

Publication 2015

Nos ref.	Titre	Auteur	Revue	Vol.	Issue	Pages
2015- 1	On an additional promoting role of hydrogen in the H ₂ -assisted C ₃ H ₆ -SCR of NO _x on Ag/Al ₂ O ₃ : A lowering of the temperature of formation-decomposition of the organo-NO _x intermediates?	C. Thomas*	Applied Catalysis B-Environmental	162		454-462
2015- 2	Oligopeptide-heavy metal interaction monitoring by hybrid gold nanoparticle based assay	J. Politi, J. Spadavecchia*, M. Iodice, L. de Stefano	Analyst	140	1	149-155
2015- 3	Evidence for an H ₂ promoting effect in the selective catalytic reduction of NO _x by propene on Au/Al ₂ O ₃	T. Chaieb, L. Delannoy, S. Casale, C. Louis, C. Thomas*	Chemical Communications	51	4	796-799
2015- 4	Plasmonic photothermal destruction of uropathogenic E-coli with reduced graphene oxide and core/shell nanocomposites of gold nanorods/reduced graphene oxide	K. Turcheniuk, CH. Hage, J. Spadavecchia, AY. Yanguas Serrano, I. Larroulet, A. Pesquera, A. Zurutuza, MG. Pisfil, L. Heliot, J. Boukaert, R. Boukherroub, S. Szunerits*	Journal of Materials Chemistry B	3	3	375-386
2015- 5	Design of TiO ₂ /Au nanoparticle films with controlled crack formation and different architectures using a centrifugal strategy	A. Taleb*, F. Mesguich, T. Onfroy, Y. Xue	RSC Advances	5	10	7007-7017
2015- 6	Sensing the Charge State of Single Gold Nanoparticles via Work Function Measurements	Y. Zhang, O. Pluchery*, L. Caillard, A.-F. Lamic-Humblot, S. Casale, YJ. Chaba, M. Salmeron*	Nano Letters	15	1	51-55
2015- 7	Nanostructured and spiky gold in biomolecule detection: improving binding efficiencies and enhancing optical signals	EE. Bedford, S. Boujday, C.-M. Pradier, FX. Gu*	RSC Advances	5	21	16461-16475
2015- 8	Facile synthesis of Pd nanostructures in hexagonal mesophases as a promising electrocatalyst for ethanol oxidation	S. Ghosh*, H. Remita, P. Kar, S. Choudhury, S. Sardar, P. Beaunier, PS. Roy, SK. Bhattacharya, SK. Pal	Journal of Materials Chemistry A	3	18	9517-9527
2015- 9	On the relationship between the basicity of a surface and its ability to catalyze transesterification in liquid and gas phases: the case of MgO	D. Cornu*, H. Guesmi, G. Laugel, J.-M. Krafft, H. Lauron-Pernot*	Physical Chemistry Chemical Physics	17	21	14168-14176
2015- 10	Dual stimuli-responsive coating designed through layer-by-layer assembly of PAA- <i>b</i> -PNIPAM block copolymers for the control of protein adsorption	A. Osypova, D. Magnin, P. Sibret, A. Aqil, C. Jerome, C. Dupont-Gillain, C.-M. Pradier, S. Demoustier-Champagne*, J. Landoulsi*	Soft Matter	11	41	8154-8164
2015- 11	Conducting polymer nanofibers with controlled diameters synthesized in hexagonal mesophases	S. Ghosh, L. Ramos, S. Remita, A. Dazzi, A. Deniset-Besseau, P. Beaunier, F. Goubard, PH. Aubert, H. Remita*	New Journal of Chemistry	39	11	8311-8320
2015- 12	Synergistic effects of Ir-Au/TiO ₂ catalysts in the total oxidation of propene: influence of the activation conditions	A. Aguilar-Tapia, R. Zanella*, C. Calers, C. Louis, L. Delannoy	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	17	42	28022-28032
2015- 13	Crossover among structural motifs in Pd-Au nanoalloys	B. Zhu, H. Guesmi, J. Creuze, B. Legrand, C. Mottet*	Physical Chemistry Chemical Physics	17	42	28129-28136
2015- 14	New insights into the mixing of gold and copper in a nanoparticle from a structural study of Au-Cu nanoalloys synthesized via a wet chemistry method and pulsed laser deposition	H. Prunier, J. Nelayah, C. Ricolleau*, G. Wang, S. Nowak, A.-F. Lamic-Humblot, D. Alloyeau	Physical Chemistry Chemical Physics	17	42	28339-28346

2015-	15	Comparison of effects of La, Mg and Rh addition on the activity and stability of Ni/SiO ₂ catalysts in dry reforming of methane at low temperature	N. El Hassan*, A. Khansa, E. Challita, H. El Zakhem, <u>S. Casale</u>	2015 International Mediterranean Gas and Oil Conference (MEDGO)	?
