Rafael Prado-Gotor

List of Publications by Year
in descending order

80 papers	1,511 citations	331259 21 h-index	360668 35 g-index
83 all docs	83 docs citations	83 times ranked	1953 citing authors

#	Article	IF	Citations
1	Rational design of a CD4 mimic that inhibits HIV-1 entry and exposes cryptic neutralization epitopes. Nature Biotechnology, 2003, 21, 71-76.	9.4	182
2	In vitro antiplasmodial activity of extracts of Alchornea cordifolia and identification of an active constituent: ellagic acid. Journal of Ethnopharmacology, 2002, 81, 399-401.	2.0	99
3	Covalent and Nonâ€Covalent DNAâ€"Goldâ€Nanoparticle Interactions: New Avenues of Research. ChemPhysChem, 2017, 18, 17-33.	1.0	94
4	Thermodynamic and structural study of phenanthroline derivative ruthenium complex/DNA interactions: Probing partial intercalation and binding properties. Journal of Inorganic Biochemistry, 2012, 106, 1-9.	1.5	81
5	A kinetic study of the interaction of DNA with gold nanoparticles: mechanistic aspects of the interaction. Physical Chemistry Chemical Physics, 2011, 13, 1479-1489.	1.3	67
6	Nonfunctionalized Gold Nanoparticles: Synthetic Routes and Synthesis Condition Dependence. Chemistry - A European Journal, 2015, 21, 9596-9609.	1.7	48
7	Studies on medicinal plants of Ivory Coast: Investigation of Sida acuta for in vitro antiplasmodial activities and identification of an active constituent. Phytomedicine, 2004, 11, 338-341.	2.3	43
8	Chitosan as a capping agent: Insights on the stabilization of gold nanoparticles. Carbohydrate Polymers, 2019, 207, 806-814.	5.1	37
9	Native and modified chitosan-based hydrogels as green heterogeneous organocatalysts for imine-mediated Knoevenagel condensation. Applied Catalysis A: General, 2016, 517, 176-186.	2.2	35
10	The Fluorophore 4â€²,6â€Diamidinoâ€2â€phenylindole (DAPI) Induces DNA Folding in Long Doubleâ€Stranded DNA. Chemistry - an Asian Journal, 2012, 7, 1803-1810.	1.7	33
11	Solvent Effects on the Kinetics of the Interaction of 1-Pyrenecarboxaldehyde with Calf Thymus DNA. Journal of Physical Chemistry B, 2010, 114, 4686-4691.	1.2	32
12	Design of highly stabilized nanocomposite inks based on biodegradable polymer-matrix and gold nanoparticles for Inkjet Printing. Scientific Reports, 2019, 9, 16097.	1.6	32
13	Understanding and improving aggregated gold nanoparticle/dsDNA interactions by molecular spectroscopy and deconvolution methods. Physical Chemistry Chemical Physics, 2017, 19, 16113-16123.	1.3	28
14	Micellar Effects upon the Reaction between Acetonitrile Pentacyanoferrate(II) and Bis(ethylenediammine)(2-pyrazinecarboxylato)cobalt(III). Langmuir, 1998, 14, 1539-1543.	1.6	27
15	Effect of DNA on the rate of electron transfer reactions between non-intercalated reactants: kinetic study of the reactions [Ru(NH3)5pz]2++[Co(C2O4)3]3- and [Ru(NH3)5py]2+ +[Co(NH3)4pzCO2]2+ in aqueous solutions in the presence of DNA. Physical Chemistry Chemical Physics, 2001, 3, 4412-4417.	1.3	26
16	Electrochemiluminescence of the [Ru(bpy)₃]²⁺ Complex: The Coreactant Effect of PAMAM Dendrimers in an Aqueous Medium. Inorganic Chemistry, 2012, 51, 10825-10831.	1.9	26
17	Use of gold nanoparticles as crosslink agent to form chitosan nanocapsules: Study of the direct interaction in aqueous solutions. Journal of Inorganic Biochemistry, 2014, 135, 77-85.	1.5	24
18	DNA conformational changes induced by cationic gemini surfactants: the key to switching DNA compact structures into elongated forms. RSC Advances, 2015, 5, 29433-29446.	1.7	24

