**Publications by Agustin J. Colussi**

**198 Chemistry on Microheterogeneous Liquid Surfaces (**with Shinichi Enami and M. R. Hoffmann) *submitted* **(2018)**.

**197 Photochemical Synthesis of Naked Palladium Nanoparticles (**with Petri Ajo, Johanna Puranen, Harri Nieminen, Erik Vartiainen**)**  *NANO 13(2)* (**2018**) *1850023*.

**196 The Role of Nitrogen Dioxide in the Production of Sulfate during Chinese Haze-Aerosol Episodes (**with Sara Li, S. Enami and M. R. Hoffmann M. A.) *Environmental Science & Technology,* 52 **(2018)** 2686 - 2693**.**

**195 Criegee Intermediates React with Levoglucosan on Water (**with S. Enami and M. R. Hoffmann M. A.) *Journal of Physical Chemistry Letters,* 8 **(2017)** 3888-3894**.**

**194 Reactions of Criegee Intermediates with Alcohols at Air-Aqueous Interfaces (**with S. Enami and M. R. Hoffmann M. A.) *Journal of Physical Chemistry A,* 121 **(2017)** 5175-5182**.**

**193 Efficient scavenging of Criegee Intermediates on water by surface-active cis-pinonic acid (**with S. Enami and M. R. Hoffmann M. A.) *Physical Chemistry Chemical Physics,* 19 **(2017)** 17044-17051**.**

**192 Criegee Chemistry on Aqueous Organic Surfaces (**with S. Enami and M. R. Hoffmann M. A.) *Journal of Physical Chemistry Letters,* 8 **(2017)** 1615-1623**.**

**191 Low intensity, continuous wave photodoping of ZnO quantum dots. Photon energy and particle size effects (**with Matías E. Aguirre, S. Municoy and M. A. Grela) *Physical Chemistry Chemical Physics,* 19 **(2017)** 4494-4499**.**

**190 Halogen Radical Chemistry at Aqueous Interfaces (**with Shinichi Enami and M. R. Hoffmann) *Journal of Physical Chemistry A,* 120 **(2016)** 6242–6248**.**

**189 Extensive H-abstraction in the reaction of benzoate with OH-radicals at the air-water interface (**with Shinichi Enami and M. R. Hoffmann) *Physical Chemistry Chemical Physics* 18, **(2016)** 31505-31512**.**

**188 Lithium batteries: Improving solid-electrolyte interphases via underpotential solvent electropolymerization (**with Laleh Majari Kasmaee, Asghar Aryanfar, Zarui Chikneyan, and Michael R. Hoffmann) *Chemical Physics Letters* 661**(2016)**65-69**.**

**187 ‘Sizing’ heterogeneous chemistry in the conversion of gaseous dimethyl sulfide to atmospheric particles (**with Shinichi Enami, Yosuke Sakamoto, Keiichiro Hara, Kazuo Osada and Michael R. Hoffmann) *Environmental Science & Technology* 50**(2016)** *1834–1843*.

**186 OH-radical specific addition to glutathione S-atom at the air-water interface – Relevance to the redox balance of the lung epithelial lining fluid (**with Shinichi Enami and M. R. Hoffmann) *Journal of Physical Chemistry Letters,* 6 *(***2015***)* 3935-3943.

**185 Annealing Kinetics of Electrodeposited Lithium Dendrites (**with Asghar Aryanfar, Tao Cheng, Boris V. Merinov, William A. Goddard III and Michael R. Hoffmann**)**  *Journal of Chemical Physics*, 143 **(2015)** 131101.

**184 Homogeneous CO2 Reduction by Photogenerated Pyridinyl Radicals (**with Francesca Riboni, Elena Selli and M. R. Hoffmann**)**  *Journal of Physical Chemistry A*, 119 **(2015)** 4433-4438.

**183 Artificial Photosynthesis of C1-C3 Hydrocarbons from Water and CO2 on Titanate Nanotubes Decorated with Nanoparticle Elemental Copper and CdS Quantum Dots (**ith Hyunwoong Park, Hsin-Hung Ou and Michael R. Hoffmann**)**  *Journal of Physical Chemistry A*, 119 **(2015)** 4658-4666.

**182 Thermal Relaxation of Lithium Dendrites (**with Asghar Aryanfar, Daniel Brooks, Boris V. Merinov, William A. Goddard III, and Michael R. Hoffmann**)** *Physical Chemistry Chemical Physics* 17 (**2015**) 8000-8005.

**181 Stepwise Oxidation of Aqueous Dicarboxylic Acids by Gas-Phase OH-Radicals (**with Sinichi Enami and Michael R. Hoffmann**)** *Journal of Physical Chemistry Letters,* 6 (**2015**) 527-534.

**180 Quantifying the Dependence of Dead Lithium Losses on the Cycling Period in Lithium Metal Batteries (**with Asghar Aryanfar, Daniel J. Brooks and Michael R. Hoffmann**)** *Phys. Chem. Chem. Phys*., **2014**, 16 (45), 24965 – 24970.

**179 Fenton Oxidation of Gaseous Isoprene on Aqueous Surfaces (**with F. Rifkha Kameel, Francesca Riboni, S. Enami and M. R. Hoffmann**)** *Journal of Physical Chemistry C,* 118 (**2014**) 29151–29158**.**

**178 In Situ Mass Spectrometric Detection of Interfacial Intermediates in the Oxidation of RCOOH(aq) by Gas-Phase OH-Radicals (**with Sinichi Enami and Michael R. Hoffmann**)** *Journal of Physical Chemistry B*, 118 **(2014)** 4130-4137.