2015-	16	Compared activity and stability of three Ni-silica catalysts for methane bi- and dry reforming	K. Jabbour, MN. Kaydouh, N. El Hassan, H. El Zakhem, K. Jabbour, <u>S. Casale</u> , P. Massiani, A. Davidson*	2015 International Mediterranean Gas and Oil Conference (MEDGO)	?
2015-	17	Rh-Ni/SBA-15 prepared by two solvents method as stable catalysts for the dry reforming of methane at high pressure	MN. Kaydouh, N. El Hassan, H. El Zakhem, MN. Kaydouh, A. Davidson, <u>S. Casale</u> , P. Massiani*	2015 International Mediterranean gas and Oil Conference (MEDGO)	?
2015-	18	Stabilization of ribofuranose by a mineral surface	T. Georgerlin, M. Jaber, F. Fournier, G. Laurent, F. Costa-Torro, MC. Maurel, J.-F. Lambert*	Carbohydrate Research	402 241-244
2015-	19	Influence of iron state and acidity of zeolites on the catalytic activity of FeHBEA, FeHZSM-5 and FeHMOR in SCR of NO with NH ₃ and N ₂ O decomposition	P. Boron, L. Chmielarz*, J. Gurgul*, K. Latka, B. Gil, B. Marszalek, <u>S. Dzwigaj</u> *	Microporous and Mesoporous Materials	203 73-85
2015-	20	Catalytic properties of AgAlBEA and AgSiBEA zeolites in H ₂ -promoted selective reduction of NO with ethanol	N. Popovych, P. Kyriienko, S. Soloviev, S. Orlyk, <u>S. Dzwigaj</u> *	Microporous and Mesoporous Materials	203 163-169
2015-	21	L-Methionine adsorption on Cu(110), binding and geometry of the amino acid as a function of coverage	C. Methivier*, V. Humblot, C.-M. Pradier	Surface Science	632 88-92
2015-	22	Exploring an alternative route for meixnerite synthesis. The impact of the gaseous environment on the reconstruction of the lamellar structure and the catalytic performances	OD. Pavel, R. Zavoianu*, R. Birjega, E. Angelescu, <u>G. Costentin</u> , M. Che	Applied Clay Science	104 59-65
2015-	23	Speciation of Ruthenium as a Reduction Promoter of Silica-Supported Co Catalysts: A Time-Resolved in Situ XAS Investigation	J. Hong, E. Marceau*, AY. Khodakov, L. Gaberova, A. Griboval-Constant, JS. Girardon, C. La Fontaine, V. Briois	ACS Catalysis	5 2 1273-1282
2015-	24	Surface functionalization by covalent immobilization of an innovative carvacrol derivative to avoid fungal biofilm formation	A. Gharbi, T. Legigan, <u>V. Humblot</u> , S. Papot, JM. Berjeaud*	AMB Express	5 9 1-12
2015-	25	Amphiphilic Polyoxometalates for the Controlled Synthesis of Hybrid Polystyrene Particles with Surface Reactivity	J. Lesage de La Haye, J.-M. Guigner, <u>E. Marceau</u> , L. Ruhlmann, B. Hasenknopf*, E. Lacote, J. Rieger	Chemistry-A European Journal	21 7 2948-2953
2015-	26	Controlling the reproducibility of Coulomb blockade phenomena for gold nanoparticles on an organic monolayer/silicon system	L. Caillard, S. Sattayaporn, <u>A.-F. Lamic-Humblot</u> , <u>S. Casale</u> , P. Campbell, YJ. Chabal, O. Pluchery*	Nanotechnology	26 6 065301
2015-	27	Recent advances in aptasensors based on graphene and graphene-like nanomaterials	J. Ping, YB. Zhou, Y. Wu, V. Papper, <u>S. Boujday</u> , RS. Marks, T. Steele*	Biosensors & Bioelectronics	64 373-385
