# Tiziano Faravelli

## List of Publications by Year in Descending Order



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| 215 papers | 10,070 citations | 55 h-index | 93 g-index |
| 218 ext. papers | 11,945 ext. citations | 5.3 avg, IF | 6.29 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 215 | Experimental and modeling investigation on pyrolysis of agricultural biomass residues: Khat stem and coffee husk for bio-oil application. *Journal of Analytical and Applied Pyrolysis*, **2022**, 162, 105435 | 6 | 2 |
| 214 | Dimethyl ether oxidation analyzed in a given flow reactor: Experimental and modeling uncertainties. *Combustion and Flame*, **2022**, 240, 111998 | 5.3 | 0 |
| 213 | A new detailed kinetic model for surrogate fuels: C3MechV3.3. *Applications in Energy and Combustion Science*, **2022**, 9, 100043 | 0.8 | 4 |
| 212 | Modeling soot particles as stable radicals: a chemical kinetic study on formation and oxidation. Part II. Soot oxidation in flow reactors and laminar flames. *Combustion and Flame*, **2022**, 112072 | 5.3 | 3 |
| 211 | Modeling soot particles as stable radicals: a chemical kinetic study on formation and oxidation. Part I. Soot formation in ethylene laminar premixed and counterflow diffusion flames. *Combustion and Flame*, **2022**, 112073 | 5.3 | 2 |
| 210 | Investigation of Oxy-Fuel Combustion through Reactor Network and Residence Time Data. *Energies* , **2022**, 15, 252 | 3.1 | 1 |
| 209 | An experimental, theoretical and kinetic-modeling study of hydrogen sulfide pyrolysis and oxidation. *Chemical Engineering Journal*, **2022**, 136723 | 14.7 | |
| 208 | Development and Application of an Efficient Chemical Reactor Network Model for Oxy-fuel Combustion. *Energy & Fuels*, **2021**, 35, 7121-7132 | 4.1 | 2 |
| 207 | Pyrolysis and Combustion Chemistry of Pyrrole, a Reference Component for Bio-oil Surrogates: Jet-Stirred Reactor Experiments and Kinetic Modeling. *Energy & Fuels*, **2021**, 35, 7265-7284 | 4.1 | 6 |
| 206 | Systematic evaluation and kinetic modeling of low heating rate sulfur release in various atmospheres. *Fuel*, **2021**, 289, 119739 | 7.1 | 2 |
| 205 | Carrier-phase DNS of detailed NOx formation in early-stage pulverized coal combustion with fuel-bound nitrogen. *Fuel*, **2021**, 291, 119998 | 7.1 | 3 |
| 204 | The chemistry of chemical recycling of solid plastic waste via pyrolysis and gasification: State-of-the-art, challenges, and future directions. *Progress in Energy and Combustion Science*, **2021**, 84, 100901 | 33.6 | 78 |
| 203 | Chemical Kinetics of Asphaltene Pyrolysis. *Energy & Fuels*, **2021**, 35, 8672-8684 | 4.1 | 1 |
| 202 | OptiSMOKE++: A toolbox for optimization of chemical kinetic mechanisms. *Computer Physics Communications*, **2021**, 264, 107940 | 4.2 | 2 |
| 201 | An evolutionary, data-driven approach for mechanism optimization: theory and application to ammonia combustion. *Combustion and Flame*, **2021**, 229, 111366 | 5.3 | 11 |
| 200 | Theoretical and kinetic modeling study of chloromethane (CH3Cl) pyrolysis and oxidation. *International Journal of Chemical Kinetics*, **2021**, 53, 403-418 | 1.4 | 0 |
| 199 | Ammonia–methane interaction in jet-stirred and flow reactors: An experimental and kinetic modeling study. *Proceedings of the Combustion Institute*, **2021**, 38, 345-353 | 5.9 | 14 |

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| 198 | Interface-resolved simulation of the evaporation and combustion of a fuel droplet suspended in normal gravity. *Fuel*, **2021**, 287, 119413 | 7.1 | 3 |