**177 Polarity and Oxidation Level of Visible Absorbers in Model Organic Aerosol (**with R. F. Kameel, S. H. Lee and M. R. Hoffmann**)** *Chemical Physics Letters*,603 **(2014)** 57-61**.**

**176 Dynamics of Lithium Dendrite Growth and Inhibition: Pulse Charging Experiments and Monte Carlo Calculations** (with A. Aryanfar, D. Brooks, B. V. Merinov, et al.)*Journal of Physical Chemistry Letters***,** 5 **(2014)** 1721-1726**.**

**175 Comment on "Surface Acidity of Water Probed by Free Energy Calculation for Trimethylamine Protonation"** (with Shinichi Enami)*Journal of Physical Chemistry C*, 118 **(2014)** 2894.

**174 Ion-Specific Long-Range Correlations on Interfacial Water Driven by Hydrogen Bond Fluctuations** (with Shinichi Enami)*Journal of Physical Chemistry B*, 118 **(2014)** 1861-1866

**173 Fenton Chemistry at Aqueous Interfaces** (with Shinichi Enami and Yosuke Sakamoto)*Proceedings of the National Academy of Sciences U.S.A.*, 111 (**2014**)623-628

**172 Protonation of Hydrophobes at the Air-Water Interface- Relevance to**

**Catalysis 'on Water'** (with Himanshu Mishra, Shinichi Enami, William A. Goddard III and Michael R. Hoffmann)submitted **(2013)**

**171 Tropospheric Aerosol as Reactive Intermediate** (with Shinichi Enami, Akihiro Yabushita Wei-Guang Liu, Himanshu Mishra, Michael R. Hoffmann, and William A. Goddard III)*Faraday Discussions*, 165 **(2013)** 407-420

**170 OH Radical-Initiated Chemistry of Isoprene in Aqueous Media - Atmospheric Implications** (with Rifkha F. Kameel and M. R. Hoffmann) *Journal of Physical Chemistry A*, 117 **(2013)** 5117-5123

**169 Long-Range Hofmeister Effects of Anionic and Cationic Amphiphiles**

(with Shinichi Enami)*Journal of Physical Chemistry A*, 117 **(2013)** 6276-6281

**168 Long-Range Specific Ion-Ion Interactions in Hydrogen-Bonded Liquid Films**

(with Shinichi Enami) *Journal of Chemical Physics* 138 **(2013)** 184706

**167** [**Quantum chemical insights into the dissociation of nitric acid on the surface of aqueous electrolytes** (with Mishra, Himanshu; Nielsen, Robert J.; Enami, Shinichi; et al.)](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=4AoK3poLlFHgKm1ifPF&page=1&doc=1) *International Journal of Quantum Chemistry***,** 113 **(2013)** 413-417**.**

**166 Bronsted basicity of the air-water interface** (with H. Mishra, S. Enami, R. J. Nielsen, et al.)*Proceedings of the National Academy of Sciences U.S.A.*, 109 (**2013**)18679-18683.

**165 Dry Deposition of Biogenic Terpenes via Cationic Oligomerization on Environmental Aqueous Surfaces** (with S. Enami, and M. R. Hoffmann) *Journal of Physical Chemistry Letters,*3 (**2012**) 3102-3108.

**164 Anions Dramatically Enhance Proton Transfer across Water Interfaces** (with H. Mishra, S. Enami, Robert J. Nielsen, M. R. Hoffmann and William A. Goddard III) *Proceedings of the National Academy of Sciences U.S.A.*, 109 (**2012**)10228-10232.

**163 Protonation and Oligomerization of Gaseous Isoprene on Mildly Acidic Surfaces. Implications for Atmospheric Chemistry** (with S. Enami, H. Mishra, and M. R. Hoffmann) *Journal of Physical Chemistry A*, 116 (**2012**)6027-6032.

**162 Hofmeister Effects in Micromolar Electrolyte Solutions** (with S. Enami, H. Mishra, and M. R. Hoffmann) *Journal of Chemical Physics*, 136 (**2012**)54707 DOI: 10.1063/1.4704752.

**161** **What Kind of Nation,** *Chemical & Engineering News,* 89(40) (**2011**) 6.

**160 Weak acids enhance halogen activation on atmospheric water’s surfaces** (with S. Hayase, A. Yabushita, M. Kawasaki, S. Enami and M. R. Hoffmann) *Journal of Physical Chemistry A*, 115 (**2011**) 4935.

**159** **Voicing Restrained Criticism,** *Chemical & Engineering News,* 89(7) (**2011**) 2.

**158** **Superacid Chemistry on Mildly Acidic Water** (with S. Enami and M. R. Hoffmann) *Journal of Physical Chemistry Letters*, 1 (**2010**) 3488.

**157** **Conversion of Gaseous Nitrogen Dioxide to Nitrate and NItrite on Aqueous Surfactants** (with T. Kinugawa, S. Enami, A. Yabushita, M. Kawasaki, and M. R. Hoffmann) *Physical Chemistry Chemical Physics 13* (**2011**) 5144.

**156** **Prompt formation of organic acids in pulse ozonation of terpenes on aqueous surfaces** (with S. Enami and M. R. Hoffmann) *Journal of Physical Chemistry Letters*, 1 (**2010**) 2374.

**155** **Heterogeneous reaction of gaseous ozone with aqueous iodide in the presence of aqueous organic species** (with S. Hayase, A. Yabushita, M. Kawasaki, S. Enami and M. R. Hoffmann) *Journal of Physical Chemistry A*, 114 (**2010**) 6016.

**154** **Molecular Control of Reactive Gas Uptake "on Water"** (with S. Enami and M. R. Hoffmann) *Journal of Physical Chemistry A*, 114 (**2010**) 5817.

**153** **Sonolytic Decomposition of Aqueous Bioxalate in the Presence of Ozone** (with Chad Vecitis, Timothy Lesko and M. R. Hoffmann) *Journal of Physical Chemistry A*, 114 (**2010**) 4968 .

**152** **Proton availability at the air/water interface** (with S. Enami and M. R. Hoffmann) *Journal of Physical Chemistry Letters*, 1 (**2010**) 1599.

**151** **Thermochromism of model organic aerosol matter** (with A. G. Rincón, M. I. Guzmán and M. R. Hoffmann) *Journal of Physical Chemistry Letters*, 1 (**2010**) 368.

