Francoise Remacle

List of Publications by Citations

269 papers	6,764 citations	42 h-index	70 g-index
291 ext. papers	7,401 ext. citations	4.9 avg, IF	6.05 L-index

#	Paper	IF	Citations
269	DNA computing circuits using libraries of DNAzyme subunits. *Nature Nanotechnology*, **2010**, 5, 417-22	28.7	369
268	Measurement and laser control of attosecond charge migration in ionized iodoacetylene. *Science*, **2015**, 350, 790-5	33.3	352
267	Architectonic Quantum Dot Solids. *Accounts of Chemical Research*, **1999**, 32, 415-423	24.3	324
266	An electronic time scale in chemistry. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 6793-8	11.5	305
265	Complexes of DNA bases and gold clusters Au3 and Au4 involving nonconventional N-H...Au hydrogen bonding. *Nano Letters*, **2005**, 5, 735-9	11.5	117
264	All-DNA finite-state automata with finite memory. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 21996-2001	11.5	112
263	Quantum dots as chemical building blocks: elementary theoretical considerations. *ChemPhysChem*, **2001**, 2, 20-36	3.2	111
262	Laser steered ultrafast quantum dynamics of electrons in LiH. *Physical Review Letters*, **2007**, 99, 183902	7.4	110
261	Intermolecular and Intramolecular Logic Gates. *Journal of Physical Chemistry B*, **2001**, 105, 5589-5591	3.4	108
260	Structure and energetics of two- and three-dimensional neutral, cationic, and anionic gold clusters Au(5Journal of Chemical Physics, **2005**, 122, 44304	3.9	105
259	pH-programmable DNA logic arrays powered by modular DNAzyme libraries. *Nano Letters*, **2012**, 12, 6049-54	11.5	96
258	Electrochemically driven sequential machines: an implementation of copper rotaxanes. *Chemistry - A European Journal*, **2009**, 15, 1310-3	4.8	95
257	Complexes of DNA bases and Watson-Crick base pairs with small neutral gold clusters. *Journal of Physical Chemistry B*, **2005**, 109, 22746-57	3.4	91
256	Pump and probe ultrafast electron dynamics in LiH: a computational study. *New Journal of Physics*, **2008**, 10, 025019	2.9	83
255	The magic gold cluster Au20. *International Journal of Quantum Chemistry*, **2007**, 107, 2922-2934	2.1	80
254	Logic reversibility and thermodynamic irreversibility demonstrated by DNAzyme-based Toffoli and Fredkin logic gates. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 21228-33	11.5	77
253	Electronic Control of Site Selective Reactivity:A Model Combining Charge Migration and Dissociation. *Journal of Physical Chemistry A*, **1999**, 103, 10149-10158	2.8	75

252	DNAzyme-based 2:1 and 4:1 multiplexers and 1:2 demultiplexer. *Chemical Science*, **2014**, 5, 1074	9.4	74
251	A full-adder based on reconfigurable DNA-hairpin inputs and DNAzyme computing modules. *Chemical Science*, **2014**, 5, 3381	9.4	69
250	Molecule-based photonically switched half and full adder. *Journal of Physical Chemistry A*, **2006**, 110, 177-84	2.8	69
249	Three-gold clusters form nonconventional hydrogen bonds OH?Au and NH?Au with formamide and formic acid. *Chemical Physics Letters*, **2005**, 404, 142-149	2.5	64
248	Trapping in competitive decay of degenerate states. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1990**, 145, 265-268	2.3	62
247	Charge directed reactivity:. *Chemical Physics Letters*, **1998**, 285, 25-33	2.5	60
246	Information-theoretic analysis of phenotype changes in early stages of carcinogenesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 10324-9	11.5	59
245	miRNA and mRNA cancer signatures determined by analysis of expression levels in large cohorts of patients. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 19160-5	11.5	57
244	Hypoxia induces a phase transition within a kinase signaling network in cancer cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E1352-60	11.5	55
243	Decay of high Rydberg states: A paradigm for intramolecular dynamics in a congested bound level structure coupled to a continuum. *Journal of Chemical Physics*, **1996**, 104, 1399-1414	3.9	53
242	Charge migration in the bifunctional PENNA cation induced and probed by ultrafast ionization: a dynamical study. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2014**, 47, 124011	1.3	51
241	Protein signaling networks from single cell fluctuations and information theory profiling. *Biophysical Journal*, **2011**, 100, 2378-86	2.9	50
240	Electronic Response of Assemblies of Designer Atoms: The Metal Insulator Transition and the Role of Disorder. *Journal of the American Chemical Society*, **2000**, 122, 4084-4091	16.4	50
239	Networks of Quantum Nanodots: The Role of Disorder in Modifying Electronic and Optical Properties. *Journal of Physical Chemistry B*, **1998**, 102, 7727-7734	3.4	50
238	Localized electron dynamics in attosecond-pulse-excited molecular systems: Probing the time-dependent electron density by sudden photoionization. *Physical Review A*, **2012**, 86,	2.6	49
237	Electronic wave packet motion in water dimer cation: A many electron description. *Chemical Physics* , **2009**, 366, 129-138	2.3	47
236	Probing Ultrafast Purely Electronic Charge Migration in Small Peptides. *Zeitschrift Fur Physikalische Chemie*, **2007**, 221, 647-661	3.1	47
235	Coherent electronic wave packet motion in C(60) controlled by the waveform and polarization of few-cycle laser fields. *Physical Review Letters*, **2015**, 114, 123004	7.4	46