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19	Electron Transfer Reactions in Micellar Systems. Progress in Reaction Kinetics and Mechanism, 2000, 25, 371-407.	1.1	23
20	Electron transfer reactions in micellar systems: Separation of the true (unimolecular) electron transfer rate constant in its components. Chemical Physics, 2001, 263, 139-148.	0.9	23
21	Thermodynamic and structural study of pyrene-1-carboxaldehyde/DNA interactions by molecular spectroscopy: Probing intercalation and binding properties. Chemical Physics, 2010, 373, 186-192.	0.9	23
22	Synthesis, structure, magnetic and electrochemical properties of an oxydiacetate iron(II) complex. Inorganica Chimica Acta, 2004, 357, 4215-4219.	1.2	20
23	On the Equivalence of the Pseudophase Related Models and the BrÃ¶nsted Approach in the Interpretation of Reactivity under Restricted Geometry Conditions. Progress in Reaction Kinetics and Mechanism, 2004, 29, 289-310.	1.1	20
24	Electron transfer reactions in solvent mixtures: the excess component of solvent reorganization free energy. Coordination Chemistry Reviews, 2000, 204, 173-198.	9.5	19
25	Comparative Study of Micellar and DNA Effects on the Reaction [Ru(NH3)5py]2++ S2O82-. Langmuir, 2003, 19, 3185-3189.	1.6	17
26	Electronically tunable anionâˆ'Ï€ interactions in pyrylium complexes: experimental and theoretical studies. Physical Chemistry Chemical Physics, 2014, 16, 18442.	1.3	17
27	Ethanol effect on gold nanoparticle aggregation state and its implication in the interaction mechanism with DNA. Journal of Colloid and Interface Science, 2018, 529, 65-76.	5.0	17
28	Quantification of nucleobases/gold nanoparticles interactions: energetics of the interactions through apparent binding constants determination. Physical Chemistry Chemical Physics, 2017, 19, 22121-22128.	1.3	16
29	Fluorescent imino and secondary amino chitosans as potential sensing biomaterials. Carbohydrate Polymers, 2015, 123, 288-296.	5.1	15
30	Influence of the Micellar Electric Field on Electron-Transfer Processes (II):Â A Study of the Ru(NH3)5pz2++ Co(C2O4)33-Reaction in SDS Micellar Solution Containing NaCl. Langmuir, 2000, 16, 7986-7990.	1.6	14
31	Micellar effects on a ligand substitution reaction: Kinetics of the formation of [Fe(CN)5(Î¼-pz)Ru(NH3)5]âˆ', from [Fe(CN)5H2O]3âˆ'and [Ru(NH3)5pz]2+, in the presence of anionic micelles. International Journal of Chemical Kinetics, 2004, 36, 627-633.	1.0	14
32	Method for the Evaluation of the Reorganization Energy of Electron Transfer Reactions Produced under Restricted Geometry Conditions. Journal of Physical Chemistry B, 2005, 109, 1703-1707.	1.2	14
33	DNA Strand Elongation Induced by Small Gold Nanoparticles at High Ethanol Content. Journal of Physical Chemistry C, 2014, 118, 4416-4428.	1.5	14
34	Effects of SB1.5G and SB4.5G dendrimers on the rate of the electron transfer reaction between [Ru(NH3)5pz]2+ and [Co(C2O4)3]3âˆ'. Chemical Physics Letters, 2004, 398, 82-86.	1.2	13
35	Improving the understanding of DNAâ€"propanediyl-1,3-bis(dodecyldimethylammonium) dibromide interaction using thermodynamic, structural and kinetic approaches. Physical Chemistry Chemical Physics, 2013, 15, 20064.	1.3	13
36	Interaction of gold nanoparticles mediated by captopril and S-nitrosocaptopril: the effect of manganese ions in mild acid medium. Physical Chemistry Chemical Physics, 2015, 17, 644-654.	1.3	13