2015-	28	Effect of Nontronite Smectite Clay on the Chemical Evolution of Several Organic Molecules under Simulated Martian Surface Ultraviolet Radiation Conditions	O. Poch*, M. Jaber, F. Stalport, S. Nowak, <u>T. Georgerlin</u> , J.-F. Lambert, C. Szopa, P. Coll	Astrobiology	15 3 221-237
2015-	29	Towards a combined use of Mn(Salen) and quaternary ammonium salts as catalysts for the direct conversion of styrene to styrene carbonate in the presence of dioxygen and carbon dioxide	<u>C.-C. Rocha</u> , <u>T. Onfray</u> , F. Launay*	Comptes Rendus Chimie	18 3 270-276
2015-	30	CO ₂ reforming of CH ₄ over highly active and stable yRhNix/NaY catalysts	J. Estephane*, M. Ayoub, K. Safieh, MN. Kaydouh, <u>S. Casale</u> , H. El Zakhem	Comptes Rendus Chimie	18 3 277-282

2015-	31	Effect of the order of Ni and Ce addition in SBA-15 on the activity in dry reforming of methane	MN. Kaydouh, N. El Hassan, A. Davidson, S. Casale, H. El Zakhem, P. Massiani*	Comptes Rendus Chimie	18	3	293-301
2015-	32	Quantum-dots containing Fe/SBA-15 silica as "green" catalysts for the selective photocatalytic oxidation of alcohol (methanol, under visible light)	N. Tabaja, S. Casale, D. Brouri, A. Davidson*, H. Obeid, J. Toufaily, T. Hamieh	Comptes Rendus Chimie	18	3	358-367
2015-	33	Characterizations and performances of Ni/diatomite catalysts for dry reforming of methane	K. Jabbour, N. El Hassan*, A. Davidson*, P. Massiani, S. Casale	Chemical Engineering Journal	264		351-358
2015-	34	Polyoxometalate nanostructured gold surfaces for sensitive biosensing of benzo[a]pyrene	D. Mercier, M. Ben Haddada, M. Huebner, D. Knopp, R. Niessner, M. Salmain, A. Proust, S. Boujday*	Sensors And Actuators B-Chemical	209		770-774
2015-	35	Nanoporous Materials as New Engineered Catalysts for the Synthesis of Green Fuels	I. Fechete*, J.-C. Védrine*	Molecules	20	4	5638-5666
2015-	36	Melanin Polymerization Held in Check: A Composite of Dihydroxyphenylalanine with Zeolite Beta	M. Bouchoucha, F. Tielens, F. Gaslain, F. CostaTorro, S. Casale, A. Palcic, V. Valtchev, J.-F. Lambert*, M. Jaber	Journal of Physical Chemistry C	119	16	8736-8747
2015-	37	Conducting polymer nanostructures for photocatalysis under visible light	S. Ghosh, NA. Kouame, L. Ramos, S. Remita, A. Dazzi, A. Deniset-Besseau, P. Beaunier, F. Goubard, PH. Aubert, H. Remita*	Nature Materials	14	5	505-511
2015-	38	Boronic species as promising inhibitors of the <i>Staphylococcus aureus</i> NorA efflux pump: Study of 6-substituted pyridine-3-boronic acid derivatives	F. Fontaine, A. Hequet*, AS. Voisin-Chiret, A. Bouillon, A. Lesnard, T. Cresteil, C. Jolivalt, S. Rault	European Journal of Medicinal Chemistry	95		185-198
2015-	39	Layer-by-layer generation of PEG-based regenerable immunosensing surfaces for small-sized analytes	M. Huebner, M. Ben Haddada, C. Méthivier, R. Niessner, D. Knopp, S. Boujday*	Biosensors & Bioelectronics	67		334-341
2015-	40	Tunable hierarchical porous silica materials using hydrothermal sedimentation-aggregation technique	A. Zaki, J. Xu, G. Stoclet, S. Casale, JP. Dacquin*, P. Granger	Microporous and Mesoporous Materials	208		140-151
