

Publication 2016

2016-	1	Experimental and theoretical evidences of the influence of hydrogen bonding on the catalytic activity of a series of 2-hydroxy substituted quaternary ammonium salts in the styrene oxide/CO ₂ coupling reaction	CC Rocha, T. Onfroy, J. Pilme, A. Denicourt-Nowicki, A. Roucoux, F. Launay*	Journal of Catalysis	333		29-39
2016-	2	Photoelectrochemical properties of nanocrystalline ZnS discrete versus continuous coating of ZnO nanorods prepared by electrodeposition	A. Brayek, S. Chaguetmi, M. Ghoul, I. Ben Assaker, A. Souissi, L. Mouton, P. Beaunier, S. Nowak, F. Mammeri, R. Chtourou, S. Ammar*	RSC Advances	6	37	30919-30927
2016-	3	Kinetic effects in dehydration, rehydration, and isotopic exchange of bacterial photosynthetic reaction centers	M. Malferrari, F. Francia, A. Mezzetti*, G. Venturoli	Biomedical Spectroscopy and Imaging	5	2	185-196
2016-	4	Conversion of syngas-derived C ₂ + mixed oxygenates to C ₃ -C ₅ olefins over Zn _x Zr _y O _z mixed oxide catalysts	C. Smith, VL. Dagle, M. Flake, KK. Ramasamy, L. Kovarik, M. Bowden, T. Onfroy, RA. Dagle*	Catalysis Science & Technology	6	7	2325-2336
2016-	5	Monitoring by in situ neutron diffraction of simultaneous dehydration and Ni ²⁺ mobility in partially exchanged NaY zeolites	F. Porcher, JL. Paillaud, L. Gaberova, G. Andre, S. Casale, P. Massiani*	New Journal of Chemistry	40	5	4228-4235
2016-	6	Smartphone spectrometer for colorimetric biosensing	Y. Wang, X. Liu, P. Chen, NT. Tran, JL. Zhang, WS Chia, S. Boujday, B. Liedberg*	Analyst	141	11	3233-3228
2016-	7	Factors affecting the long-term stability of mesoporous nickel-based catalysts in combined steam and dry reforming of methane	K. Jabbour, N. El Hassan, A. Davidson, S. Casale, P. Massiani*	Catalysis Science & Technology	6	12	4616-4631
2016-	8	Fluorescent core-shell nanoparticles and nanocapsules using comb-like macromolecular RAFT agents: synthesis and functionalization thereof	C. Grazon, J. Rieger*, P. Beaunier, R. Meallet-Renault, G. Clavier	Polymer Chemistry	7	25	4272-4283
2016-	9	An expeditious synthesis of early transition metal carbide nanoparticles on graphitic carbons	D. Rössnig, S. Moldovan, O. Ersen, P. Beaunier, D. Portehault, C. Sanchez, S. Carenco*	Chemical Communications	52	61	9546-9549
2016-	10	Methane dry reforming over hydrotalcite-derived Ni-Mg-Al mixed oxides: the influence of Ni content on catalytic activity, selectivity and stability	R. Debek, M. Motak, D. Duraczyska, F. Launay, ME. Galvez*, T. Grzybek, P. Da Costa	Catalysis Science & Technology	6	17	6705-6715
2016-	11	Selective gas phase hydrogenation of nitroarenes over Mo ₂ C-supported Au-Pd	X. Wang, N. Perret, L. Delannoy, C. Louis, MA. Keane*	Catalysis Science & Technology	6	18	6932-6941
2016-	12	Investigating the DMPO-formate spin trapping method for the study of paper iron gall ink corrosion	A. Gimat, V. Kasneryk, AL. Dupont, S. Paris, F. Averseng, J. Fournier, P. Massiani, V. Rouchon*	New Journal of Chemistry	40	11	9098-9110
2016-	13	Highly active and stable Ni/SBA-15 catalysts prepared by a "two solvents" method for dry reforming of methane	MN. Kaydouh, N. El Hassan*, A. Davidson, S. Casale, H. El Zakhem, P. Massiani*	Microporous and Mesoporous Materials	220		99-109
