Plinio Maroni

List of Publications by Year in descending order

73 papers	2,745 citations	159585 30 h-index	182427 51 g-index
76 all docs	76 docs citations	76 times ranked	2816 citing authors

#	Article	IF	Citations
1	Polyelectrolyte adsorption, interparticle forces, and colloidal aggregation. Soft Matter, 2014, 10, 2479.	2.7	284
2	Vibrational Mode-Specific Reaction of Methane on a Nickel Surface. Science, 2003, 302, 98-100.	12.6	239
3	State-Resolved Gas-Surface Reactivity of Methane in the Symmetric C-H Stretch Vibration on Ni(100). Physical Review Letters, 2005, 94, .	7.8	150
4	Ordered and Oriented Supramolecular n/p-Heterojunction Surface Architectures: Completion of the Primary Color Collection. Journal of the American Chemical Society, 2009, 131, 11106-11116.	13.7	111
5	Surface reactivity of highly vibrationally excited molecules prepared by pulsed laser excitation: CH4 (2Î½3) on Ni(100). Journal of Chemical Physics, 2002, 117, 8603-8606.	3.0	106
6	Importance of Charge Regulation in Attractive Double-Layer Forces between Dissimilar Surfaces. Physical Review Letters, 2010, 104, 228301.	7.8	89
7	Attractive Forces between Charged Colloidal Particles Induced by Multivalent Ions Revealed by Confronting Aggregation and Direct Force Measurements. Journal of Physical Chemistry Letters, 2013, 4, 648-652.	4.6	89
8	Size-dependent aggregation of graphene oxide. Carbon, 2020, 160, 145-155.	10.3	86
9	Investigating forces between charged particles in the presence of oppositely charged polyelectrolytes with the multi-particle colloidal probe technique. Advances in Colloid and Interface Science, 2012, 179-182, 85-98.	14.7	79
10	Thin adsorbed films of a strong cationic polyelectrolyte on silica substrates. Journal of Colloid and Interface Science, 2007, 309, 28-35.	9.4	66
11	Structure of Adsorbed Polyelectrolyte Monolayers Investigated by Combining Optical Reflectometry and Piezoelectric Techniques. Langmuir, 2012, 28, 5642-5651.	3.5	62
12	Measurements of dispersion forces between colloidal latex particles with the atomic force microscope and comparison with Lifshitz theory. Journal of Chemical Physics, 2014, 140, 104906.	3.0	55
13	Dispersion forces acting between silica particles across water: influence of nanoscale roughness. Nanoscale Horizons, 2016, 1, 325-330.	8.0	55
14	Predicting Aggregation Rates of Colloidal Particles from Direct Force Measurements. Journal of Physical Chemistry B, 2013, 117, 11853-11862.	2.6	54
15	Mechanism of Chitosan Adsorption on Silica from Aqueous Solutions. Langmuir, 2014, 30, 4980-4988.	3.5	51
16	Topologically Matching Supramolecular n/pâ€Heterojunction Architectures. Angewandte Chemie - International Edition, 2009, 48, 6461-6464.	13.8	46
17	Adsorption of monovalent and divalent cations on planar water-silica interfaces studied by optical reflectivity and Monte Carlo simulations. Journal of Chemical Physics, 2011, 135, 064701.	3.0	44
18	Electric double-layer potentials and surface regulation properties measured by colloidal-probe atomic force microscopy. Physical Review E, 2014, 90, 012301.	2.1	44

