

# Benedicte Prelot

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6930855/publications.pdf>

Version: 2024-02-01

74  
papers

1,860  
citations

279487

23  
h-index

315357

38  
g-index

75  
all docs

75  
docs citations

75  
times ranked

2278  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent developments in nanostructured inorganic materials for sorption of cesium and strontium: Synthesis and shaping, sorption capacity, mechanisms, and selectivity—A review. <i>Journal of Hazardous Materials</i> , 2018, 344, 511-530.	6.5	205
2	Adsorption processes for the removal of contaminants from wastewater. , 2020, , 161-222.		167
3	Layer charge and electrophoretic mobility of smectites. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 159, 351-358.	2.3	124
4	Study of Adsorption and Intercalation of Orange-Type Dyes into Mg-Al Layered Double Hydroxide. <i>Journal of Physical Chemistry C</i> , 2015, 119, 23388-23397.	1.5	116
5	Morphology and surface heterogeneities in synthetic goethites. <i>Journal of Colloid and Interface Science</i> , 2003, 261, 244-254.	5.0	62
6	Effect of heteroatom doping on surface acidity and hydrophilicity of Al, Ti, Zr-doped mesoporous SBA-15. <i>Microporous and Mesoporous Materials</i> , 2009, 124, 84-93.	2.2	46
7	Migration of Ce and Mn Ions in PEMFC and Its Impact on PFSA Membrane Degradation. <i>Journal of the Electrochemical Society</i> , 2018, 165, F3281-F3289.	1.3	45
8	Structural—chemical disorder of manganese dioxides. <i>Journal of Colloid and Interface Science</i> , 2003, 257, 77-84.	5.0	44
9	Capture of actinides ( $\text{Th}^{4+}$ , $[\text{UO}_2]^{2+}$ ) and surrogating lanthanide ( $\text{Nd}^{3+}$ ) in porous metal—organic framework MIL-100(Al) from water: selectivity and imaging of embedded nanoparticles. <i>Dalton Transactions</i> , 2017, 46, 12010-12014.	1.6	44
10	Driving force for the hydration of the swelling clays: Case of montmorillonites saturated with alkaline-earth cations. <i>Journal of Colloid and Interface Science</i> , 2013, 395, 269-276.	5.0	43
11	Preparation of amino-functionalized silica in aqueous conditions. <i>Applied Surface Science</i> , 2013, 266, 155-160.	3.1	42
12	Removal of three anionic orange-type dyes and Cr(VI) oxyanion from aqueous solutions onto strongly basic anion-exchange resin. The effect of single-component and competitive adsorption. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 508, 240-250.	2.3	36
13	Calcium phosphate precipitation in cationic templates. <i>Materials Science and Engineering C</i> , 2005, 25, 553-559.	3.8	35
14	Calorimetric Effects Accompanying Ion Adsorption at the Charged Metal Oxide/Electrolyte Interfaces: Effects of Oxide Surface Energetic Heterogeneity. <i>Langmuir</i> , 1998, 14, 5210-5225.	1.6	33
15	Interactions between Oppositely Charged Polyelectrolytes by Isothermal Titration Calorimetry: Effect of Ionic Strength and Charge Density. <i>Journal of Physical Chemistry B</i> , 2017, 121, 2684-2694.	1.2	33
16	On the real performance of cation exchange resins in wastewater treatment under conditions of cation competition: the case of heavy metal pollution. <i>Environmental Science and Pollution Research</i> , 2014, 21, 9334-9343.	2.7	30
17	Calorimetric Effects of Simple Ion Adsorption at the Silica/Electrolyte Interface: Quantitative Analysis of Surface Energetic Heterogeneity. <i>Langmuir</i> , 1999, 15, 5977-5983.	1.6	28
18	Application of the Theoretical 1-pK Approach to Analyzing Proton Adsorption Isotherm Derivatives on Heterogeneous Oxide Surfaces. <i>Journal of Physical Chemistry B</i> , 2002, 106, 13280-13286.	1.2	27

