Antoine P Van Muyden

List of Publications by Year
in descending order

91	5,018	136885	91828
papers	citations	32 h-index	69 g-index

95	95	95	6938
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Homogeneous Catalysis for Sustainable Hydrogen Storage in Formic Acid and Alcohols. Chemical Reviews, 2018, 118, 372-433.	23.0	805
2	Selective Degradation of Wood Lignin over Nobleâ€Metal Catalysts in a Twoâ€Step Process. ChemSusChem, 2008, 1, 626-629.	3.6	500
3	Hydrodeoxygenation of Ligninâ€Derived Phenols into Alkanes by Using Nanoparticle Catalysts Combined with BrÃ¸nsted Acidic Ionic Liquids. Angewandte Chemie - International Edition, 2010, 49, 5549-5553.	7.2	309
4	In vivo anti-tumor activity of the organometallic ruthenium(<scp>ii</scp>)-arene complex [Ru(Î·⁶-p-cymene)Cl₂(pta)] (RAPTA-C) in human ovarian and colorectal carcinomas. Chemical Science, 2014, 5, 4742-4748.	3.7	224
5	Arene hydrogenation by homogeneous catalysts: fact or fiction?. Dalton Transactions, 2003, , 2964.	1.6	207
6	Synthesis of carbonates and related compounds incorporating CO2 using ionic liquid-type catalysts: State-of-the-art and beyond. Journal of Catalysis, 2016, 343, 52-61.	3.1	183
7	Cycloaddition of CO2 to epoxides catalyzed by imidazolium-based polymeric ionic liquids. Green Chemistry, 2013, 15, 1584.	4.6	169
8	Intricacies of Cationâ€“Anion Combinations in Imidazolium Salt-Catalyzed Cycloaddition of CO₂ Into Epoxides. ACS Catalysis, 2018, 8, 2589-2594.	5.5	129
9	Thiazolium carbene catalysts for the fixation of CO₂ onto amines. Chemical Communications, 2016, 52, 2497-2500.	2.2	124
10	Single-crystalline TiO2 nanoparticles for stable and efficient perovskite modules. Nature Nanotechnology, 2022, 17, 598-605.	15.6	121
11	Passivation Mechanism Exploiting Surface Dipoles Affords High-Performance Perovskite Solar Cells. Journal of the American Chemical Society, 2020, 142, 11428-11433.	6.6	107
12	Tuning structural isomers of phenylenediammonium to afford efficient and stable perovskite solar cells and modules. Nature Communications, 2021, 12, 6394.	5.8	98
13	Combination of ruthenium(II)-arene complex [Ru(Î·6-p-cymene)Cl2(pta)] (RAPTA-C) and the epidermal growth factor receptor inhibitor erlotinib results in efficient angiostatic and antitumor activity. Scientific Reports, 2017, 7, 43005.	1.6	97
14	Optimization of drug combinations using Feedback System Control. Nature Protocols, 2016, 11, 302-315.	5.5	86
15	En route to CO₂-containing renewable materials: catalytic synthesis of polycarbonates and non-isocyanate polyhydroxyurethanes derived from cyclic carbonates. Chemical Communications, 2019, 55, 1360-1373.	2.2	85
16	An Efficient Approach to Fabricate Airâ€Stable Perovskite Solar Cells via Addition of a Selfâ€Polymerizing Ionic Liquid. Advanced Materials, 2020, 32, e2003801.	11.1	84
17	A streamlined search technology for identification of synergistic drug combinations. Scientific Reports, 2015, 5, 14508.	1.6	72
18	Synthesis of cyclic carbonates from diols and CO₂ catalyzed by carbenes. Chemical Communications, 2016, 52, 10787-10790.	2.2	71

