

# Marco Ranocchiari

## List of Publications by Year in descending order

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69  
papers

4,837  
citations

136885

32  
h-index

91828

69  
g-index

81  
all docs

81  
docs citations

81  
times ranked

5454  
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly selective Suzuki reaction catalysed by a molecular Pd <sup>II</sup> -P-MOF catalyst under mild conditions: role of ligands and palladium speciation. <i>Catalysis Science and Technology</i> , 2022, 12, 954-961.	2.1	13
2	Catalyst overcoating engineering towards high-performance electrocatalysis. <i>Chemical Society Reviews</i> , 2022, 51, 188-236.	18.7	53
3	Copper <sup>II</sup> -zinc oxide interface as a methanol-selective structure in Cu <sup>II</sup> -ZnO catalyst during catalytic hydrogenation of carbon dioxide to methanol. <i>Catalysis Science and Technology</i> , 2022, 12, 2703-2716.	2.1	18
4	Unraveling the molecular mechanism of MIL-53(Al) crystallization. <i>Nature Communications</i> , 2022, 13, .	5.8	22
5	Thermal catalytic conversion: general discussion. <i>Faraday Discussions</i> , 2021, 230, 124-151.	1.6	0
6	Spatio <sup>II</sup> -Chemical Heterogeneity of Defect <sup>II</sup> -Engineered Metal <sup>II</sup> -Organic Framework Crystals Revealed by Full <sup>II</sup> -Field Tomographic X <sup>II</sup> -ray Absorption Spectroscopy. <i>Angewandte Chemie</i> , 2021, 133, 10120-10127.	1.6	1
7	Spatio <sup>II</sup> -Chemical Heterogeneity of Defect <sup>II</sup> -Engineered Metal <sup>II</sup> -Organic Framework Crystals Revealed by Full <sup>II</sup> -Field Tomographic X <sup>II</sup> -ray Absorption Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10032-10039.	7.2	13
8	Mapping Vibrational Spectra to the Structures of Copper Species in Zeolites Based on Calculated Stretching Frequencies of Adsorbed Nitrogen and Carbon Monoxides. <i>Journal of Physical Chemistry C</i> , 2021, 125, 12094-12106.	1.5	11
9	On the Stability of Pt <sup>II</sup> -Based Catalysts in HBr/Br <sub>2</sub> Solution. <i>Helvetica Chimica Acta</i> , 2021, 104, e2100082.	1.0	1
10	Enlightening the journey of metal-organic framework (derived) catalysts during the oxygen evolution reaction in alkaline media via operando X-ray absorption spectroscopy. <i>Current Opinion in Electrochemistry</i> , 2021, 30, 100845.	2.5	5
11	Solvent-dependent textural properties of defective UiO-66 after acidic and basic treatment. <i>Inorganic Chemistry Frontiers</i> , 2021, 9, 70-77.	3.0	3
12	Heterogeneous Metal-Organic Framework Catalysts for Suzuki-Miyaura Cross Coupling in the Pharma Industry. <i>Chimia</i> , 2021, 75, 972.	0.3	6
13	Thermal degradation of defective high-surface-area UiO-66 in different gaseous environments. <i>RSC Advances</i> , 2021, 11, 38849-38855.	1.7	20
14	Influence of Water in the Synthesis of the Zirconium-Based Metal <sup>II</sup> -Organic Framework UiO-66: Isolation and Reactivity of [ZrCl(OH) <sub>2</sub> (DMF) <sub>2</sub> ]Cl. <i>Inorganic Chemistry</i> , 2020, 59, 7860-7868.	1.9	29
15	Metal-organic frameworks as kinetic modulators for branched selectivity in hydroformylation. <i>Nature Communications</i> , 2020, 11, 1059.	5.8	40
16	The catalytic and radical mechanism for ethanol oxidation to acetic acid. <i>Chemical Communications</i> , 2019, 55, 11833-11836.	2.2	21
17	Increasing the activity of copper exchanged mordenite in the direct isothermal conversion of methane to methanol by Pt and Pd doping. <i>Chemical Science</i> , 2019, 10, 167-171.	3.7	17
18	Misconceptions and challenges in methane-to-methanol over transition-metal-exchanged zeolites. <i>Nature Catalysis</i> , 2019, 2, 485-494.	16.1	140

