

Andrea Rossin

List of Publications by Year in descending order

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118
papers

4,340
citations

117625
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60
g-index

124
all docs

124
docs citations

124
times ranked

5274
citing authors

#	ARTICLE	IF	CITATIONS
1	P ₄ Activation by Late-Transition Metal Complexes. Chemical Reviews, 2010, 110, 4178-4235.	47.7	391
2	Ammonia-Borane and Amine-Borane Dehydrogenation Mediated by Complex Metal Hydrides. Chemical Reviews, 2016, 116, 8848-8872.	47.7	358
3	A Dense Metal-Organic Framework for Enhanced Magnetic Refrigeration. Advanced Materials, 2013, 25, 4653-4656.	21.0	273
4	Induction Heating: An Enabling Technology for the Heat Management in Catalytic Processes. ACS Catalysis, 2019, 9, 7921-7935.	11.2	120
5	FeB Double Bonds: A Synthetic, Structural, and Reaction Chemistry of Cationic Terminal Borylene Complexes. Organometallics, 2004, 23, 2911-2926.	2.3	119
6	Chemically Functionalized Carbon Nanotubes with Pyridine Groups as Easily Tunable N-Decorated Nanomaterials for the Oxygen Reduction Reaction in Alkaline Medium. Chemistry of Materials, 2014, 26, 3460-3470.	6.7	107
7	C-H Oxidative Addition of Bisimidazolium Salts to Iridium and Rhodium Complexes, and N-Heterocyclic Carbene Generation. A Combined Experimental and Theoretical Study. Organometallics, 2006, 25, 1120-1134.	2.3	96
8	Synthesis and Characterization of Terminal [Re(XCO)(CO) ₂ (triphos)] (X=N, P): Isocyanate versus Phosphaethynolate Complexes. Chemistry - A European Journal, 2012, 18, 14805-14811.	3.3	94
9	Tailoring Carbon Nanotube N-Dopants while Designing Metal-Free Electrocatalysts for the Oxygen Reduction Reaction in Alkaline Medium. ACS Catalysis, 2013, 3, 2108-2111.	11.2	91
10	Metal-Organic Frameworks as Heterogeneous Catalysts in Hydrogen Production from Lightweight Inorganic Hydrides. ACS Catalysis, 2017, 7, 5035-5045.	11.2	88
11	Unraveling Surface Basicity and Bulk Morphology Relationship on Covalent Triazine Frameworks with Unique Catalytic and Gas Adsorption Properties. Advanced Functional Materials, 2017, 27, 1605672.	14.9	72
12	Amine-Templated Polymeric Lanthanide Formates: Synthesis, Characterization, and Applications in Luminescence and Magnetism. Inorganic Chemistry, 2012, 51, 6962-6968.	4.0	69
13	Complexes of a gallium heterocycle with transition metal dicyclopentadienyl and cyclopentadienylcarbonyl fragments, and with a dialkylmanganese compound. Dalton Transactions, 2006, , 3313.	3.3	66
14	Carbonyl analogues? Analysis of Fe-E (E = B, Al, Ga) bonding in cationic terminal diyl complexes by density functional theory. Dalton Transactions, 2004, , 2649-2654.	3.3	65
15	Phase Transitions and CO ₂ Adsorption Properties of Polymeric Magnesium Formate. Crystal Growth and Design, 2008, 8, 3302-3308.	3.0	62
16	Aziridine-Functionalized Multiwalled Carbon Nanotubes: Robust and Versatile Catalysts for the Oxygen Reduction Reaction and Knoevenagel Condensation. ACS Applied Materials & Interfaces, 2016, 8, 30099-30106.	8.0	61
17	Porous Silicon Carbide (SiC): A Chance for Improving Catalysts or Just Another Active-Phase Carrier?. Chemical Reviews, 2021, 121, 10559-10665.	47.7	61
18	Water-Assisted H-H Bond Splitting Mediated by [CpRu(PTA)2Cl] (PTA=1,3,5-triaza-7-phosphaadamantane). A DFT Analysis. Organometallics, 2007, 26, 3289-3296.	2.3	57