#	Article	IF	Citations
19	Inkjetâ€Printed Mesoporous TiO₂ and Perovskite Layers for High Efficiency Perovskite Solar Cells. Energy Technology, 2019, 7, 317-324.	1.8	67
20	Oxidative cleavage of Î²-O-4 bonds in lignin model compounds with a single-atom Co catalyst. Green Chemistry, 2019, 21, 1974-1981.	4.6	65
21	Extending the Lifetime of Perovskite Solar Cells using a Perfluorinated Dopant. ChemSusChem, 2016, 9, 2708-2714.	3.6	62
22	Angiostatic treatment prior to chemo- or photodynamic therapy improves anti-tumor efficacy. Scientific Reports, 2015, 5, 8990.	1.6	58
23	Efficient cleavage of aryl ether Câ€“O linkages by Rhâ€“Ni and Ruâ€“Ni nanoscale catalysts operating in water. Chemical Science, 2018, 9, 5530-5535.	3.7	57
24	Recent Considerations in the Application of RAPTAâ€C for Cancer Treatment and Perspectives for Its Combination with Immunotherapies. Advanced Therapeutics, 2019, 2, 1900042.	1.6	57
25	Dopantâ€Free Hole Transport Materials Afford Efficient and Stable Inorganic Perovskite Solar Cells and Modules. Angewandte Chemie - International Edition, 2021, 60, 20489-20497.	7.2	56
26	Polyimidazolium Salts: Robust Catalysts for the Cycloaddition of Carbon Dioxide into Carbonates in Solventâ€Free Conditions. ChemSusChem, 2017, 10, 2728-2735.	3.6	53
27	Towards Extending Solar Cell Lifetimes: Addition of a Fluorous Cation to Triple Cationâ€Based Perovskite Films. ChemSusChem, 2017, 10, 3846-3853.	3.6	49
28	Nitrogenâ€Incorporated Cobalt Sulfide/Graphene Hybrid Catalysts for Overall Water Splitting. ChemSusChem, 2020, 13, 5112-5118.	3.6	48
29	Transformation of biomass via the selective hydrogenolysis of CO bonds by nanoscale metal catalysts. Current Opinion in Chemical Engineering, 2013, 2, 178-183.	3.8	42
30	NanoSIMS analysis of an isotopically labelled organometallic ruthenium(<scp>ii</scp>) drug to probe its distribution and state in vitro. Chemical Communications, 2015, 51, 16486-16489.	2.2	39
31	Selective Acceptorless Dehydrogenation of Primary Amines to Imines by Coreâ€“Shell Cobalt Nanoparticles. Angewandte Chemie - International Edition, 2020, 59, 7501-7507.	7.2	37
32	A Gibeon meteorite yields a high-performance water oxidation electrocatalyst. Energy and Environmental Science, 2016, 9, 3448-3455.	15.6	35
33	Differences in cisplatin distribution in sensitive and resistant ovarian cancer cells: a TEM/NanoSIMS study. Metallomics, 2017, 9, 1413-1420.	1.0	34
34	Acceptorless dehydrogenation and hydrogenation of N- and O-containing compounds on Pd ₃ Au ₁ (111) facets. Science Advances, 2020, 6, .	4.7	31
35	Solventâ€and Catalystâ€Free Carbon Dioxide Capture and Reduction to Formate with Borohydride Ionic Liquid. ChemSusChem, 2020, 13, 2025-2031.	3.6	31
36	Versatile Tool for the Analysis of Metalâ€“Protein Interactions Reveals the Promiscuity of Metallodrugâ€“Protein Interactions. Analytical Chemistry, 2017, 89, 11985-11989.	3.2	30

#	Article	IF	Citations
37	Aqueous-phase hydrogenation of alkenes and arenes: The growing role of nanoscale catalysts. Catalysis Today, 2015, 247, 96-103.	2.2	29
38	Synthesis, Molecular Structure and Cytotoxicity of Molecular Materials Based on Water Soluble Half-Sandwich Rh(III) and Ir(III) Tetranuclear Metalla-Cycles. Materials, 2013, 6, 5352-5366.	1.3	28
39	Indirect CO₂ Methanation: Hydrogenolysis of Cyclic Carbonates Catalyzed by Ruâ€Modified Zeolite Produces Methane and Diols. Angewandte Chemie - International Edition, 2019, 58, 557-560.	7.2	28
40	Lignin First: Confirming the Role of the Metal Catalyst in Reductive Fractionation. Jacs Au, 2021, 1, 729-733.	3.6	28
41	Antiangiogenic and Anticancer Properties of Bifunctional Ruthenium(II)â€“p-Cymene Complexes: Influence of Pendant Perfluorous Chains. Molecular Pharmaceutics, 2015, 12, 3089-3096.	2.3	27
42	An efficient Pt nanoparticleâ€“ionic liquid system for the hydrodeoxygenation of bio-derived phenols under mild conditions. Green Chemistry, 2017, 19, 5435-5441.	4.6	27
43	The Differential Distribution of RAPTA-T in Non-Invasive and Invasive Breast Cancer Cells Correlates with Its Anti-Invasive and Anti-Metastatic Effects. International Journal of Molecular Sciences, 2017, 18, 1869.	1.8	25
44	Benzimidazolium salt-based solid-state electrolytes afford efficient quantum-dot sensitized solar cells. Journal of Materials Chemistry A, 2017, 5, 13526-13534.	5.2	23
45	Clickâ€Functionalized Ru(II) Complexes for Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2012, 2, 1004-1012.	10.2	22
46	Catalytic Ionicâ€Liquid Membranes: The Convergence of Ionicâ€Liquid Catalysis and Ionicâ€Liquid Membrane Separation Technologies. ChemPlusChem, 2018, 83, 7-18.	1.3	22
47	CO₂ Methanation via Amino Alcohol Relay Molecules Employing a Ruthenium Nanoparticle/Metal Organic Framework Catalyst. Angewandte Chemie - International Edition, 2020, 59, 16371-16375.	7.2	21
48	Boosting hydrogen production via urea electrolysis on anÂamorphous nickel phosphide/graphene hybrid structure. Journal of Materials Science, 2021, 56, 17709-17720.	1.7	21
49	Expression proteomics study to determine metallodrug targets and optimal drug combinations. Scientific Reports, 2017, 7, 1590.	1.6	19
50	Selective hydrogenation of lignin-derived compounds under mild conditions. Green Chemistry, 2020, 22, 3069-3073.	4.6	19
51	Synthesis of Crossâ€linked Ionic Poly(styrenes) and their Application as Catalysts for the Synthesis of Carbonates from CO₂ and Epoxides. ChemPlusChem, 2017, 82, 144-151.	1.3	18
52	Introduction of a Bifunctional Cation Affords Perovskite Solar Cells Stable at Temperatures Exceeding 80 Â°C. ACS Energy Letters, 2019, 4, 2989-2994.	8.8	18
53	Expanded Phase Distribution in Low Average Layerâ€Number 2D Perovskite Films: Toward Efficient Semitransparent Solar Cells. Advanced Functional Materials, 2021, 31, 2104868.	7.8	17
54	Drug Repurposing Approach Identifies a Synergistic Drug Combination of an Antifungal Agent and an Experimental Organometallic Drug for Melanoma Treatment. Molecular Pharmaceutics, 2018, 15, 116-126.	2.3	16