**150** **Confocal fluorescence microscopy of the morphology and composition of interstitial fluids in freezing electrolyte solutions** (with J. Cheng, C. Soetjipto, and M. R. Hoffmann) *Journal of Physical Chemistry Letters*, 1 (**2010**) 374.

**149** **Acid dissociation versus molecular association of perfluoroalkyl oxoacids. Environmental implications** (with J. Cheng, E. Psillakis, and M. R. Hoffmann) *Journal of Physical Chemistry A*, 113 (**2009**) 8152.

**148** **Optical absorptivity versus molecular composition of model organic aerosol matter** (with A. G. Rincón, M. I. Guzmán and M. R. Hoffmann) *Journal of Physical Chemistry A*, 113 (**2009**) 10512.

**147** **Simultaneous detection of cysteine sulfenate, sulfinate and sulfonate in cysteine interfacial ozonolysis** (with S. Enami and M. R. Hoffmann) *Journal of Physical Chemistry B*, 113 (**2009**) 9356.

**146** **Response to Reply to Comment on Can Water Store Charge?** (with H. R. Corti) *Langmuir*, 25 (**2009**) 11203.

**145** **Do concentration cells store charge in water? Comment on ¨Can Water Store Charge?"** (with H. R. Corti) *Langmuir*, 25 (**2009**) 6587.

**144** **Absorption of inhaled NO2** (with S. Enami and M. R. Hoffmann) *Journal of Physical Chemistry B,* 113 (**2009**) 7977.

**143** **Enrichment factors of perfluoroalkyl oxoanions at the air/water interface** (with E. Psillakis, J. Cheng, and M. R. Hoffmann) *Journal of Physical Chemistry A*, 113 (**2009**) 8826.

**142** **How phenol and alpha-tocopherol react with ambient ozone at gas/liquid interfaces** (with S. Enami and M. R. Hoffmann) *Journal of Physical Chemistry A*, 113 (**2009**) 7002.

**141** **Anion-catalyzed dissolution of NO2 on aqueous microdroplets** (with A. Yabushita, S. Enami, Y. Sakamoto, M. Kawasaki, and M. R. Hoffmann) *Journal of Physical Chemistry A*, 113 (**2009**) 4844.

**140** **Ozone oxidizes glutathione to a sulfonic acid** (with S. Enami and M. R. Hoffmann), *Chemical Research in Toxicology,* 22 (**2009**) 35.

**139** **HONO emissions from snow surfaces** (with H. Beine, A. Amoroso, G. Esposito, M. Montagnoli, and M. R. Hoffmann) *Environmental Research Letters*, 3 (**2008**) 045005.

**138** **Anion fractionation and reactivity at air/water:methanol interfaces. Implications for the origin of Hofmeister effects** (with J. Cheng and M. R. Hoffmann) *Journal of Physical Chemistry B*, 112 (**2008**) 7157.

**137** **Ozonolysis of Uric Acid at the Air/Water Interface** (with S. Enami and M. R. Hoffmann), *Journal of Physical Chemistry B*,112 (**2008**) 4153.

**136** **Acidity Enhances the Formation of a Persistent Ozonide at Aqueous Ascorbate/Ozone Gas Interfaces** (with S. Enami and M. R. Hoffmann), *Proceedings of the National Academy of Sciences U.S.A.* 105 (**2008**) 7365.

**135** **Mass Spectrometry of Interfacial Layers during Fast Aqueous Aerosol/Ozone Gas Reactions of Atmospheric Interest** (with S. Enami, C. D. Vecitis, J. Cheng and M. R. Hoffmann) *Chemical Physics Letters*, 455 (**2008**) 316.

**134** **Electrospray Mass Spectrometric Detection of Products and Short-Lived Intermediates in Aqueous Aerosol Microdroplets Exposed to a Reactive Gas** (with S. Enami, C. D. Vecitis, J. Cheng and M. R. Hoffmann) *Journal of Physical Chemistry A*, 111 (**2007**) 13032.

**133** **Global Inorganic Source of Atmospheric Bromine** (with S. Enami, C. D. Vecitis, J. Cheng and M. R. Hoffmann) *Journal of Physical Chemistry A*, 111 (**2007**) 8749.

**132** **Photolysis of Pyruvic Acid in Ice. Possible Relevance to CO and CO2 Ice Core Record Anomalies** (with M. I. Guzmán and M. R. Hoffmann) *Journal of Geophysical Research* 112 (**2007**) D10123.

**131** **Experimental Anion Affinities for the Air/Water Interface** (with J. Cheng, C. D. Vecitis and M. R. Hoffmann) *Journal of Physical Chemistry B*, 110 (**2006**) 25598.

**130** **Sonochemical Decomposition of Phenol: Evidence for a Synergistic Effect of Ozone and Ultrasound for the Elimination of Total Organic Carbon from Water** (with T. M. Lesko and M. R. Hoffmann) *Environmental Science & Technology*, 40 (**2006**) 6818.

**129** **Cooperative Hydration of Pyruvic Acid in Ice** (with M. I. Guzmán and M. R. Hoffmann) *Journal of the American Chemical Society,* 108 (**2006**) 10621.

**128** **Acidity of Frozen Electrolyte Solutions** (with C. Robinson, C. S. Boxe, M. I. Guzmán and M. R. Hoffmann) *Journal of Physical Chemistry B*, 110 (**2006**) 7613.

**127** **Kinetics of NO and NO2 Evolution from Illuminated Frozen Nitrate Solutions** (with C. S. Boxe, M. R. Hoffmann, I. M. Perez, J. G. Murphy, and R. C. Cohen) *Journal of Physical Chemistry A*, 110(**2006**) 3578.

**126** **Photoinduced Oligomerization of Aqueous Pyruvic Acid** (with M. I. Guzmán and M. R. Hoffmann) *Journal of Physical Chemistry A*, 110 (**2006**) 3619.