| 197 | Calibration and validation of a comprehensive kinetic model of coal conversion in inert, air and oxy-fuel conditions using data from multiple test rigs. *Fuel*, **2021**, 290, 119682 | 7.1 | 2 |
| 196 | Kinetic Modeling of the Ignition of Droplets of Fast Pyrolysis Bio-oil: Effect of Initial Diameter and Fuel Composition. *Industrial & Engineering Chemistry Research*, **2021**, 60, 6719-6729 | 3.9 | 2 |
| 195 | Assessment of a detailed biomass pyrolysis kinetic scheme in multiscale simulations of a single-particle pyrolyzer and a pilot-scale entrained flow pyrolyzer. *Chemical Engineering Journal*, **2021**, 418, 129347 | 14.7 | 12 |
| 194 | On the radical behavior of large polycyclic aromatic hydrocarbons in soot formation and oxidation. *Combustion and Flame*, **2021**, 235, 111692 | 5.3 | 3 |
| 193 | Data Ecosystems for Scientific Experiments: Managing Combustion Experiments and Simulation Analyses in Chemical Engineering. *Frontiers in Big Data*, **2021**, 4, 663410 | 2.8 | 0 |
| 192 | Advanced modeling approaches for CFD simulations of coal combustion and gasification. *Progress in Energy and Combustion Science*, **2021**, 86, 100938 | 33.6 | 8 |
| 191 | A Predictive Physico-chemical Model of Biochar Oxidation. *Energy & Fuels*, **2021**, 35, 14894-14912 | 4.1 | 3 |
| 190 | Master equation lumping for multi-well potential energy surfaces: A bridge between ab initio based rate constant calculations and large kinetic mechanisms. *Chemical Engineering Journal*, **2021**, 422, 129954 | 14.7 | 3 |
| 189 | Experimental and modeling assessment of sulfur release from coal under low and high heating rates. *Proceedings of the Combustion Institute*, **2021**, 38, 4053-4061 | 5.9 | 6 |
| 188 | Combustion of -C-C Linear Alcohols: An Experimental and Kinetic Modeling Study. Part II: Speciation Measurements in a Jet-Stirred Reactor, Ignition Delay Time Measurements in a Rapid Compression Machine, Model Validation, and Kinetic Analysis. *Energy & Fuels*, **2020**, 34, 14708-14725 | 4.1 | 10 |
| 187 | Can Small Polyaromatics Describe Their Larger Counterparts for Local Reactions? A Computational Study on the H-Abstraction Reaction by an H-Atom from Polyaromatics. *Journal of Physical Chemistry A*, **2020**, 124, 9626-9637 | 2.8 | 4 |
| 186 | An experimental, theoretical and kinetic-modeling study of the gas-phase oxidation of ammonia. *Reaction Chemistry and Engineering*, **2020**, 5, 696-711 | 4.9 | 69 |
| 185 | A forward approach for the validation of soot sizing models using laser-induced incandescence (LII). *Applied Physics B: Lasers and Optics*, **2020**, 126, 1 | 1.9 | 2 |
| 184 | An a priori DNS analysis of scale similarity based combustion models for LES of non-premixed jet flames. *Flow, Turbulence and Combustion*, **2020**, 104, 605-624 | 2.5 | 0 |
| 183 | Kinetic Modeling of Solid, Liquid and Gas Biofuel Formation from Biomass Pyrolysis. *Biofuels and Biorefineries*, **2020**, 31-76 | 0.3 | 1 |
| 182 | The role of chemistry in the oscillating combustion of hydrocarbons: An experimental and theoretical study. *Chemical Engineering Journal*, **2020**, 385, 123401 | 14.7 | 12 |
| 181 | Comprehensive kinetic study of combustion technologies for low environmental impact: MILD and OXY-fuel combustion of methane. *Combustion and Flame*, **2020**, 212, 142-155 | 5.3 | 55 |

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| 180 | Theoretical study of sensitive reactions in phenol decomposition. *Reaction Chemistry and Engineering*, **2020**, 5, 452-472 | 4.9 | 21 |
| 179 | Combustion of -C-C Linear Alcohols: An Experimental and Kinetic Modeling Study. Part I: Reaction Classes, Rate Rules, Model Lumping, and Validation. *Energy & Fuels*, **2020**, 34, 14688-14707 | 4.1 | 8 |