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19	Halide Abstraction as a Route to Cationic Transition-Metal Complexes Containing Two-Coordinate Gallium and Indium Ligand Systems. <i>Organometallics</i> , 2005, 24, 5891-5900.	2.3	53
20	“Click” on MOFs: A Versatile Tool for the Multimodal Derivatization of N3-Decorated Metal Organic Frameworks. <i>Chemistry of Materials</i> , 2013, 25, 2297-2308.	6.7	53
21	Chiral Co(II) Metal-Organic Framework in the Heterogeneous Catalytic Oxidation of Alkenes under Aerobic and Anaerobic Conditions. <i>ACS Catalysis</i> , 2014, 4, 1032-1039.	11.2	53
22	The Active Role of the Water Solvent in the Regioselective CO Hydrogenation of Unsaturated Aldehydes by [RuH ₂ (mtpm)s] _x in Basic Media. <i>Organometallics</i> , 2006, 25, 5010-5023.	2.3	52
23	Functionalization of Multiwalled Carbon Nanotubes with Cyclic Nitrones for Materials and Composites: Addressing the Role of CNT Sidewall Defects. <i>Chemistry of Materials</i> , 2011, 23, 1923-1938.	6.7	51
24	Fe-Ga multiple bonding? Synthesis, spectroscopic and structural characterization of a transition metal complex containing a cationic two-coordinate gallium centre. <i>Chemical Communications</i> , 2004, , 1732-1733.	4.1	50
25	Acid-Base Interaction between Transition-Metal Hydrides: Dihydrogen Bonding and Dihydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 1367-1370.	13.8	50
26	Synthetic and reaction chemistry of heteroatom stabilized boryl and cationic borylene complexes. <i>Dalton Transactions</i> , 2006, , 399-410.	3.3	48
27	Nickel(ii) hydride and fluoride pincer complexes and their reactivity with Lewis acids BX ₃ -L (X = H, L =) <i>J. Organomet. Chem.</i> 2011, 874, 1-14.	3.3	46
28	Amine-templated polymeric Mg formates: crystalline scaffolds exhibiting extensive hydrogen bonding. <i>CrystEngComm</i> , 2012, 14, 4454.	2.6	46
29	Selective B-H versus N-H Bond Activation in Ammonia Borane by [Ir(dppm) ₂ OTf]. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 3055-3059.	2.0	44
30	Pyrazole-Based PCN Pincer Complexes of Palladium(II): Mono- and Dinuclear Hydroxide Complexes and Ligand Rollover C-H Activation. <i>Organometallics</i> , 2015, 34, 3998-4010.	2.3	42
31	Synthesis, characterization and CO ₂ uptake of a chiral Co(ii) metal-organic framework containing a thiazolidine-based spacer. <i>Journal of Materials Chemistry</i> , 2012, 22, 10335.	6.7	38
32	Facing Unexpected Reactivity Paths with Zr ^{IV} -Pyridylamido Polymerization Catalysts. <i>Chemistry - A European Journal</i> , 2012, 18, 671-687.	3.3	37
33	Catalytic amine-borane dehydrogenation by a PCP-pincer palladium complex: a combined experimental and DFT analysis of the reaction mechanism. <i>Dalton Transactions</i> , 2013, 42, 3533.	3.3	37
34	Yttrium-Amidopyridinate Complexes: Synthesis and Characterization of Yttrium-Alkyl and Yttrium-Hydrido Derivatives. <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 608-620.	2.0	36
35	Amino-decorated bis(pyrazolate) metal-organic frameworks for carbon dioxide capture and green conversion into cyclic carbonates. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 533-545.	6.0	36
36	Dimerization Mechanism of Bis(triphenylphosphine)copper(I) Tetrahydroborate: Proton Transfer via a Dihydrogen Bond. <i>Inorganic Chemistry</i> , 2012, 51, 6486-6497.	4.0	34