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19	Adsorption of poly(l-lysine) on silica probed by optical reflectometry. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 360, 20-25.	4.7	43
20	Response of Adsorbed Polyelectrolyte Monolayers to Changes in Solution Composition. Langmuir, 2012, 28, 17506-17516.	3.5	41
21	Molecular-beam/surface-science apparatus for state-resolved chemisorption studies using pulsed-laser preparation. Review of Scientific Instruments, 2003, 74, 4110-4120.	1.3	40
22	Adsorption of polyelectrolytes to like-charged substrates induced by multivalent counterions as exemplified by poly(styrene sulfonate) and silica. Physical Chemistry Chemical Physics, 2015, 17, 10348-10352.	2.8	39
23	Charge Reversal of Sulfate Latex Particles by Adsorbed Linear Poly(ethylene imine) Probed by Multiparticle Colloidal Probe Technique. Journal of Physical Chemistry B, 2011, 115, 9098-9105.	2.6	37
24	Accurate Predictions of Forces in the Presence of Multivalent Ions by Poissonâ€“Boltzmann Theory. Langmuir, 2014, 30, 4551-4555.	3.5	37
25	Forces between Negatively Charged Interfaces in the Presence of Cationic Multivalent Oligoamines Measured with the Atomic Force Microscope. Journal of Physical Chemistry C, 2015, 119, 15482-15490.	3.1	37
26	Transition from Completely Reversible to Irreversible Adsorption of Poly(amido amine) Dendrimers on Silica. Langmuir, 2009, 25, 2928-2934.	3.5	35
27	Interaction and Structure of Surfaces Coated by Poly(vinyl amines) of Different Line Charge Densities. Journal of Physical Chemistry B, 2008, 112, 14609-14619.	2.6	34
28	Interaction Forces and Aggregation Rates of Colloidal Latex Particles in the Presence of Monovalent Counterions. Journal of Physical Chemistry B, 2015, 119, 8184-8193.	2.6	34
29	Large Mechanical Response of Single Dendronized Polymers Induced by Ionic Strength. Angewandte Chemie - International Edition, 2010, 49, 4250-4253.	13.8	31
30	Direct measurements of forces between different charged colloidal particles and their prediction by the theory of Derjaguin, Landau, Verwey, and Overbeek (DLVO). Journal of Chemical Physics, 2013, 138, 234705.	3.0	31
31	Long-ranged and soft interactions between charged colloidal particles induced by multivalent coions. Soft Matter, 2015, 11, 1562-1571.	2.7	31
32	Forces between silica particles in the presence of multivalent cations. Journal of Colloid and Interface Science, 2016, 472, 108-115.	9.4	31
33	Influence of Solvent Quality on the Force Response of Individual Poly(styrene) Polymer Chains. ACS Macro Letters, 2017, 6, 1052-1055.	4.8	26
34	Unexpectedly Large Decay Lengths of Double-Layer Forces in Solutions of Symmetric, Multivalent Electrolytes. Journal of Physical Chemistry B, 2019, 123, 1733-1740.	2.6	26
35	Adsorbed Mass of Polymers on Self-Assembled Monolayers: Effect of Surface Chemistry and Polymer Charge. Langmuir, 2015, 31, 6045-6054.	3.5	25
36	Interplay between Depletion and Double-Layer Forces Acting between Charged Particles in Solutions of Like-Charged Polyelectrolytes. Physical Review Letters, 2016, 117, 088001.	7.8	25

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37	Ion-Specific Responsiveness of Polyamidoamine (PAMAM) Dendrimers Adsorbed on Silica Substrates. Macromolecules, 2012, 45, 3919-3927.	4.8	23
38	Conformational Changes of Polyamidoamine (PAMAM) Dendrimers Adsorbed on Silica Substrates. Macromolecules, 2011, 44, 5069-5071.	4.8	19
39	Direct force measurements between silica particles in aqueous solutions of ionic liquids containing 1-butyl-3-methylimidazolium (BMIM). Physical Chemistry Chemical Physics, 2015, 17, 16553-16559.	2.8	19
40	Depletion and double layer forces acting between charged particles in solutions of like-charged polyelectrolytes and monovalent salts. Soft Matter, 2017, 13, 3284-3295.	2.7	19
41	Formation of Poly-<scp>l</scp>-lysine Monolayers on Silica: Modeling and Experimental Studies. Journal of Physical Chemistry C, 2020, 124, 4571-4581.	3.1	19
42	Interactions between Individual Charged Dendronized Polymers and Surfaces. Macromolecules, 2013, 46, 3603-3610.	4.8	18
43	Studying the role of surface chemistry on polyelectrolyte adsorption using goldâ€“thiol self-assembled monolayer with optical reflectivity. Soft Matter, 2014, 10, 9220-9225.	2.7	18
44	Polymerâ€“Aptamer Hybrid Emulsion Templating Yields Bioresponsive Nanocapsules. Advanced Functional Materials, 2014, 24, 1133-1139.	14.9	18
45	Synthesis and Self-Assembly of a DNA Molecular Brush. Biomacromolecules, 2014, 15, 3375-3382.	5.4	18
46	Mechanically induced cis-to-trans isomerization of carbonâ€“carbon double bonds using atomic force microscopy. Physical Chemistry Chemical Physics, 2016, 18, 31202-31210.	2.8	18
47	Efficient stimulated Raman pumping for quantum state resolved surface reactivity measurements. Review of Scientific Instruments, 2006, 77, 054103.	1.3	17
48	Highly-sensitive reflectometry setup capable of probing the electrical double layer on silica. Sensors and Actuators B: Chemical, 2010, 151, 250-255.	7.8	16
49	Dispersion Characteristics and Aggregation in Titanate Nanowire Colloids. ChemPlusChem, 2014, 79, 592-600.	2.8	15
50	Single-Molecule Force Measurements by Nano-Handling of Individual Dendronized Polymers. ACS Nano, 2014, 8, 2237-2245.	14.6	15
51	Recording stretching response of single polymer chains adsorbed on solid substrates. Polymer, 2016, 102, 350-362.	3.8	15
52	Nanometer-ranged attraction induced by multivalent ions between similar and dissimilar surfaces probed using an atomic force microscope (AFM). Physical Chemistry Chemical Physics, 2016, 18, 8739-8751.	2.8	15
53	Attractive non-DLVO forces induced by adsorption of monovalent organic ions. Physical Chemistry Chemical Physics, 2018, 20, 158-164.	2.8	15
54	Persistence Length of Poly(vinyl amine): Quantitative Image Analysis versus Single Molecule Force Response. Macromolecules, 2018, 51, 3632-3639.	4.8	14