| 178 | An experimental and numerical study on the combustion of lignites from different geographic origins. *Fuel*, **2020**, 278, 118320 | 7.1 | 4 |
| 177 | Electronic structure-based rate rules for addition-elimination reactions on mono-aromatic hydrocarbons with single and double OH/CH/OCH/CHO/CH substituents: a systematic theoretical investigation. *Physical Chemistry Chemical Physics*, **2020**, 22, 20368-20387 | 3.6 | 4 |
| 176 | New Dynamic Scale Similarity Based Finite-Rate Combustion Models for LES and a priori DNS Assessment in Non-premixed Jet Flames with High Level of Local Extinction. *Flow, Turbulence and Combustion*, **2020**, 104, 233-260 | 2.5 | 4 |
| 175 | Experimental and modeling study of benzaldehyde oxidation. *Combustion and Flame*, **2020**, 211, 124-132 | 5.3 | 10 |
| 174 | Detailed kinetics of substituted phenolic species in pyrolysis bio-oils. *Reaction Chemistry and Engineering*, **2019**, 4, 490-506 | 4.9 | 48 |
| 173 | Addressing the complexity of combustion kinetics: Data management and automatic model validation. *Computer Aided Chemical Engineering*, **2019**, 45, 763-798 | 0.6 | 5 |
| 172 | A first evaluation of butanoic and pentanoic acid oxidation kinetics. *Chemical Engineering Journal*, **2019**, 373, 973-984 | 14.7 | 18 |
| 171 | Towards a scientific data framework to support scientific model development. *Data Science*, **2019**, 2, 245-273 | 2.2 | 4 |
| 170 | Buoyancy effect in sooting laminar premixed ethylene flame. *Combustion and Flame*, **2019**, 205, 135-146 | 5.3 | 8 |
| 169 | First-principles assessment of the analogy between gas-phase and gas-solid H-abstraction reactions at graphene edges. *Chemical Engineering Journal*, **2019**, 377, 119691 | 14.7 | 4 |
| 168 | An experimental and kinetic modelling study of n-C4C6 aldehydes oxidation in a jet-stirred reactor. *Proceedings of the Combustion Institute*, **2019**, 37, 389-397 | 5.9 | 13 |
| 167 | The sensitizing effects of NO2 and NO on methane low temperature oxidation in a jet stirred reactor. *Proceedings of the Combustion Institute*, **2019**, 37, 667-675 | 5.9 | 46 |
| 166 | A post processing technique to predict primary particle size of sooting flames based on a chemical discrete sectional model: Application to diluted coflow flames. *Combustion and Flame*, **2019**, 208, 122-138 | 5.3 | 7 |
| 165 | Numerical investigation of a porous media combustor in a small-scale diesel engine. *Energy*, **2019**, 186, 115785 | 7.9 | 9 |
| 164 | An experimental and CFD modeling study of suspended droplets evaporation in buoyancy driven convection. *Chemical Engineering Journal*, **2019**, 375, 122006 | 14.7 | 7 |
| 163 | Prediction of flammable range for pure fuels and mixtures using detailed kinetics. *Combustion and Flame*, **2019**, 207, 120-133 | 5.3 | 21 |

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| 162 | Examination of a soot model in premixed laminar flames at fuel-rich conditions. *Proceedings of the Combustion Institute*, **2019**, 37, 1013-1021 | 5.9 | 62 |
| 161 | Soot Modeling of Ethylene Counterflow Diffusion Flames. *Combustion Science and Technology*, **2019**, 191, 1473-1483 | 1.5 | 8 |
| 160 | Fully-resolved simulations of coal particle combustion using a detailed multi-step approach for heterogeneous kinetics. *Fuel*, **2019**, 240, 75-83 | 7.1 | 29 |
| 159 | DropletSMOKE++: A comprehensive multiphase CFD framework for the evaporation of multidimensional fuel droplets. *International Journal of Heat and Mass Transfer*, **2019**, 131, 836-853 | 4.9 | 13 |
