

# CÃ©dric Carteret

## List of Publications by Year in descending order

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91  
papers

2,803  
citations

159525

30  
h-index

189801

50  
g-index

95  
all docs

95  
docs citations

95  
times ranked

4330  
citing authors

#	ARTICLE	IF	CITATIONS
1	Background removal from spectra by designing and minimising a non-quadratic cost function. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2005, 76, 121-133.	1.8	240
2	Separation of Non-Negative Mixture of Non-Negative Sources Using a Bayesian Approach and MCMC Sampling. <i>IEEE Transactions on Signal Processing</i> , 2006, 54, 4133-4145.	3.2	148
3	The Raman spectrum of CaCO <sub>3</sub> polymorphs calcite and aragonite: A combined experimental and computational study. <i>Journal of Chemical Physics</i> , 2014, 140, 164509.	1.2	131
4	Functionalization of natural smectite-type clays by grafting with organosilanes: physico-chemical characterization and application to mercury(ii) uptake. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 4951.	1.3	109
5	The vibrational spectrum of CaCO <sub>3</sub> aragonite: A combined experimental and quantum-mechanical investigation. <i>Journal of Chemical Physics</i> , 2013, 138, 014201.	1.2	92
6	Hydration of a Synthetic Clay with Tetrahedral Charges: A Multidisciplinary Experimental and Numerical Study. <i>Journal of Physical Chemistry B</i> , 2005, 109, 23745-23759.	1.2	88
7	Raman Spectroscopy – A Powerful Tool for the Quantitative Determination of the Composition of Polymorph Mixtures: Application to CaCO <sub>3</sub> Polymorph Mixtures. <i>Chemical Engineering and Technology</i> , 2006, 29, 221-225.	0.9	81
8	Room temperature bistability with wide thermal hysteresis in a spin crossover silica nanocomposite. <i>Journal of Materials Chemistry C</i> , 2013, 1, 1933.	2.7	81
9	Direct One-Step Immobilization of Glucose Oxidase in Well-Ordered Mesostructured Silica Using a Nonionic Fluorinated Surfactant. <i>Chemistry of Materials</i> , 2005, 17, 1479-1486.	3.2	80
10	Polymorphism Studied by Lattice Phonon Raman Spectroscopy and Statistical Mixture Analysis Method. Application to Calcium Carbonate Polymorphs during Batch Crystallization. <i>Crystal Growth and Design</i> , 2009, 9, 807-812.	1.4	79
11	Bayesian separation of spectral sources under non-negativity and full additivity constraints. <i>Signal Processing</i> , 2009, 89, 2657-2669.	2.1	71
12	Sorption of methylene blue on an organoclay bearing thiol groups and application to electrochemical sensing of the dye. <i>Talanta</i> , 2008, 74, 489-497.	2.9	70
13	Synthesis and Photoactivity of Ordered Mesoporous Titania with a Semicrystalline Framework. <i>Journal of Physical Chemistry C</i> , 2012, 116, 6585-6594.	1.5	69
14	Hydrolysis of Uranyl(VI) in Acidic and Basic Aqueous Solutions Using a Noncomplexing Organic Base: A Multivariate Spectroscopic and Statistical Study. <i>Inorganic Chemistry</i> , 2011, 50, 2811-2823.	1.9	62
15	Formation of Hydroxysulphate Green Rust 2 as a Single Iron(II-III) Mineral in Microbial Culture. <i>Geomicrobiology Journal</i> , 2005, 22, 389-399.	1.0	58
16	Bayesian analysis of spectral mixture data using Markov Chain Monte Carlo Methods. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2006, 81, 137-148.	1.8	55
17	Hydrolysis of mixed Ni <sup>2+</sup> –Fe <sup>3+</sup> and Mg <sup>2+</sup> –Fe <sup>3+</sup> solutions and mechanism of formation of layered double hydroxides. <i>Dalton Transactions</i> , 2013, 42, 15687.	1.6	53
18	Near infrared and ab initio study of the vibrational modes of isolated silanol on silica. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 3217-3226.	1.3	51