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37	Comparative DFT Analysis of Ligand and Solvent Effects on the Mechanism of H ₂ Activation in Water Mediated by Half-Sandwich Complexes [Cp ² Ru(PTA) ₂ Cl] (Cp ² =) TJ ETQq1 1 0.784314 10.3 BT / Overlock 10 11 Organometallics, 2010, 29, 5121-5131.	10.3	32
38	Ammonia Borane Dehydrogenation Catalyzed by (P ⁴ -EP ₃)Co(H) [EP ₃ = E(CH ₂ CH ₂ PPh ₂) ₃ ; E = N, P] and H ₂ Evolution from Their Interaction with NH Acids. Inorganic Chemistry, 2017, 56, 4296-4307.	4.0	32
39	Amine Boranes Dehydrogenation Mediated by an Unsymmetrical Iridium Pincer Hydride: (PCN) vs (PCP) Improved Catalytic Performance. Organometallics, 2018, 37, 3142-3153.	2.3	32
40	Chemical functionalization of N-doped carbon nanotubes: a powerful approach to cast light on the electrochemical role of specific N-functionalities in the oxygen reduction reaction. Catalysis Science and Technology, 2016, 6, 6226-6236.	4.1	31
41	How to teach an old dog new (electrochemical) tricks: aziridine-functionalized CNTs as efficient electrocatalysts for the selective CO ₂ reduction to CO. Journal of Materials Chemistry A, 2018, 6, 16382-16389.	10.3	31
42	Metal-Ligand Alkyl Migration Inducing Carbon-Sulfur Bond Cleavage in Dialkyl Yttrium Complexes Supported by Thiazole-Containing Amidopyridinate Ligands: Synthesis, Characterization, and Catalytic Activity in the Intramolecular Hydroamination Reaction. Chemistry - A European Journal, 2014, 20, 3487-3499.	3.3	30
43	Surface Engineering of Chemically Exfoliated MoS ₂ in a "Click" How To Generate Versatile Multifunctional Transition Metal Dichalcogenides-Based Platforms. Chemistry of Materials, 2018, 30, 8257-8269.	6.7	29
44	Nitro-Functionalized Bis(pyrazolate) Metal-Organic Frameworks as Carbon Dioxide Capture Materials under Ambient Conditions. Chemistry - A European Journal, 2018, 24, 13170-13180.	3.3	29
45	Cobalt(II) Bipyrazolate Metal-Organic Frameworks as Heterogeneous Catalysts in Cumene Aerobic Oxidation: A Tag-Dependent Selectivity. Inorganic Chemistry, 2020, 59, 8161-8172.	4.0	29
46	Can nitrones functionalize carbon nanotubes?. Chemical Communications, 2010, 46, 252-254.	4.1	28
47	Tuning Carbon Dioxide Adsorption Affinity of Zinc(II) MOFs by Mixing Bis(pyrazolate) Ligands with N-Containing Tags. ACS Applied Materials & Interfaces, 2019, 11, 26956-26969.	8.0	28
48	Selective synthesis of 2-substituted 4-carboxy oxazoles, thiazoles and thiazolidines from serine or cysteine amino acids. Tetrahedron, 2011, 67, 267-274.	1.9	27
49	Benzoimidazole-Pyridylamido Zirconium and Hafnium Alkyl Complexes as Homogeneous Catalysts for Tandem Carbon Dioxide Hydrosilylation to Methane. ChemCatChem, 2019, 11, 495-510.	3.7	27
50	H ₂ production from lightweight inorganic hydrides catalyzed by 3d transition metals. International Journal of Hydrogen Energy, 2019, 44, 25746-25776.	7.1	25
51	Group IV Organometallic Compounds Based on Dianionic "Pincer" Ligands: Synthesis, Characterization, and Catalytic Activity in Intramolecular Hydroamination Reactions. Chemistry - A European Journal, 2013, 19, 4906-4921.	3.3	24
52	Organolanthanide Complexes Supported by Thiazole-Containing Amidopyridinate Ligands: Synthesis, Characterization, and Catalytic Activity in Isoprene Polymerization. Organometallics, 2014, 33, 7125-7134.	2.3	24
53	Computational screening, synthesis and testing of metal-organic frameworks with a bithiazole linker for carbon dioxide capture and its green conversion into cyclic carbonates. Molecular Systems Design and Engineering, 2019, 4, 1000-1013.	3.4	24
54	Coordination Chemistry of Thiazole-Based Ligands: New Complexes Generating 3D Hydrogen-Bonded Architectures. European Journal of Inorganic Chemistry, 2011, 2011, 539-548.	2.0	23