#	Article	IF	Citations
55	Fluorescent Benzothiazinone Analogues Efficiently and Selectively Label Dpre1 in Mycobacteria and Actinobacteria. ACS Chemical Biology, 2018, 13, 3184-3192.	1.6	16
56	Vascularâ€targeted low dose photodynamic therapy stabilizes tumor vessels by modulating pericyte contractility. Lasers in Surgery and Medicine, 2019, 51, 550-561.	1.1	15
57	Synthesis and anticancer activity of chalcogenide derivatives and platinum(II) and palladium(II) complexes derived from a polar ferrocene phosphanylâ€“carboxamide. Applied Organometallic Chemistry, 2010, 24, 392-397.	1.7	14
58	Aom²S: A new webâ€based application for DNA/RNA tandem mass spectrometry data interpretation. Rapid Communications in Mass Spectrometry, 2020, 34, e8927.	0.7	14
59	Understanding the interactions of diruthenium anticancer agents with amino acids. Journal of Biological Inorganic Chemistry, 2018, 23, 1159-1164.	1.1	13
60	Deconvolution of Lightâ€Induced Ion Migration Phenomena by Statistical Analysis of Cathodoluminescence in Lead Halideâ€Based Perovskites. Advanced Science, 2022, 9, e2103729.	5.6	13
61	Functionalized Ionic (Poly)Styrenes and their Application as Catalysts in the Cycloaddition of <scp>CO</scp>₂ to Epoxides. Helvetica Chimica Acta, 2016, 99, 821-829.	1.0	12
62	Cellular responses of BRCA1-defective HCC1937 breast cancer cells induced by the antimetastasis ruthenium(II) arene compound RAPTA-T. Apoptosis: an International Journal on Programmed Cell Death, 2019, 24, 612-622.	2.2	12
63	Drug Repurposing to Identify a Synergistic High-Order Drug Combination to Treat Sunitinib-Resistant Renal Cell Carcinoma. Cancers, 2021, 13, 3978.	1.7	12
64	Chemo-manipulation of tumor blood vessels by a metal-based anticancer complex enhances antitumor therapy. Scientific Reports, 2018, 8, 10263.	1.6	11
65	Metalâ€Sulfide Catalysts Derived from Lignosulfonate and their Efficient Use in Hydrogenolysis. ChemSusChem, 2019, 12, 3271-3277.	3.6	11
66	Methanol production from CO₂via an integrated, formamide-assisted approach. Sustainable Energy and Fuels, 2020, 4, 1773-1779.	2.5	11
67	Oxazolium Iodide Modified Perovskites for Solar Cell Fabrication. ChemPlusChem, 2018, 83, 279-284.	1.3	10
68	Masking specific effects of ionic liquid constituents at the solidâ€“liquid interface by surface functionalization. Physical Chemistry Chemical Physics, 2020, 22, 24764-24770.	1.3	10
69	Aggregation of Halloysite Nanotubes in the Presence of Multivalent Ions and Ionic Liquids. Langmuir, 2021, 37, 11869-11879.	1.6	10
70	Versatile Route to trans-Platinum(II) Complexes via Manipulation of a Coordinated 3-(Pyridin-3-yl)propanoic Acid Ligand. Inorganic Chemistry, 2019, 58, 7200-7208.	1.9	9
71	Triarylamine-Functionalized Imidazolyl-Capped Bithiophene Hole Transporting Material for Cost-Effective Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 22053-22060.	4.0	8
72	Biochemical and biophysical characterization of ruthenation of BRCA1 RING protein by RAPTA complexes and its E3 ubiquitin ligase activity. Biochemical and Biophysical Research Communications, 2017, 488, 355-361.	1.0	7