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37	Exploring Factors for the Design of Nanoparticles as Drug Delivery Vectors. ChemPhysChem, 2018, 19, 2810-2828.	1.0	13
38	Salt and Solvent Effects on the Kinetics of the Oxidation of the Excited State of the [Ru(bpy)3]2+Complex by S2O82-. Journal of Physical Chemistry A, 2006, 110, 4196-4201.	1.1	12
39	A colorimetric study of the interaction of cationic and anionic surfactants with anionic gold nanoparticles. Colloid and Polymer Science, 2017, 295, 2141-2149.	1.0	12
40	Influence of the Charge and Concentration of Coreactants on the Apparent Binding Constant of the Reactant to Micelles. Langmuir, 2003, 19, 5991-5995.	1.6	11
41	DNA interactions with small solutes: change in the character of the binding of [Ru(NH3)5pz]2+ to DNA as a consequence of changes in the solvent. Chemical Physics, 2004, 297, 163-169.	0.9	11
42	Electrolyte effects on the intervalence transition within discrete binuclear cyano-bridged complexes. An estimation of activation free energy from static, optical and electrochemical data. Inorganica Chimica Acta, 2006, 359, 149-158.	1.2	11
43	Quantification of salts and cosolventsâ€“DNA interactions in terms of free energies: A study using the pyren-1-carboxyaldehyde as fluorescent probe. Chemical Physics, 2008, 352, 306-310.	0.9	11
44	Synthesis of hyperpolarizable biomaterials at molecular level based on pyridiniumâ€“chitosan complexes. RSC Advances, 2015, 5, 74274-74283.	1.7	11
45	DNA effects upon the reaction between acetonitrile pentacyanoferrate (II) and ruthenium pentammine pyrazine: Kinetic and thermodynamic evidence of the interaction of DNA with anionic species. Chemical Physics, 2005, 314, 101-107.	0.9	10
46	Salt and Solvent Effects on the Kinetics and Thermodynamics of the Inclusion of the Ruthenium Complex [Ru(NH3)5(4,4â€²-bpy)]2+in Î²-Cyclodextrin. Journal of Physical Chemistry B, 2006, 110, 12959-12963.	1.2	10
47	Decorating a single giant DNA with gold nanoparticles. RSC Advances, 2018, 8, 26571-26579.	1.7	10
48	Understanding gold nanoparticles interactions with chitosan: Crosslinking agents as novel strategy for direct covalent immobilization of biomolecules on metallic surfaces. Journal of Molecular Liquids, 2020, 302, 112381.	2.3	10
49	Biocompatible DNA/5-Fluorouracil-Gemini Surfactant-Functionalized Gold Nanoparticles as Promising Vectors in Lung Cancer Therapy. Pharmaceutics, 2021, 13, 423.	2.0	10
50	Kinetic Study of the Fe(bpy)²⁺₃ +S₂O^{2âˆ’}₈ Reaction in Solvent Mixtures. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1997, 101, 1452-1460.	0.9	9
51	Solvent effects on the oxidation (electron transfer) reaction of [Fe(CN)6]4âˆ’ by [Co(NH3)5pz]3+. Chemical Physics, 2004, 298, 317-325.	0.9	9
52	A study of the electron-transfer reaction between Fe(CN)2(bpy)2 and S2O82- in solvent mixtures: the translational component of solvent reorganization. New Journal of Chemistry, 1998, 22, 39-44.	1.4	8
53	â€œAbnormalâ€•Salt and Solvent Effects on Anion/Cation Electron-Transfer Reactions:Â An Interpretation Based on Marcusâˆ’Hush Treatment. Journal of Physical Chemistry B, 2005, 109, 15087-15092.	1.2	8
54	Reversible cationic gemini surfactant-induced aggregation of anionic gold nanoparticles for sensing biomolecules. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 610, 125893.	2.3	8