2016-	14	Real-time colorimetric hydration sensor for sport activities	Y. Zhou, H. Han, HPP. Naw, AV. Lammy, CH. Goh, S. Boujday*, TWJ. Steele*	Materials & Design	90		1181-1185
2016-	15	Characterization of Phosphate Species on Hydrated Anatase TiO ₂ Surfaces	F. Tielens, C. Gervais, G. Deroy, M. Jaber, L. Stievano, CC. Diogo, J.-F. Lambert	Langmuir	32	4	997-1008
2016-	16	Static and dynamic electronic characterization of organic monolayers grafted on a silicon surface	O. Pluchery*, Y. Zhang, R. Benbalagh, L. Caillard, JJ. Gallet, F. Bournel, A.-F. Lamic-Humblot, M. Salmeron, YJ. Chabal, F. Rochet	Physical Chemistry Chemical Physics	18	5	3675-3684
2016-	17	Influence of Coadsorbed Water and Alcohol Molecules on Isopropyl Alcohol Dehydration on gamma-Alumina: Multiscale Modeling of Experimental Kinetic Profiles	K. Larmier*, A. Nicolle, C. Chizallet, N. Cadran, S. Maury, A.-F. Lamic-Humblot, E. Marceau, H. Lauron-Pernot*	ACS Catalysis	6	3	1905-1920

2016-	18	Biom mineralization Patterns of Intracellular Carbonatogenesis in Cyanobacteria: Molecular Hypotheses	J. Li, IM. Oliver, <u>N. Cam</u> , T. Boudier, M. Blondeau, E. Leroy, J. Cosmidis, F. Skouri-Panet, JM. Guigner, C. Ferard, M. Poinso, D. Moreira, P. Lopez-Garcia, C. Cassier-Chauvat, F; Chauvat, K. Benzerara*	Minerals	6	1	UNSP10
2016-	19	High selectivity of TaSiBEA zeolite catalysts in 1,3-butadiene production from ethanol and acetaldehyde mixture	PI. Kyriienko, OV. Larina, SO. Soloviev, SM. Orlyk, <u>S. Dzwigaj*</u>	Catalysis Communications	77		123-126
2016-	20	Polyethylene glycol gold-nanoparticles: Facile nanostructuring of doxorubicin and its complex with DNA molecules for SERS detection	<u>J. Spadavecchia*</u> , <u>R. Perumal</u> , <u>S. Casale</u> , <u>J.-M. Krafft</u> , <u>C. Methivier</u> , <u>C.-M. Pradier</u>	Chemical Physics Letters	648		
2016-	21	Al-Mn-silicate nanobubbles phase as an intermediate in zeolite formation	A. Bejar, S. Ben Chaabene, M. Jaber, <u>J.-F. Lambert</u> , <u>L. Bergaoui*</u>	Applied Clay Science	123		202-209
2016-	22	Hierarchical Self-Assembly of Polyoxometalate-Based Hybrids Driven by Metal Coordination and Electrostatic Interactions: From Discrete Supramolecular Species to Dense Monodisperse Nanoparticles	G. Izzet*, B. Abecassis, <u>D. Brouri</u> , M. Piot, B. Matt, SA. Serapian, C. Bo, A. Proust	Journal of The American Chemical Society	138	15	5093-5099
2016-	23	Characterization of zeolitic intraframework molybdenum sites	G. Skara, <u>R. Baran</u> , <u>T. Onfroy</u> , F. De Proft, <u>S. Dzwigaj</u> , F. Tielens*	Microporous and Mesoporous Materials	225		355-364
2016-	24	Insights into the accessibility of Zr in Zr/SBA-15 mesoporous silica supports with increasing Zr loadings	M. Ogura, R. Guillet-Nicolas, <u>D. Brouri</u> , <u>S. Casale</u> , <u>J. Blanchard</u> , KA. Cychosz, M. Thommes, <u>C. Thomas*</u>	Microporous and Mesoporous Materials	225		440-449
2016-	25	Influence of the nature and environment of cobalt on the catalytic activity of Co-BEA zeolites in selective catalytic reduction of NO with ammonia	<u>R. Baran</u> , <u>J.-M. Krafft</u> , <u>T. Onfroy</u> , <u>T. Grzybek</u> , <u>S. Dzwigaj*</u>	Microporous and Mesoporous Material	225		515-523