2015-	41	Influence of Cu on the catalytic activity of FeBEA zeolites in SCR of NO with NH ₃	P. Boron, L. Chmielarz*, S. Dzwigaj*	Applied Catalysis B-Environmental	168		377-384
2015-	42	Potent antimicrobial peptides against <i>Legionella pneumophila</i> and its environmental host, <i>Acanthamoeba castellanii</i>	M. Schlusselhuber, V. Humblot, S. Casale, C. Methivier, J. Verdon, M. Leippe, JM. Berjeaud*	Applied Microbiology and Biotechnology	99	11	4879-4891
2015-	43	Co-Al Mixed Oxides Prepared via LDH Route Using Microwaves or Ultrasound: Application for Catalytic Toluene Total Oxidation	E. Genty, J. Brunet, C. Poupin, S. Casale, S. Capelle, P. Massiani, S. Siffert, Stephane, R. Cousin*	Catalysts	5	2	851-867
2015-	44	Hypercondensation of an Amino Acid: Synthesis and Characterization of a Black Glycine Polymer	S. Fox, P. Dalai, J.-F. Lambert, H. Strasdeit	chemistry-A European Journal	21	24	8897-8904
2015-	45	Methanol Oxidation to Formaldehyde on VSiBEA Zeolite: A Combined DFT/vdW/Transition Path Sampling and Experimental Study	DC. Tranca*, Fj. Keil, I. Tranca, M. Calatayud, S. Dzwigaj*, M. Trejda, F. Tielens	Journal of Physical Chemistry C	119	24	13619-13631
2015-	46	Surface Chirality of Gly-Pro Dipeptide Adsorbed on a Cu(110) Surface	H. Cruguel, C. Methivier, C.-M. Pradier, V. Humblot	Chirality	27	7	411-416
2015-	47	Mechanistic Investigation of Isopropanol Conversion on Alumina Catalysts: Location of Active Sites for Alkene/Ether Production	K. Larmier*, C. Chizallet*, N. Cadran, S. Maury, J. Abboud, A.-F. Lamic-Humblot, E. Marceau*, H. Lauron-Pernot	ACS Catalysis	5	7	4423-4437

2015-	48	The remarkable effect of the preparation procedure on the catalytic activity of CoBEA zeolites in the Fischer-Tropsch synthesis	KA. Chalupka*, <u>S. Casale</u> , E. Zurawicz, J. Rynkowski, <u>S. Dzwigaj</u> *	Microporous and Mesoporous Materials	211	9-18	
2015-	49	In vitro synthesis of amorphous Mg-, Ca-, Sr- and Ba-carbonates: What do we learn about intracellular calcification by cyanobacteria?	N. Cam, <u>T. Georgelin</u> , M. Jaber, <u>JF. Lambert</u> , K. Benzerara*	Geochimica et Cosmochimica acta	161	36-49	
2015-	50	Revealing the Interplay between Adsorbed Molecular Layers and Gold Nanoparticles by Linear and Nonlinear Optical Properties	L. Dalstein, <u>M. Ben Haddada</u> , G. Barbillon, C. Humbert, A. Tadjeddine, <u>S. Boujday</u> , B. Busson*	Journal of Physical Chemistry C	119	30	17146-17155
2015-	51	Catalytic hydrogen-assisted dehydrochlorination of 1,2-dichloroethane over cobalt-containing beta zeolite	A. Srebowata, <u>R. Baran</u> , I.I. Kaminska, <u>T. Onfroy</u> , J.-M. Kraft, <u>S. Dzwigaj</u> *	Catalysis Today	251	73-80	
2015-	52	A new method for elaborating mesoporous SiO ₂ /montmorillonite composite materials	T. Abou Khalil*, S. Ben Chaabene, <u>S. Boujday</u> , J. Blanchard, L. Bergaoui	Journal of Sol-Gel Science and Technology	75	2	436-446
2015-	53	Quantification of aldehyde terminated heparin by SEC-MALLS-UV for the surface functionalization of polycaprolactone biomaterials	SA. Irvine*, T. Steele, R. Bhuthalingam, M. Li, <u>S. Boujday</u> , M. Prawirasatya, KG. Neoh, FYC. Boey, SS. Venkatraman	Colloids and Surfaces B-Biointerfaces	132		253-263