234	Quantum dot artificial solids: understanding the static and dynamic role of size and packing disorder. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99 Suppl 2, 6456-9	11.5	45
233	Glioblastoma cellular architectures are predicted through the characterization of two-cell interactions. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 6521-6	11.5	44
232	Gating the Conductivity of Arrays of Metallic Quantum Dots. *Journal of Physical Chemistry B*, **2003**, 107, 13892-13901	3.4	44
231	On the strong and selective isotope effect in the UV excitation of N2 with implications toward the nebula and Martian atmosphere. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 6020-5	11.5	43
230	On a fundamental structure of gene networks in living cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 4702-7	11.5	42
229	The transition from localized to collective electronic states in a silver quantum dots monolayer examined by nonlinear optical response. *Chemical Physics Letters*, **1998**, 291, 453-458	2.5	42
228	Charge migration and control of site selective reactivity: The role of covalent and ionic states. *Journal of Chemical Physics*, **1999**, 110, 5089-5099	3.9	42
227	The gold-ammonia bonding patterns of neutral and charged complexes Au m 0+/-1-(NH3)n. I. Bonding and charge alternation. *Journal of Chemical Physics*, **2007**, 127, 194305	3.9	40
226	On spectroscopy, control, and molecular information processing. *ChemPhysChem*, **2002**, 3, 43-51	3.2	40
225	Thermometer ions for matrix-enhanced laser desorption/ionization internal energy calibration. *Rapid Communications in Mass Spectrometry*, **2003**, 17, 1847-54	2.2	40
224	On the feasibility of an ultrafast purely electronic reorganization in lithium hydride. *Chemical Physics*, **2007**, 338, 342-347	2.3	39
223	All-optical digital logic: Full addition or subtraction on a three-state system. *Physical Review A*, **2006** , 73,	2.6	39
222	Attosecond pumping of nonstationary electronic states of LiH: Charge shake-up and electron density distortion. *Physical Review A*, **2011**, 83,	2.6	38
221	Nonconventional hydrogen bonding between clusters of gold and hydrogen fluoride. *Journal of Physical Chemistry A*, **2005**, 109, 7309-18	2.8	38
220	Electrical transmission of molecular bridges. *Chemical Physics Letters*, **2004**, 383, 537-543	2.5	38
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217	Ternary DNA computing using 3 □B multiplication matrices. *Chemical Science*, **2015**, 6, 1288-1292	9.4	36

216	Angular-resolved photoelectron spectroscopy of superatom orbitals of fullerenes. *Physical Review Letters*, **2012**, 108, 173401	7.4	36
215	On Electronic Properties of Assemblies of Quantum Nanodots *Journal of Physical Chemistry A*, **2000**, 104, 4739-4747	2.8	36
214	Ligand and solvation effects on the electronic properties of Au55 clusters: a density functional theory study. *Nano Letters*, **2009**, 9, 3007-11	11.5	35
213	Ligand and Solvation Effects on the Structural and Electronic Properties of Small Gold Clusters. *Journal of Physical Chemistry C*, **2014**, 118, 4362-4376	3.8	33
212	Conductivity of 2-D Ag Quantum Dot Arrays: Computational Study of the Role of Size and Packing Disorder at Low Temperatures. *Journal of Physical Chemistry B*, **2002**, 106, 4116-4126	3.4	33
211	Intercommunication of DNA-Based Constitutional Dynamic Networks. *Journal of the American Chemical Society*, **2018**, 140, 8721-8731	16.4	32
210	Stereocontrol of attosecond time-scale electron dynamics in ABCU using ultrafast laser pulses: a computational study. *Physical Chemistry Chemical Physics*, **2011**, 13, 8331-44	3.6	31
209	Integrated logic circuits using single-atom transistors. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 13969-72	11.5	31
208	Vibrational computing: simulation of a full adder by optimal control. *Journal of Chemical Physics*, **2008**, 128, 064110	3.9	31
207	Architecture with designer atoms: simple theoretical considerations. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 553-8	11.5	31
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199	Imaging Transport Disorder in Conducting Arrays of Metallic Quantum Dots: An Experimental and Computational Study. *Advanced Materials*, **2002**, 14, 124-128	24	28

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197	Experimental and Theoretical Study of the Reactivity of Gold Nanoparticles Towards Benzimidazole-2-ylidene Ligands. *Chemistry - A European Journal*, **2016**, 22, 10446-58	4.8	27
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194	Consecutive feedback-driven constitutional dynamic networks. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 2843-2848	11.5	25
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177	Parallel and Multivalued Logic by the Two-Dimensional Photon-Echo Response of a Rhodamine□DNA Complex. *Journal of Physical Chemistry Letters*, **2015**, 6, 1714-8	6.4	20
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175	Coherent electronic and nuclear dynamics in a rhodamine heterodimer-DNA supramolecular complex. *Physical Chemistry Chemical Physics*, **2017**, 19, 23043-23051	3.6	20
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161	Ultrafast predissociation mechanism of the 1□u states of 14N2 and its isotopomers upon attosecond excitation from the ground state. *Journal of Physical Chemistry A*, **2012**, 116, 11311-8	2.8	16
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112	Controlled full adder-subtractor by vibrational computing. *Physical Chemistry Chemical Physics*, **2010**, 12, 15628-35	3.6	9
111	Broken Symmetry in the Density of Electronic States of an Array of Quantum Dots As Computed for Scanning Tunneling Microscopy. *Journal of Physical Chemistry A*, **2000**, 104, 10435-10441	2.8	9
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