

# Jozef Peeters

## List of Publications by Citations

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134  
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138  
ext. papers

6,233  
ext. citations

3.7  
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L-index

#	Paper	IF	Citations
134	HOx radical regeneration in the oxidation of isoprene. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 5935-9	3.6	384
133	Hydroxyl radical recycling in isoprene oxidation driven by hydrogen bonding and hydrogen tunneling: the upgraded LIM1 mechanism. <i>Journal of Physical Chemistry A</i> , <b>2014</b> , 118, 8625-43	2.8	160
132	HO(x) radical regeneration in isoprene oxidation via peroxy radical isomerisations. II: experimental evidence and global impact. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 14227-35	3.6	159
131	Laboratory and Theoretical Study of the Oxy Radicals in the OH- and Cl-Initiated Oxidation of Ethene. <i>Journal of Physical Chemistry A</i> , <b>1998</b> , 102, 8116-8123	2.8	135
130	To the core of autocatalysis in cyclohexane autoxidation. <i>Chemistry - A European Journal</i> , <b>2006</b> , 12, 4229-48	4.8	127
129	Decomposition of substituted alkoxy radicals--part I: a generalized structure-activity relationship for reaction barrier heights. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 9062-74	3.6	113
128	The gas-phase ozonolysis of beta-caryophyllene (C(15)H(24)). Part I: an experimental study. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 4152-72	3.6	111
127	The detailed mechanism of the OH-initiated atmospheric oxidation of $\beta$ -pinene: a theoretical study. <i>Physical Chemistry Chemical Physics</i> , <b>2001</b> , 3, 5489-5504	3.6	107
126	Autoxidation of cyclohexane: conventional views challenged by theory and experiment. <i>ChemPhysChem</i> , <b>2005</b> , 6, 637-45	3.2	106
125	Low-volatility poly-oxygenates in the OH-initiated atmospheric oxidation of alpha-pinene: impact of non-traditional peroxy radical chemistry. <i>Physical Chemistry Chemical Physics</i> , <b>2007</b> , 9, 5241-8	3.6	91
124	The 1,5-H-shift in 1-butoxy: A case study in the rigorous implementation of transition state theory for a multimer system. <i>Journal of Chemical Physics</i> , <b>2003</b> , 119, 5159-5170	3.9	91
123	Structure-activity relationship for the addition of OH to (poly)alkenes: site-specific and total rate constants. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 1618-31	2.8	89
122	Potential energy surfaces, product distributions and thermal rate coefficients of the reaction of O(3P) with C2H4(X1Ag): a comprehensive theoretical study. <i>Journal of Physical Chemistry A</i> , <b>2005</b> , 109, 7489-99	2.8	87
121	Autoxidation of Hydrocarbons: From Chemistry to Catalysis. <i>Topics in Catalysis</i> , <b>2008</b> , 50, 124-132	2.3	86
120	Autoxidation of ethylbenzene: the mechanism elucidated. <i>Journal of Organic Chemistry</i> , <b>2007</b> , 72, 3057-64	4.2	83
119	Kinetics of alpha-hydroxy-alkylperoxy radicals in oxidation processes. HO2*-initiated oxidation of ketones/aldehydes near the tropopause. <i>Journal of Physical Chemistry A</i> , <b>2005</b> , 109, 4303-11	2.8	81
118	Computational study of the stability of $\beta$ -hydroperoxy- or $\beta$ -alkylperoxy substituted alkyl radicals. <i>Chemical Physics Letters</i> , <b>2004</b> , 393, 432-436	2.5	81