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19	Nitrate reduction by mixed iron(II-III) hydroxycarbonate green rust in the presence of phosphate anions: The key parameters influencing the ammonium selectivity. <i>Water Research</i> , 2014, 62, 29-39.	5.3	45
20	Ternary Layered Double Hydroxides (LDHs) Based on Co-, Cu-Substituted ZnAl for the Design of Efficient Photocatalysts. <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 669-678.	1.0	43
21	Investigation of the Silanols Groups of Mesostructured Silica Prepared Using a Fluorinated Surfactant: Influence of the Hydrothermal Temperature. <i>Journal of Physical Chemistry C</i> , 2007, 111, 14380-14388.	1.5	42
22	Sorption of 1-hydroxy-2-naphthoic acid to goethite, lepidocrocite and ferrihydrite: Batch experiments and infrared study. <i>Chemosphere</i> , 2007, 70, 178-186.	4.2	41
23	Biogenic hydroxysulfate green rust, a potential electron acceptor for SRB activity. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 5450-5462.	1.6	41
24	Structural Cohesion of M <sup>II</sup> -M <sup>III</sup> Layered Double Hydroxides Crystals: Electrostatic Forces and Cationic Polarizing Power. <i>Crystal Growth and Design</i> , 2012, 12, 4324-4333.	1.4	41
25	Competitive Formation of Hydroxycarbonate Green Rust 1 versus Hydroxysulphate Green Rust 2 in <i>Shewanella putrefaciens</i> Cultures. <i>Geomicrobiology Journal</i> , 2004, 21, 79-90.	1.0	40
26	Synthesis and transformation of iron-based layered double hydroxides. <i>Applied Clay Science</i> , 2010, 48, 195-202.	2.6	39
27	Mid- and Near-Infrared Study of Hydroxyl Groups at a Silica Surface: H-Bond Effect. <i>Journal of Physical Chemistry C</i> , 2009, 113, 13300-13308.	1.5	37
28	Highly ordered mesoporous titania with semi crystalline framework templated by large or small nonionic surfactants. <i>New Journal of Chemistry</i> , 2010, 34, 2113.	1.4	32
29	Enhanced catalytic oxidation ability of ternary layered double hydroxides for organic pollutants degradation. <i>Dalton Transactions</i> , 2016, 45, 8224-8235.	1.6	32
30	Properties of rare-earth orthoferrites perovskite driven by steric hindrance. <i>Journal of Alloys and Compounds</i> , 2016, 657, 631-638.	2.8	32
31	Reductive transformation and mineralization of an azo dye by hydroxysulphate green rust preceding oxidation using H <sub>2</sub> O <sub>2</sub> at neutral pH. <i>Chemosphere</i> , 2009, 75, 212-219.	4.2	30
32	Isocyanate-mediated covalent immobilization of <i>Mucor miehei</i> lipase onto SBA-15 for transesterification reaction. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 112, 139-145.	2.5	28
33	Enhanced photocatalytic ability of Cu, Co doped ZnAl based mixed metal oxides derived from layered double hydroxides. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017, 524, 43-52.	2.3	28
34	Hydration Properties and Interlayer Organization in Synthetic C-S-H. <i>Langmuir</i> , 2020, 36, 9449-9464.	1.6	28
35	Vibrational properties of polysiloxanes: from dimer to oligomers and polymers. 1. Structural and vibrational properties of hexamethyldisiloxane (CH <sub>3</sub> ) <sub>3</sub> SiOSi(CH <sub>3</sub> ) <sub>3</sub> . <i>Journal of Raman Spectroscopy</i> , 2010, 41, 996-1004.	1.2	26
36	Hydrothermal stability of mesostructured silica prepared using a nonionic fluorinated surfactant. <i>Microporous and Mesoporous Materials</i> , 2008, 116, 308-317.	2.2	25