2015-	54	Efficiency of Polyoxometalate-Based Mesoporous Hybrids as Covalently Anchored Catalysts	F. Bentaleb, O. Makrygenni, D. Brouri, CC. Diogo, A. Mehdi, A. Proust, <u>F. Launay</u> *, R. Villanneau*	Inorganic Chemistry	54	15	7607-7616
2015-	55	Biocidal Properties of a Glycosylated Surface: Sophorolipids on Au(111)	<u>C. Valotteau</u> , <u>C. Calers</u> , <u>S. Casale</u> , J. Berton, CV. Stevens, F. Babonneau, <u>C.-M. Pradier</u> , V. Humblot*, N. Baccile*	ACS Applied Materials & Interfaces	7	32	18086-18095
2015-	56	Surface segregation in AuPd alloys: Ab initio analysis of the driving forces	J. Creuze*, <u>H. Guesmi</u> , C. Mottet, <u>B. Zhu</u> , B. Legrand	Surface Science	639		48-53
2015-	57	Enhanced Vibrational Spectroscopies as Tools for Small Molecule Biosensing	<u>S. Boujday</u> , ML. de la Chapelle, J. Srager, W. Knoll*	Sensors	15	9	21239-21264
2015-	58	Ag-Ni bimetallic SiBEA zeolite as an efficient catalyst of hydrodechlorination of 1,2-dichloroethane towards ethylene	A. Srebowata, I. Zielinska, <u>R. Baran</u> , G. Slowik, <u>S. Dzwigaj</u> *	Catalysis Communications	69		154-160
2015-	59	Preface to the special issue "Nanocatalysis science: Preparation, characterization and reactivity", honoring Jacques C. Vedrine	I. Fechete*, M. Guisnet, <u>C.-M. Pradier</u> , N. Essayem, N. Hoelderich, F. Garin	Applied Catalysis A-General	504		1-3
2015-	60	Synergistic effect in bimetallic Au-Ag/TiO ₂ catalysts for CO oxidation: New insights from in situ characterization	A. Sandoval, <u>L. Delannoy</u> , C. Méthivier, <u>C. Louis</u> , R. Zanella*	Applied Catalysis A-General	504		287-294
2015-	61	Passivation behaviour of stainless steel (UNS N-08028) in industrial or simplified phosphoric acid solutions at different temperatures	M. Ben Salah, R. Sabot, P. Refait, <u>I. Liascukiene</u> , <u>C. Methivier</u> , J. Landoulsi, L. Dhouibi, M. Jeannin*	Corrosion Science	99		320-332
2015-	62	Phosphorous Modified ZSM-5 Zeolites: Impact on Methanol Conversion into Olefins	P. Losch, <u>G. Laugel</u> , JS. Martinez-Espin, S. Chavan, U. Olsbye, B. Louis*	Topics in Catalysis	58	14-17	826-832
2015-	63	An Experimental and Theoretical Approach to Investigate the Effect of Chain Length on Aminothiol Adsorption and Assembly on Gold	<u>EE. Bedford</u> , <u>V. Humblot</u> , <u>C. Methivier</u> , <u>CM. Pradier</u> , F. Gu, F. Tielens*, <u>S. Boujday</u> *	Chemistry-A European Journal	21	41	14555-14561
2015-	64	Discrimination of Surface and Bulk Structure of Crystalline Hydroxyapatite Nanoparticles by NMR	<u>M. Ben Osman</u> , <u>S. Diallo-Garcia</u> , V. Herledan, D. Brouri, T. Yoshioka, J. Kubo, <u>Y. Millot</u> *, G. Costentin*	Journal of Physical Chemistry C	119	40	23008-23020

2015-	65	Surface Science Approaches for the Preparation of Alumina-Supported Hydrotreating Catalysts	C. Bara, E. Devers, M. Digne, A.-F. Lamic-Humblot, GD. Pirngruber, X. Carrier*	Chemcatchem	7	21	3422-3440
2015-	66	Dispersion of colloidal TiO ₂ nanoparticles on mesoporous materials targeting photocatalysis applications	C. Salameh, JP. Nogier, F. Launay, M. Boutros*	Catalysis Today	257		35-40