| 158 | Thermochemical oscillation of methane MILD combustion diluted with N2/CO2/H2O. *Combustion Science and Technology*, **2019**, 191, 68-80 | 1.5 | 9 |
| 157 | H-Abstraction reactions by OH, HO, O, O and benzyl radical addition to O and their implications for kinetic modelling of toluene oxidation. *Physical Chemistry Chemical Physics*, **2018**, 20, 10607-10627 | 3.6 | 50 |
| 156 | Ab initio calculations and kinetic modeling of thermal conversion of methyl chloride: implications for gasification of biomass. *Physical Chemistry Chemical Physics*, **2018**, 20, 10741-10752 | 3.6 | 6 |
| 155 | Numerical investigation of soot formation from microgravity droplet combustion using heterogeneous chemistry. *Combustion and Flame*, **2018**, 189, 393-406 | 5.3 | 15 |
| 154 | A Model Investigation of Fuel and Operating Regime Impact on Homogeneous Charge Compression Ignition Engine Performance. *Energy & Fuels*, **2018**, 32, 2282-2298 | 4.1 | 4 |
| 153 | A predictive model of biochar formation and characterization. *Journal of Analytical and Applied Pyrolysis*, **2018**, 134, 326-335 | 6 | 39 |
| 152 | Kinetic modeling of soot formation in premixed burner-stabilized stagnation ethylene flames at heavily sooting condition. *Fuel*, **2018**, 234, 199-206 | 7.1 | 22 |
| 151 | Oscillatory Behavior in Methane Combustion: Influence of the Operating Parameters. *Energy & Fuels*, **2018**, 32, 10088-10099 | 4.1 | 15 |
| 150 | Storing Combustion Data Experiments: New Requirements Emerging from a First Prototype. *Lecture Notes in Computer Science*, **2018**, 138-149 | 0.9 | 4 |
| 149 | The influence of low-temperature chemistry on partially-premixed counterflow n-heptane/air flames. *Combustion and Flame*, **2018**, 188, 440-452 | 5.3 | 8 |
| 148 | Prediction of Combustion and Heat Release Rates in Non-Premixed Syngas Jet Flames Using Finite-Rate Scale Similarity Based Combustion Models. *Energies*, **2018**, 11, 2464 | 3.1 | 5 |
| 147 | A computational framework for the pyrolysis of anisotropic biomass particles. *Chemical Engineering Journal*, **2017**, 321, 458-473 | 14.7 | 38 |
| 146 | Algae characterization and multistep pyrolysis mechanism. *Journal of Analytical and Applied Pyrolysis*, **2017**, 128, 423-436 | 6 | 50 |
| 145 | Numerical investigation of soot-flame-vortex interaction. *Proceedings of the Combustion Institute*, **2017**, 36, 753-761 | 5.9 | 6 |

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| 144 | Flame extinction and low-temperature combustion of isolated fuel droplets of n-alkanes. *Proceedings of the Combustion Institute*, **2017**, 36, 2531-2539 | 5.9 | 14 |
| 143 | The role of preferential evaporation on the ignition of multicomponent fuels in a homogeneous spray/air mixture. *Proceedings of the Combustion Institute*, **2017**, 36, 2483-2491 | 5.9 | 27 |
| 142 | Skeletal kinetic mechanism for diesel combustion. *Combustion Theory and Modelling*, **2017**, 21, 79-92 | 1.5 | 7 |
| 141 | Alkyl radicals rule the low temperature oxidation of long chain aldehydes. *Proceedings of the Combustion Institute*, **2017**, 36, 393-401 | 5.9 | 21 |
| 140 | A Kinetic Modelling Study of Alcohols Operating Regimes in a HCCI Engine. *SAE International Journal of Engines*, **2017**, 10, 2354-2370 | 2.4 | 16 |
| 139 | Resolved flow simulation of pulverized coal particle devolatilization and ignition in air- and O2/CO2-atmospheres. *Fuel*, **2016**, 186, 285-292 | 7.1 | 52 |
| 138 | Relative Reactivity of Oxygenated Fuels: Alcohols, Aldehydes, Ketones, and Methyl Esters. *Energy & Fuels*, **2016**, 30, 8665-8679 | 4.1 | 26 |