117	Understanding the autoxidation of hydrocarbons at the molecular level and consequences for catalysis. <i>Journal of Molecular Catalysis A</i> , <b>2006</b> , 251, 221-228		80
116	Theoretical study of the gas-phase ozonolysis of beta-pinene (C <sub>10</sub> H <sub>16</sub> ). <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 5643-56	3.6	76
115	A structure-activity relationship for the rate coefficient of H-migration in substituted alkoxy radicals. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 12608-20	3.6	74
114	Stochastic simulation of chemically activated unimolecular reactions. <i>Journal of Chemical Physics</i> , <b>1997</b> , 106, 6564-6573	3.9	72
113	Identification of the Sequence CH(2) + C <sub>2</sub> H <sub>2</sub> → C <sub>3</sub> H <sub>2</sub> + H (and C <sub>3</sub> H + H <sub>2</sub> ) Followed by C <sub>3</sub> H <sub>2</sub> + O → C <sub>2</sub> H + HCO (or H + CO) as C <sub>2</sub> H Source in C <sub>2</sub> H <sub>2</sub> /O/H Atomic Flames. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 998-1007		71
112	B3LYP-DFT characterization of the potential energy surface of the CH(X 2) + C <sub>2</sub> H <sub>2</sub> reaction. <i>Journal of Chemical Physics</i> , <b>1998</b> , 108, 1068-1080	3.9	70
111	The formation of byproducts in the autoxidation of cyclohexane. <i>Chemistry - A European Journal</i> , <b>2007</b> , 13, 754-61	4.8	68
110	Product distributions of the acetylene + atomic oxygen and HCCO (ketenyl) + atomic hydrogen reactions. Rate constant of methylene (approx. X3B1) + atomic hydrogen. <i>The Journal of Physical Chemistry</i> , <b>1992</b> , 96, 9810-9816		66
109	The Atmospheric Chemistry of the Acetonyoxy Radical. <i>Journal of Physical Chemistry A</i> , <b>2000</b> , 104, 11578-11588	1.5	65
108	Rate Coefficients of the Reactions of C <sub>2</sub> H with O <sub>2</sub> , C <sub>2</sub> H <sub>2</sub> , and H <sub>2</sub> O between 295 and 450 K. <i>The Journal of Physical Chemistry</i> , <b>1995</b> , 99, 16284-16289		65
107	Mechanism of the catalytic oxidation of hydrocarbons by N-hydroxyphthalimide: a theoretical study. <i>Chemical Communications</i> , <b>2004</b> , 1140-1	5.8	63
106	Theoretical Investigation of the Role of Intramolecular Hydrogen Bonding in β-Hydroxyethoxy and β-Hydroxyethylperoxy Radicals in the Tropospheric Oxidation of Ethene. <i>Journal of Physical Chemistry A</i> , <b>1999</b> , 103, 1768-1775	2.8	63
105	A Generalized Structure-Activity Relationship for the Decomposition of (Substituted) Alkoxy Radicals. <i>Journal of Atmospheric Chemistry</i> , <b>2004</b> , 48, 59-80	3.2	62
104	Reaction of phenyl radicals with propyne. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 2781-9	16.4	61
103	Mechanism of the catalytic deperoxidation of tert-butylhydroperoxide with cobalt(II) acetylacetonate. <i>Chemistry - A European Journal</i> , <b>2010</b> , 16, 13226-35	4.8	60
102	The gas-phase ozonolysis of beta-caryophyllene (C <sub>15</sub> H <sub>24</sub> ). Part II: A theoretical study. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 4173-83	3.6	58
101	Experimental Investigation of the Reaction between Nitric Oxide and Ketenyl Radicals (HCCO + NO): Rate Coefficient at T = 290-670 K and Product Distribution at 700 K. <i>The Journal of Physical Chemistry</i> , <b>1994</b> , 98, 8036-8043		56
100	Theoretical Characterization of the Reaction between Nitric Oxide and Ketenyl Radicals (HCCO + NO): CO versus CO <sub>2</sub> Loss. <i>The Journal of Physical Chemistry</i> , <b>1994</b> , 98, 8030-8035		56