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73	Steric control on the redox chemistry of $(\text{I}^{\text{5-C9H7}})_2\text{YbII}(\text{THF})_2$ by 6-aryl substituted iminopyridines. Dalton Transactions, 2011, 40, 10568.	3.3	16
74	Structural features and applications of metal-organic frameworks containing thiazole- and thiazolidine-based spacers. CrystEngComm, 2015, 17, 218-228.	2.6	16
75	Pyridine-decorated carbon nanotubes as a metal-free heterogeneous catalyst for mild CO ₂ reduction to methanol with hydroboranes. Catalysis Science and Technology, 2017, 7, 5833-5837.	4.1	15
76	Bis(alkyl) scandium and yttrium complexes coordinated by an amidopyridinate ligand: synthesis, characterization and catalytic performance in isoprene polymerization, hydroelementation and carbon dioxide hydrosilylation. Dalton Transactions, 2020, 49, 638-650.	3.3	15
77	Two pathways of proton transfer reaction to $(\text{triphos})\text{Cu}(\text{I}^{\text{1}}\text{-BH}^{\text{4}})$ via a dihydrogen bond [triphos = 1,1,1-tris(diphenylphosphinomethyl)ethane]. Dalton Transactions, 2016, 45, 9127-9135.	3.3	14
78	Temperature-Dependent Nitrous Oxide/Carbon Dioxide Preferential Adsorption in a Thiazolium-Functionalized NU-1000 Metal-Organic Framework. ACS Applied Materials & Interfaces, 2021, 13, 58982-58993.	8.0	14
79	Novel yttrium and zirconium catalysts featuring reduced Ar-BIANH ₂ ligands for olefin hydroamination (Ar-BIANH ₂ = bis-arylaminoacenaphthylene). New Journal of Chemistry, 2016, 40, 10285-10293.	2.8	13
80	Binuclear Copper(I) Borohydride Complex Containing Bridging Bis(diphenylphosphino) Methane Ligands: Polymorphic Structures of $[(\mu_2\text{-dppm})_2\text{Cu}_2(\text{I}^{\text{2-BH4}})_2]$ Dichloromethane Solvate. Crystals, 2017, 7, 318.	2.2	13
81	Bifunctional activation of amine-boranes by the W/Pd bimetallic analogs of σ -frustrated Lewis pairs. Chemical Science, 2021, 12, 3682-3692.	7.4	13
82	Interaction between a Transition-Metal Fluoride and a Transition-Metal Hydride: Water-Mediated Hydrofluoric Acid Evolution Following Fluoride Solvation. Inorganic Chemistry, 2013, 52, 12616-12623.	4.0	12
83	Engineered Nitrogen-Decorated Carbon Networks for the Metal-Free Catalytic Isomerization of Glucose to Fructose. ACS Sustainable Chemistry and Engineering, 2019, 7, 16959-16963.	6.7	12
84	Playing with covalent triazine framework tiles for improved CO ₂ adsorption properties and catalytic performance. Beilstein Journal of Nanotechnology, 2019, 10, 1217-1227.	2.8	12
85	Tailoring morphological and chemical properties of covalent triazine frameworks for dual CO ₂ and H ₂ adsorption. International Journal of Hydrogen Energy, 2022, 47, 8434-8445.	7.1	12
86	Graphite Felt-Sandwiched Ni/SiC Catalysts for the Induction Versus Joule-Heated Sabatier Reaction: Assessing the Catalyst Temperature at the Nanoscale. ACS Sustainable Chemistry and Engineering, 2022, 10, 622-632.	6.7	12
87	Competition between the Hydride Ligands of Two Types in Proton Transfer to $[\{\text{I}^{\text{3-P-CH3C(CH2CH2PPh2)3}}\}\text{RuH}(\text{I}^{\text{2-BH4}})]$. European Journal of Inorganic Chemistry, 2017, 2017, 4673-4682.	2.0	11
88	Second Youth of a Metal-Free Dehydrogenation Catalyst: When $\text{I}^{\text{3-Al}}_2\text{O}_3$ Meets Coke Under Oxygen- and Steam-Free Conditions. ACS Catalysis, 2019, 9, 9474-9484.	11.2	11
89	Ammonia borane and hydrazine bis(borane) dehydrogenation mediated by an unsymmetrical (PNN) ruthenium pincer hydride: metal-ligand cooperation for hydrogen production. Sustainable Energy and Fuels, 2019, 3, 2583-2596.	4.9	11
90	Carbon Dioxide Capture and Utilization with Isomeric Forms of Bis(amino)-tagged Zinc Bipyrazolate Metal-Organic Frameworks. Chemistry - A European Journal, 2021, 27, 4746-4754.	3.3	11