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37	Vibrational properties of silanol group: From alkylsilanol to small silica cluster. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2006, 64, 670-680.	2.0	24
38	Nanoparticle-free magnetic mesoporous silica with magneto-responsive surfactants. <i>Journal of Materials Chemistry C</i> , 2013, 1, 6930.	2.7	24
39	Carbonate-Hydrogenocarbonate Coexistence and Dynamics in Layered Double Hydroxides. <i>Journal of Physical Chemistry C</i> , 2017, 121, 6104-6112.	1.5	23
40	Infrared spectroscopy and multivariate analysis to appraise $\delta$ -cellulose extracted from wood for stable carbon isotope measurements. <i>Chemical Geology</i> , 2014, 381, 168-179.	1.4	22
41	Ordered mesoporous materials containing Mucor Miehei Lipase as biocatalyst for transesterification reaction. <i>Process Biochemistry</i> , 2013, 48, 831-837.	1.8	21
42	Joint processing of the parallel and crossed polarized Raman spectra and uniqueness in blind nonnegative source separation. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2011, 105, 7-18.	1.8	20
43	Selective direct desulfurization way (DDS) with CoMoS supported over mesostructured titania for the deep hydrodesulfurization of 4,6-dimethyldibenzothiophene. <i>Applied Catalysis A: General</i> , 2018, 563, 91-97.	2.2	20
44	Confined Growth of Spin Crossover Nanoparticles in Surfactant-Based Matrices: Enhancing Shape Anisotropy. <i>Journal of Dispersion Science and Technology</i> , 2011, 32, 1771-1779.	1.3	19
45	Using factorial experimental design to optimize biocatalytic biodiesel production from Mucor Miehei Lipase immobilized onto ordered mesoporous materials. <i>Microporous and Mesoporous Materials</i> , 2018, 268, 39-45.	2.2	19
46	Preparation and characterization of mesoporous materials from a nonionic fluorinated surfactant: Adsorption of glucose oxidase. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2010, 357, 128-135.	2.3	18
47	Tunable composition of Ni <sup>II</sup> and Ni <sup>III</sup> layered hydroxides within a wide range of layer charge. <i>Solid State Sciences</i> , 2011, 13, 146-150.	1.5	17
48	Insights into the Formation and Properties of Templated Dual Mesoporous Titania with Enhanced Photocatalytic Activity. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 3113-3122.	4.0	17
49	Hydrothermal Stability of Ordered Surfactant-Templated Titania. <i>Journal of Physical Chemistry C</i> , 2013, 117, 16500-16508.	1.5	14
50	Origin of the Differential Nanoscale Reactivity of Biologically and Chemically Formed Green Rust Crystals Investigated by Chemical Force Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 5978-5987.	1.5	14
51	Water-Catalyzed Low-Temperature Transformation from Amorphous to Semi-Crystalline Phase of Ordered Mesoporous Titania Framework. <i>ACS Sustainable Chemistry and Engineering</i> , 2014, 2, 120-125.	3.2	14
52	Multitechnique Investigation of Mesoporous Titanosilicate Materials Prepared from Both the Self-Assembly and the Liquid Crystal Mechanisms. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8684-8692.	1.5	13
53	Cation size effect on the thermochromic properties of rare earth cobaltites $\text{CoO}_{3-x}$ ( $x$ : La, Nd, Sm). <i>Journal of Applied Physics</i> , 2013, 114, 113510.	1.1	13
54	Temperature effect on the acid-base behaviour of Na-montmorillonite. <i>Journal of Colloid and Interface Science</i> , 2008, 327, 472-476.	5.0	12

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55	Use of <i>ab initio</i> methods for the interpretation of the experimental IR reflectance spectra of crystalline compounds. <i>Journal of Computational Chemistry</i> , 2013, 34, 1476-1485.	1.5	12
56	Influence of Zn ion addition on the properties of ordered mesoporous TiO <sub>2</sub> . <i>New Journal of Chemistry</i> , 2014, 38, 2081.	1.4	12
57	Tuning and Investigating the Structure of M <sup>II</sup> -Fe <sup>III</sup> Layered Double Hydroxides (M <sup>II</sup> = Ni <sup>II</sup> , Co <sup>II</sup> ) Properties. <i>Current Inorganic Chemistry</i> , 2015, 5, 169-183.	1.1	12
58	Divalent metal release and antimicrobial effects of layered double hydroxides. <i>Applied Clay Science</i> , 2022, 216, 106369.	2.6	12
59	A comparison of different concentration methods for the detection of viruses present in bottled waters and those adsorbed to water bottle surfaces. <i>Journal of Virological Methods</i> , 2012, 181, 18-24.	1.0	11
60	Investigation of properties of mesoporous silica materials based on nonionic fluorinated surfactant using Box-Behnken experimental designs. <i>Microporous and Mesoporous Materials</i> , 2013, 174, 135-143.	2.2	11
61	Zn-TiO <sub>2</sub> mesoporous oxides prepared by mechanical milling. <i>Journal of Alloys and Compounds</i> , 2015, 649, 1-10.	2.8	11
62	Effect of Sb on precipitation of biogenic minerals during the reduction of Sb-bearing ferrihydrites. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 309, 96-111.	1.6	11
63	Remineralization of ferrous carbonate from bioreduction of natural goethite in the Lorraine iron ore (Minette) by <i>Shewanella putrefaciens</i> . <i>Chemical Geology</i> , 2015, 412, 48-58.	1.4	10
64	Amorphous mesostructured zirconia with high (hydro)thermal stability. <i>RSC Advances</i> , 2020, 10, 26165-26176.	1.7	10
65	LaFeOxNy perovskite thin films: Nitrogen location and its effect on morphological, optical and structural properties. <i>Journal of Alloys and Compounds</i> , 2017, 724, 74-83.	2.8	9
66	An ab initio and DFT study of structure and vibrational spectra of disiloxane H <sub>3</sub> SiOSiH <sub>3</sub> conformers. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 67, 1421-1429.	2.0	8
67	Probing the Dynamics of Layered Double Hydroxides by Solid-State <sup>27</sup> Al NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 7276-7281.	1.5	8
68	Experimental and Theoretical Infrared Signatures of REMO <sub>3</sub> (RE = La, Pr, Nd, Sm, and M =) <i>Journal of Physical Chemistry C</i> , 2017, 121, 7276-7281.	1.5	8
69	Thermal stability and phase transformation of semi-crystalline mesostructured TiO <sub>2</sub> in the presence of heteroelements. <i>Microporous and Mesoporous Materials</i> , 2021, 315, 110896.	2.2	8
70	Effect of heat treatment on boron impurity in Vycor. Part I. Near infrared spectra and ab initio calculations of the vibrations of model molecules for surface boranols. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 1747-1755.	1.3	7
71	Effect of heat treatment on boron impurity in Vycor. Part II. Migration, reactivity with vapour water and dissolution in liquid water. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 1757-1762.	1.3	7
72	Multivalency: influence of the residence time and the retraction rate on rupture forces measured by AFM. <i>Journal of Materials Chemistry B</i> , 2015, 3, 1801-1812.	2.9	7

