Andrea Sartorel

List of Publications by Year in descending order

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88 papers

5,379 citations

38 h-index 93651 **72** g-index

106 all docs

106 docs citations

106 times ranked 5442 citing authors

#	Article	IF	CITATIONS
1	Beyond Water Oxidation: Hybrid, Molecular-Based Photoanodes for the Production of Value-Added Organics. Frontiers in Chemistry, 2022, 10, .	1.8	7
2	Waterâ€Assisted Concerted Protonâ€Electron Transfer at Co(II)â€Aquo Sites in Polyoxotungstates With Photogenerated Ru III (bpy) 3 3+ Oxidant. ChemPhysChem, 2021, 22, 1208-1218.	1.0	3
3	Microwaveâ€Assisted 1,3â€Dipolar Cycloaddition of Azomethine Ylides to [60]Fullerene: Thermodynamic Control of Bisâ€Addition with Ionic Liquids Additives. European Journal of Organic Chemistry, 2021, 2021, 3545-3551.	1.2	3
4	Fel Intermediates in N2O2 Schiff Base Complexes: Effect of Electronic Character of the Ligand and of the Proton Donor on the Reactivity with Carbon Dioxide. Energies, 2021, 14, 5723.	1.6	3
5	Artificial photosynthesis: photoanodes based on polyquinoid dyes onto mesoporous tin oxide surface. Photochemical and Photobiological Sciences, 2021, 20, 1243-1255.	1.6	10
6	Basicity as a Thermodynamic Descriptor of Carbanions Reactivity with Carbon Dioxide: Application to the Carboxylation of $\hat{i}\pm,\hat{i}^2$ -Unsaturated Ketones. Frontiers in Chemistry, 2021, 9, 783993.	1.8	2
7	Transparent Polymeric Formulations Effective against SARS-CoV-2 Infection. ACS Applied Materials & Lamp; Interfaces, 2021, 13, 54648-54655.	4.0	9
8	Naphthochromenones: Organic Bimodal Photocatalysts Engaging in Both Oxidative and Reductive Quenching Processes. Angewandte Chemie - International Edition, 2020, 59, 1302-1312.	7.2	48
9	Carbon Dioxide Reduction Mediated by Iron Catalysts: Mechanism and Intermediates That Guide Selectivity. ACS Omega, 2020, 5, 21309-21319.	1.6	25
10	Electrochemical Conversion of CO ₂ to CO by a Competent Fe ^I Intermediate Bearing a Schiff Base Ligand. ChemSusChem, 2020, 13, 4111-4120.	3.6	11
11	Photoanodes for water oxidation with visible light based on a pentacyclic quinoid organic dye enabling proton-coupled electron transfer. Chemical Communications, 2020, 56, 2248-2251.	2.2	19
12	Chelating di(N-heterocyclic carbene) complexes of iridium(III): Structural analysis, electrochemical characterisation and catalytic oxidation of water. Journal of Organometallic Chemistry, 2020, 917, 121260.	0.8	7
13	Tailored Crafting of Core–Shell Cobalt-Hydroxides@Polyfluoroaniline Nanostructures with Strongly Coupled Interfaces and Improved Hydrophilicity to Enable Efficient Oxygen Evolution. ACS Sustainable Chemistry and Engineering, 2020, 8, 6127-6133.	3.2	12
14	Novel iridium complexes with N-heterocyclic dicarbene ligands in light-driven water oxidation catalysis: photon management, ligand effect and catalyst evolution. Dalton Transactions, 2020, 49, 2696-2705.	1.6	11
15	Tracking Ultrafast Charge Separation in a PBI-based Biomimetic Complex for Oxygen Evolution. , 2020, , .		O
16	Fluorinated Zn ^{II} Porphyrins for Dye-Sensitized Aqueous Photoelectrosynthetic Cells. ACS Applied Materials & Description of the Applied Materials & Description of t	4.0	19
17	Mechanistic Insights into Light-Activated Catalysis for Water Oxidation. European Journal of Inorganic Chemistry, 2019, 2019, 2013-2013.	1.0	O
18	Light-Driven Water Oxidation with the lr-blue Catalyst and the Ru(bpy) ₃ ²⁺ /S ₂ O ₈ ^{2–} Cycle: Photogeneration of Active Dimers, Electron-Transfer Kinetics, and Light Synchronization for Oxygen Evolution with High Quantum Efficiency. Inorganic Chemistry, 2019, 58, 16537-16545.	1.9	19