**125** **Photogeneration of Distant Radical Pairs in Aqueous Pyruvic Acid Glasses** (with M. I. Guzmán and M. R. Hoffmann) *Journal of Physical Chemistry A*, 110 (**2006**) 931.

**124** **Photochemical Production and Release of Gaseous NO2 from Nitrate-doped Ice** (with C. S. Boxe, M. R. Hoffmann, J. G. Murphy, P. J. Wooldridge, R. H. Bertram and R. C. Cohen) *Journal of Physical Chemistry A*, 109 (**2005**) 8520.

**123** **Oxygen Isotopic Fractionation in the Photochemistry of Nitrate in Water and Ice** (with J. R. McCabe, C. S. Boxe, M. R. Hoffmann, and M. H. Thiemmens) *Journal of Geophysical Research*, 110 (**2005**) D15310.

**122** **Oxidative Power of Nitrogen-Doped TiO2 Photocatalysts under Visible Light** (with M. Mrowetz, W. Balcerski, A. K. Zaleska and M. R. Hoffmann) *Journal of Physical Chemistry B*, 108 (**2004**) 17269.

**121** **Electronic Spectra of Carbonyl Sulfide Sulfur Isotopologues** (with F.-Y. Leung, and M. R. Hoffmann) *Environmental Chemistry*, 1 (**2004**) 44.

**120** **Hydrogen Isotope Effects and Mechanism of Aqueous Ozone and Peroxone Decompositions** (with T. M. Lesko, and M. R. Hoffmann) *Journal of the American Chemical Society*, 126 (**2004**) 4432.

**119** **Multiscale Ice Fluidity in NOx Photodesorption from Frozen Nitrate Solutions** (with C. S. Boxe, M. R. Hoffmann, D. Tan, J. Mastromarino, S. T. Sandholm, and D. D. Davis) *Journal of Physical Chemistry A*, 107 (**2003**) 11409.

**118** **Soluble Sunscreens Fully Protect Escherichia Coli from Disinfection by Electrohydraulic Discharges** (with W.-K Ching, and M. R. Hoffmann) *Environmental Science and Technology*, 37 (**2003**) 4901.

**117** **Timescales and pH-Dependences of the Redox Processes Determining the Photocatalytic Efficiency of TiO2 Nanoparticles from Periodic Illumination Experiments in the Stochastic Regime** (with C. J. G. Cornu, and M. R. Hoffmann) *Journal of Physical Chemistry B*, 107 (**2003**) 3156.

**116** **In situ Photolysis of Deep Ice Core Contaminants by Çerenkov Radiation of Cosmic Origin** (with M. R. Hoffmann) *Geophysical Research Letters*, 30 (**2003**) 1195.

**115** **Monotonic Increase of Nitrite Yields in the Photolysis of Nitrate in Ice and Water between 238 and 294 K** (with Y. Dubowski, C. Boxe, and M. R. Hoffmann) *Journal of Physical Chemistry A*, 106 (**2002**) 6967.

**114** **Isotopic Fractionation of Carbonyl Sulfide in the Stratosphere: Implications for the Source of Background Stratospheric Sulfate Aerosol** (with F.-Y. Leung, G. Toon, and M. R. Hoffmann) *Geophysical Research Letters*, 29(10) (**2002**) 112.

**113** **Sulfur Isotopic Fractionation in the Gas-Phase Oxidation of Sulfur Dioxide Initiated by Hydroxyl Radicals** (with F.-Y. Leung and M. R. Hoffmann) *Journal of Physical Chemistry A*, 105 (**2001**) 8073.

**112** **Escherichia Coli Disinfection by Electrohydraulic Discharges** (with W.-K Ching, H. J. Sun, K. H. Nealson and M. R. Hoffmann) *Environmental Science and Technology*, 35 (**2001**) 4139.

**111** **Nitrogen Dioxide Release in the 302 nm Band Photolysis of Spray-frozen Aqueous Nitrate Solutions. Atmospheric Implications** (with Y. Dubowski and M. R. Hoffmann) *Journal of Physical Chemistry A*, 105 (**2001**) 4928.

**110** **Quantum Yields of the Photocatalytic Oxidation of Formate in Aqueous TiO2 Suspensions under Continuous and Periodic Illumination** (with C. J. G. Cornu, and M. R. Hoffmann) *Journal of Physical Chemistry B*, 105 (**2001**) 1351.

**109** **Rates and Mechanism of Carbonyl Sulfide Oxidation by Peroxides in Concentrated Sulfuric Acid** (with N. F. Dalleska, A. M. Hyldahl and M. R. Hoffmann) *Journal of Physical Chemistry A*, 104 (**2000**) 10794.

**108** **Synergystic Effects of Sonolysis Combined with Sonolysis for the Oxidation of Azobenzene and Methyl Orange** (with H. Destaillats, J. M. Joseph and M. R. Hoffmann) *Journal of Physical Chemistry A*, 104 (**2000**) 8930.

**107** **Infrared Spectra of Photoinduced Species on Hydroxylated Titania Surfaces** (with S. H. Szczepankiewicz and M. R. Hoffmann) *Journal of Physical Chemistry B*, 104 (**2000**) 9842.

**106** **Conformational Disorder Binds n-Alkanes into Surface Monolayers above the Normal Freezing Point** (with M. R. Hoffmann, and Y. Tang) *Langmuir*, 16 (**2000**) 5213.

**105** **Dynamic Inhibition of Constrained Crystallization by Mesoscopic Morphology Modifiers** (with M. R. Hoffmann and Y. Tang) *Langmuir*, 16 (**2000**) 2405.

**104** **Vapor Supersaturation in Collapsing Bubbles. Relevance to the Mechanisms of Sonochemistry and Sonoluminescence** (with M. R. Hoffmann) *Journal of Physical Chemistry A*, 103 (**1999**) 11336.

**103** **Efficiency of Hot Carrier Trapping by Outer-Sphere Redox Probes at Quantum Dot Interfaces** (with M. A. Grela and M. A. Brusa) *Journal of Physical Chemistry B*, 103 (**1999**) 6400.

