Jean-Philippe Renault

List of Publications by Year
in descending order

58 papers	1,487 citations	331670 21 h-index	330143 37 g-index
60 all docs	60 docs citations	60 times ranked	2208 citing authors

#	Article	IF	Citations
1	The reaction of coumarin with the OH radical revisited: hydroxylation product analysis determined by fluorescence and chromatography. Radiation Physics and Chemistry, 2005, 72, 119-124.	2.8	231
2	Series of Mn Complexes Based onN-Centered Ligands and Superoxide - Reactivity in an Anhydrous Medium and SOD-Like Activity in an Aqueous Medium Correlated to MnII/MnIII Redox Potentials. European Journal of Inorganic Chemistry, 2005, 2005, 3513-3523.	2.0	98
3	Structural Determinants for Protein adsorption/non-adsorption to Silica Surface. PLoS ONE, 2013, 8, e81346.	2.5	95
4	RNA-binding proteins are a major target of silica nanoparticles in cell extracts. Nanotoxicology, 2016, 10, 1555-1564.	3.0	86
5	Radiolysis of Confined Water: Hydrogen Production at a High Dose Rate. ChemPhysChem, 2005, 6, 2585-2596.	2.1	67
6	Radiolysis of Confined Water: Production and Reactivity of Hydroxyl Radicals. Angewandte Chemie - International Edition, 2005, 44, 110-112.	13.8	54
7	Finite Size Effects on Hydrogen Bonds in Confined Water. Angewandte Chemie - International Edition, 2008, 47, 8033-8035.	13.8	42
8	Proteinâ€"Nanoparticle Interactions: What Are the Proteinâ€"Corona Thickness and Organization?. Langmuir, 2019, 35, 10831-10837.	3.5	40
9	<i>In Situ</i> Analysis of Weakly Bound Proteins Reveals Molecular Basis of Soft Corona Formation. ACS Nano, 2020, 14, 9073-9088.	14.6	38
10	EPR and Ligand Field Studies of Iron Superoxide Dismutases and Iron-Substituted Manganese Superoxide Dismutases:â€‰ Relationships between Electronic Structure of the Active Site and Activity. Inorganic Chemistry, 2000, 39, 2666-2675.	4.0	33
11	Myoglobin on Silica: A Case Study of the Impact of Adsorption on Protein Structure and Dynamics. Langmuir, 2013, 29, 13465-13472.	3.5	32
12	Radiolytic Events in Nanostructured Aluminum Hydroxides. Journal of Physical Chemistry C, 2017, 121, 6365-6373.	3.1	29
13	Protein Corona Composition of Silica Nanoparticles in Complex Media: Nanoparticle Size does not Matter. Nanomaterials, 2020, 10, 240.	4.1	29
14	High-Throughput Evaluation of Antioxidant and Pro-oxidant Activities of Polyphenols with Thymidine Protection Assays. ChemBioChem, 2005, 6, 1234-1241.	2.6	28
15	H2 formation by electron irradiation of SBA-15 materials and the effect of CuII grafting. Physical Chemistry Chemical Physics, 2010, 12, 14188.	2.8	27
16	Structure and Function of Adsorbed Hemoglobin on Silica Nanoparticles: Relationship between the Adsorption Process and the Oxygen Binding Properties. Langmuir, 2017, 33, 3241-3252.	3.5	27
17	From Protein Corona to Colloidal Self-Assembly: The Importance of Protein Size in Proteinâ€"Nanoparticle Interactions. Langmuir, 2020, 36, 8218-8230.	3.5	26
18	A Pulse Radiolysis Study of Catalytic Superoxide Radical Dismutation by a Manganese(II) Complex with an N-Tripodal Ligand. European Journal of Inorganic Chemistry, 2005, 2005, 2789-2793.	2.0	25

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19	A Powerful Antiradiation Compound Revealed by a New High-Throughput Screening Method. ChemBioChem, 2004, 5, 832-840.	2.6	23
20	Nanosecond Pulse Radiolysis of Nanoconfined Water. Journal of Physical Chemistry C, 2012, 116, 13104-13110.	3.1	22
21	Improving ¹³¹I Radioiodine Therapy By Hybrid Polymer-Grafted Gold Nanoparticles . International Journal of Nanomedicine, 2019, Volume 14, 7933-7946.	6.7	22
22	Ab initio study of Cdâ€“thiol complexes: application to the modelling of the metallothionein active site. Physical Chemistry Chemical Physics, 2003, 5, 3762-3767.	2.8	21
23	First coupling between a LINAC and FT-IR spectroscopy: The aqueous ferrocyanide system. Chemical Physics Letters, 2006, 426, 71-76.	2.6	21
24	Radiolysis of water in nanoporous gold. Physical Chemistry Chemical Physics, 2010, 12, 12868.	2.8	21
25	Hydrogen radiolytic release from zeolite 4A/water systems under Î³ irradiations. Radiation Physics and Chemistry, 2015, 110, 6-11.	2.8	21
26	Time-Resolved Studies of Water Dynamics and Proton Transfer at the Aluminaâˆ’Air Interface. Journal of the American Chemical Society, 2007, 129, 11720-11729.	13.7	20
27	Synthesis and antioxidant properties of pulvinic acids analogues. Bioorganic and Medicinal Chemistry, 2010, 18, 7931-7939.	3.0	20
28	Dynamics of Water Confined in Clay Minerals. Journal of Physical Chemistry C, 2012, 116, 12916-12925.	3.1	20
29	Manipulating hemoglobin oxygenation using silica nanoparticles: a novel prospect for artificial oxygen carriers. Blood Advances, 2018, 2, 90-94.	5.2	20
30	Determination of hydroxyl rate constants by a high-throughput fluorimetric assay: towards a unified reactivity scale for antioxidants. Analyst, The, 2009, 134, 250-255.	3.5	19
31	Interferences of Silica Nanoparticles in Green Fluorescent Protein Folding Processes. Langmuir, 2016, 32, 195-202.	3.5	19
32	How Do Surface Properties of Nanoparticles Influence Their Diffusion in the Extracellular Matrix? A Model Study in Matrigel Using Polymer-Grafted Nanoparticles. Langmuir, 2020, 36, 10460-10470.	3.5	19
33	Hydrated Electron Production by Reaction of Hydrogen Atoms with Hydroxide Ions: A First-Principles Molecular Dynamics Study. Journal of Physical Chemistry A, 2008, 112, 7027-7034.	2.5	18
34	Tuning hydrogen production during oxide irradiation through surface grafting. Journal of Materials Chemistry, 2009, 19, 4261.	6.7	15
35	Carbonâ€Centered Radicals Can Transfer Hydrogen Atoms between Amino Acid Side Chains. Angewandte Chemie - International Edition, 2012, 51, 2960-2963.	13.8	15
36	The effect of myoglobin crowding on the dynamics of water: an infrared study. Physical Chemistry Chemical Physics, 2014, 16, 22841-22852.	2.8	14