| 137 | Probe effects in soot sampling from a burner-stabilized stagnation flame. *Combustion and Flame*, **2016**, 167, 184-197 | 5.3 | 38 |
| 136 | Curve matching, a generalized framework for models/experiments comparison: An application to n-heptane combustion kinetic mechanisms. *Combustion and Flame*, **2016**, 168, 186-203 | 5.3 | 14 |
| 135 | Laminar flame speeds of pentanol isomers: An experimental and modeling study. *Combustion and Flame*, **2016**, 166, 1-18 | 5.3 | 39 |
| 134 | Experimental and modeling investigation of the effect of the unsaturation degree on the gas-phase oxidation of fatty acid methyl esters found in biodiesel fuels. *Combustion and Flame*, **2016**, 164, 346-362 | 5.3 | 30 |
| 133 | Skeletal mechanism reduction through species-targeted sensitivity analysis. *Combustion and Flame*, **2016**, 163, 382-393 | 5.3 | 91 |
| 132 | Detailed kinetic mechanism of gas-phase reactions of volatiles released from biomass pyrolysis. *Biomass and Bioenergy*, **2016**, 93, 60-71 | 5.3 | 56 |
| 131 | A new predictive multi-zone model for HCCI engine combustion. *Applied Energy*, **2016**, 178, 826-843 | 10.7 | 25 |
| 130 | Pyrolysis, Gasification, and Combustion of Solid Fuels. *Advances in Chemical Engineering*, **2016**, 49, 1-94 | 0.6 | 22 |
| 129 | OpenSMOKE++: An object-oriented framework for the numerical modeling of reactive systems with detailed kinetic mechanisms. *Computer Physics Communications*, **2015**, 192, 237-264 | 4.2 | 196 |
| 128 | Modeling soot formation in premixed flames using an Extended Conditional Quadrature Method of Moments. *Combustion and Flame*, **2015**, 162, 2529-2543 | 5.3 | 51 |
| 127 | New reaction classes in the kinetic modeling of low temperature oxidation of n-alkanes. *Combustion and Flame*, **2015**, 162, 1679-1691 | 5.3 | 107 |

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| 126 | High-temperature chemistry of HCl and Cl2. *Combustion and Flame*, **2015**, 162, 2693-2704 | 5.3 | 29 |
| 125 | Extractives Extend the Applicability of Multistep Kinetic Scheme of Biomass Pyrolysis. *Energy & Fuels*, **2015**, 29, 6544-6555 | 4.1 | 76 |
| 124 | Kinetic modeling of particle size distribution of soot in a premixed burner-stabilized stagnation ethylene flame. *Combustion and Flame*, **2015**, 162, 3356-3369 | 5.3 | 128 |
| 123 | Reduced kinetic mechanisms of diesel fuel surrogate for engine CFD simulations. *Combustion and Flame*, **2015**, 162, 3991-4007 | 5.3 | 58 |
| 122 | An experimental and kinetic modeling study of the pyrolysis and oxidation of n-C3C5 aldehydes in shock tubes. *Combustion and Flame*, **2015**, 162, 265-286 | 5.3 | 48 |
| 121 | Numerical modeling of auto-ignition of isolated fuel droplets in microgravity. *Proceedings of the Combustion Institute*, **2015**, 35, 1621-1627 | 5.9 | 37 |
| 120 | Kinetic modeling study of benzene and PAH formation in laminar methane flames. *Combustion and Flame*, **2015**, 162, 1692-1711 | 5.3 | 50 |
| 119 | Experimental and kinetic modeling study of laminar coflow diffusion methane flames doped with 2-butanol. *Proceedings of the Combustion Institute*, **2015**, 35, 863-871 | 5.9 | 18 |
| 118 | Detailed Emissions Prediction for a Turbulent Swirling Nonpremixed Flame. *Energy & Fuels*, **2014**, 28, 1470-1488 | 4.1 | 14 |
| 117 | Reduced Kinetic Schemes of Complex Reaction Systems: Fossil and Biomass-Derived Transportation Fuels. *International Journal of Chemical Kinetics*, **2014**, 46, 512-542 | 1.4 | 224 |