#	ARTICLE	IF	CITATIONS
19	Structural "chemical disorder of manganese dioxides. Journal of Colloid and Interface Science, 2003, 264, 343-353.	5.0	27
20	Diffusion of Interlayer Cations in Swelling Clays as a Function of Water Content: Case of Montmorillonites Saturated with Alkali Cations. Journal of Physical Chemistry C, 2015, 119, 10370-10378.	1.5	27
21	Effect of synthesis conditions on the pore structure and degree of heteroatom insertion in Zr-doped SBA-15 silica-based materials prepared by classical or microwave-assisted hydrothermal treatment. Microporous and Mesoporous Materials, 2008, 110, 111-118.	2.2	26
22	Flow microcalorimetry: Experimental development and application to adsorption of heavy metal cations on silica. Applied Surface Science, 2007, 253, 5807-5813.	3.1	25
23	Influence of Morphology and Crystallinity on Surface Reactivity of Nanosized Anatase TiO <sub>2</sub> Studied by Adsorption Techniques. 2. Solid "Liquid Interface. Journal of Physical Chemistry C, 2013, 117, 4459-4469.	1.5	25
24	Adsorption of cadmium ions at the electrolyte/silica interface. Applied Surface Science, 2002, 196, 322-330.	3.1	24
25	Electrochemical properties of solids at the aqueous "solid interface and heterogeneity of surface. Comptes Rendus - Geoscience, 2002, 334, 633-648.	0.4	22
26	What are the main contributions to the total enthalpy of displacement accompanying the adsorption of some multivalent metals at the silica "electrolyte interface?. Journal of Colloid and Interface Science, 2013, 396, 205-209.	5.0	22
27	Ionosilicas as efficient adsorbents for the separation of diclofenac and sulindac from aqueous media. New Journal of Chemistry, 2016, 40, 7620-7626.	1.4	22
28	Thermodynamic assessment of the variation of the surface areas of two synthetic swelling clays during adsorption of water. Journal of Colloid and Interface Science, 2007, 316, 1003-1011.	5.0	21
29	Self-organization in water of well-defined amphiphilic poly(vinyl acetate)-b-poly(vinyl alcohol) diblock copolymers. Polymer Chemistry, 2015, 6, 3063-3073.	1.9	21
30	How Does Competition between Anionic Pollutants Affect Adsorption onto Mg "Al Layered Double Hydroxide? Three Competition Schemes. Journal of Physical Chemistry C, 2016, 120, 10410-10418.	1.5	21
31	Tuning the Interfacial Properties of Mesoporous Ionosilicas: Effect of Cationic Precursor and Counter Anion. Journal of Physical Chemistry C, 2016, 120, 27412-27421.	1.5	21
32	Micellization Behavior of Long-Chain Substituted Alkylguanidinium Surfactants. International Journal of Molecular Sciences, 2016, 17, 223.	1.8	20
33	Ionosilicas as efficient sorbents for anionic contaminants: Radiolytic stability and ion capacity. Journal of Colloid and Interface Science, 2016, 482, 233-239.	5.0	20
34	Effect of Nanoscale Pore Space Confinement on Cadmium Adsorption from Aqueous Solution onto Ordered Mesoporous Silica: A Combined Adsorption and Flow Calorimetry Study. Journal of Physical Chemistry C, 2011, 115, 19686-19695.	1.5	19
35	Multiscale Mechanistic Study of the Adsorption of Methyl Orange on the External Surface of Layered Double Hydroxide. Journal of Physical Chemistry C, 2019, 123, 22212-22220.	1.5	19
36	Contribution of calorimetry to the understanding of competitive adsorption of calcium, strontium, barium, and cadmium onto 4A type zeolite from two-metal aqueous solutions. Thermochemica Acta, 2018, 664, 39-47.	1.2	18

#	ARTICLE	IF	CITATIONS
37	Manganese Dioxides Surface Properties Studied by XPS and Gas Adsorption. Journal of the Electrochemical Society, 2004, 151, A1611.	1.3	16
38	Synthesis and study of sorption properties of polyvinyl alcohol (PVA)-based hybrid materials. Reactive and Functional Polymers, 2019, 144, 104364.	2.0	15
39	Clays and modified clays in remediating environmental pollutants. Environmental Science and Pollution Research, 2020, 27, 38381-38383.	2.7	15
40	Experimental Studies and Theoretical Interpretation of the Calorimetric Effects Accompanying Ion Adsorption at Oxide/Electrolyte Interfaces: A Application of Flow Adsorption Calorimetry. Langmuir, 1999, 15, 5921-5931.	1.6	14
41	The difference between the surface reactivity of amorphous silica in the gas and liquid phase due to material porosity. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 355, 67-74.	2.3	14
42	Aqueous or solvent based surface modification: The influence of the combination solvent " organic functional group on the surface characteristics of titanium dioxide grafted with organophosphonic acids. Applied Surface Science, 2017, 416, 716-724.	3.1	14
43	Surface Properties and Chemical Constitution as Crucial Parameters for the Sorption Properties of Ionosilicas: The Case of Chromate Adsorption. ACS Applied Nano Materials, 2018, 1, 2076-2087.	2.4	14
44	Filtration " elution of Cryptosporidium oocysts assisted by electrostatic interactions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 195, 135-142.	2.3	12
45	Influence of electrolyte ion adsorption on the derivative of potentiometric titration curve of oxide suspension " theoretical analysis. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 244, 9-17.	2.3	12
46	Accessibility and Dispersion of Vanadyl Sites of Vanadium Silicate-1 Nanoparticles Deposited in SBA-15. Journal of Physical Chemistry C, 2010, 114, 12966-12975.	1.5	12
47	Influence of Morphology and Crystallinity on Surface Reactivity of Nanosized Anatase TiO <sub>2</sub> Studied by Adsorption Techniques. 1. The Use of Gaseous Molecular Probes. Journal of Physical Chemistry C, 2012, 116, 24596-24606.	1.5	12
48	Demonstrating the Benefits and Pitfalls of Various Acidity Characterization Techniques by a Case Study on Bimodal Aluminosilicates. Langmuir, 2014, 30, 1880-1887.	1.6	12
49	MUSIC Speciation of $\text{Al}^{3+}$ at the Solid Liquid Interface: How DFT Calculations Can Help with Amorphous and Poorly Crystalline Materials. Langmuir, 2019, 35, 12986-12992.	1.6	12
50	Complexation properties of water-soluble poly(vinyl alcohol) (PVA)-based acidic chelating polymers. Separation and Purification Technology, 2021, 255, 117747.	3.9	11
51	Bulk hydrolysis and solid " liquid sorption of heavy metals in multi-component aqueous suspensions containing porous inorganic solids: Are these mechanisms competitive or cooperative?. Journal of Colloid and Interface Science, 2012, 386, 300-306.	5.0	10
52	Design of ionosilicas: Tailoring ionosilicas for the efficient adsorption of p-aminosalicylate. Separation and Purification Technology, 2018, 196, 217-223.	3.9	10
53	Adsorption of cadmium ions at the electrolyte/silica interface. Applied Surface Science, 2002, 196, 331-342.	3.1	9
54	Microwave-assisted hydrothermal synthesis of manganate nanoflowers for selective retention of strontium. Journal of Hazardous Materials, 2019, 368, 661-669.	6.5	9