**102** **Sonochemical Degradation Rates of Volatile Solutes** (with H-M. Hung and M. R. Hoffmann) *Journal of Physical Chemistry A*, 103 (**1999**) 2696.

**101** **Exclusive Formation of C16O in the Prompt Oxidation of Carbon Films by 18O2 on Sm216O3. Implications for the Mechanism of Oxygen Activation** (with V. T. Amorebieta) *Langmuir*, 15 (**1999**) 2617.

**100** **Photon Energy and Photon Intermittence Effects on the Quantum Efficiency of Photoinduced Oxidations in Crystalline and Metastable TiO2 Nanoparticles** (with M. A. Grela) *Journal of Physical Chemistry B*, 103 (**1999**) 2614.

**99** **Chemical Bubble Dynamics and Quantitative Sonochemistry** (with Linda Weavers and Michael R. Hoffmann) *Journal of Physical Chemistry A*, 102 (**1998**) 6927.

**98** **Thermochemical Kinetics of Bromine Nitrate, Bromine Nitrite, Halogen Hydroperoxides, Dichlorine Pentoxide, Peroxycarboxylic Acids and Acyl Peroxides** (with M. A. Grela) *International Journal of Chemical Kinetics*, 30 (**1998**) 41.

**97** **Kinetics and Mechanism of the Heterogeneous Decomposition of Nitric Oxide on Metal Oxides in the Presence of Hydrocarbons** (with V. T. Amorebieta) *Journal of Physical Chemistry A,* 102 (**1998**) 8486.

**96** **Harnessing Excess Photon Energy in Photoinduced Surface Electron Transfer between Salicylate and Illuminated Titanium Dioxide Nanoparticles** (with M. A. Brusa and M. A. Grela) *Journal of Physical Chemistry B*, 101 (**1997**) 10986.

**95** **Optimum Yield of the Purely Heterogeneous Oxidative Dimerization of Methane** (with V. T. Amorebieta) *Journal of Catalysis*, 169 (**1997**) 301.

**94** **Kinetics of Stochastic Charge Transfer and Recombination Events in Semiconductor Colloids. Relevance to Photocatalysis Efficiency** (with M. A. Grela) *Journal of Physical Chemistry*, 100 (**1996**) 18214.

**93** **Kinetics and Mechanism of the Heterogeneous Oxidation of Ethane and Ethylene on Samarium(III) Oxide** (with V. T. Amorebieta) *Journal of the American Chemical Society*, 118 (**1996**) 10236.

**92** **Mechanism of Chlorine Dioxide Photodissociation in Condensed Media** (with M. A. Brusa, L. J. Perissinotti, and M. S. Churio) *Journal of Photochemistry and Photobiology, A: Chemistry*, 101 (**1996**) 105.

**91** **Quantitative Spin Trapping Studies of Weakly Illuminated Titanium Dioxide Sols. Implications for the Mechanism of Photocatalysis** (with M. A. Grela, and M. E. J. Coronel) *Journal of Physical Chemistry*, 100 (**1996**) 16940.

**90** **Quantitative Structure-Stability Relationships for Oxides and Peroxides of Potential Atmospheric Significance** (with M. A. Grela) *Journal of Physical Chemistry*, 100 (**1996**) 10150.

**89** **System Analysis of Polar Ozone Depletion**, *Trends in Physical Chemistry*, 5 (**1995**) 15.

**88** **Arrested Formation of Carbon Oxides in Programmed Oxidation of Methane on Nonstoichiometric Samaria** (with V. T. Amorebieta) *Journal of Physical Chemistry*, 99 (**1995**) 13921.

**87** **Kinetics and Mechanism of the Heterogeneous Oxidation of Methyl Radicals on Samarium(III) Oxide. Implications for the Oxidative Coupling of Methane** (with V. T. Amorebieta) *Journal of the American Chemical Society*, 117 (**1995**) 3856.

**86** **ESR Kinetic Study of the Photobleaching of Chlorine Dioxide Solutions at 303, 365, and 436 nm** (with M. S. Churio, M. A. Brusa, L. J. Perissinotti, E. Ghibaudi, and M. Coronel) *Chemical Physics Letters*, 232 (**1995**) 237.

**85** **Reactive vs. Adsorbed Oxygen in the Heterogenous Oxidation of Methane over Li/MgO** (with V. T. Amorebieta) *Methane and Alkane Conversion Chemistry*, D. N. Slocum and M. M. Bashin, Eds. Plenum Press, New York, **1995**, 131-136

**84** **Bifurcation Analysis of Methyl Radical Oxidation in Open Systems. The Low Pressure Regime** (with M. A. Grela) *Twenty- Fifth Symposium (International) on Combustion*/The Combustion Institute, (**1994**) 733.

**83** **Rate of the Reaction between Oxygen Monofluoride and Ozone. Implications for the Atmospheric Role of Fluorine** (with M. A. Grela) *Chemical Physics Letters*, 229 (**1994**) 134.

**82** **Entropic and Enthalpic Effects of 4-Methoxy Substitution in Phenoxyl Radicals** (with M. E. J. Coronel) *Journal of the Chemical Society, Perkin Transactions II*, (**1994**) 985.

**81** **Kinetics and Thermochemistry of Chlorine and Nitrogen-Containing Oxides and Peroxides** (with M. A. Grela) *Journal of Physical Chemistry*, 97 (**1993**) 3775.

**80** **Very Low Pressure Pyrolysis of Phenylacetic Acid** (with M. A. Grela and V. T. Amorebieta) *Journal of the Chemical Society, Faraday Transactions*, 88 (**1992**) 2125.

**79** **Pyrolysis of Styrene. Kinetics and Mechanism of the Equilibrium Styrene Benzene + Acetylene** (with M. A. Grela and V. T. Amorebieta) *Journal of Physical Chemistry*, 96 (**1992**) 9861.