| 116 | Kinetic Modeling Study of Polycyclic Aromatic Hydrocarbons and Soot Formation in Acetylene Pyrolysis. *Energy & Fuels*, **2014**, 28, 1489-1501 | 4.1 | 53 |
| 115 | Improved Kinetic Model of the Low-Temperature Oxidation of n-Heptane. *Energy & Fuels*, **2014** , 28, 7178-7193 | 4.1 | 75 |
| 114 | Experimental and kinetic modeling study of PAH formation in methane coflow diffusion flames doped with n-butanol. *Combustion and Flame*, **2014**, 161, 657-670 | 5.3 | 32 |
| 113 | A fully coupled, parallel approach for the post-processing of CFD data through reactor network analysis. *Computers and Chemical Engineering*, **2014**, 60, 197-212 | 4 | 13 |
| 112 | Lumping and Reduction of Detailed Kinetic Schemes: an Effective Coupling. *Industrial & Engineering Chemistry Research*, **2014**, 53, 9004-9016 | 3.9 | 69 |
| 111 | Experimental and modeling study of single coal particle combustion in O2/N2 and Oxy-fuel (O2/CO2) atmospheres. *Combustion and Flame*, **2013**, 160, 2559-2572 | 5.3 | 114 |
| 110 | Extinction of laminar, premixed, counter-flow methane/air flames under unsteady conditions: Effect of H2 addition. *Chemical Engineering Science*, **2013**, 93, 266-276 | 4.4 | 16 |
| 109 | Numerical Modeling of Laminar Flames with Detailed Kinetics Based on the Operator-Splitting Method. *Energy & Fuels*, **2013**, 27, 7730-7753 | 4.1 | 71 |

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| 108 | Experimental Study of Tetralin Oxidation and Kinetic Modeling of Its Pyrolysis and Oxidation. *Energy & Fuels*, **2013**, 27, 1576-1585 | 4.1 | 21 |
| 107 | Experimental and detailed kinetic modeling study of PAH formation in laminar co-flow methane diffusion flames. *Proceedings of the Combustion Institute*, **2013**, 34, 1811-1818 | 5.9 | 26 |
| 106 | A lumped approach to the kinetic modeling of pyrolysis and combustion of biodiesel fuels. *Proceedings of the Combustion Institute*, **2013**, 34, 427-434 | 5.9 | 43 |
| 105 | Experimental and semi-detailed kinetic modeling study of decalin oxidation and pyrolysis over a wide range of conditions. *Proceedings of the Combustion Institute*, **2013**, 34, 289-296 | 5.9 | 44 |
| 104 | A wide range kinetic modeling study of pyrolysis and oxidation of benzene. *Combustion and Flame*, **2013**, 160, 1168-1190 | 5.3 | 90 |
| 103 | Predictive one step kinetic model of coal pyrolysis for CFD applications. *Proceedings of the Combustion Institute*, **2013**, 34, 2401-2410 | 5.9 | 47 |
| 102 | A computational tool for the detailed kinetic modeling of laminar flames: Application to C2H4/CH4 coflow flames. *Combustion and Flame*, **2013**, 160, 870-886 | 5.3 | 101 |
| 101 | Numerical Modeling of NOx Formation in Turbulent Flames Using a Kinetic Post-processing Technique. *Energy & Fuels*, **2013**, 27, 1104-1122 | 4.1 | 37 |
| 100 | Multistep Kinetic Model of Biomass Pyrolysis. *Green Energy and Technology*, **2013**, 111-139 | 0.6 | 4 |
| 99 | Reduced Kinetic Mechanisms for Diesel Spray Combustion Simulations **2013**, | | 9 |
| 98 | Detailed Kinetic Analysis of HCCI Combustion Using a New Multi-Zone Model and CFD Simulations. *SAE International Journal of Engines*, **2013**, 6, 1594-1609 | 2.4 | 14 |
| 97 | Automatic Generation of Detailed Mechanisms. *Green Energy and Technology*, **2013**, 59-92 | 0.6 | 14 |
| 96 | Specificities Related to Detailed Kinetic Models for the Combustion of Oxygenated Fuels Components. *Green Energy and Technology*, **2013**, 93-109 | 0.6 | 5 |
| 95 | Hierarchical and comparative kinetic modeling of laminar flame speeds of hydrocarbon and oxygenated fuels. *Progress in Energy and Combustion Science*, **2012**, 38, 468-501 | 33.6 | 603 |
