

## Publication 2014

Nos Ref	Titre	Auteur	Revue	Vol.	Issue	Pages
2014-01	Amplified plasmonic detection of DNA hybridization using doxorubicin-capped gold particles	<u>J. Spadavecchia*</u> , <u>R. Perumal</u> , A. Barras, J. Lyskawa, P. Woisel, W. Laure, <u>C.-M. Pradier</u> , <u>R. Boukherroub</u> , <u>S. Szunerits*</u>	Analyst	139	1	157-164
2014-02	Atomic level characterization and sulfur resistance of unsupported W <sub>2</sub> C during dibenzothiophene hydrodesulfurization. Classical kinetic simulation of the reaction	M. Lewandowski*, A. Szymanska-Kolasa, <u>C. Sayag</u> , <u>P. Beaunier</u> , G. Djega-Mariadassou	Applied Catalysis B-Environmental	144		750-759
2014-03	Low-energy electron induced resonant loss of aromaticity: consequences on cross-linking in terphenylthiol SAMs	L. Amiaud*, J. Houplin, M. Bourdier, <u>V. Humblot</u> , R. Azria, <u>C.-M. Pradier</u> , A. Lafosse	Physical Chemistry Chemical Physics	16	3	1050-1059
2014-04	Self-Organization and/or Nanocrystallinity of Co Nanocrystals Effects on the Oxidation Process Using High-Energy Electron Beam	A. Cazacu, C. Larosa, <u>P. Beaunier</u> , G. Laurent, P. Nanni, L. Mitoseriu, I. Lisiecki*	Advanced Functional Materials	24	1	164-170
2014-05	Selectivity in the gas-phase hydrogenation of 4-nitrobenzaldehyde over supported Au catalysts	N. Perret, XD. Wang, <u>T. Onfroy</u> , <u>C. Calers</u> , MA. Keane*	Journal of Catalysis	309		333-342
2014-06	Control of the anisotropic shape of cobalt nanorods in the liquid phase: from experiment to theory ... and back	KA. Atmane, C. Michel*, JY. Piquemal*, P. Sautet, <u>P. Beaunier</u> , M. Giraud, M. Sicard, S. Nowak, R. Losno, G. Viau	Nanoscale	6	5	2682-2692
2014-07	PEDOT nanostructures synthesized in hexagonal mesophases	S. Ghosh, H. Remita, L. Ramos, A. Dazzi, A. Deniset-Besseau, <u>P. Beaunier</u> , F. Goubard, PH. Aubert, F. Brisset, S. Remita*	New Journal of Chemistry	38	3	1106-1115
2014-08	Electron transfers in a TiO <sub>2</sub> -containing MOR zeolite: synthesis of the nanoassemblies and application using a probe chromophore molecule	A. Legrand, A. Moissette, M. Hureau, <u>S. Casale</u> , <u>P. Massiani*</u> , H. Vezin, AS. Mamede, I. Batonneau-Gener	Physical Chemistry Chemical Physics	16	26	13145-13155
2014-09	Simple procedure for vacant POM-stabilized palladium (0) nanoparticles in water: structural and dispersive effects of lacunary polyoxometalates	R. Villanneau*, A. Roucoux*, <u>P. Beaunier</u> , D. Brouji, A. Proust	RSC Advances	4	50	26491-26498
2014-10	Selective hydrogenation of butadiene over TiO <sub>2</sub> supported copper, gold and gold-copper catalysts prepared by deposition-precipitation	<u>L. Delannoy*</u> , <u>G. Thirumurthulu</u> , PS. Reddy, <u>C. Méthivier</u> , J. Nelayah, BM. Reddy, C. Ricolleau, <u>C. Louis</u>	Physical Chemistry Chemical Physics	16	48	26514-26527
2014-11	Structural studies of adsorbed protein (betalactoglobulin) on natural clay (montmorillonite)	A. Assifaoui*, L. Huault, C. Maissiat, C. Roullier-Gall, P. Jeandet, J. Hirschinger, J. Raya, M. Jaber, <u>J.-F. Lambert</u> , P. Cayot, RD. Gougeon, C. Loupiac	RSC Advances	4	105	61096-61103
2014-12	Characterization of Two-Dimensional Chiral Self-Assemblies L- and D-Methionine on Au(111)	<u>V. Humblot*</u> , <u>F. Tielens*</u> , <u>N.-B. Luque</u> , <u>H. Hampartsoumian</u> , <u>C. Methivier</u> , <u>C.-M. Pradier</u>	Langmuir	30	1	203-212