**78** **Free Radicals and Diradicals in the Reaction between Nitrous Acid and Bisulfite in Acid Aqueous Media** (with S. Mendiara, E. Ghibaudi, L. J. Perissinotti) *Journal of Physical Chemistry*, 96 (**1992**) 8089.

**77** **High Temperature Oxidation of Methyl Radicals in Open Systems** (with M. A. Grela and V. T. Amorebieta) *Journal of Physical Chemistry*, 96 (**1992**) 7013.

**76** **Determinación de la Energía de Disociación Homolítica de la Unión O-H en el 2,3,5,6-Tetrametil-4-Metoxifenol** (with M. Coronel) *Anales de la Asociación Química Argentina*, 79 (**1991**) 197.

**75** **Temperature Dependence and Mechanism of the Reaction between O(3P)-Atoms and Chlorine Dioxide (OClO)** (with S. P. Sander and R. R. Friedl) *Journal of Physical Chemistry*, 96 (**1992**) 4442.

**74** **Induced ClO Vacuum Ultraviolet Fluorescence** (with S. P. Sander) Chemical Physics Letters, 187 (**1991**) 85.

**73** **Thermodynamics of Acetylene van der Waals Dimerization** (with S. P. Sander and R. R. Friedl) *Chemical Physics Letters*, 178 (**1991**) 497.

**72** **Cobaltator. A Skeleton Model for the Oscillatory Oxidation of Benzaldehyde** (with J. Guslander and R. M. Noyes) *Journal of Physical Chemistry*, 95 (**1991**) 4387.

**71** **The Oscillatory Oxidation of Benzaldehyde by Air. I. Experimental Observations** (with E. Ghibaudi, R. M. Noyes and Z. Yuan) *Journal of the American Chemical Society*, 112 (**1990**) 8660.

**70** **Formation and Decay of (3PJ)O-atoms in the Laser Flash Photolysis of Chlorine Dioxide (OClO) at 308 nm**, *Journal of Physical Chemistry*, 94 (**1990**) 8922.

**69** **Quantum Yield of Chlorine Atom Formation in the Photodissociation of Chlorine Peroxide (ClOOCl) at 308 nm** (with M. J. Molina, L. T. Molina, R. N. Schindler and T-L. Tso) *Chemical Physics Letters*, 173 (**1990**) 310.

**68** **The Pyrolysis of Acetylene Initiated by Acetone**, *Combustion & Flame*, 84 (**1991**) 432.

**67** **Lack of Kinetic Hydrogen Atom Isotope Effect in Acetylene Pyrolysis** (with R. P. Durán and V. T. Amorebieta) *International Journal of Chemical Kinetics*, 21 (**1989**) 847.

**66** **Laser Flash Photolysis of Chlorine Dioxide: Formation and Ultraviolet Absorption Spectrum of Cl2O3** (with R. W. Redmond and J. C. Scaiano) *Journal of Physical Chemistry*, 93 (**1989**) 4783.

**65** **Mass Spectrometric Studies of the Low Pressure Oxidation of Methane over Samarium Sesquioxide** (with V. T. Amorebieta) *Journal of Physical Chemistry*, 93 (**1989**) 5155.

**64** **Radical Sensitization of Acetylene Pyrolysis** (with R. P. Durán and V. T. Amorebieta) *International Journal of Chemical Kinetics*, 21 (**1989**) 947.

**63** **La Atmósfera Antártica como un Problema Físicoquímico**, *Actividad*, 4 (**1988**) 5.

**62** **Kinetics and Mechanism of the Catalytic Oxidation of Methane over Lithium-Promoted Magnesium Oxide** (with V. T. Amorebieta) *Journal of Physical Chemistry*, 92 (**1988**) 4576.

**61** **Decomposition of Methylamino and Aminomethyl Radicals. The Heats of Formation of Methyleneimine (CH2=NH) and Hydrazyl Radical** (with M. A. Grela) *International Journal of Chemical Kinetics*, 20 (**1988**) 713.

**60** **ESR Studies of Intramolecular Electron Transfer in Malonic Acid Radical Chelates of Cerium(IV)** (with M. A.Brusa and L. J. Perissinotti) *Inorganic Chemistry*, 27 (**1988**) 4474.

**59** **The Mechanism of Photodecomposition of Phenyl Benzoate in Inert Solvents at 242 and 282 nm** (with M. S. Churio and E. Ghibaudi) *Journal of Photochemistry & Photobiology, Chemistry Section,* 44 (**1988**) 133.

**58** **ESR Equilibrium Measurements of the O-H Bond Energy in α-Tocopherol** (with M. E. J. Coronel) *International Journal of Chemical Kinetics*, 20 (**1988**) 746.

**57** **Kinetics and Thermochemistry of the Equilibrium: 2 C2H2 Vinylacetylene. Direct Evidence against a Chain Mechanism** (with E. Ghibaudi) *Journal of Physical Chemistry*, 92 (**1988**) 5839.

**56** **Is the Homogeneous Thermal Dimerization of Acetylene a Free Radical Chain Reaction? Kinetic and Thermochemical Analysis** (with R. P. Durán and V. T. Amorebieta) *Journal of Physical Chemistry*, 92 (**1988**) 636.

**55** **Thermochemistry of Free Radicals**, in *Chemical Kinetics of Small Organic Radicals*, Z. Alfassi, Ed., Uniscience Series CRC, Boca Raton, FL., Volume 1, (**1988**) chapter 2,

**54** **Systematic Characterization of Transition States for Radical Decompositions** (with M. A. Grela) *International Journal of Chemical Kinetics*, 19 (**1987**) 839.

**53** **Pyrolysis of Acetylene: a Thermal Source of Vinylidene** (with R. P. Durán and V. T. Amorebieta) *Journal of the American Chemical Society*, 109 (**1987**) 3154.

**52** **Heterogeneous Decomposition of Trichlorofluoromethane on Carbonaceous Surfaces** (with V. T. Amorebieta) *Journal of the Chemical Society, Faraday Transactions I*, 83 (**1987**) 3055.