| 94 | A predictive kinetic model of sulfur release from coal. *Fuel*, **2012**, 91, 213-223 | 7.1 | 34 |
| 93 | A wide range kinetic modeling study of pyrolysis and oxidation of methyl butanoate and methyl decanoate. Note I: Lumped kinetic model of methyl butanoate and small methyl esters. *Energy*, **2012**, 43, 124-139 | 7.9 | 41 |
| 92 | A Detailed Kinetic Study of Pyrolysis and Oxidation of Glycerol (Propane-1,2,3-triol). *Combustion Science and Technology*, **2012**, 184, 1164-1178 | 1.5 | 31 |
| 91 | Detailed Multi-dimensional Study of Pollutant Formation in a Methane Diffusion Flame. *Energy & Fuels*, **2012**, 26, 1598-1611 | 4.1 | 26 |

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| 90 | Kinetic modelling of extinction and autoignition of condensed hydrocarbon fuels in non-premixed flows with comparison to experiment. *Combustion and Flame*, **2012**, 159, 130-141 | 5.3 | 13 |
| 89 | Inhibition of hydrogen oxidation by HBr and Br2. *Combustion and Flame*, **2012**, 159, 528-540 | 5.3 | 27 |
| 88 | A wide range kinetic modeling study of pyrolysis and oxidation of methyl butanoate and methyl decanoate Note II: Lumped kinetic model of decomposition and combustion of methyl esters up to methyl decanoate. *Combustion and Flame*, **2012**, 159, 2280-2294 | 5.3 | 38 |
| 87 | Detailed kinetic modeling of the combustion of the four butanol isomers in premixed low-pressure flames. *Combustion and Flame*, **2012**, 159, 2295-2311 | 5.3 | 95 |
| 86 | Reactor network analysis of Claus furnace with detailed kinetics. *Computer Aided Chemical Engineering*, **2012**, 30, 1007-1012 | 0.6 | 4 |
| 85 | Experimental and kinetic modeling study of combustion of JP-8, its surrogates and components in laminar premixed flows. *Combustion Theory and Modelling*, **2011**, 15, 569-583 | 1.5 | 28 |
| 84 | Kinetic modeling study of ethanol and dimethyl ether addition to premixed low-pressure propene oxygen argon flames. *Combustion and Flame*, **2011**, 158, 1264-1276 | 5.3 | 47 |
| 83 | Detailed kinetics in the mathematical model of fixed bed gasifiers. *Computer Aided Chemical Engineering*, **2010**, 829-834 | 0.6 | 1 |
| 82 | Kinetic Modeling of the Oxidation of Ethanol and Gasoline Surrogate Mixtures. *Combustion Science and Technology*, **2010**, 182, 653-667 | 1.5 | 55 |
| 81 | Kinetic and fluid dynamics modeling of methane/hydrogen jet flames in diluted coflow. *Applied Thermal Engineering*, **2010**, 30, 376-383 | 5.8 | 105 |
| 80 | A predictive multi-step kinetic model of coal devolatilization. *Fuel*, **2010**, 89, 318-328 | 7.1 | 93 |
| 79 | Detailed kinetic modeling of the thermal degradation of lignins. *Biomass and Bioenergy*, **2010**, 34, 290-301 | 5.3 | 237 |
| 78 | An experimental and kinetic modeling study of n-propanol and iso-propanol combustion. *Combustion and Flame*, **2010**, 157, 2-16 | 5.3 | 128 |
| 77 | An experimental and kinetic modeling study of combustion of isomers of butanol. *Combustion and Flame*, **2010**, 157, 2137-2154 | 5.3 | 206 |
| 76 | Experimental and kinetic modeling study of sooting atmospheric-pressure cyclohexane flame. *Proceedings of the Combustion Institute*, **2009**, 32, 585-591 | 5.9 | 41 |
| 75 | Formation of soot and nitrogen oxides in unsteady counterflow diffusion flames. *Combustion and Flame*, **2009**, 156, 2010-2022 | 5.3 | 66 |
| 74 | Soot formation in unsteady counterflow diffusion flames. *Proceedings of the Combustion Institute*, **2009**, 32, 1335-1342 | 5.9 | 23 |