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91	A Hetero-Bifunctional Spacer for the Smart Engineering of Carbon-Based Nanostructures. <i>ChemPlusChem</i> , 2015, 80, 704-714.	2.8	10
92	Dioxomolybdenum(VI) Complexes with Salicylamide Ligands: Synthesis, Structure, and Catalysis in the Epoxidation of Olefins under Eco-Friendly Conditions. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 221-229.	2.0	10
93	Binuclear 3,3',5,5'-tetramethyl-1H,4,4'-bipyrazole Ruthenium(II) complexes: Synthesis, characterization and biological studies. <i>Inorganica Chimica Acta</i> , 2020, 513, 119902.	2.4	10
94	Metal-Organic Frameworks in Italy: From synthesis and advanced characterization to theoretical modeling and applications. <i>Coordination Chemistry Reviews</i> , 2021, 437, 213861.	18.8	10
95	Benzothiazole- vs. pyrazole-based unsymmetrical (PCN) pincer complexes of nickel(II) as homogeneous catalysts in ethylene oligomerization. <i>Journal of Organometallic Chemistry</i> , 2021, 949, 121951.	1.8	10
96	Synthesis and reactivity of rhodium(III) pentamethylcyclopentadienyl complexes of Na-B-PTA(BH ₃): X-ray crystal structures of [Cp-RhCl ₂ {Na-B-PTA(BH ₃)}] and [Cp-Rh{Na-B-PTA(BH ₃)}(1-2-CH ₂ =CHPh)]. <i>Journal of Organometallic Chemistry</i> , 2008, 693, 2397-2406.		9
97	Zinc Coordination Polymers Containing Isomeric Forms of m-(2-thiazolyl)benzoic Acid: Blue-Emitting Materials with a Solvatochromic Response to Water. <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 4909-4918.	2.0	9
98	CO ₂ Electrochemical Reduction by Exohedral N-Pyridine Decorated Metal-Free Carbon Nanotubes. <i>Energies</i> , 2020, 13, 2703.	3.1	9
99	Unsymmetrical nickel (PCN) pincer complexes with a benzothiazole side-arm: Synthesis, characterization and electrochemical properties. <i>Inorganica Chimica Acta</i> , 2021, 517, 120182.	2.4	9
100	Ammonia-Borane Dehydrogenation Catalyzed by Dual-Mode Proton-Responsive Ir-CNNH Complexes. <i>Inorganic Chemistry</i> , 2021, 60, 18490-18502.	4.0	9
101	Zinc Coordination Polymers Containing the m-(2-thiazolyl)benzoic Acid Spacer: Synthesis, Characterization and Luminescent Properties in Aqueous Solutions. <i>ChemistrySelect</i> , 2016, 1, 1123-1131.	1.5	8
102	Zirconium Metal-Organic Frameworks Containing a Biselenophene Linker: Synthesis, Characterization, and Luminescent Properties. <i>Inorganic Chemistry</i> , 2020, 59, 15832-15841.	4.0	8
103	Electrochemical Generation of Pyrazolyl-Pyridyl N-Heterocyclic Carbene Complexes of Nickel. <i>Russian Journal of Electrochemistry</i> , 2021, 57, 134-140.	0.9	8
104	Synthesis and characterisation of 1-P and 2-P,N palladium(II) complexes of the open cage water soluble aminophosphine PTN. <i>Inorganica Chimica Acta</i> , 2008, 361, 3017-3023.	2.4	7
105	C ₁ and C _s -2-pyridylethylanilido zirconium(IV), yttrium(III) and lutetium(III) complexes: synthesis, characterization and catalytic activity in the isoprene polymerization. <i>New Journal of Chemistry</i> , 2017, 41, 540-551.	2.8	7
106	Palladium Nanosheet-Carbon Black Powder Composites for Selective Hydrogenation of Alkynes to Alkenes. <i>ACS Applied Nano Materials</i> , 2021, 4, 2265-2277.	5.0	7
107	Synthesis of Enantiomerically Enriched Amino Sulfide Building Blocks from Acyclic Chiral Amino Allylsilanes. <i>Journal of Organic Chemistry</i> , 2011, 76, 7415-7422.	3.2	6
108	Hydrogenolysis of Dinuclear PCN R Ligated Pd II Hydroxides and Their Mononuclear Pd II Hydroxide Analogues. <i>Chemistry - A European Journal</i> , 2019, 25, 9920-9929.	3.3	5