- 99 Reactions of chemically activated C<sub>9</sub>H<sub>9</sub> species II: The reaction of phenyl radicals with allene and cyclopropene, and of benzyl radicals with acetylene. *Physical Chemistry Chemical Physics*, **2003**, 5, 2807 3.6 55
- 98 The reaction of methyl peroxy and hydroxyl radicals as a major source of atmospheric methanol. *Nature Communications*, **2016**, 7, 13213 17.4 54
- 97 Silica-immobilized N-hydroxyphthalimide: An efficient heterogeneous autoxidation catalyst. *Journal of Catalysis*, **2007**, 251, 204-212 7.3 52
- 96 Autoxidation catalysis with N-hydroxyimides: more-reactive radicals or just more radicals?. *Physical Chemistry Chemical Physics*, **2007**, 9, 686-90 3.6 52
- 95 Mechanism of thermal toluene autoxidation. *ChemPhysChem*, **2007**, 8, 2678-88 3.2 51
- 94 Branching ratio of the C<sub>2</sub>H<sub>2</sub> + O reaction at 290 K from kinetic modelling of relative methylene concentration versus time profiles in C<sub>2</sub>H<sub>2</sub>/O/H systems. *International Journal of Chemical Kinetics*, **1994**, 26, 869-886 1.4 51
- 93 Mechanism of prompt OH formation in hydrocarbon flames. *Proceedings of the Combustion Institute*, **1977**, 16, 1055-1064 51
- 92 Absolute Rate Coefficients of the Reactions of C<sub>2</sub>H with NO and H<sub>2</sub> between 295 and 440 K. *The Journal of Physical Chemistry*, **1996**, 100, 15124-15129 50
- 91 Direct Identification of the C<sub>2</sub>H(X<sup>2</sup>Σ) + O(3P) → CH(A<sup>2</sup>Π) + CO Reaction as the Source of the CH(A<sup>2</sup>Π) Chemiluminescence in C<sub>2</sub>H<sub>2</sub>/O/H Atomic Flames. *Journal of Physical Chemistry A*, **1997**, 101, 2546-2551 2.8 50
- 90 Decomposition of β-Hydroxypropoxy Radicals in the OH-Initiated Oxidation of Propene. A Theoretical and Experimental Study. *Journal of Physical Chemistry A*, **1999**, 103, 4693-4702 2.8 50
- 89 Reactions of Cl Atoms with Selected VOCs: Kinetics, Products and Mechanisms. *Journal of Atmospheric Chemistry*, **1998**, 31, 247-267 3.2 48
- 88 Nontraditional (Per)oxy Ring-Closure Paths in the Atmospheric Oxidation of Isoprene and Monoterpenes. *Journal of Physical Chemistry A*, **2004**, 108, 5197-5204 2.8 48
- 87 The acetic acid forming channel in the acetone + OH reaction: A combined experimental and theoretical investigation. *Physical Chemistry Chemical Physics*, **2002**, 4, 461-466 3.6 47
- 86 Determination of the rate constants for the gas-phase reactions of methyl butenol with OH radicals, ozone, NO<sub>3</sub> radicals, and Cl atoms. *International Journal of Chemical Kinetics*, **1998**, 30, 589-594 1.4 46
- 85 CH(α<sup>4</sup>SIGMA.- and/or X<sup>2</sup>PI.) Formation in the Reaction Between Ketenyl Radicals and Oxygen Atoms. Determination of the CH-yield between 405 and 960 K. *The Journal of Physical Chemistry*, **1995**, 99, 3583-3591 45
- 84 A theoretical study of the OH-initiated gas-phase oxidation mechanism of pinene (C<sub>10</sub>H<sub>16</sub>): first generation products. *Physical Chemistry Chemical Physics*, **2012**, 14, 3802-15 3.6 44
- 83 Quantum chemical and theoretical kinetics study of the O(3P) + C<sub>2</sub>H<sub>2</sub> reaction: a multistate process. *Journal of Physical Chemistry A*, **2006**, 110, 6696-706 2.8 44
- 82 The OH-initiated atmospheric oxidation of pinonaldehyde: Detailed theoretical study and mechanism construction. *Physical Chemistry Chemical Physics*, **2002**, 4, 5795-5805 3.6 43