2014-13	Time-of-Flight Secondary Ion Mass Spectrometry Investigation of the Orientation of Adsorbed Antibodies on SAMs Correlated to Biorecognition Tests	<u>V. Lebec</u> , <u>S. Boujday</u> , C. Poleunis, <u>C.-M. Pradier</u> , A. Delcorte*	Journal of Physical Chemistry C	118	4	2085-2092
2014-14	Synthesis of Well-Defined Dawson-Type Poly(N,N-diethylacrylamide) Organopolyoxometalates	J. Lesage de la Haye, <u>P. Beaunier</u> , L. Ruhlmann, B. Hasenknopf*, E. Lacote*, J. Rieger*	Chempluschem	79	2	250-256

2014-	15	Multi-stimuli responsive supramolecular diblock copolymers	L. Sambe, K. Belal, F. Stoffelbach, J. Lyskawa, F. Delattre, M. Bria, FX. Sauvage, M. Sliwa, V. Humblot, B. Charleux, G. Cooke, P. Woisel*	Polymer Chemistry	5	3	1031-1036
2014-	16	Organo-NO <sub>x</sub> formation-decomposition as the origin of the changes in the low temperature NO-TPD profile in the presence of <i>n</i> -decane on Ag/ $\gamma$ -Al <sub>2</sub> O <sub>3</sub>	K. Malinger, J. Blanchard, R.P. Doherty, C. Thomas*	Catalysis Communications	46		81-85
2014-	17	Surface passivation of aluminum alloy 6061 with gaseous trichlorosilane: A surface investigation	R. Ngongang*, E. Marceau, X. Carrier, C.-M. Pradier, C. Methivier, JL. Blanc, M. Carre	Applied Surface Science	292		165-173
2014-	18	Incorporation of Mo into the Vacant T-Atom Sites of the Framework of BEA Zeolite as Mononuclear Mo Evidenced by XRD and FTIR, NMR, EPR, and DR UV-Vis Spectroscopies	R. Baran, F. Ayerseng, Y. Millot, T. Onfroy, S. Casale, S. Dzwigaj*	Journal of Physical Chemistry C	118	8	4143-4150
2014-	19	Partial oxidation of methane on Ni(x)AlBEA and Ni(x)SiBEA zeolite catalysts: Remarkable effect of preparation procedure and Ni content	KA. Chalupka*, WK. Jozwiak, J. Rynkowski, W. Maniukiewicz, S. Casale, S. Dzwigaj*	Applied Catalysis B-Environmental	146	si	227-236
2014-	20	LRS-2: Eco-Friendly Material for Catalysis	B. Zebib*	Journal of Inorganic and Organometallic Polymers and Materials	24	2	275-282
2014-	21	Revisiting active sites in heterogeneous catalysis: Their structure and their dynamic behaviour	J. Vedrine*	Applied Catalysis A-General	474	si	40-50
2014-	22	Using planktonic microorganisms to supply the unpurified multi-copper oxidases laccase and copper efflux oxidases at a biofuel cell cathode	S. Sane, K. Richter, S. Rubenwolf, NJ. Matschke, C. Jolival*, C. Madzak, R. Zengerle, J. Gescher, S. Kerzenmacher*	Bioresource Technology	158		231-328
2014-	23	Fe-clay-plate as a heterogeneous catalyst in photo-Fenton oxidation of phenol as probe molecule for water treatment	HB. Hadjltaief, P. Da Costa*, P. Beaunier, ME. Galvez, M. Ben Zina	Applied Clay Science	91-92		46-54
2014-	24	Effect of SAM chain length and binding functions on protein adsorption: $\beta$ -Lactoglobulin and apo-transferrin on gold	EE. Bedford, S. Boujday*, V. Humblot, FX. Gu, C.-M. Pradier	Colloids and Surfaces B-Biointerfaces	116		489-496
2014-	25	Insights into the WO <sub>x</sub> Coverage-Dependent Location and Oxidation State of Noble Metals Supported on Tungstated Oxides: The Case of Rh/WO <sub>x</sub> -Ce <sub>0.62</sub> Zr <sub>0.38</sub> O <sub>2</sub>	T. Bonnotte, R.P. Doherty, C. Sayag, J.-M. Krafft, C. Methivier, M. Sicard, F. Ser, C. Thomas*	Journal of Physical Chemistry C	118	14	7386-7397