| 73 | Experimental and kinetic modeling study of combustion of gasoline, its surrogates and components in laminar non-premixed flows. *Proceedings of the Combustion Institute*, **2009**, 32, 493-500 | 5.9 | 75 |

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| 72 | Experimental and kinetic modeling study of the effect of fuel composition in HCCI engines. *Proceedings of the Combustion Institute*, **2009**, 32, 2843-2850 | 5.9 | 23 |
| 71 | Lumped Kinetic Modeling of the Oxidation of Isocetane (2,2,4,4,6,8,8-Heptamethylnonane) in a Jet-Stirred Reactor (JSR). *Energy & Fuels*, **2009**, 23, 5287-5289 | 4.1 | 14 |
| 70 | Experimental and Modeling Study of a Low NOx Combustor for Aero-Engine Turbofan. *Combustion Science and Technology*, **2009**, 181, 483-495 | 1.5 | 16 |
| 69 | Dynamic analysis of oscillating flames. *Computer Aided Chemical Engineering*, **2009**, 749-753 | 0.6 | |
| 68 | Robust and efficient numerical methods for the prediction of pollutants using detailed kinetics and fluid dynamics. *Computer Aided Chemical Engineering*, **2009**, 707-711 | 0.6 | 1 |
| 67 | Frequency Response of Counter Flow Diffusion Flames to Strain Rate Harmonic Oscillations. *Combustion Science and Technology*, **2008**, 180, 767-784 | 1.5 | 27 |
| 66 | Experimental and Numerical Investigation of n-Heptane/Air Counterflow Nonpremixed Flame Structure. *Journal of Propulsion and Power*, **2008**, 24, 797-804 | 1.8 | 8 |
| 65 | Kinetic Modeling of Soot Formation in Turbulent Nonpremixed Flames. *Environmental Engineering Science*, **2008**, 25, 1407-1422 | 2 | 13 |
| 64 | Two-dimensional detailed modeling of fuel-rich . *Chemical Engineering Science*, **2008**, 63, 2657-2669 | 4.4 | 40 |
| 63 | Chemical Kinetics of Biomass Pyrolysis. *Energy & Fuels*, **2008**, 22, 4292-4300 | 4.1 | 465 |
| 62 | Development and Experimental Validation of a Combustion Model with Detailed Chemistry for Knock Predictions **2007**, | | 12 |
| 61 | A Multizone approach to the detailed kinetic modeling of HCCI combustion **2007**, | | 10 |
| 60 | The ignition, combustion and flame structure of carbon monoxide/hydrogen mixtures. Note 1: Detailed kinetic modeling of syngas combustion also in presence of nitrogen compounds. *International Journal of Hydrogen Energy*, **2007**, 32, 3471-3485 | 6.7 | 131 |
| 59 | The ignition, combustion and flame structure of carbon monoxide/hydrogen mixtures. Note 2: Fluid dynamics and kinetic aspects of syngas combustion. *International Journal of Hydrogen Energy*, **2007**, 32, 3486-3500 | 6.7 | 62 |
| 58 | Role of gas-phase chemistry in the rich combustion ofH2and CO over aRh/Al2O3catalyst in annular reactor. *Chemical Engineering Science*, **2007**, 62, 4992-4997 | 4.4 | 14 |
| 57 | Ab initio evaluation of primary cyclo-hexane oxidation reaction rates. *Proceedings of the Combustion Institute*, **2007**, 31, 201-209 | 5.9 | 58 |
| 56 | Experimental and kinetic modeling study of combustion of JP-8, its surrogates and reference components in laminar nonpremixed flows. *Proceedings of the Combustion Institute*, **2007**, 31, 393-400 | 5.9 | 159 |
| 55 | Detailed kinetic modeling of pyrolysis of tetrabromobisphenol A. *Journal of Analytical and Applied Pyrolysis*, **2007**, 80, 325-345 | 6 | 38 |

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| 54 | Detailed kinetic modeling of the thermal degradation of vinyl polymers. *Journal of Analytical and Applied Pyrolysis*, **2007**, 78, 343-362 | 6 | 46 |
| 53 | Modeling Homogeneous Combustion in Bubbling Beds Burning Liquid Fuels. *Journal of Energy Resources Technology, Transactions of the ASME*, **2007**, 129, 33-41 | 2.6 | 6 |
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