81	Enhanced H-atom abstraction from pinonaldehyde, pinonic acid, pinic acid, and related compounds: theoretical study of C-H bond strengths. <i>Physical Chemistry Chemical Physics</i> , <b>2002</b> , 4, 467-472	3.6	43
80	Theoretical and experimental study of the product branching in the reaction of acetic acid with OH radicals. <i>Journal of Physical Chemistry A</i> , <b>2005</b> , 109, 2401-9	2.8	42
79	Reaction of HO with hydroxyacetone (HOCH <sub>2</sub> C(O)CH <sub>3</sub> ): rate coefficients (233-363 K) and mechanism. <i>Physical Chemistry Chemical Physics</i> , <b>2006</b> , 8, 236-46	3.6	42
78	Theoretical Study of the Formation of Acetone in the OH-Initiated Atmospheric Oxidation of $\beta$ -Pinene. <i>Journal of Physical Chemistry A</i> , <b>2000</b> , 104, 11140-11146	2.8	42
77	Experimental and theoretical study of the reaction of the ethynyl radical with acetylene (HC $\equiv$ C+HC $\equiv$ CH). <i>Chemical Physics</i> , <b>2000</b> , 262, 243-252	2.3	40
76	H-atom abstraction by OH-radicals from (biogenic) (poly)alkenes: C-H bond strengths and abstraction rates. <i>Chemical Physics Letters</i> , <b>2001</b> , 333, 162-168	2.5	39
75	Reactions of chemically activated C <sub>9</sub> H <sub>9</sub> species.. <i>Physical Chemistry Chemical Physics</i> , <b>2002</b> , 4, 2019-2027	3.6	39
74	NO <sub>x</sub> reduction by reburning: theoretical study of the branching ratio of the HCCO+NO reaction. <i>Chemical Physics Letters</i> , <b>2001</b> , 344, 400-406	2.5	38
73	Reaction of Isocyanic Acid and Hydrogen Atom (H + HNCO): Theoretical Characterization. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 1615-1621		37
72	Use of DFT-Based Reactivity Descriptors for Rationalizing Radical Reactions: A Critical Analysis. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 484-489	2.8	36
71	A combined crossed-beam, ab initio, and Rice-Ramsperger-Kassel-Marcus investigation of the reaction of carbon atoms C(3P <sub>j</sub> ) with benzene, C <sub>6</sub> H <sub>6</sub> (X 1A <sub>1</sub> g) and d <sub>6</sub> -benzene, C <sub>6</sub> D <sub>6</sub> (X 1A <sub>1</sub> g). <i>Journal of Chemical Physics</i> , <b>2002</b> , 116, 3248-3262	3.9	36
70	The reaction of C <sub>2</sub> H with H <sub>2</sub> : Absolute rate coefficient measurements and ab initio study. <i>Journal of Chemical Physics</i> , <b>2002</b> , 116, 3700-3709	3.9	36
69	HO <sub>x</sub> regeneration in the oxidation of isoprene III: theoretical study of the key isomerisation of the Z-hydroxy-peroxy isoprene radicals. <i>ChemPhysChem</i> , <b>2010</b> , 11, 3996-4001	3.2	34
68	Autoxidation Chemistry: Bridging the Gap Between Homogeneous Radical Chemistry and (Heterogeneous) Catalysis. <i>Topics in Catalysis</i> , <b>2008</b> , 48, 41-48	2.3	34
67	Tropopause chemistry revisited: HO <sub>2</sub> *-initiated oxidation as an efficient acetone sink. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 9908-9	16.4	34
66	H-atom abstraction in reactions of cyclic polyalkenes with OH. <i>Chemosphere</i> , <b>1999</b> , 38, 1189-1195	8.4	34
65	Detailed Microvariational RRKM Master Equation Analysis of the Product Distribution of the C <sub>2</sub> H <sub>2</sub> + CH(X <sup>2</sup> $\Sigma$ ) Reaction over Extended Temperature and Pressure Ranges. <i>Journal of Physical Chemistry A</i> , <b>1999</b> , 103, 5523-5533	2.8	34
64	Theoretical analysis of reactions related to the HNO <sub>2</sub> energy surface: OH + NO and H + NO <sub>2</sub> . <i>Chemical Physics</i> , <b>1998</b> , 230, 1-11	2.3	30

