFT Study. Synthesis of the Miharamycins™ Bicyclic Sugar Moiety. <i>Organic Letters</i> , 2015, 17, 5622-5625.	2.4	18
52	Synthesis of Co-Al layered double hydroxide nanoclusters as reduction nanocatalyst in aqueous media. <i>Journal of Asian Ceramic Societies</i> , 2017, 5, 466-471.	1.0	17
53	Water in Deep Eutectic Solvents: New Insights From Inelastic Neutron Scattering Spectroscopy. <i>Frontiers in Physics</i> , 2022, 10, .	1.0	17
54	Synthesis and characterisation of hybrid mesoporous materials with the 1,4-diazobutadiene ligand. <i>Microporous and Mesoporous Materials</i> , 2006, 95, 104-111.	2.2	15

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55	Mixed-Ligand Rhenium Tricarbonyl Complexes Anchored on a (η^2 -H,S) Trihydro(mercaptoimidazolyl)borate: A Missing Binding Motif for Soft Scorpionates. <i>Organometallics</i> , 2008, 27, 1334-1337.	1.1	14
56	Disappearing and Concomitant Polymorphism of Nickel(II) Complexes with 6-Hydroxypicolinic Acid. Structural and Density Functional Theory Studies. <i>Crystal Growth and Design</i> , 2010, 10, 3685-3693.	1.4	14
57	The Versatility of Immobilized Mo Complexes in Organic Transformations - Epoxidation and Metathesis Reactions. <i>Current Organic Chemistry</i> , 2012, 16, 89-114.	0.9	14
58	Pyridine Carboxylate Complexes of Mo(II) as Active Catalysts in Homogeneous and Heterogeneous Olefin Epoxidation. <i>Current Inorganic Chemistry</i> , 2011, 1, 146-155.	0.2	14
59	Understanding the vibrational spectra of crystalline isoniazid: Raman, IR and INS spectroscopy and solid-state DFT study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 204, 452-459.	2.0	13
60	Hybrid mesoporous MCM-41 type material containing 1,4-diazobutadiene chelate ligand in the walls. <i>Progress in Solid State Chemistry</i> , 2005, 33, 163-170.	3.9	12
61	Crystal structure landscapes from combined vibrational spectroscopy and ab initio calculations: 4-(Dimethylamino)benzaldehyde. <i>Computational and Theoretical Chemistry</i> , 2010, 946, 65-69.	1.5	12
62	Helical Channel Mesoporous Materials with Embedded Magnetic Iron Nanoparticles: Chiral Recognition and Implications in Asymmetric Olefin Epoxidation. <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 3127-3140.	2.1	12
63	Looking inside the pores of a MCM-41 based Mo heterogeneous styrene oxidation catalyst: an inelastic neutron scattering study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 17272-17280.	1.3	12
64	Catalytic performance of bulk and colloidal Co/Al layered double hydroxide with Au nanoparticles in aerobic olefin oxidation. <i>Applied Catalysis A: General</i> , 2019, 584, 117155.	2.2	12
65	Understanding the Structure and Dynamics of Nanocellulose-Based Composites with Neutral and Ionic Poly(methacrylate) Derivatives Using Inelastic Neutron Scattering and DFT Calculations. <i>Molecules</i> , 2020, 25, 1689.	1.7	12
66	Near Infrared Reflectance Spectroscopy Coupled to Chemometrics as a Cost-Effective, Rapid, and Non-Destructive Tool for Fish Fraud Control: Monitoring Source, Condition, and Nutritional Value of Five Common Whitefish Species. <i>Journal of AOAC INTERNATIONAL</i> , 2021, 104, 53-60.	0.7	12
67	The Role of C-H...O Interactions in the Solid and Liquid-Phase Structures of Methyltrioxo Rhenium. <i>European Journal of Inorganic Chemistry</i> , 2005, 2005, 1836-1840.	1.0	11
68	Catalytic Application of Fe-doped MoO ₂ Tremella-Like Nanosheets. <i>Topics in Catalysis</i> , 2016, 59, 1123-1131.	1.3	11
69	Melanin: Production from Cheese Bacteria, Chemical Characterization, and Biological Activities. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 10562.	1.2	11
70	Structural preferences and isomerism in nickel(II) and copper(II) complexes with 3-hydroxypicolinic acid. <i>Polyhedron</i> , 2012, 39, 66-75.	1.0	10
71	Synthesis and catalytic activity of Mo(II) complexes of $\hat{I}\pm$ -diimines intercalated in layered double hydroxides. <i>Inorganica Chimica Acta</i> , 2019, 486, 274-282.	1.2	10
72	Porous materials as delivery and protective agents for Vitamin A. <i>RSC Advances</i> , 2016, 6, 66495-66504.	1.7	8