2016-	26	Covalent immobilization of glucose oxidase on mesocellular silica foams: Characterization and stability towards temperature and organic solvents	<u>N. Balistreri</u> , D. Gaboriau, C. Jolival, <u>F. Launay*</u>	Journal of Molecular Catalysis B-Enzymatic	127		26-33
2016-	27	Incorporation of Mn into the vacant T-atom sites of a BEA zeolite as isolated, mononuclear Mn: FTIR, XPS, EPR and DR UV-Vis studies	<u>R. Baran</u> , L. Valentin, <u>S. Dzwigaj*</u>	Physical Chemistry Chemical Physic	18	17	12050-12057
2016-	28	Influence of partial dealumination of BEA zeolites on physicochemical and catalytic properties of AgAlSiBEA in H ₂ -promoted SCR of NO with ethanol	N. Popovych*, PI. Kyriienko, SO. Soloviev, SM. Orlyk, <u>S. Dzwigaj*</u>	Microporous and Mesoporous Materials	226		10-18
2016-	29	High activity of mononuclear copper present in the framework of CuSiBEA zeolites in the selective catalytic reduction of NO with NH ₃	<u>R. Baran</u> , T. Grzybek, <u>T. Onfroy</u> , <u>S. Dzwigaj*</u>	Microporous and Mesoporous Materials	226		104-109
2016-	30	Molecular Understanding of the Bulk Composition of Crystalline Nonstoichiometric Hydroxyapatites: Application to the Rationalization of Structure-Reactivity Relationships	<u>M. Ben Osman</u> , <u>JM. Krafft</u> , Y. Millot, F. Averseng, T. Yoshioka, J. Kubo, <u>G. Costentin*</u>	European Journal of Inorganic Chemistry		17	2709-2720
2016-	31	Nature of the active sites in CO oxidation on FeSiBEA zeolites	I. Kocemba, J. Rynkowski, J. Gurgul, RP. Socha, K. Latka, <u>J.-M. Krafft</u> , <u>S. Dzwigaj*</u>	Applied Catalysis A-General	519		16-26
2016-	32	Skeletal Au prepared from Au-Zr amorphous alloys with controlled atomic compositions and arrangement for active oxidation of benzyl alcohol	A. Nozaki, Y. Tanihara, Y. Kuwahara, T. Ohmichi, K. Mori, T. Nagase, HY. Yasuda, <u>C. Calers</u> , <u>C. Louis</u> , H. Yamashita	Journal of Materials Chemistry A	4	21	8458-8465

2016-	33	Enhancing low-temperature activity and durability of Pd-based diesel oxidation catalysts using ZrO ₂ supports	MY. Kim, EA. Kyriakidou, JS. Choi*, TJ. Toops, AJ. Binder, <u>C. Thomas</u> , JE. Parks, V. Schwartz, JH. Chen, DK. Hensley	Applied Catalysis B-Environmental	187		181-194
2016-	34	Low temperature dry reforming of methane on rhodium and cobalt based catalysts: Active phase stabilization by confinement in mesoporous SBA-15	N. El Hassan*, MN. Kaydouh, H. Geagea, H. El Zein, <u>K. Jabbour</u> , <u>S. Casale</u> , H. El Zakhem, <u>P. Massiani*</u>	Applied Catalysis A-General	520		114-121
2016-	35	Low temperature dry methane reforming over Ce, Zr and CeZr promoted Ni-Mg-Al hydrotalcite-derived catalysts	R. Debek, ME. Galvez, <u>F. Launay</u> , M. Motak, T. Grzybek, P. Da Costa*	International Journal of Hydrogen Energy	41	27	11616-11623
2016-	36	Adsorption of Amino Acids and Peptides on Metal and Oxide Surfaces in Water Environment: A Synthetic and Prospective Review	D. Costa, L. Savio, <u>C.-M. Pradier*</u>	Journal of Physical Chemistry B	120	29	7039-7052