63	Theoretical reinvestigation of the O(3P) + C <sub>6</sub> H <sub>6</sub> reaction: quantum chemical and statistical rate calculations. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 3836-49	2.8	30
62	Production of chemi-ions and formation of CH and CH <sub>2</sub> radicals in methane-oxygen and ethylene-oxygen flames. <i>Proceedings of the Combustion Institute</i> , <b>1975</b> , 15, 969-977		30
61	Unusually fast 1,6-h shifts of enolic hydrogens in peroxy radicals: formation of the first-generation C <sub>2</sub> and C <sub>3</sub> carbonyls in the oxidation of isoprene. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 6134-41	2.8	29
60	Pronounced non-Arrhenius behaviour of hydrogen-abstractions from toluene and derivatives by phthalimide-N-oxyl radicals: a theoretical study. <i>Physical Chemistry Chemical Physics</i> , <b>2008</b> , 10, 1125-32	3.6	29
59	A new model for the plasma anodization of silicon at constant current. <i>Journal of Applied Physics</i> , <b>1992</b> , 72, 719-724	2.5	29
58	Solvent- and Metal-Free Ketonization of Fatty Acid Methyl Esters and Triacylglycerols with Nitrous Oxide. <i>Advanced Synthesis and Catalysis</i> , <b>2007</b> , 349, 1604-1608	5.6	28
57	Reaction of HO with glycolaldehyde, HOCH <sub>2</sub> CHO: rate coefficients (240-362 K) and mechanism. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 897-908	2.8	28
56	Pulsed laser photolysis and quantum chemical-statistical rate study of the reaction of the ethynyl radical with water vapor. <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 114307	3.9	28
55	Theoretical Study of the Interaction between Methyl Fluoride, Methyl Chloride, and Methyl Bromide with Hydrogen Peroxide. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 11101-11108	2.8	28
54	Theoretical studies on the C <sub>2</sub> H+O <sub>2</sub> reaction: mechanism for HCO+CO, HCCO+O and CH+CO <sub>2</sub> formation. <i>Chemical Physics Letters</i> , <b>1998</b> , 287, 109-118	2.5	27
53	Experimental and theoretical study of the gas phase reaction of ethynyl radical with methane (HC≡C+CH <sub>4</sub> ). <i>Chemical Physics Letters</i> , <b>2000</b> , 329, 412-420	2.5	27
52	The reaction of C <sub>2</sub> H radicals with C <sub>2</sub> H <sub>6</sub> : Absolute rate coefficient measurements for T= 295-800 K, and quantum chemical study of the molecular mechanism. <i>Physical Chemistry Chemical Physics</i> , <b>2001</b> , 3, 3070-3074	3.6	27
51	Diazo chemistry controlling the selectivity of olefin ketonisation by nitrous oxide. <i>Physical Chemistry Chemical Physics</i> , <b>2007</b> , 9, 4269-74	3.6	26
50	Origin of byproducts during the catalytic autoxidation of cyclohexane. <i>Journal of Physical Chemistry A</i> , <b>2008</b> , 112, 1747-53	2.8	26
49	Silica-immobilized chromium colloids for cyclohexane autoxidation. <i>Angewandte Chemie - International Edition</i> , <b>2006</b> , 45, 7584-8	16.4	26
48	Absolute rate coefficient of the OH + CH <sub>3</sub> C(O)OH reaction at T = 287-802 K. The two faces of pre-reactive H-bonding. <i>Journal of Physical Chemistry A</i> , <b>2006</b> , 110, 12852-9	2.8	26
47	Kinetics of O(1D) + H <sub>2</sub> O and O(1D) + H <sub>2</sub> : absolute rate coefficients and O(3P) yields between 227 and 453 K. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 9213-21	3.6	25
46	Absolute Rate Coefficient of the HCCO + NO Reaction over the Range T= 297-802 K. <i>Journal of Physical Chemistry A</i> , <b>2002</b> , 106, 12242-12247	2.8	25