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19	Clean rhodium nanoparticles prepared by laser ablation in liquid for high performance electrocatalysis of the hydrogen evolution reaction. Nanoscale Advances, 2019, 1, 4296-4300.	2.2	17
20	Mechanistic Insights into Lightâ€Activated Catalysis for Water Oxidation. European Journal of Inorganic Chemistry, 2019, 2019, 2027-2039.	1.0	20
21	Hierarchical organization of perylene bisimides and polyoxometalates for photo-assisted water oxidation. Nature Chemistry, 2019, 11, 146-153.	6.6	132
22	Visible Light Driven Photoanodes for Water Oxidation Based on Novel r-GO/β-Cu2V2O7/TiO2 Nanorods Composites. Nanomaterials, 2018, 8, 544.	1.9	23
23	Proton coupled electron transfer from Co ₃ O ₄ nanoparticles to photogenerated Ru(bpy) ₃ ³⁺ : base catalysis and buffer effect. Sustainable Energy and Fuels, 2018, 2, 1951-1956.	2.5	12
24	Ruthenium based photosensitizer/catalyst supramolecular architectures in light driven water oxidation. Inorganica Chimica Acta, 2017, 454, 171-175.	1.2	18
25	Cobalt based water oxidation catalysis with photogenerated Ru(bpy) 3 3+: Different kinetics and competent species starting from a molecular polyoxometalate and metal oxide nanoparticles capped with a bisphosphonate alendronate pendant. Catalysis Today, 2017, 290, 39-50.	2.2	20
26	Enhanced Electrocatalytic Oxygen Evolution in Au–Fe Nanoalloys. Angewandte Chemie - International Edition, 2017, 56, 6589-6593.	7.2	72
27	Enhanced Electrocatalytic Oxygen Evolution in Au–Fe Nanoalloys. Angewandte Chemie, 2017, 129, 6689-6693.	1.6	5
28	Photo-assisted water oxidation by high-nuclearity cobalt-oxo cores: tracing the catalyst fate during oxygen evolution turnover. Green Chemistry, 2017, 19, 2416-2426.	4.6	40
29	Hydrogen Evolution by Fe ^{III} Molecular Electrocatalysts Interconverting between Mono and Diâ€Nuclear Structures in Aqueous Phase. ChemSusChem, 2017, 10, 4430-4435.	3.6	9
30	Tuning Iridium Photocatalysts and Light Irradiation for Enhanced CO ₂ Reduction. ACS Catalysis, 2017, 7, 154-160.	5.5	73
31	Photoinduced hydrogen evolution with new tetradentate cobalt(<scp>ii</scp>) complexes based on the TPMA ligand. Dalton Transactions, 2016, 45, 14764-14773.	1.6	38
32	Hydrogen peroxide activation by fluorophilic polyoxotungstates for fast and selective oxygen transfer catalysis. Dalton Transactions, 2016, 45, 14544-14548.	1.6	11
33	Heterogeneous and Homogeneous Routes in Water Oxidation Catalysis Starting from Cu ^{II} Complexes with Tetraaza Macrocyclic Ligands. Chemistry - an Asian Journal, 2016, 11, 1281-1287.	1.7	43
34	Water oxidation electrocatalysis with iron oxide nanoparticles prepared via laser ablation. Journal of Energy Chemistry, 2016, 25, 246-250.	7.1	23
35	Working the Other Way Around: Photocatalytic Water Oxidation Triggered by Reductive Quenching of the Photoexcited Chromophore. Journal of Physical Chemistry C, 2015, 119, 2371-2379.	1.5	29
36	Water oxidation catalysis upon evolution of molecular Co(<scp>iii</scp>) cubanes in aqueous media. Faraday Discussions, 2015, 185, 121-141.	1.6	29