2016-	37	Nanostructure characterization of carbide-derived carbons by morphological analysis of transmission electron microscopy images combined with physisorption and Raman spectroscopy	M. Oschatz, P. Pre, S. Doerfler, W. Nickel, <u>P. Beaunier</u> , JN. Rouzaud, C. Fischer, E. Brunner, S. Kaskel*	Carbon	105		314-322
2016-	38	Effect of Ca-doping on microstructure and photocatalytic activity of ZnO nanoparticles synthesized by sol gel method	R. Slama*, J. El Ghoul, K. Omri, A. Houas, L. El Mir, <u>F. Launay</u>	Journal of Materials Science-Materials in Electronics	27	8	7939-7946
2016-	39	Application of Arrhenius law to DP and zero-span tensile strength measurements taken on iron gall ink impregnated papers: relevance of artificial ageing protocols	V. Rouchon*, O. Belhadj, M. Duranton, <u>A. Gimat</u> , <u>P. Massiani</u>	Applied Physics A-Materials Science & Processing	122	8	
2016-	40	Chemical Preparation of Supported Bimetallic Catalysts. Gold-Based Bimetallic, a Case Study	<u>C. Louis*</u>	Catalysts	6	8	110
2016-	41	Exploration of the preparation of Cu/TiO ₂ catalysts by deposition-precipitation with urea for selective hydrogenation of unsaturated hydrocarbons	<u>Z. Wang</u> , D. Brouri, <u>S. Casale</u> , <u>L. Delannoy</u> , <u>C. Louis*</u>	Journal of Catalysis	340		95-106
2016-	42	Effect of postsynthesis preparation procedure on the state of copper in CuSEA zeolites and its catalytic properties in SCR of NO with NH ₃	R. Baran, F. Averseng, D. Wierzbicki, K. Chalupka, <u>J.-M. Krafft</u> , T. Grzybek, <u>S. Dzwigaj*</u>	Applied Catalysis A-General	523		332-342
2016-	43	Synergetic effect of Ni and Au nanoparticles synthesized on titania particles for efficient photocatalytic hydrogen production	AL. Luna, E. Novoseltceva, E. Louarn, <u>P. Beaunier</u> , E. Kowalska, B. Ohtani, MA.Valenzuela, H. Remita*, C. Colbeau-Justin*	Applied Catalysis B-Environmental	191		18-28
2016-	44	Cation Migration and Structural Deformations upon Dehydration of Nickel-Exchanged NaY Zeolite: A Combined Neutron Diffraction and Monte Carlo Study	W. Louisfremea, JL. Paillaud, F. Porcher, E. Perrin, <u>T. Onfroy</u> , <u>P. Massiani*</u> , A. Boutin, B. Rotenberg	Journal of Physical Chemistry C	120	32	18115-18125
2016-	45	Effect of Fe on the activity of Au/FeO (x) -TiO ₂ catalysts for CO oxidation	M. Raphulu, T. Ntho, P. Gqogqa, J. Moma, L. Mokoena, P. Gary, M. Scurrrell, <u>L. Delannoy</u> , <u>C. Louis*</u>	Gold Bulletin	49	1-2	9-20
2016-	46	One-pot synthesis of reduced graphene oxide supported gold-based nanomaterials as robust nanocatalysts for glucose electrooxidation	S. Ghosh, Y. Holade, H. Remita, K. Servat, <u>P. Beaunier</u> , A. Hagege, K. Kokoh, TW. Napporn*	Electrochimica Acta	212		864-875
2016-	47	The controlled synthesis of metal-acid bifunctional catalysts: The effect of metal:acid ratio and metal-acid proximity in Pt silica-alumina catalysts for n-heptane isomerization	JE. Samad, <u>J. Blanchard</u> , <u>C. Sayag</u> , <u>C. Louis</u> , JR. Regalbuto*	Journal of Catalysis	342		203-212

2016-	48	The controlled synthesis of metal-acid bifunctional catalysts: Selective Pt deposition and nanoparticle synthesis on amorphous aluminosilicates	JE. Samad, <u>J. Blanchard</u> , <u>C. Sayag</u> , <u>C. Louis</u> , JR. Regalbuto*	Journal of Catalysis	342		213-225