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73	Abiotically or microbially mediated transformations of magnetite by sulphide species: The unforeseen role of nitrate-reducing bacteria. <i>Corrosion Science</i> , 2018, 142, 31-44.	3.0	7
74	Thermal and Hydrothermal Stability of Hierarchical Porous Silica Materials. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 3194-3202.	1.0	7
75	Simultaneous variable selection for the classification of near infrared spectra. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2021, 211, 104268.	1.8	7
76	Thin Films of SiP Lamellar Alloys: A First Step toward 2D SiP. <i>Journal of Physical Chemistry C</i> , 2021, 125, 3235-3241.	1.5	6
77	Influence of crystallization conditions and of gaseous ammonia treatment on mesoporous TiO <sub>2</sub> properties. <i>Microporous and Mesoporous Materials</i> , 2018, 262, 1-12.	2.2	5
78	Assessment of an anti-scale low-frequency electromagnetic field device on drinking water biofilms. <i>Biofouling</i> , 2018, 34, 1020-1031.	0.8	5
79	Facile and green release of template from mesostructured titania. <i>RSC Advances</i> , 2013, 3, 14970.	1.7	4
80	A step towards controlled-diameter single walled carbon nanotubes. <i>Carbon</i> , 2014, 67, 753-765.	5.4	4
81	Simultaneous regularized sparse approximation for wood wastes NIR spectra features selection. , 2015, , .		4
82	Formation of SiP <sub>2</sub> Nanocrystals Embedded in SiO <sub>2</sub> from Phosphorus-Rich SiO <sub>1.5</sub> Thin Films. <i>Journal of Physical Chemistry C</i> , 2020, 124, 7973-7978.	1.5	4
83	Multi-techniques investigation of mesoporous zinc and tungsten titanates materials. <i>Microporous and Mesoporous Materials</i> , 2014, 194, 208-218.	2.2	2
84	Modelling the Structure and Vibrational Properties of Layered Double Hydroxides. , 2015, , 317-323.		1
85	Monitoring structural transformation of hydroxy-sulphate green rust in the presence of sulphate reducing bacteria. <i>Hyperfine Interactions</i> , 2006, 167, 723-727.	0.2	0
86	Micro-crystal orientations estimation in polarized Raman microscopy using an acquisition scheme with multiple diversities. , 2011, , .		0
87	Chemisorbed nickel catalyst for the production of SWCNTs with a very narrow size distribution. <i>Physica Status Solidi (B): Basic Research</i> , 2013, 250, 2581-2585.	0.7	0
88	Low Biotinyl Glycogen: A Model for Single-Molecule Force Analysis of Branched Biological Macromolecules. <i>Journal of Bionanoscience</i> , 2014, 8, 445-454.	0.4	0
89	Correction: Multivalency: influence of the residence time and the retraction rate on rupture forces measured by AFM. <i>Journal of Materials Chemistry B</i> , 2015, 3, 3098-3098.	2.9	0
90	A regularized sparse approximation method for hyperspectral image classification. , 2016, , .		0

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91	Bayesian Positive Source Separation for Spectral Mixture Analysis. Data Handling in Science and Technology, 2016, 30, 279-309.	3.1	0