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37	A Bioinspired System for Light-Driven Water Oxidation with a Porphyrin Sensitizer and a Tetrametallic Molecular Catalyst. European Journal of Inorganic Chemistry, 2015, 2015, 3467-3477.	1.0	22
38	Natural and artificial photosynthesis: general discussion. Faraday Discussions, 2015, 185, 187-217.	1.6	3
39	Polyoxometalates Catalysts for Sustainable Oxidations and Energy Applications. , 2014, , 586-630.		2
40	Oxygenation by Ruthenium Monosubstituted Polyoxotungstates in Aqueous Solution: Experimental and Computational Dissection of a Ru(III)–Ru(V) Catalytic Cycle. Chemistry - A European Journal, 2014, 20, 10932-10943.	1.7	11
41	Nâ€Heterocyclic Dicarbene Iridium(III) Catalysts Enabling Water Oxidation under Visible Light Irradiation. European Journal of Inorganic Chemistry, 2014, 2014, 665-675.	1.0	44
42	N-Heterocyclic Dicarbene Iridium(III) Catalysts Enabling Water Oxidation under Visible Light Irradiation. European Journal of Inorganic Chemistry, 2014, 2014, 568-568.	1.0	3
43	Positive graphene by chemical design: tuning supramolecular strategies for functional surfaces. Chemical Communications, 2014, 50, 885-887.	2.2	26
44	Photocatalytic Water Oxidation by a Mixedâ€Valent Mn ^{III} ₃ Manganese Oxo Core that Mimics the Natural Oxygenâ€Evolving Center. Angewandte Chemie - International Edition, 2014, 53, 11182-11185.	7.2	180
45	Innentitelbild: Photocatalytic Water Oxidation by a Mixed-Valent MnIII3MnIVO3Manganese Oxo Core that Mimics the Natural Oxygen-Evolving Center (Angew. Chem. 42/2014). Angewandte Chemie, 2014, 126, 11280-11280.	1.6	0
46	A Co(<scp>ii</scp>)–Ru(<scp>ii</scp>) dyad relevant to light-driven water oxidation catalysis. Physical Chemistry Chemical Physics, 2014, 16, 12000-12007.	1.3	22
47	Surface Immobilization of a Tetra-Ruthenium Substituted Polyoxometalate Water Oxidation Catalyst Through the Employment of Conducting Polypyrrole and the Layer-by-Layer (LBL) Technique. ACS Applied Materials & Diterfaces, 2014, 6, 8022-8031.	4.0	54
48	Dynamic Motion of Ruâ€Polyoxometalate Ions (POMs) on Functionalized Fewâ€Layer Graphene. Small, 2013, 9, 3922-3927.	5.2	22
49	Light driven water oxidation by a single site cobalt salophen catalyst. Chemical Communications, 2013, 49, 9941.	2.2	83
50	Knitting the Catalytic Pattern of Artificial Photosynthesis to a Hybrid Graphene Nanotexture. ACS Nano, 2013, 7, 811-817.	7. 3	93
51	Tetrametallic molecular catalysts for photochemical water oxidation. Chemical Society Reviews, 2013, 42, 2262-2280.	18.7	310
52	Water oxidation surface mechanisms replicated by a totally inorganic tetraruthenium–oxo molecular complex. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4917-4922.	3.3	80
53	Salophen and salen oxo vanadium complexes as catalysts of sulfides oxidation with H2O2: Mechanistic insights. Catalysis Today, 2012, 192, 44-55.	2.2	55
54	Shaping the beating heart of artificial photosynthesis: oxygenic metal oxide nano-clusters. Energy and Environmental Science, 2012, 5, 5592.	15.6	93