45	Formation of CH(a4.SIGMA.- and/or X2.PI.) in the Reaction of Ketenyl Radicals with Oxygen Atoms. Determination of the Methylidyne Yield at 290 K and ab Initio Calculations. <i>The Journal of Physical Chemistry</i> , <b>1994</b> , 98, 11988-11996		25
44	Quantum chemical and statistical rate study of the reaction of O(3P) with allene: O-addition and H-abstraction channels. <i>Journal of Physical Chemistry A</i> , <b>2006</b> , 110, 12166-76	2.8	24
43	An experimental and theoretical study of the reaction of ethynyl radicals with nitrogen dioxide (HC≡C+NO <sub>2</sub> ). <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 10996-11008	3.9	24
42	Energetics and chemical bonding of the 1,3,5-tridehydrobenzene triradical and its protonated form. <i>Chemical Physics</i> , <b>2005</b> , 316, 125-140	2.3	24
41	Laser-induced fluorescence of nascent CH from ultraviolet photodissociation of HCCO and the absolute rate coefficient of the HCCO+O <sub>2</sub> reaction over the range T=296-339 K. <i>Journal of Chemical Physics</i> , <b>2001</b> , 114, 10332-10341	3.9	24
40	Theoretical studies on C <sub>2</sub> H+NO reactions: mechanism for HCN+CO and HCO+CN formation. <i>Chemical Physics Letters</i> , <b>1998</b> , 283, 91-96	2.5	21
39	A temperature dependence kinetic study of O(1D) + CH <sub>4</sub> : overall rate coefficient and product yields. <i>Physical Chemistry Chemical Physics</i> , <b>2008</b> , 10, 5714-22	3.6	21
38	Theoretical study of the blue-shifting hydrogen bonds between CH <sub>2</sub> X <sub>2</sub> and CHX <sub>3</sub> (X=F, Cl, Br) and hydrogen peroxide. <i>Journal of Molecular Structure</i> , <b>2006</b> , 792-793, 16-22	3.4	20
37	No Barrier for the Gas-Phase C <sub>2</sub> H + NH <sub>3</sub> Reaction. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 3695-3698	2.8	20
36	Chemistry and deposition in the Model of Atmospheric composition at Global and Regional scales using Inversion Techniques for Trace gas Emissions (MAGRITTE-V1.1) [Part 1: Chemical mechanism. <i>Geoscientific Model Development</i> , <b>2019</b> , 12, 2307-2356	6.3	19
35	Enhanced activity and selectivity in cyclohexane autoxidation by inert H-bond acceptor catalysts. <i>ChemPhysChem</i> , <b>2006</b> , 7, 1142-8	3.2	19
34	Direct ab initio dynamics studies of the reactions of HNO with H and OH radicals. <i>Chemical Physics Letters</i> , <b>2004</b> , 388, 94-99	2.5	19
33	The reaction of acetaldehyde and propionaldehyde with hydroxyl radicals: experimental determination of the primary H <sub>2</sub> O yield at room temperature. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2003</b> , 157, 269-274	4.7	17
32	Atmospheric Vinyl Alcohol to Acetaldehyde Tautomerization Revisited. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 4005-11	6.4	16
31	Ozone Based Atomic Layer Deposition of Hafnium Oxide and Impact of Nitrogen Oxide Species. <i>Journal of the Electrochemical Society</i> , <b>2011</b> , 158, D259	3.9	16
30	Kinetic parameters for gas-phase reactions: experimental and theoretical challenges. <i>Physical Chemistry Chemical Physics</i> , <b>2007</b> , 9, 4071-84	3.6	15
29	Ozone-Based Metal Oxide Atomic Layer Deposition: Impact of N <sub>2</sub> /O <sub>2</sub> Supply Ratio in Ozone Generation. <i>Electrochemical and Solid-State Letters</i> , <b>2010</b> , 13, H176		14
28	Theoretical study of the reaction of the ethynyl radical with ammonia (C <sub>2</sub> H + NH <sub>3</sub> ): hydrogen abstraction versus condensation. <i>Physical Chemistry Chemical Physics</i> , <b>2004</b> , 6, 4111	3.6	13