2015-	67	The catalytic activity of Fe-containing SiBEA zeolites in Fischer-Tropsch synthesis	KA. Chalupka*, W. Maniukiewicz, P. Mierczynski, T. Maniecki, J. Rynkowski, S. Dzwigaj*	Catalysis Today	257		117-121
2015-	68	Functional properties of Sm ₂ NiMnO ₆ multiferroic ceramics prepared by spark plasma sintering	F. Gheorghiu*, L. Curecheriu, I. Lisiecki, P. Beaunier, S. Feraru, MN. Palamaru, V. Musteata, N. Lupu, L. Mitoseriu*	Journal of Alloys and Compounds	649		151-158
2015-	69	Co ²⁺ @Mesoporous Silica Monoliths: Tailor-Made Nanoreactors for Confined Soft Chemistry	E. Delahaye, R. Moulin, M. Aouadi, V. Trannoy, P. Beaunier, G. Fornasieri, A. Bleuzen*	Chemistry-A European Journal	21	47	16906-16916
2015-	70	Oxidation of laccase for improved cathode biofuel cell performances	MH. Zheng, S. Griveau, C. Dupont-Gillain, MJ. Genet, C. Jolivalt*	Bioelectrochemistry	106		77-87
2015-	71	Effect of Co content on the catalytic activity of CoSiBEA zeolites in N ₂ O decomposition and SCR of NO with ammonia	P. Boron, L. Chmielarz, S. Casale, C. Calers, J.-M. Krafft, S. Dzwigaj*	Catalysis Today	258		507-517
2015-	72	Acid-base characterization of heterogeneous catalysts: an up-to-date overview	J.-C. Vedrine*	Research on Chemical Intermediates	41	12	9387-9423
2015-	73	Adsorption and self-assembly of bio-organic molecules at model surfaces: A route towards increased complexity	D. Costa, C.-M. Pradier, F. Tielens, L. Savio	Surface Science Report	70	4	449-553
2015-	74	The amphiphilic hydrophobin Vmh2 plays a key role in one step synthesis of hybrid protein-gold nanoparticles	J. Politi, L. De Stefano*, S. Longobardi, P. Giardina, I. Rea, C. Methivier, C.-M. Pradier, S. Casale, J. Spadavecchia	colloids AND Surfaces B-Biointerfaces	136		214-221
2015-	75	Co-grafting of antiadhesive and antimicrobial agents onto UV-micropatterned copper surfaces	J. Peyre, V. Humblot, C. Méthivier, J.-M. Berjeaud, C.-M. Pradier	Colloids and Surfaces B-Biointerfaces	136		1120-1130
2015-	76	Enhancing the magnetic anisotropy of maghemite nanoparticles via the surface coordination of molecular complexes	Y. Prado*, N. Daffe, A. Michel, T. Georgelin, N. Yaacoub, JM. Greneche, F. Choueikani, E. Otero, P. Ohresser, MA. Arrio, C. Cartier-dit-Moulin, P. Sainctavit, B. Fleury, V. Dupuis, L. Lisnard*, J. Fresnais*	Nature Communications	6		10139
2015-	77	A reusable optical biosensor for the ultrasensitive and selective detection of unamplified human genomic DNA with gold nanostars	S. Mariani, S. Scarano, J. Spadavecchia, M. Minunni*	Biosensors & Bioelectronics	74		981-988
2015-	78	A Brown Mesoporous TiO _{2-x} /MCF Composite with an Extremely High Quantum Yield of Solar Energy Photocatalysis for H ₂ Evolution	MY. Xing, JL. Zhang*, B. Qiu, B. Tian, M. Anpo, M. Che	Small	11	16	1920-1929
2015-	79	Aqueous-phase preparation of model HDS catalysts on planar alumina substrates : support effect on Mo adsorption and sulfidation	C. Bara, L. Plais, K. Larmier, E. Devers, M. Digne, A.-F. Lamic-Humblot, GD. Pirngruber, X. Carrier*	Journal of the American Chemical Society	137		15915-15928