2016-	49	Organic adlayer on inorganic materials: XPS analysis selectivity to cope with adventitious contamination	<u>J. Landoulsi*</u> , MJ. Genet, S. Fleith, Y. Toure, I. Liascukiene, <u>C. Méthivier</u> , PG. Rouxhet	Applied Surface Science	383		71-83
2016-	50	Syngas production via steam reforming of bioethanol over Ni-BEA catalysts: A BTL strategy	I. Rossetti*, M. Compagnoni, E. Finocchio, G. Ramis, A. Di Michele, A. Zucchini, <u>S. Dzwigaj</u>	International Journal of Hydrogen Energy	41	38	16878-16889
2016-	51	Thermal Behavior of d-Ribose Adsorbed on Silica: Effect of Inorganic Salt Coadsorption and Significance for Prebiotic Chemistry	<u>M. Akouche</u> , M. Jaber, EM. Zins, MC. Maurel, <u>J.-F. Lambert*</u> , <u>T. Georgelin*</u>	Chemistry-A European Journal	22	44	15834-15846
2016-	52	Control of calcium accessibility over hydroxyapatite by post-precipitation steps: influence on the catalytic reactivity toward alcohols	<u>M. Ben Osman</u> , <u>S. Diallo Garcia</u> , J.-M. Krafft, <u>C. Methivier</u> , <u>J. Blanchard</u> , T. Yoshioka, J. Kubo, <u>G. Costentin*</u>	Physical Chemistry Chemical Physics	18	40	27837-27847
2016-	53	Fischer carbene mediated covalent grafting of a peptide nucleic acid on gold surfaces and IR optical detection of DNA hybridization with a transition metalcarbonyl label	P. Srivastava, M. Ghasemi, N. Ray, A. Sarkar, J. Kocabova, S. Lachmanova, M. Hromadova, <u>S. Boujday</u> , S. Cauteruccio, P. Thakare, E. Licandro, C. Fosse, M. Salmain*	Applied Surface Science	385		47-55
2016-	54	Selective amino acid substitution reduces cytotoxicity of the antimicrobial peptide mastoparan	LN. Irazazabal, WF. Porto, SM. Ribeiro, <u>S. Casale</u> , <u>V. Humblot</u> , A. Ladram, OL. Franco*	Biochimica et Biophysica Acta-Biomembranes	1858	11	2699-2708
2016-	55	Identification of the silver state in the framework of Ag-containing zeolite by XRD, FTIR, photoluminescence, Ag-109 NMR, EPR, DR UV-vis, TEM and XPS investigations	N. Popovych, P. Kyriienko, S. Soloviev, <u>R. Baran</u> , <u>Y. Millot</u> , <u>S. Dzwigaj*</u>	Physical Chemistry Chemical Physics	18	42	29458-29465
2016-	56	Experimental evidence of NO SCR mechanism in the presence of the BEA zeolite with framework and extra-framework cobalt species	P. Boron, L. Chmielarz*, B. Gil, B. Marszalek, <u>S. Dzwigaj*</u>	Applied Catalysis B-Environmental	198		457-470
2016-	57	Influence of the postsynthesis preparation procedure on catalytic behaviour of Ag-loaded BEA zeolites in the hydrodechlorination of 1,2-dichloroethane into value added products	A. Srebowata, <u>R. Baran*</u> , G. Slowik, D. Lisovytskiy, <u>S. Dzwigaj*</u>	Applied Catalysis B-Environmental	199		514-522
2016-	58	Simple and specific grafting of antibacterial peptides on silicone catheters	C. Pinese, S. Jebors, C. Echaliier, P. Licznar-Fajardo, X. Garric, <u>V. Humblot</u> , <u>C. Calers</u> , J. Martinez, A. Mehdi*, G. Subra*	Advanced Helthcare Material	5	23	3067-3073