#	ARTICLE	IF	CITATIONS
55	Alkylguanidinium based ionic liquids in a screening study for the removal of anionic pollutants from aqueous solution. <i>RSC Advances</i> , 2016, 6, 39125-39130.	1.7	8
56	Second-Harmonic Scattering in Layered Double Hydroxide Colloids: A Microscopic View of Adsorption and Intercalation. <i>Langmuir</i> , 2018, 34, 12206-12213.	1.6	8
57	Probing the organization of fulvic acid using a cationic surfactant. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 504, 252-259.	2.3	7
58	Study of the influence of location of substitutions on the surface energy of dioctahedral smectites. <i>Journal of Colloid and Interface Science</i> , 2008, 325, 275-281.	5.0	6
59	Pd@ionosilica as heterogeneous hydrogenation catalyst for continuous flow reductive upgrade of cinnamaldehyde. <i>Journal of Chemical Technology and Biotechnology</i> , 2017, 92, 2229-2235.	1.6	6
60	Estimation of enthalpic effects of ion adsorption at oxide/electrolyte interfaces from temperature dependence of adsorption data. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 152, 381-386.	2.3	5
61	Evidences for the relationship between surface structure and reactivity of goethite nanoparticles based on advanced molecular-probe methods. <i>Adsorption</i> , 2010, 16, 185-195.	1.4	5
62	Hybrid Ionosilica containing aromatic groups. <i>European Physical Journal: Special Topics</i> , 2015, 224, 1669-1674.	1.2	4
63	How competitive species such as buffer solutions influence the adsorption of dyes onto photocatalyst TiO <sub>2</sub> particles. <i>Materials Research Bulletin</i> , 2017, 94, 70-76.	2.7	4
64	Simple and Straightforward Synthesis of Porous Ionosilica for Efficient Chromate Adsorption. <i>Israel Journal of Chemistry</i> , 2019, 59, 843-851.	1.0	4
65	The effect of chelating anions on the retention of Co(II) by $\gamma$ -alumina from aqueous solutions under the unadjusted pH condition of supported catalyst preparation. <i>Journal of Colloid and Interface Science</i> , 2019, 535, 182-194.	5.0	4
66	Second-Harmonic Scattering Can Probe Hydration and Specific Ion Effects in Clay Particles. <i>Journal of Physical Chemistry C</i> , 2020, 124, 4109-4113.	1.5	4
67	Nitrogen Plasma Modified Carbons for PEMFC with Increased Interaction with Catalyst and Ionomer. <i>Journal of the Electrochemical Society</i> , 2022, 169, 044502.	1.3	4
68	Controlled synthesis and osmotic properties of ionosilica nanoparticles. <i>Microporous and Mesoporous Materials</i> , 2021, 310, 110644.	2.2	3
69	Driving Forces of Cationic Dye Adsorption, Confinement, and Long-Range Correlation in Zeolitic Materials. <i>Langmuir</i> , 2022, 38, 1296-1303.	1.6	3
70	Calorimetric screening of co-operative effects in adsorption of Co(II) on $\gamma$ -alumina surface in the presence of Co-complexing anions in aqueous solution. <i>Thermochimica Acta</i> , 2020, 694, 178800.	1.2	1
71	Advances in design and modeling of porous materials. <i>European Physical Journal: Special Topics</i> , 2015, 224, 1653-1653.	1.2	0
72	How to distinguish various components of the SHG signal recorded from the solid/liquid interface?. <i>Chemical Physics Letters</i> , 2016, 664, 50-55.	1.2	0

#	ARTICLE	IF	CITATIONS
73	Adsorbentien: Organisch-anorganische Hybride. Nachrichten Aus Der Chemie, 2019, 67, 30-32.	0.0	0
74	Adsorbentien: sammeln durch tauschen. Nachrichten Aus Der Chemie, 2019, 67, 22-24.	0.0	0