#	ARTICLE	IF	CITATIONS
55	What controls the unusual melting profiles of small AuNPs/DNA complexes. Physical Chemistry Chemical Physics, 2019, 21, 11019-11032.	1.3	7
56	Colorimetric, Naked-Eye Detection of Lysozyme in Human Urine with Gold Nanoparticles. Nanomaterials, 2021, 11, 612.	1.9	7
57	Polymerization-induced enhancement of binding and binding-induced polymerization. Chemical Physics Letters, 2004, 384, 266-270.	1.2	6
58	Method for the evaluation of the reorganization energy of electron transfer reactions in waterâ€“methanol mixtures. Chemical Physics Letters, 2005, 407, 342-346.	1.2	5
59	Strength and Character of Peptide/Anion Interactions. Journal of Physical Chemistry B, 2005, 109, 19676-19680.	1.2	5
60	CIELab chromaticity evolution to measure the binding free energy of non-colored biomolecules to gold nanoparticles. RSC Advances, 2015, 5, 85039-85045.	1.7	5
61	Factors that control the gold nanoparticles' aggregation induced by adenine molecules: New insights through a combined experimental and theoretical study. Journal of Molecular Liquids, 2020, 310, 113136.	2.3	5
62	Lysozymeâ€“AuNPs Interactions: Determination of Binding Free Energy. Nanomaterials, 2021, 11, 2139.	1.9	5
63	Two-State Model Based on Electron-Transfer Reactivity Changes to Quantify the Noncovalent Interaction between Co(NH3)5Cl2+ and 18-Crown-6 Ether:â€‰ The Effect of Second-Sphere Coordination on Electron-Transfer Processes. Journal of Physical Chemistry A, 2008, 112, 2813-2819.	1.1	4
64	Noncovalent Interactions of Tiopronin-Protected Gold Nanoparticles with DNA: Two Methods to Quantify Free Energy of Binding. Scientific World Journal, The, 2014, 2014, 1-9.	0.8	4
65	Understanding AuNP interaction with low-generation PAMAM dendrimers: a CIELab and deconvolution study. Journal of Nanoparticle Research, 2017, 19, 1.	0.8	4
66	Theoretical study on the interactions between ibrutinib and gold nanoparticles for being used as drug delivery in the chronic lymphocytic leukemia. Journal of Molecular Liquids, 2020, 316, 113878.	2.3	4
67	Solvent and salt effects on the kinetics of the reaction between [Ru(NH3)5pz]2+and [Fe(CN)5H2O]3-. International Journal of Chemical Kinetics, 2003, 35, 367-373.	1.0	3
68	Kinetic Approach for the Study of Noncovalent Interaction between [Ru(NH₃)₅pz]²⁺ and Gold Nanoparticles. Journal of Physical Chemistry A, 2007, 111, 9769-9774.	1.1	3
69	Noncovalent interactions between <mml:math altimg="si13.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http. Chemical Physics Lett	1.2	3
70	Citrate and Polyvinylpyrrolidone Stabilized Silver Nanoparticles as Selective Colorimetric Sensor for Aluminum (III) Ions in Real Water Samples. Materials, 2020, 13, 1373.	1.3	3
71	Title is missing!. Transition Metal Chemistry, 2002, 27, 127-133.	0.7	2
72	Asymmetric salt effects on anion/cation reactions: A comparative study of the [Fe(CN)6]4â^’+[Co(NH3)5pz]3+and [Ru(NH3)5pz]2++ [Co(C2O4)3]3â^’reactions. International Journal of Chemical Kinetics, 2005, 37, 81-89.	1.0	2

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73	Restricted Geometry Conditions Promoted by AlOOH Nanoparticles: Variable Strength and Character of AlOOH-Cluster/Charged Ligand Interactions As a Consequence of Changes in the Solvent. Journal of Physical Chemistry C, 2008, 112, 9240-9246.	1.5	2
74	Direct effect of tetrahedral alcohol species on the SPB of gold colloids: a deconvolution study. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	2
75	A study of the non-electrostatic interaction micelle/charged ligand: A comparison of the results obtained by two different methods. Chemical Physics Letters, 2006, 417, 509-514.	1.2	1
76	Free energy of binding of cationic metal complexes to AuNPs through electron-transfer processes. Soft Matter, 2014, 10, 8482-8488.	1.2	1
77	Study of the base-catalyzed nitrito-nitro isomerization reaction ([(NH3)5Co-ONO]2+â†’) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5	1.0	0
78	Cylodextrins effects in the substitution reaction of 4,4â€²-bpy for the aquo ligand in aquopentacyanoferrate (II): An estimation of the binding constants of the reactant and the transition state to cyclodextrins. Chemical Physics, 2006, 320, 181-187.	0.9	0
79	Binding Study of the [Ru(NH₃)₅pz]²⁺ Complex to Bile Anion Aggregates through Kinetic Measurements. International Journal of Chemical Kinetics, 2013, 45, 780-786.	1.0	0
80	Encased Gold Nanoparticle Synthesis as a Probe for Oleuropein Self-Assembled Structure Formation. Materials, 2021, 14, 50.	1.3	0