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55	Measuring Inner Layer Capacitance with the Colloidal Probe Technique. Colloids and Interfaces, 2018, 2, 65.	2.1	14
56	The persistence length of adsorbed dendronized polymers. Nanoscale, 2016, 8, 13498-13506.	5.6	12
57	Interactions between similar and dissimilar charged interfaces in the presence of multivalent anions. Physical Chemistry Chemical Physics, 2018, 20, 9436-9448.	2.8	12
58	Swelling Behavior, Interaction, and Electrostatic Properties of Chitosan/Alginate Dialdehyde Multilayer Films with Different Outermost Layer. Langmuir, 2020, 36, 3782-3791.	3.5	11
59	Zipper and Layer-by-Layer Assemblies of Artificial Photosystems Analyzed by Combining Optical and Piezoelectric Surface Techniques. Langmuir, 2011, 27, 7213-7221.	3.5	8
60	Adsorption and surface-induced precipitation of poly(acrylic acid) on calcite revealed with atomic force microscopy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 390, 225-230.	4.7	8
61	Structural and Double Layer Forces between Silica Surfaces in Suspensions of Negatively Charged Nanoparticles. Langmuir, 2020, 36, 14443-14452.	3.5	6
62	Dendrimer induced interaction forces between colloidal particles revealed by direct force and aggregation measurements. Journal of Colloid and Interface Science, 2014, 417, 346-355.	9.4	5
63	Structuring of colloidal silica nanoparticle suspensions near waterâ€“silica interfaces probed by specular neutron reflectivity. Physical Chemistry Chemical Physics, 2020, 22, 6449-6456.	2.8	5
64	Forces between different latex particles in aqueous electrolyte solutions measured with the colloidal probe technique. Microscopy Research and Technique, 2017, 80, 144-152.	2.2	4
65	Size extensivity of elastic properties of alkane fragments. Journal of Molecular Modeling, 2018, 24, 36.	1.8	4
66	Thickness of the particle-free layer near charged interfaces in suspensions of like-charged nanoparticles. Soft Matter, 2021, 17, 6212-6224.	2.7	4
67	Adsorption and Self-Organization of Dendrimers at Waterâ€“Solid Interfaces. Chimia, 2009, 63, 279.	0.6	3
68	Preparation of Anisotropic and Oriented Particles on a Flexible Substrate. Langmuir, 2015, 31, 13221-13229.	3.5	3
69	Oscillatory structural forces between charged interfaces in solutions of oppositely charged polyelectrolytes. Soft Matter, 2020, 16, 9662-9668.	2.7	3
70	Exploring Forces between Individual Colloidal Particles with the Atomic Force Microscope. Chimia, 2012, 66, 214.	0.6	2
71	Rapid Desorption of Polyelectrolytes from Solid Surfaces Induced by Changes of Aqueous Chemistry. Langmuir, 2018, 34, 12302-12309.	3.5	2
72	Depletion of Polyelectrolytes near Like-Charged Substrates Probed by Optical Reflectivity. Journal of Physical Chemistry C, 0, , .	3.1	2

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73	Particle Deposition to Silica Surfaces Functionalized with Cationic Polyelectrolytes. Colloids and Interfaces, 2021, 5, 26.	2.1	1