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73	New heterogeneous catalysts with Mo(II) intercalated in layered double hydroxides. <i>Inorganica Chimica Acta</i> , 2017, 455, 483-488.	1.2	8
74	Zinc biomimetic catalysts for epoxidation of olefins with H ₂ O ₂ . <i>Applied Clay Science</i> , 2020, 190, 105562.	2.6	8
75	Tuning the Surface of Mesoporous Materials Towards Hydrophobicity-Effects in Olefin Epoxidation. <i>Current Inorganic Chemistry</i> , 2011, 1, 156-165.	0.2	8
76	A new role for layered double hydroxides hybrid materialsâ€™ uptake and delivery of small molecules into the gas phase. <i>New Journal of Chemistry</i> , 2010, 34, 541.	1.4	7
77	Association of aescin with Î²- and Î³-cyclodextrins studied by DFT calculations and spectroscopic methods. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 348-357.	1.5	7
78	Can Semi-empirical Calculations Help Solve Mass Spectrometry Problems? Protonation Sites and Proton Affinities of Amino Acids. <i>ChemPlusChem</i> , 2013, 78, 1149-1156.	1.3	6
79	Vibrational Dynamics of Crystalline 4-Phenylbenzaldehyde from INS Spectra and Periodic DFT Calculations. <i>Molecules</i> , 2020, 25, 1374.	1.7	6
80	On the way to understand antioxidants: chromanol and dimethoxyphenols gas-phase acidities. <i>Journal of Mass Spectrometry</i> , 2011, 46, 640-648.	0.7	5
81	Intermolecular C=O interactions in cyclopentanone: An inelastic neutron scattering study. <i>Chemical Physics</i> , 2013, 427, 117-123.	0.9	5
82	Exploring C-H...O hydrogen bonds in dihydrocoumarin from combined vibrational spectroscopy and DFT calculations. <i>Chemical Physics Letters</i> , 2012, 551, 86-91.	1.2	4
83	Asymmetric binuclear Ni(II) and Cu(II) Schiff base metallopolymers. <i>RSC Advances</i> , 2015, 5, 39495-39504.	1.7	4
84	Probing the relevance of MoO ₂ nanoparticlesâ€™ synthesis on their catalytic activity by inelastic neutron scattering. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 896-904.	1.3	4
85	New Insights on the Vibrational Dynamics of 2-Methoxy-, 4-Methoxy- and 4-Ethoxy-Benzaldehyde from INS Spectra and Periodic DFT Calculations. <i>Materials</i> , 2021, 14, 4561.	1.3	4
86	Colourless aegirine in metamorphic rocks from Bayan Obo (Inner Mongolia): lack of charge transfer transitions as possible explanation. <i>European Journal of Mineralogy</i> , 2014, 25, 987-993.	0.4	3
87	Solventless Olefin Epoxidation Using a Mo-Loaded Sisal Derived Acid-Char Catalyst. <i>ChemistrySelect</i> , 2018, 3, 10357-10363.	0.7	3
88	Vibrational dynamics of 4-fluorobenzaldehyde from periodic DFT calculations. <i>Chemical Physics Letters: X</i> , 2019, 2, 100006.	2.1	3
89	Selective and Efficient Olefin Epoxidation by Robust Magnetic Mo Nanocatalysts. <i>Catalysts</i> , 2021, 11, 380.	1.6	3
90	Substrate-Solvent Crosstalk Effects on Reaction Kinetics and Product Selectivity in Olefin Oxidation Catalysis. <i>Chemistry</i> , 2021, 3, 753-764.	0.9	3

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91	Vibrational Dynamics in crystalline 4-(dimethylamino) benzaldehyde: Inelastic Neutron Scattering and Periodic DFT Study. <i>Materials</i> , 2022, 15, 475.	1.3	2
92	Validation of the Steinrath Index Predictions for the Degree of Soil Aggressiveness Toward Copper Corrosion in Soils Contaminated with Chlorides. <i>Corrosion</i> , 2015, 71, 1267-1277.	0.5	1
93	Nitroarene and dye reduction with 2:1 Co/Al layered double hydroxide catalysts “Is gold still necessary?”. <i>Inorganica Chimica Acta</i> , 2021, 521, 120336.	1.2	1