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109	(Amido)- and (Chlorido)titanium and -zirconium Complexes Coordinated by ansa -Bis(amidinate) Ligands with a Rigid o -Phenylene Linker. European Journal of Inorganic Chemistry, 2017, 2017, 2736-2744.	2.0	3
110	Chemical Functionalization of Carbon Nanomaterials: Bridging the Gap between Simple Carriers and Smart (Metal-free) Catalysts. Chimia, 2017, 71, 568.	0.6	3
111	Imidazoleâ€Bridged Tetrameric Group(IV) Heteroleptic Complexes from the Spontaneous Metalâ€Ligand Assembly of a Potentially $\langle i \rangle N \langle /i \rangle \langle sub \rangle 4 \langle /sub \rangle$ â€Tetradentate Ligand. European Journal of Inorganic Chemistry, 2019, 2019, 4384-4393.	2.0	3
112	UiO-67-derived bithiophene and bithiazole MIXMOFs for luminescence sensing and removal of contaminants of emerging concern in wastewater. Inorganic Chemistry Frontiers, 2021, 9, 90-102.	6.0	3
113	Crystallographic report: $(\eta^5\text{-C}_5\text{Me}_5)\text{Fe}(\text{CO})_2(\text{BOCH}_2\text{CH}_2\text{CH}_2\text{O})$: an organoiron complex containing the (trimethyleneglycolato)boryl ligand. Applied Organometallic Chemistry, 2005, 19, 181-182.	3.5	2
114	Exohedrally functionalized carbon-based networks as catalysts for electrochemical syntheses. Current Opinion in Green and Sustainable Chemistry, 2022, 33, 100579.	5.9	2
115	Multimodal hybrid 2D networks via the thiol-epoxide reaction on 1T/2H MoS2 polytypes. Materials Chemistry Frontiers, 2021, 5, 3470-3479.	5.9	1
116	Coordination polymers of d- and f-elements with (1,4-phenylene)dithiazole dicarboxylic acid. Inorganica Chimica Acta, 2022, 537, 120923.	2.4	1
117	Design and Synthesis of Thiazole and Thiazolidine Metallo-Supramolecular Networks. Phosphorus, Sulfur and Silicon and the Related Elements, 2011, 186, 1312-1315.	1.6	0
118	Editorial for Special Issue â€œFunctional Coordination Polymers and Metalâ€Organic Frameworksâ€• Inorganics, 2021, 9, 33.	2.7	0