Hongbo Ning

List of Publications by Year
in descending order

		687363	752698
39	500	13	20
papers	citations	h-index	g-index

39	39	39	454
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pressure-dependent kinetics of methyl formate reactions with OH at combustion, atmospheric and interstellar temperatures. Physical Chemistry Chemical Physics, 2018, 20, 26190-26199.	2.8	40
2	Low- and intermediate-temperature oxidation of ethylcyclohexane: A theoretical study. Combustion and Flame, 2015, 162, 4167-4182.	5.2	39
3	In Situ Flame Temperature Measurements Using a Mid-Infrared Two-Line H₂O Laser-Absorption Thermometry. Combustion Science and Technology, 2018, 190, 393-408.	2.3	32
4	An improved study of the uniformity of laminar premixed flames using laser absorption spectroscopy and CFD simulation. Experimental Thermal and Fluid Science, 2020, 112, 110013.	2.7	28
5	Experimental and modeling study of thermal and catalytic cracking of n-decane. Journal of Analytical and Applied Pyrolysis, 2014, 110, 463-469.	5.5	27
6	Pressure-Dependent Kinetics of Initial Reactions in Iso-octane Pyrolysis. Journal of Physical Chemistry A, 2015, 119, 4093-4107.	2.5	25
7	Theoretical and Shock Tube Study of the Rate Constants for Hydrogen Abstraction Reactions of Ethyl Formate. Journal of Physical Chemistry A, 2017, 121, 6304-6313.	2.5	22
8	Chemical kinetics of H-abstractions from dimethyl amine by H, CH₃, OH, and HO₂ radicals with multi-structural torsional anharmonicity. Physical Chemistry Chemical Physics, 2019, 21, 12685-12696.	2.8	21
9	Mid-infrared heterodyne phase-sensitive dispersion spectroscopy in flame measurements. Proceedings of the Combustion Institute, 2019, 37, 1329-1336.	3.9	20
10	Chemical kinetic modeling and shock tube study of methyl propanoate decomposition. Combustion and Flame, 2017, 184, 30-40.	5.2	18
11	Ignition delay time measurements and kinetic modeling of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">CH</mml:mi></mml:mrow><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> by<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">CH</mml:mi></mml:mrow>	6.4	16
12	Exploring the pyrolysis chemistry of prototype aromatic ester phenyl formate: Reaction pathways, thermodynamics and kinetics. Combustion and Flame, 2020, 211, 337-346.	5.2	15
13	Combined Ab Initio, Kinetic Modeling, and Shock Tube Study of the Thermal Decomposition of Ethyl Formate. Journal of Physical Chemistry A, 2017, 121, 6568-6579.	2.5	14
14	Characterization of Temperature and Soot Volume Fraction in Laminar Premixed Flames: Laser Absorption/Extinction Measurement and Two-Dimensional Computational Fluid Dynamics Modeling. Energy & Fuels, 2018, 32, 12962-12970.	5.1	14
15	Benchmarking dual-level MS-Tor and DLPNO-CCSD(T) methods for H-abstraction from methyl pentanoate by an OH radical. Physical Chemistry Chemical Physics, 2019, 21, 20857-20867.	2.8	14
16	A theoretical and shock tube kinetic study on hydrogen abstraction from phenyl formate. Physical Chemistry Chemical Physics, 2018, 20, 21280-21285.	2.8	13
17	Theoretical and kinetic study of reaction C2HÂ+ÂC3H6 on the C5H7 potential energy surface. Theoretical Chemistry Accounts, 2015, 134, 1.	1.4	12
18	Accurate entropy calculation for large flexible hydrocarbons using a multi-structural 2-dimensional torsion method. Physical Chemistry Chemical Physics, 2019, 21, 10003-10010.	2.8	12