#	Article	IF	Citations
73	Discovery of a Highly Active Catalyst for Hydrogenolysis of Câ”O Bonds via Systematic, Multiâ€metallic Catalyst Screening. ChemCatChem, 2019, 11, 2743-2752.	1.8	7
74	CO 2 Methanation via Amino Alcohol Relay Molecules Employing a Ruthenium Nanoparticle/Metal Organic Framework Catalyst. Angewandte Chemie, 2020, 132, 16513.	1.6	7
75	Cut from the Same Cloth: Enamine-Derived Spirobifluorenes as Hole Transporters for Perovskite Solar Cells. Chemistry of Materials, 2021, 33, 6059-6067.	3.2	7
76	Selective Acceptorless Dehydrogenation of Primary Amines to Imines by Coreâ€“Shell Cobalt Nanoparticles. Angewandte Chemie, 2020, 132, 7571-7577.	1.6	6
77	Anion Exchangeâ€Induced Crystal Engineering via Hotâ€Pressing Sublimation Affording Highly Efficient and Stable Perovskite Solar Cells. Solar Rrl, 2021, 5, 2000729.	3.1	6
78	Dopantâ€Free Hole Transport Materials Afford Efficient and Stable Inorganic Perovskite Solar Cells and Modules. Angewandte Chemie, 2021, 133, 20652-20660.	1.6	6
79	Low-dose photodynamic therapy promotes a cytotoxic immunological response in a murine model of pleural mesothelioma. European Journal of Cardio-thoracic Surgery, 2020, 58, 783-791.	0.6	6
80	Leaching from Palladium Nanoparticles in an Ionic Liquid Leads to the Formation of Ionic Monometallic Species. Journal of Physical Chemistry Letters, 2017, 8, 3452-3456.	2.1	5
81	Utility of Coreâ€“Shell Nanomaterials in the Catalytic Transformations of Renewable Substrates. Chemistry - A European Journal, 2021, 27, 12-19.	1.7	4
82	Area-Scalable Zn₂SnO₄ Electron Transport Layer for Highly Efficient and Stable Perovskite Solar Modules. ACS Applied Materials & Interfaces, 2022, 14, 23297-23306.	4.0	4
83	Anti-angiogenic properties of chlorambucil derivatives with fluorous and hydrocarbon appendages. MedChemComm, 2016, 7, 1596-1603.	3.5	3
84	Ruthenium â€“ A Non-essential Element that May Become Essential in Treating Chemoresistant Cancers. Chimia, 2019, 73, 332.	0.3	3
85	Anticancer activity of RAPTA-EA1 in triple-negative BRCA1 proficient breast cancer cells: single and combined treatment with the PARP inhibitor olaparib. Heliyon, 2021, 7, e07749.	1.4	3
86	Efficient Solid-State Electrolytes Based on Aryl-Modified Imidazolium Ionic Crystals for Quantum Dot-Sensitized Solar Cells. ACS Applied Energy Materials, 2021, 4, 10739-10747.	2.5	2
87	Mechanistic Insights into the Role of the Bis(trifluoromethanesulfonyl)imide Ion in Coevaporated pâ€“iâ€“n Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, , .	4.0	2
88	Chlorination of arenes via the degradation of toxic chlorophenols. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2122425119.	3.3	2
89	Cycloaddition of Biogas-Contained CO₂ into Epoxides via Ionic Polymer Catalysis: An Experimental and Process Simulation Study. Industrial & Engineering Chemistry Research, 2021, 60, 17942-17948.	1.8	1
90	Simultaneous mass spectrometry analysis of cisplatin with oligonucleotide-peptide mixtures: implications for the mechanism of action. Journal of Biological Inorganic Chemistry, 2022, 27, 239.	1.1	1

#	Article	IF	Citations
91	Society and Chemistry They Are a-Changin'. Chimia, 2021, 75, 895-896.	0.3	0