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37	Efficient hydrogen production from irradiated aluminum hydroxides. International Journal of Hydrogen Energy, 2019, 44, 3737-3743.	7.1	14
38	Ionizing radiation induces a Yap1-dependent peroxide stress response in yeast. Free Radical Biology and Medicine, 2007, 43, 136-144.	2.9	13
39	Thermochromic Conformational Change of Methanobacterium thermoautotrophicum Iron Superoxide Dismutase. Inorganic Chemistry, 1999, 38, 614-615.	4.0	10
40	Interaction of TiO2 nanoparticles with proteins from aquatic organisms: the case of gill mucus from blue mussel. Environmental Science and Pollution Research, 2017, 24, 13474-13483.	5.3	10
41	Albumin-driven disassembly of lipidic nanoparticles: the specific case of the squalene-adenosine nanodrug. Nanoscale, 2020, 12, 2793-2809.	5.6	9
42	Paramagnetic NMR spectroscopy of native and cobalt substituted manganese superoxide dismutase from Escherichia coli. FEBS Letters, 1997, 401, 15-19.	2.8	8
43	In Situ Electron-Beam Polymerization Stabilized Quantum Dot Micelles. Langmuir, 2011, 27, 4358-4361.	3.5	8
44	Effect of pressure on pulse radiolysis reduction of proteins. Biochimica Et Biophysica Acta - General Subjects, 2005, 1724, 432-439.	2.4	6
45	Water reduction by photoexcited silica and alumina. Chemical Communications, 2010, 46, 2394.	4.1	6
46	H2 production through oxide irradiation: Comparison of gamma rays and vacuum ultraviolet excitation. International Journal of Hydrogen Energy, 2013, 38, 3889-3897.	7.1	6
47	VUV grafting: an efficient method for 3D bulk patterning of polymer sheets. Polymer Chemistry, 2014, 5, 2990-2996.	3.9	6
48	Oxadiazoleâ€2â€thiol Adsorption on Gold Nanorods: A Joint Theoretical and Experimental Study by Using SERS, XPS, and DFT. ChemPhysChem, 2014, 15, 3646-3654.	2.1	4
49	Importance of Post-translational Modifications in the Interaction of Proteins with Mineral Surfaces: The Case of Arginine Methylation and Silica surfaces. Langmuir, 2018, 34, 5312-5322.	3.5	4
50	Combining surface chemistry modification and <i>in situ</i> small-angle scattering characterization to understand and optimize the biological behavior of nanomedicines. Journal of Materials Chemistry B, 2020, 8, 6438-6450.	5.8	4
51	Footprinting of Protein Interactions by Tritium Labeling. Biochemistry, 2010, 49, 4297-4299.	2.5	3
52	Water splitting by infrared femtosecond laser excitation of surface plasmon. Chemical Physics Letters, 2013, 558, 31-35.	2.6	3
53	The nano-bio interface mapped by oxidative footprinting of the adsorption sites of myoglobin. Analytical and Bioanalytical Chemistry, 2014, 406, 8037-8040.	3.7	3
54	A microfluidic dosimetry cell to irradiate solutions with poorly penetrating radiations: a step towards online dosimetry for synchrotron beamlines. Journal of Synchrotron Radiation, 2021, 28, 778-789.	2.4	3

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55	Seeing the solvated electron in action: First-principles molecular dynamics of NO3â˜’ and N2O reduction. Radiation Physics and Chemistry, 2022, 190, 109810.	2.8	3
56	Relation between frequency and H bond length in heavy water: Towards the understanding of the unusual properties of H bond dynamics in nanoporous media. Journal of Physics: Conference Series, 2009, 177, 012012.	0.4	1
57	Infrared Spectroscopy and Radiation Chemistry. , 2010, , 201-229.		1
58	Radiolysis of Water Confined in Nanoporous Materials. , 2010, , 325-345.		0