2016-	59	Selective hydrogenation of 1,3-butadiene over bimetallic Au-Ni/TiO ₂ catalysts prepared by deposition-precipitation with urea	A. Aguilar-Tapia, <u>L. Delannoy</u> , <u>C. Louis</u> , C. W. Han, V. Ortalan, R. Zanella*	Journal of Catalysis	344		515-523
2016-	60	Tuning the Growth Mode of 3D Silver Nanocrystal Superlattices by Triphenylphosphine	K. Ouhenia-Ouadahi, A. Andrieux-Ledier, J. Richardi, PA. Albouy, <u>P. Beaunier</u> , P. Sutter, E. Sutter, A. Courty*	Chemistry of Materials	28	12	4380-4389
2016-	61	Unusual behaviour of Au/ZnO catalysts in selective hydrogenation of butadiene due to the formation of a AuZn nanoalloy	<u>S. Derrouiche</u> , <u>C. La Fontaine</u> , <u>G. Thrimurtulu</u> , <u>S. Casale</u> , <u>L. Delannoy</u> , H. Lauron-Pernot, <u>C. Louis*</u>	Catalysis Science & Technology	6	18	6794-6805
2016-	62	Promoting Ag/Al ₂ O ₃ performance in low-temperature H ₂ -C ₃ H ₆ -SCR by thermal pretreatment of gamma-alumina in water	<u>T. Chaieb</u> , <u>L. Delannoy</u> , <u>C. Louis</u> , <u>C. Thomas*</u>	Catalysis Letters	146	12	2622-2629

2016-	63	Surface-dependent sulfidation and orientation of MoS ₂ slabs on alumina-supported model hydrodesulfurization catalysts	<u>C. Bara</u> ; <u>A.-F. Lamic-Humblot</u> ; E. Fonda ; AS. Gay ; AL. Taleb ; A. Devers ; M. Digne ; G. Pirngruber ; <u>X. Carrier*</u>	Journal of Catalysis	344		591-605
2016-	64	UHV Deposition of the Gly-Pro Dipeptide on Cu(110) by Sublimation or Electrospray Ionization	<u>C. Méthivier</u> , <u>V. Humblot</u> , <u>C.-M. Pradier*</u>	The Journal of Physical Chemistry C	120	48	27364-27368
2016-	65	Protosalvinia revisited, new evidence for a plant land affinity	M. Quijada*, A. Riboulleau, P. Strother, W. Taylor, <u>A. Mezzetti</u> , G.J.M. Versteegh	Review of Paleobotany and Palynology	227		52-64
2016-	66	QM/MM dynamics of a Peridinin model in triplet state in three prototypical solvents	D. Bovi, <u>A. Mezzetti*</u> , L. Guidoni*	Vibrational Spectroscopy	87		182-192
2016-	67	Heterogeneous partial oxidation catalysis on metal oxides	<u>J.-C. Vedrine*</u> , I. Fechete*	Comptes Rendus Chimie	19	10	1203-1225
2016-	68	Heterogeneous catalytic partial oxidation of lower alkanes (C ₁ -C ₆) on mixed metal oxides	<u>J.-C. Vedrine*</u>	Journal of Energie Chemistry	25		936-946
2016-	69	Silicone dressings modified with bioactive hybrid peptides: a simple and specific method	C. Pinese, S. Jebors, P.-E. Stoebner, P. Verdié, L. Causse, X. Garric, H. Taillades, <u>V. Humblot</u> , J. Martinez, A. Mehdi, G. Subra*	Materials Today Chemistry	4		73-83
2016-	70	New route toward nanosized crystalline metal borides with tuneable stoichiometry and variable morphologies	G. Gouget, <u>P. Beaunier</u> , D. Portehault*, C. Sanchez*	Faraday Discussions	191		511-525
2016-	71	Effect of preparation protocol on the surface acidity of molybdenum catalysts supported on titania and zirconia	N. Lamine, A. Benadda*, A. Djadoun, A. Barama, <u>J. Blanchard</u>	Journal of Molecular Catalysis A : Chemical	425		157-165
2016-	72	Tuning Surface Chirality of Adsorbed Gly-Pro Dipeptide/Cu(110) by Changing its Chemical Form via Electrospray Deposition	<u>C. Méthivier</u> , H. Cruguel, D. Costa, <u>C.-M. Pradier</u> , <u>V. Humblot*</u>	Langmuir	32	51	13759-13763