2014-	26	Enzyme Immobilization on Si lane-Modified Surface through Short Linkers: Fate of Interfacial Phases and Impact on Catalytic Activity	N. Aissaoui, L. Bergaoui, S. Boujday, JF. Lambert, C. Methivier, J. Landoulsi*	Langmuir	30	14	4066-4077
2014-	27	Tuning Model Drug Release and Soft-Tissue Bioadhesion of Polyester Films by Plasma Post-Treatment	VT. Mogal, CS. Yin, R. O'Rorke, S. Boujday, C. Methivier, SS. Venkatraman, TWJ. Steele*	ACS Applied Materials & Interfaces	6	8	5749-5758
2014-	28	Discrimination of infrared fingerprints of bulk and surface POH and OH of hydroxyapatites	S. Diallo-Garcia*, M. Ben Osman, J.-M. Krafft, S. Boujday, G. Costentin*	Catalysis Today	226		81-88
2014-	29	On the influence of water traces on the acidity measurement of amorphous aluminosilicates	J. Blanchard*, J.-M. Krafft, C. Dupont, C. Sayag, T. Takahashi, H. Yasuda	Catalysis Today	226		89-96
2014-	30	Hydrodechlorination of 1,2-dichloroethane on nickel loaded Beta zeolite modified by copper: Influence of nickel and copper state on product selectivity	R. Baran, A. Srebowata*, S. Casale, D. Lomot, S. Dzwigaj	Catalysis Today	226		134-140
2014-	31	Polyol-mediated syntheses of crystalline nanosized manganese oxides	G. Diao, F. Chau, JY. Piquemal*, E. Briot, S. Ammar, M. Sicard, S. Nowak, P. Beaunier, H. Lecoq, P. Decorse, L. Yu*	Journal of Nanoparticle Research	16	6	2428

2014-	32	Promotional effect of Ru on the activity and stability of Co/SBA-15 catalysts in dry reforming of methane	K. Jabbour, N. El Hassan*, <u>S. Casale</u> , J. Estephane, H. El Zakhem	International Journal of Hydrogen Energy	39	15	7780-7787
2014-	33	Self-Assembly of Fatty Acids on Hydroxylated Al Surface and Effects of Their Stability on Wettability and Nanoscale Organization	I. Liascukiene, <u>M. Steffenhagen</u> , S.J. Asadauskas, <u>J.F. Lambert</u> , <u>J. Landoulsi*</u>	Langmuir	30	20	5797-5807
2014-	34	Using Prussian blue analogue nanoparticles confined into ordered mesoporous silica monoliths as precursors of oxides	V. Trannoy, E. Delahaye, G.Fornasieri, <u>P. Beaunier</u> , A. Bleuzen*	Comptes Rendus Chimie	17	6	512-520
2014-	35	BSA and lysozyme adsorption on homoionic montmorillonite: Influence of the interlayer cation	M. Lepoitevin, <u>M. Jaber</u> , R. Guegan, JM. Janot, P. De Jardin, F. Henn, S. Balme*	Applied Clay Science	95		396-402
2014-	36	Identification of Surface Basic Sites and Acid-Base Pairs of Hydroxyapatite	<u>S. Diallo-Garcia</u> , <u>M. Ben Osman</u> , <u>JM. Krafft</u> , <u>S. Casale</u> , C. Thomas, J. Kubo, G. Costentin*	Journal of Physical Chemistry C	118	24	12744-12757
2014-	37	Catalytic conversion of 1,2-dichloroethane over bimetallic Cu-Ni loaded BEA zeolites	A. Srebowata*, <u>R. Baran</u> , <u>S. Casale</u> , Il. Kaminska, D. Lomot, D. Lisovytskiy, <u>S. Dzwigaj*</u>	Applied Catalysis B-Environmental	152-153		317-327
2014-	38	Partial oxidation of methane over bifunctional catalyst I. In situ formation of Ni <sup>0</sup> /La <sub>2</sub> O <sub>3</sub> during temperature programmed POM reaction over LaNiO <sub>3</sub> perovskite	TH. Nguyen*, A. Lamacz, <u>P. Beaunier</u> , S. Czajkowska, M. Domanski, A. Krzton, T. Van Le, G. Djega-Mariadassou	Applied Catalysis B-Environmental	152		360-369