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55	Water Oxidation Catalysis by Molecular Metal-Oxides. Energy Procedia, 2012, 22, 78-87.	1.8	4
56	Is $[Co4(H2O)2(\hat{1}\pm PW9O34)2]10\hat{a}^2$ a genuine molecular catalyst in photochemical water oxidation? Answers from time-resolved hole scavenging experiments. Chemical Communications, 2012, 48, 8808.	2.2	90
57	Light-driven wateroxidation with a molecular tetra-cobalt(iii) cubanecluster. Faraday Discussions, 2012, 155, 177-190.	1.6	110
58	Photoinduced Water Oxidation by a Tetraruthenium Polyoxometalate Catalyst: Ion-pairing and Primary Processes with Ru(bpy) ₃ ²⁺ Photosensitizer. Inorganic Chemistry, 2012, 51, 7324-7331.	1.9	98
59	Photocatalytic Water Oxidation: Tuning Light-Induced Electron Transfer by Molecular Co ₄ O ₄ Cores. Journal of the American Chemical Society, 2012, 134, 11104-11107.	6.6	196
60	Organicâ€Inorganic Molecular Nanoâ€Sensors: A Bisâ€Dansylated Tweezerâ€Like Fluoroionophore Integrating a Polyoxometalate Core. European Journal of Organic Chemistry, 2012, 2012, 281-289.	1.2	23
61	Photoinduced water oxidation using dendrimeric Ru(II) complexes as photosensitizers. Coordination Chemistry Reviews, 2011, 255, 2594-2601.	9.5	118
62	Hybrid Polyoxometalates: Merging Organic and Inorganic Domains for Enhanced Catalysis and Energy Applications. Israel Journal of Chemistry, 2011, 51, 259-274.	1.0	34
63	Artificial Photosynthesis Challenges: Water Oxidation at Nanostructured Interfaces. Topics in Current Chemistry, 2011, 303, 121-150.	4.0	34
64	Oxygenic polyoxometalates: a new class of molecular propellers. Chemical Communications, 2011, 47, 1716.	2.2	47
65	Tailored Functionalization of Carbon Nanotubes for Electrocatalytic Water Splitting and Sustainable Energy Applications. ChemSusChem, 2011, 4, 1447-1451.	3.6	64
66	Reactive Zr ^{IV} and Hf ^{IV} Butterfly Peroxides on Polyoxometalate Surfaces: Bridging the Gap between Homogeneous and Heterogeneous Catalysis. Chemistry - A European Journal, 2011, 17, 8371-8378.	1.7	77
67	Dendron-functionalized multiwalled carbon nanotubes incorporating polyoxometalates for water-splitting catalysis. Pure and Applied Chemistry, 2011, 83, 1529-1542.	0.9	23
68	Polyoxometalateâ€Based Nâ€Heterocyclic Carbene (NHC) Complexes for Palladiumâ€Mediated CC Coupling and Chloroaryl Dehalogenation Catalysis. Chemistry - A European Journal, 2010, 16, 10662-10666.	1.7	55
69	Efficient water oxidation at carbon nanotube–polyoxometalate electrocatalytic interfaces. Nature Chemistry, 2010, 2, 826-831.	6.6	459
70	Ruthenium polyoxometalate water splitting catalyst: very fast hole scavenging from photogenerated oxidants. Chemical Communications, 2010, 46, 3152.	2.2	165
71	Peroxo-Zr/Hf-Containing Undecatungstosilicates and -Germanates. Inorganic Chemistry, 2010, 49, 7-9.	1.9	75
72	Photo-induced water oxidation with tetra-nuclear ruthenium sensitizer and catalyst: A unique 4 \tilde{A} — 4 ruthenium interplay triggering high efficiency with low-energy visible light. Chemical Communications, 2010, 46, 4725.	2.2	162