27	Evaluation of a detailed model of secondary organic aerosol formation from $\alpha$ -pinene against dark ozonolysis experiments. <i>Atmospheric Environment</i> , <b>2010</b> , 44, 5434-5442	5.3	12
26	Temperature and pressure dependent product distribution of the addition of CN radicals to C <sub>2</sub> H <sub>4</sub> . <i>Physical Chemistry Chemical Physics</i> , <b>2003</b> , 5, 5070	3.6	12
25	Electronic Structure Calculations on the Reaction of Vinyl Radical with Nitric Oxide. <i>Journal of Physical Chemistry A</i> , <b>2000</b> , 104, 1905-1914	2.8	12
24	Theoretically derived mechanisms of HPALD photolysis in isoprene oxidation. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 9096-9106	3.6	11
23	Cycloaddition Reactions of CF with Unsaturated Hydrocarbons. Correlation of Activation Energies and Frequency Factors with the Hydrocarbon Ionization Energies. <i>Journal of Physical Chemistry A</i> , <b>1997</b> , 101, 787-793	2.8	11
22	The 5-Dehydro-m-xyllylene Triradical and Its Nitrogen and Phosphorus Derivatives: $\pi$ -Open-Shell Doublet versus Quartet Ground State. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 8411-8418	2.8	11
21	Oxidation of silicon in plasma afterglows: New model of oxide growth including recombination of diffusing O atoms. <i>Journal of Applied Physics</i> , <b>1993</b> , 73, 2477-2485	2.5	11
20	The photolysis of $\beta$ -hydroperoxycarbonyls. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 6970-6979	3.6	10
19	Absolute rate coefficient of the gas-phase reaction between hydroxyl radical (OH) and hydroxyacetone: investigating the effects of temperature and pressure. <i>Journal of Physical Chemistry A</i> , <b>2013</b> , 117, 12208-15	2.8	9
18	Fast (E)-(Z) Isomerization Mechanisms of Substituted Allyloxy Radicals in Isoprene Oxidation. <i>Journal of Physical Chemistry A</i> , <b>2015</b> , 119, 7270-6	2.8	7
17	Theoretical Study of the HOCH <sub>2</sub> OOH + HO <sub>2</sub> Reaction: Detailed Molecular Mechanisms of the Three Reaction Channels. <i>Zeitschrift Fur Physikalische Chemie</i> , <b>2010</b> , 224, 1081-1093	3.1	7
16	Silica-supported chromium oxide: colloids as building blocks. <i>Physical Chemistry Chemical Physics</i> , <b>2007</b> , 9, 5382-6	3.6	7
15	The kinetics of the CF <sub>3</sub> + CF <sub>3</sub> and CF <sub>3</sub> + F combination reactions at 290 K and at He-pressures of approximately 1-6 Torr. <i>Physical Chemistry Chemical Physics</i> , <b>2005</b> , 7, 1187-93	3.6	7
14	Experimental and theoretical studies of the C <sub>2</sub> F <sub>4</sub> + O reaction: nonadiabatic reaction mechanism. <i>Journal of Physical Chemistry A</i> , <b>2005</b> , 109, 9786-94	2.8	7
13	Experimental and theoretical study of the reaction of the ethynyl radical with nitrous oxide, C <sub>2</sub> H + N <sub>2</sub> O. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 7456-70	3.6	6
12	Theoretical and experimental investigation of the C <sub>2</sub> H + SO <sub>2</sub> reaction over the range T = 295-800 K. <i>Chemical Physics Letters</i> , <b>2011</b> , 513, 201-207	2.5	5
11	Absolute rate coefficients of the reactions of CF <sub>2</sub> ( $\beta$ B1) with C <sub>3</sub> H <sub>8</sub> , C <sub>3</sub> H <sub>6</sub> , iso-C <sub>4</sub> H <sub>8</sub> and C <sub>3</sub> H <sub>4</sub> between 295 and 550 K. <i>Physical Chemistry Chemical Physics</i> , <b>2004</b> , 6, 2211-2215	3.6	5
10	Absolute rate coefficients of the reactions of CF <sub>2</sub> ( $\beta$ B1) with NO and H <sub>2</sub> between 287 K and 600 K. <i>Physical Chemistry Chemical Physics</i> , <b>2003</b> , 5, 5405-5408	3.6	5



9	Absolute rate coefficient of the reaction of CF <sub>2</sub> ( $\beta$ B1) with O <sub>2</sub> between 288 and 600 K. <i>Physical Chemistry Chemical Physics</i> , <b>2003</b> , 5, 2376-2380	3.6	5
8	Theoretical study of the kinetics of hydrogen abstraction in reactions of simple hydrogen compounds with triplet difluorocarbene. <i>Chemical Physics Letters</i> , <b>2005</b> , 402, 460-467	2.5	5
7	Absolute rate coefficients over extended temperature ranges and mechanisms of the CF(X(2)Pi) reactions with F(2), Cl(2) and O(2). <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 4319-25	3.6	4
6	Silica-Immobilized Chromium Colloids for Cyclohexane Autoxidation. <i>Angewandte Chemie</i> , <b>2006</b> , 118, 7746-7750	3.6	4
5	Quantum chemical study of the electronic structure of the 1-methylene-3,5-didehydrobenzene triradical (C <sub>7</sub> H <sub>5</sub> ). <i>Chemical Physics Letters</i> , <b>2005</b> , 404, 150-155	2.5	4
4	A model for the plasma anodization of silicon at constant voltage. <i>Journal of Applied Physics</i> , <b>1993</b> , 74, 639-644	2.5	2
3	Quantum chemical and statistical rate investigation of the CF <sub>2</sub> ( $\alpha$ 3B1)+NO(X2Pi) reaction: a fast chemical quenching process. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 6628-36	2.8	1
2	The CH(X $\Sigma$ ) + HO reaction: two transition state kinetics. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 16142-16149	3.6	0
1	Designing a Novel Heterogeneous Catalytic System for Cyclohexane Autoxidation. <i>Studies in Surface Science and Catalysis</i> , <b>2007</b> , 373-376	1.8	