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19	Response to Comment on "Selective anaerobic oxidation of methane enables direct synthesis of methanol". Science, 2018, 359, .	6.0	1
20	Direct Stepwise Oxidation of Methane to Methanol over Cu <sup>2+</sup> /SiO <sub>2</sub> . ACS Catalysis, 2018, 8, 5721-5731.	5.5	61
21	Direct Conversion of Methane to Methanol under Mild Conditions over Cu-Zeolites and beyond. Accounts of Chemical Research, 2017, 50, 418-425.	7.6	322
22	Selective anaerobic oxidation of methane enables direct synthesis of methanol. Science, 2017, 356, 523-527.	6.0	646
23	Comparative Study of Diverse Copper Zeolites for the Conversion of Methane into Methanol. ChemCatChem, 2017, 9, 3705-3713.	1.8	96
24	The Direct Catalytic Oxidation of Methane to Methanol – A Critical Assessment. Angewandte Chemie - International Edition, 2017, 56, 16464-16483.	7.2	537
25	In situ high-resolution powder X-ray diffraction study of UiO-66 under synthesis conditions in a continuous-flow microwave reactor. CrystEngComm, 2017, 19, 3206-3214.	1.3	28
26	Subnanometer Gold Clusters on Amino-Functionalized Silica: An Efficient Catalyst for the Synthesis of 1,3-Diynes by Oxidative Alkyne Coupling. ACS Catalysis, 2017, 7, 3414-3418.	5.5	40
27	Mixed-linker UiO-66: structure–property relationships revealed by a combination of high-resolution powder X-ray diffraction and density functional theory calculations. Physical Chemistry Chemical Physics, 2017, 19, 1551-1559.	1.3	47
28	Gold Particles Supported on Amino-Functionalized Silica Catalyze Transfer Hydrogenation of N-Heterocyclic Compounds. Advanced Synthesis and Catalysis, 2017, 359, 677-686.	2.1	35
29	Assessing the relative stability of copper oxide clusters as active sites of a CuMOR zeolite for methane to methanol conversion: size matters?. Nanoscale, 2017, 9, 1144-1153.	2.8	94
30	Response to Comment on "Selective anaerobic oxidation of methane enables direct synthesis of methanol". Science, 2017, 358, .	6.0	18
31	MOFs modeling and theory: general discussion. Faraday Discussions, 2017, 201, 233-245.	1.6	4
32	Electronic, magnetic and photophysical properties of MOFs and COFs: general discussion. Faraday Discussions, 2017, 201, 87-99.	1.6	9
33	New directions in gas sorption and separation with MOFs: general discussion. Faraday Discussions, 2017, 201, 175-194.	1.6	6
34	Catalysis in MOFs: general discussion. Faraday Discussions, 2017, 201, 369-394.	1.6	14
35	Metal–Organic Frameworks Invert Molecular Reactivity: Lewis Acidic Phosphonium Zwitterions Catalyze the Aldol-Tishchenko Reaction. Journal of the American Chemical Society, 2017, 139, 18166-18169.	6.6	30
36	Die direkte katalytische Oxidation von Methan zu Methanol – eine kritische Beurteilung. Angewandte Chemie, 2017, 129, 16684-16704.	1.6	51

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37	Continuous-Flow Microwave Synthesis of Metal-Organic Frameworks: A Highly Efficient Method for Large-Scale Production. <i>Chemistry - A European Journal</i> , 2016, 22, 3245-3249.	1.7	132
38	Enantioselective Hydrogenation of Olefins Enhanced by Metal-Organic Framework Additives. <i>ChemCatChem</i> , 2016, 8, 308-312.	1.8	14
39	Isothermal Cyclic Conversion of Methane into Methanol over Copper-Exchanged Zeolite at Low Temperature. <i>Angewandte Chemie</i> , 2016, 128, 5557-5561.	1.6	70
40	Decomposition Process of Carboxylate MOF HKUST-1 Unveiled at the Atomic Scale Level. <i>Journal of Physical Chemistry C</i> , 2016, 120, 12879-12889.	1.5	99
41	Aging of the reaction mixture as a tool to modulate the crystallite size of UiO-66 into the low nanometer range. <i>Chemical Communications</i> , 2016, 52, 6411-6414.	2.2	39
42	Photocatalyzed Hydrogen Evolution from Water by a Composite Catalyst of NH <sub>2</sub> -MIL-125(Ti) and Surface Nickel(II) Species. <i>Chemistry - A European Journal</i> , 2016, 22, 13894-13899.	1.7	62
43	Isothermal Cyclic Conversion of Methane into Methanol over Copper-Exchanged Zeolite at Low Temperature. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5467-5471.	7.2	184
44	Synthesis of sub-nanometer gold particles on modified silica. <i>Dalton Transactions</i> , 2016, 45, 2983-2988.	1.6	17
45	Methane to methanol over copper mordenite: yield improvement through multiple cycles and different synthesis techniques. <i>Catalysis Science and Technology</i> , 2016, 6, 5011-5022.	2.1	75
46	Bis( $\mu_4$ -oxo) versus mono( $\mu_4$ -oxo)dicopper cores in a zeolite for converting methane to methanol: an in situ XAS and DFT investigation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 7681-7693.	1.3	137
47	Metal organic frameworks for photo-catalytic water splitting. <i>Energy and Environmental Science</i> , 2015, 8, 1923-1937.	15.6	277
48	Efficient microwave assisted synthesis of metal-organic framework UiO-66: optimization and scale up. <i>Dalton Transactions</i> , 2015, 44, 14019-14026.	1.6	104
49	Phosphine and phosphine oxide groups in metal-organic frameworks detected by P K-edge XAS. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 3326-3331.	1.3	23
50	Functionalized Ruthenium-Phosphine Metal-Organic Framework for Continuous Vapor-Phase Dehydrogenation of Formic Acid. <i>ACS Catalysis</i> , 2015, 5, 7099-7103.	5.5	45
51	Tetrahedral Tetraphosphonic Acids. <i>New Building Blocks in Supramolecular Chemistry. Crystal Growth and Design</i> , 2015, 15, 4925-4931.	1.4	21
52	Synthesis and Characterization of Phosphine-Functionalized Metal-Organic Frameworks Based on MOF-5 and MIL-101 Topologies. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 9120-9127.	1.8	35
53	Selective Catalytic Behavior of a Phosphine-Tagged Metal-Organic Framework Organocatalyst. <i>Chemistry - A European Journal</i> , 2014, 20, 15467-15472.	1.7	21
54	Tuning Regioisomer Reactivity in Catalysis using Bifunctional Metal-Organic Frameworks with Mixed Linkers. <i>ChemCatChem</i> , 2014, 6, 1887-1891.	1.8	19