**51** **Vacuum Pyrolysis of Furfural: a Facile Synthesis of Vinylketene** (with M. A. Grela) *Anales de la Asociación Química Argentina*, 75 (**1987**) 111.

**50** **Ammonia from Power Plant Emissions via Reduction of the Nitrosyl Complex of Fe(II)EDTA by S(IV)** (with S. L. Quiroga and S. Mendiara) *Anales de la Asociación Química Argentina*, 75 (**1987**) 333.

**49** **Dynamics of Gas-Surface Interactions. Temperature Dependence of the Translational Relaxation of Polyatomic Gases on Silica and Platinum** (with V. T. Amorebieta) *Journal of Physical Chemistry*, 90 (**1986**) 1225.

**48** **Kinetic and Mechanism of the Thermal Decomposition of Unsaturated Aldehydes: Benzaldehyde, 2-Butenal and 2-Furaldehyde** (with M. A. Grela) *Journal of Physical Chemistry*, 90 (**1986**) 454. Invited paper, First International Conference on Chemical Kinetics, National Institute of Science and Technology, Gaithersburg, Maryland, June 1985

**47** **Mass spectrometric Direct Measurements of the Vibrational Relaxation of Hot n-Butane by SF6 and Toluene in Crossed Molecular Beams** (with V. T. Amorebieta) *Journal of Physical Chemistry*, 89 (**1985**) 4664.

**46** **Electron Spin Resonance Kinetic Study of Malonyl Radical Self-decay and Oxidation Reactions by Cerium(IV) and Bromate in Acid Aqueous Media. The Role of Free Radicals in the Belousov-Zhabotinskii Oscillator** (with M. A. Brusa and L. J. Perissinotti) *Journal of Physical Chemistry*, 89 (**1985**) 1572.

**45** **Kinetics of Iodine Dissociation on Silica Surfaces between 800-1000 K** (with M. A. Grela) *Anales de la Asociación Química Argentina*, 73 (**1985**) 131.

**44** **Direct Study of the Catalytic Decomposition of Chlorine and Chloromethanes over Carbon Films** (with V. T. Amorebieta) *International Journal of Chemical Kinetics*, 17 (**1985**) 849.

**43** **Extended Correlation between O-F Bond Energies and 19F Chemical Shifts in Fluoroxy Compounds** (with E. Ghibaudi and K. O. Christe) *Inorganic Chemistry*, 24 (**1985**) 2869.

**42** **Estudios Físicoquímicos de Procesos Gas-Sólido mediante la Espectrometría de Masa de Haz Modulado**, *Anales de la Academia Nacional de Ciencias Exactas, Físicas y Naturales (Buenos Aires)*, 37 (**1985**) 63.

**41** **Pyrolysis of 2-Phenylethylamines. Heats of Formation of Aminomethyl R2NCH2 (R = H, CH3) Radicals** (with M. A. Grela) *International Journal of Chemical Kinetics*, 17 (**1985**) 257.

**40** **Very Low Pressure Pyrolysis of Furan, 2-Methylfuran and 2,5-Dimethylfuran. The Stability of the Furan Ring** (with M. A. Grela and V. T. Amorebieta) *Journal of Physical Chemistry*, 89 (**1985**) 38.

**39** **Very Low Pressure Pyrolysis of Phenyl Acetate** (with E. Ghibaudi) *International Journal of Chemical Kinetics*, 16 (**1984**) 1575.

**38** **Pyrolysis of Ethylenediamines. The Stabilization Energies of Aminomethyl and N,N-Dimethylaminomethyl Radicals** (with M. A. Grela*) Journal of Physical Chemistry*, 88 (**1984**) 5995.

**37** **Vibrational Energy Transfer in Single Polyatomic Gas-Surface Encounters. Molecular Structure, Surface and Temperature Effects** (with V. T. Amorebieta) *Journal of Physical Chemistry*, 88 (**1984**) 4284.

**36** **Pyrolysis of Phenyl Acetate: a Concerted Reaction** (with E. Ghibaudi) *Journal of the Chemical Society, Chemical Communications,* (**1984**) 433.

**35** **Thermochemistry of Fluoroxy Compounds: a Linear Correlation between O-F Bond Energies and 19F Chemical Shifts** (with E. Ghibaudi) *Inorganic Chemistry*, 23 (**1984**) 635.

**34** **Single Collision Low Level Vibrational Energy Transfer between Alkanes and Silica in the Range 350-700 K** (with V. T. Amorebieta) *Chemical Physics Letters*, 104 (**1984**) 221.

**33** **Involvement of Formic Acid in the Belousov-Zhabotinskii Oscillator** (with M. A. Brusa) *International Journal of Chemical Kinetics*, 15 (**1983**) 1335.

**32** **Accuracy of Semiclassical Partition Functions for an Oscillator in a Finite Well** (with V. T. Amorebieta) *Chemical Physics Letters*, 98 (**1983**) 315.

**31** **Temperature Dependence of Cage Processes in the Photodecomposition of Phenyl Acetate** (with E. Ghibaudi) *Chemical Physics Letters*, 94 (**1983**) 121.

**30** **Radiation Scattering and Heat Transfer in Cellular Plastics: Thermal Conductivities from Infrared Spectra** (with V. T. Amorebieta) *Revista Latinoamericana de Transferencia de Calor y Materia*, 6 (**1982**) 181.

**29** **The Effective Potential of ß-Bonds in Free Radicals (with M. A. Grela)** *Journal of Physical Chemistry*, 86 (**1982**) 4844.

**28** **Anomalous Kinetic Hydrogen Isotope Effect in the Oxidation of Formate by Bromine: Tunneling via an Intermediate** (with M. A. Brusa) *International Journal of Chemical Kinetics*, 14 (**1982**) 1211.

**27** **Direct Evidence of Inefficient Vibrational Energy Transfer in Gas-Surface Collisions** (with V. T. Amorebieta) *Journal of Physical Chemistry*, 86 (**1982**) 3058.