2014-	39	Temporin-SHa peptides grafted on gold surfaces display antibacterial activity	<u>A. Lombana</u> , Z. Raja, <u>S. Casale</u> , C.-M. Pradier, T. Foulon, A. Ladram*, <u>V. Humblot*</u>	Journal of Peptide Science	20	7	563-569
2014-	40	One-Step Synthesis of Collagen Hybrid Gold Nanoparticles and Formation on Egyptian-like Gold-Plated Archaeological Ivory	<u>J. Spadavecchia</u> , E. Apcchain, M. Alberic, E. Fontan, I. Reiche*	Angewandte Chemie-International Edition	53	32	8363-8366
2014-	41	Preparation of Highly Anisotropic Cobalt Ferrite/Silica Microellipsoids Using an External Magnetic Field	S. Abramson*, V. Dupuis, S. Neveu, <u>P. Beaunier</u> , D. Montero	Langmuir	30	30	9190-9200
2014-	42	Tuning the shape and size of hybrid gold nanoparticles by porphyrins using seed-mediated synthesis	<u>J. Spadavecchia*</u> , <u>S. Casale</u> , <u>J. Landoulsi</u> , C.-M. Pradier	Chemical Physics Letters	609		134-141
2014-	43	Insights into the influence of the Ag loading on Al <sub>2</sub> O <sub>3</sub> in the H <sub>2</sub> -assisted C <sub>3</sub> H <sub>6</sub> -SCR of NO <sub>x</sub>	<u>T. Chaieb</u> , L. Delannoy, G. Costentin, C. Louis, <u>S. Casale</u> , R.L. Chantry, Z.Y. Li, C. Thomas*	Applied Catalysis B-Environmental	156		192-201
2014-	44	Oxidation of carbon black, propene and toluene on highly reducible Co/SBA-15 catalysts	N. El Hassan*, S. Aouad, <u>S. Casale</u> , H. El Zakhem, H. El Nakat	Comptes Rendus Chimie	17	9	913-919
2014-	45	Introduction of Co into the Vacant T-Atom Sites of SiBEA Zeolite as Isolated Mononuclear Co Species	<u>R. Baran</u> , T. Onfroy, <u>S. Casale</u> , <u>S. Dzwigaj*</u>	Journal of Physical Chemistry C	118	35	20445-20451
2014-	46	Mn-analcime: Synthesis, characterization and application to cyclohexene oxidation	A. Bejar, S. Ben Chaabene, <u>M. Jaber</u> , J.-F. Lambert, L. Bergaoui*	Microporous and Mesoporous Materials	196		158-164
2014-	47	Direct grafting of ethylene sulfide onto silicic acid magadiite	MM. de Oliveira, MM. Fernandes, MG. Fonseca*, EC. da Silva Filho, AG. de Souza, F. Gaslain, <u>M. Jaber</u>	Microporous and Mesoporous Materials	196		292-299
2014-	48	Walking peptide on Au(110) surface: Origin and nature of interfacial process	<u>V. Humblot*</u> , A. Tejada, <u>J. Landoulsi</u> , <u>A. Vallee</u> , <u>A. Naitabdi</u> , A. Taleb, C.-M. Pradier	Surface Science	628		21-29
2014-	49	Surface plasmon resonance: signal amplification using colloidal gold nanoparticles for enhanced sensitivity	S. Szunerits*, <u>J. Spadavecchia</u> , R. Boukherroub	Reviews in Analytical Chemistry	33	3	153-164
2014-	50	Rational design of a CO <sub>2</sub> -resistant toluene hydrogenation catalyst based on FT-IR spectroscopy studies	J. Scalbert, C. Daniel, Y. Schuurman, <u>C. Thomas</u> , FC. Meunier*	Journal of Catalysis	318		61-66

2014-	51	Room-Temperature Synthesis of Iron-Doped Anatase TiO <sub>2</sub> for Lithium-Ion Batteries and Photocatalysis	C. Andriamiadamanana, C. Laberty-Robert, MT. Sougrati, <u>S. Casale</u> , C. Davoisne, S. Patra, F. Sauvage*	Inorganic Chemistry	53	19	10129-10139
2014-	52	Heterogeneous catalyst preparation in ionic liquids: Titania supported gold nanoparticles	C. Oumahi, J. Lombard, S. Casale, C. Calers, L. Delannoy, C. Louis, X. Carrier*	Catalysis Today	235		58-71