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55	Au <sup>I</sup> Catalysis on a Coordination Polymer: A Solid Porous Ligand with Free Phosphine Sites. <i>ChemCatChem</i> , 2013, 5, 692-696.	1.8	43
56	Fine tuning of gold electronic structure by IRMOF post-synthetic modification. <i>RSC Advances</i> , 2013, 3, 12043.	1.7	12
57	Highly Enantioselective Ruthenium/PNNP-Catalyzed Imine Aziridination: Evidence of Carbene Transfer from a Diazoester Complex. <i>Organometallics</i> , 2013, 32, 4690-4701.	1.1	37
58	“Click” on MOFs: A Versatile Tool for the Multimodal Derivatization of N <sub>3</sub> -Decorated Metal Organic Frameworks. <i>Chemistry of Materials</i> , 2013, 25, 2297-2308.	3.2	53
59	Synthesis and Reactivity of Zn <sup>II</sup> -Biphenyl Metal <sup>II</sup> -Organic Frameworks, Introducing a Diphenylphosphino Functional Group. <i>Chimia</i> , 2013, 67, 397-402.	0.3	9
60	Catalytic Conversion of Methane to Methanol Using Cu-Zeolites. <i>Chimia</i> , 2012, 66, 668.	0.3	21
61	Synthesis of Water-Soluble Phosphine Oxides by Pd/C-Catalyzed P <sup>II</sup> -C Coupling in Water. <i>Organic Letters</i> , 2012, 14, 2188-2190.	2.4	86
62	Catalytic conversion of methane to methanol over Cu <sup>II</sup> -mordenite. <i>Chemical Communications</i> , 2012, 48, 404-406.	2.2	187
63	Single-atom active sites on metal-organic frameworks. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 1985-1999.	1.0	48
64	Fast and high yield post-synthetic modification of metal <sup>II</sup> -organic frameworks by vapor diffusion. <i>Chemical Communications</i> , 2012, 48, 1904.	2.2	66
65	Aqua and Diethyl Ether PNNP Complexes of Ruthenium(II): Structure and Solution Behavior. <i>Organometallics</i> , 2011, 30, 3596-3602.	1.1	8
66	Catalysis by metal <sup>II</sup> -organic frameworks: fundamentals and opportunities. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 6388.	1.3	365
67	Synthesis and characterization of new tetra-substituted porphyrins with exo-donor carboxylic groups as building blocks for supramolecular architectures: Catalytic and structural studies of their metalated derivatives. <i>Journal of Porphyrins and Phthalocyanines</i> , 2010, 14, 804-814.	0.4	6
68	PNNP Macrocycles: A New Class of Ligands for Asymmetric Catalysis. <i>Organometallics</i> , 2009, 28, 1286-1288.	1.1	33
69	Ru/PNNP-Catalyzed Asymmetric Imine Aziridination by Diazo Ester Activation. <i>Organometallics</i> , 2009, 28, 3611-3613.	1.1	33