**26** **Mass Spectrometry at Low Electron Beam Energy: A Sensitive Probe of Vibrational Excitation** (with V. T. Amorebieta) *Chemical Physics Letters*, 89 (**1982**) 193.

**25** **Gas Phase Free Radical in the Catalytic Decomposition of Hexane over Tungsten: a Modulated Beam Mass Spectrometric Study** (with V. T. Amorebieta) *Journal of Physical Chemistry*, 86 (**1982**) 2760.

**24** **A Kinetic Study of the Reaction between Formic Acid and HOBr** (with M. A. Brusa) *International Journal of Chemical Kinetics*, 14 (**1982**) 479.

**23** **Thermodynamic Functions of a Morse Oscillator** (with V. T. Amorebieta) *Chemical Physics Letters*, 82 (**1981**) 530.

**22** **The Estimation of A-factors for Atom Fissions in Polyatomics** (with E. Ghibaudi) *International Journal of Chemical Kinetics*, 13 (**1981**) 591.

21 **Kinetics and Mechanism of the Oxidation of Formic Acid by Bromine in Acid Aqueous Media** (with M. A. Brusa) *International Journal of Chemical Kinetics*, 12 (**1980**) 1013.

**20** **The Very Low Pressure Study of the Kinetics and Equilibrium of Cl + CH4 CH3 + HCl at 298 K. The Heat of Formation of the Methyl Radical** (with M. H. Baghal-Vayjooee and S. W. Benson) *International Journal of Chemical Kinetics*, 11 (**1979**) 147.

**19** **The Very Low Pressure Pyrolysis of N-methylaniline and N,N-dimethylaniline. The Enthalpy of Formation of the Anilino and N-methylanilino Radicals** (with S. W. Benson) *International Journal of Chemical Kinetics*, 10 (**1978**) 1139.

**18** **Molecular Beam Sampling** (with S. W. Benson) *International Journal of Chemical Kinetics*, 10 (**1978**) 1091.

**17** **The Very Low Pressure Reactor. A New Technique for Measuring Rates and Equilibria of Radical Molecule Reactions at Low Temperature. Heat of Formation of the Methyl Radical** (with M. H. Baghal-Vayjooee and S. W. Benson) *Journal of the American Chemical Society*, 100 (**1978**) 3214.

**16** **Intramolecular Isotope Effect in Laser Multiphoton Dissociation of CH2DCH2Cl** (with S. W. Benson, R. J. Hwang and J. J. Tiee) *Chemical Physics Letters*, 52 (**1977**) 349.

15 **The Very Low Pressure Pyrolysis of 2-Phenylethylamine. The Enthalpy of Formation of the Aminomethyl Radical** (with S. W. Benson) *International Journal of Chemical Kinetics*, 9 (**1977**) 307.

**14** **The Very Low Pressure Pyrolysis of Phenyl Methyl Sulfide and Benzyl Methyl Sulfide and the Enthalpy of Formation of the Methylthio and Phenylthio Radicals** (with S. W. Benson) *International Journal of Chemical Kinetics*, 9 (**1977**) 295.

**13** **The Very Low Pressure Pyrolysis of Phenyl Ethyl Ether, Phenyl Allyl Ether and Benzyl Methyl Ether. The Enthalpy of Formation of the Phenoxyl Radical** (with F. Zabel and S. W. Benson) *International Journal of Chemical Kinetics*, 9 (**1977**) 161.

**12** **ESR Spectra of Fluorine-Containing Radicals of Phosphorous and Arsenic** (with R. Boate, K. F. Preston and R. J. Morton) *Chemical Physics Letters*, 37 (**1976**) 135.

**11** **Absolute Rates of O3P Reactions with Benzene and Toluene** (with D. Singleton, R. Irwin and R. J. Cvetanovic) *Journal of Physical Chemistry*, 79 (**1975**) 1900.

**10** **Reactions of Excited Oxygen Atoms O1D with Cyclobutane** (with R. J. Cvetanovic) *Journal of Physical Chemistry*, 79 (**1975**) 1891.

**9** **ESR Spectra of Certain Fluorohydride Radicals of Phosphorous, Arsenic and Antimony** (with K. F. Preston and J. R. Morton) *Journal of Physical Chemistry*, 79 (**1975**) 1885.

**8** **Electron Spin Resonance Spectra of the Phosphoranyl Radicals ROPF3** (with K. F. Preston and J. R. Morton) *Journal of Physical Chemistry*, 79 (**1975**) 651.

**7** **The ESR Spectrum of PH4** (with K. F. Preston and J. R. Morton) *Journal of Chemical Physics*, 62 (**1975**) 2004.

**6** **The ESR Spectrum of AsF4** (with K. F. Preston and J. R. Morton) *Chemical Physics Letters*, 30 (**1975**) 317.

**5** **ESR Spectra of PF2 and SF3 Radicals** (with K. F. Preston, J. R. Morton and R. W. Fessenden) *Journal of Chemical Physics*, 61 (**1974**) 1247.

**4** **Determination by the Phase Shift Method of the Absolute Rate Constants of Reactions of O3P Atoms with Olefins at 25oC** (with S. Furuyama, R. Atkinson and R. J. Cvetanovic) *International Journal of Chemical Kinetics*, 6 (**1974**) 741.

**3** **Die Kinetic des thermischen Zerfalles von SF5OF in gegenwart von Cl2** (with H. J. Schumacher) *Zeitschrift fur Physikalische Chemie (Frankfurt)*, 78 (**1972**) 257.

**2** **The Thermal Reaction between SF5OF and NO2** (with H. J. Schumacher) *Journal of Inorganic and Nuclear Chemistry*, 33 (**1971**) 2680.

**1** **Die Kinetic der thermischen Reaction zwischen SF5OF und CO** (with H. J. Schumacher) *Zeitschrift fur Physikalische Chemie (Frankfurt)*, 71 (**1970**) 208.