2014-	53	The influence of the preparation procedures on the catalytic activity of Fe-BEA zeolites in SCR of NO with ammonia and N <sub>2</sub> O decomposition	P. Boron, L. Chmielarz*, J. Gurgul*, K. Latka, B. Gil, J.-M. Krafft, S. Dzwigaj*	Catalysis Today	235		210-225
2014-	54	In-situ monitoring of transition metal complex adsorption on oxide surfaces during the first stages of supported metal catalyst preparation	J. Blanchard*, A. Hervier, G. Costentin, J. Regalbuto, C. Louis, S. Boujday*	Catalysis Today	235		245-249
2014-	55	Influence of organic additives on the properties of impregnation solutions and on nickel oxide particle size for Ni/Al <sub>2</sub> O <sub>3</sub> catalysts	F. Bentaleb, M. Che, AC. Dubreuil, C. Thomazeau, E. Marceau*	Catalysis Today	235		250-255
2014-	56	Cu-modified hydroxy-apatite as catalyst for Glaser-Hay C-C homo- coupling reaction of terminal alkynes	B. Maaten, J. Moussa, C. Desmarets, P. Gredin, P. Beaunier, T. Kanger, K. Tonsuaadu, D. Villemain, M. Gruselle*	Journal of Molecular Catalysis A-Chemical	393		112-116
2014-	57	How Surface Hydroxyls Enhance MgO Reactivity in Basic Catalysis: The Case of Methylbutynol Conversion	H. Petitjean*, H. Guesmi*, H. Lauron-Pernot, G. Costentin, D. Loffreda, P. Sautet, F. Delbecq	ACS Catalysis	4	1	4004-4014
2014-	58	Selectivities in Adsorption and Peptidic Condensation in the (Arginine and Glutamic Acid)/Montmorillonite Clay System	M. Jaber*, T. Georgelin, H. Bazzi, F. Costa-Torro, J.-F. Lambert*, G. Bolbach, G. Clodic	Journal of Physical Chemistry C	118	44	25447-25455
2014-	59	New Insights into Surface-Enhanced Raman Spectroscopy Label-Free Detection of DNA on Ag degrees/TiO <sub>2</sub> Substrate	LJ. He, M. Langlet, P. Bouvier, C. Calers, C.-M. Pradier, V. Stambouli*	Journal of Physical Chemistry C	118	44	25658-25670
2014-	60	Enzymatic Fuel Cells Solely Supplied with Unpurified Cellobiose Dehydrogenase and Laccase in Microorganism's Culture Supernatants	S. Sane, C. Heilemann, P. Salavei, S. Rubenwolf, C. Jolival, C. Madzak, R. Zengerle, P.J. Nielsen, S. Kerzenmacher*	Chemelectrochem	1	11	1886-1894
2014-	61	Oxidation and Surface Segregation Behavior of a Pt-Pd-Rh Alloy Catalyst	PAJ. Bagot*, K. Kruska, D. Haley, X. Carrier, E. Marceau, MP. Moody, GDW. Smith	Journal of Physical Chemistry C	118	45	26130-26138
2014-	62	Highly Sensitive Detection of DNA Hybridization on Commercialized Graphene-Coated Surface Plasmon Resonance Interfaces	O. Zagorodko, J. Spadavecchia, AY. Yanguas Serrano, I. Larroulet, A. Pesquera, A. Zurutuza, R. Boukherroub, S. Szunerits*	Analytical Chemistry	86	22	11211-11216
2014-	63	Catalytic conversion of trichloroethylene on nickel containing beta zeolites into value added products	A. Srebowata*, R. Baran, D. Lisovytskiy, II. Kaminska, S. Dzwigaj*	Catalysis Communications	57		107-110
2014-	64	Amine degradation in CO <sub>2</sub> capture. 3. New degradation products of MEA in liquid phase: Amides and nitrogenous heterocycles	C. Guedard, A. Rey, V. Cuzuel, J. Brunet, B. Delfort, D. Picq, J. Dugay, J. Vial, F. Launay, L. Assam, J. Ponthus, PL. Carrette*	International Journal of Greenhouse Gas Control	29		61-69
2014-	65	The genesis of a heterogeneous catalyst: in situ observation of a transition metal complex adsorbing onto an oxide surface in solution	A. Hervier, J. Blanchard, G. Costentin, J. Regalbuto, C. Louis, S. Boujday*	Chemical Communications	50	19	2409-2411