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73	Ironâ€Substituted Polyoxotungstates as Inorganic Synzymes: Evidence for a Biomimetic Pathway in the Catalytic Oxygenation of Catechols. Chemistry - A European Journal, 2009, 15, 7854-7858.	1.7	32
74	Optically Active Polyoxotungstates Bearing Chiral Organophosphonate Substituents. European Journal of Inorganic Chemistry, 2009, 2009, 5164-5174.	1.0	49
75	Water Oxidation at a Tetraruthenate Core Stabilized by Polyoxometalate Ligands: Experimental and Computational Evidence To Trace the Competent Intermediates. Journal of the American Chemical Society, 2009, 131, 16051-16053.	6.6	195
76	H ₂ O ₂ activation by heteropolyacids with defect structures: the case of <i>î³</i> â€{(XO ₄)W ₁₀ O ₃₂] ^{nâ°'} (X = Si, Ge, n	o= 8;∶	Xâ € ‰=
77	Chiral Strandbergâ€Type Molybdates [(RPO ₃) ₅ 0 ₁₅] ^{2â^'} as Molecular Gelators: Selfâ€Assembled Fibrillar Nanostructures with Enhanced Optical Activity. Angewandte Chemie - International Edition, 2008, 47, 7275-7279.	7.2	113
78	Polyoxometalate Embedding of a Tetraruthenium(IV)-oxo-core by Template-Directed Metalation of [γ-SiW ₁₀ O ₃₆] ^{8â^³} : A Totally Inorganic Oxygen-Evolving Catalyst. Journal of the American Chemical Society, 2008, 130, 5006-5007.	6.6	571
79	Catalytic Strategies for Sustainable Oxidations in Water. Synthesis, 2008, 2008, 1971-1978.	1.2	23
80	Fast Catalytic Epoxidation with H ₂ O ₂ and $ [\hat{I}^3\text{-SiW}<\text{sub}>10O<\text{sub}>36(PhPO)<\text{sub}>2 <\text{sup}>4- in Ionic Liquids under Microwave Irradiation. Journal of Organic Chemistry, 2007, 72, 8954-8957. } $	1.7	55
81	Asymmetric Tetraprotonation of \hat{I}^3 -[(SiO4)W10O32]8 \hat{a} Triggers a Catalytic Epoxidation Reaction: Perspectives in the Assignment of the Active Catalyst. Angewandte Chemie - International Edition, 2007, 46, 3255-3258.	7.2	72
82	Aerobic oxidation of cis-cyclooctene by iron-substituted polyoxotungstates: Evidence for a metal initiated auto-oxidation mechanism. Journal of Molecular Catalysis A, 2007, 262, 36-40.	4.8	32
83	Hybrid Polyoxotungstates as Second-Generation POM-Based Catalysts for Microwave-Assisted H2O2Activation. Organic Letters, 2006, 8, 3671-3674.	2.4	110
84	Bio-inspired oxidations with polyoxometalate catalysts. Journal of Molecular Catalysis A, 2006, 251, 93-99.	4.8	62
85	Relativistic DFT Calculations of Polyoxotungstate 183W NMR Spectra: Insight into their Solution Structure. ChemPhysChem, 2003, 4, 517-519.	1.0	37
86	Electrospray Behavior of Lacunary Keggin-Type Polyoxotungstates [XW11039]p (X = Si, P): Mass Spectrometric Evidence for a Concentration-Dependent Incorporation of an MOn+ (M = WVI, MoVI, VV) Unit into the Polyoxometalate Vacancy. European Journal of Inorganic Chemistry, 2003, 2003, 699-704.	1.0	58
87	Microwave-Assisted Rapid Incorporation of Ruthenium into Lacunary Keggin-Type Polyoxotungstates: One-Step Synthesis,99Ru,183W NMR Characterization and Catalytic Activity of [PW11O39Rull(DMSO)]5–. European Journal of Inorganic Chemistry, 2000, 2000, 17-20.	1.0	7 3
88	Photo-induced water oxidation: New photocatalytic processes and materials. Photochemistry, 0, , 274-294.	0.2	7