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19	Multistructural Variational Reaction Kinetics of the Simplest Unsaturated Methyl Ester: H-Abstraction from Methyl Acrylate by H, OH, CH₃, and HO₂ Radicals. Journal of Physical Chemistry A, 2021, 125, 5103-5116.	2.5	11
20	Progress in Combustion Kinetics. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2016, 32, 131-153.	4.9	10
21	Accurate prediction of bond dissociation energies of large n-alkanes using ONIOM-CCSD(T)/CBS methods. Chemical Physics Letters, 2018, 699, 139-145.	2.6	10
22	Significance of reaction CH3â€¯+â€¯NOâ€¯=â€¯H2CNâ€¯+â€¯OH in two-stage ignition of nitromethane. Fuel, 2019, 256, 115956.	6.4	10
23	Cascaded group-additivity ONIOM: A new method to approach CCSD(T)/CBS energies of large aliphatic hydrocarbons. Combustion and Flame, 2019, 201, 31-43.	5.2	9
24	Kinetic modeling of methyl pentanoate pyrolysis based onab initiocalculations. Physical Chemistry Chemical Physics, 2020, 22, 17978-17986.	2.8	8
25	Direct dynamics of a large complex hydrocarbon reaction system: The reaction of OH with exo-tricyclodecane (the main component of Jet Propellant-10). Combustion and Flame, 2020, 216, 82-91.	5.2	8
26	Shock tube measurement of NO time-histories in nitromethane pyrolysis using a quantum cascade laser at 5.26â€Âµm. Proceedings of the Combustion Institute, 2021, 38, 1745-1752.	3.9	8
27	Ignition characteristics of 1-Nitropropane: Experimental measurements and kinetic modeling. Fuel, 2022, 317, 123385.	6.4	7
28	Temperature and H2O sensing in laminar premixed flames using mid-infrared heterodyne phase-sensitive dispersion spectroscopy. Applied Physics B: Lasers and Optics, 2018, 124, 1.	2.2	6
29	Insight into the low-temperature oxidation of dimethylamine radicals. Proceedings of the Combustion Institute, 2021, 38, 853-860.	3.9	5
30	Abnormal promotion effect of nitromethane on ethane ignition. Combustion and Flame, 2021, 223, 267-270.	5.2	4
31	Implication of Sensitive Reactions to Ignition of Methyl Pentanoate: H-Abstraction Reactions by H and CH3 Radicals. Chemical Research in Chinese Universities, 2021, 37, 711-717.	2.6	4
32	Ignition characteristics of nitromethane-doped ethanol in a heated shock tube. Energetic Materials Frontiers, 2021, 2, 174-180.	3.2	4
33	Accurate reaction barriers and rate constants of H-abstraction from primary, secondary, and tertiary amines by H atom determined with the isodesmic reaction method. Chemical Physics Letters, 2021, 776, 138708.	2.6	3
34	Combustion kinetics of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e3358" altimg="si330.svg"><mml:mi>n</mml:mi></mml:math>-propylamine: Theoretical calculations and ignition delay time measurements. Fuel, 2022, 324, 124710.	6.4	3
35	Reaction pathways and kinetics study on a syngas combustion system: CO + HO2in an H2O environment. Physical Chemistry Chemical Physics, 2020, 22, 5797-5806.	2.8	2
36	Kinetic Calculation and Modeling Study of 1, 3-Butadiene Pyrolysis. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2016, 32, 453-464.	4.9	2

#	Article	IF	Citations
37	Experimental and kinetic modeling study on the ignition characteristics of methyl acrylate and vinyl acetate: Effect of C C double bond. Energy, 2022, 245, 123257.	8.8	2
38	Effects of Anharmonicity, Recrossing, Tunneling, and Pressure on the H-Abstractions from Dimethylamine by Triplets O and O₂. Journal of Physical Chemistry A, 2022, 126, 825-833.	2.5	2
39	A CGA-ONIOM-DFT framework for accurate and efficient determination of thermodynamics and Kinetics: Case study of cyclopentane reaction with hydroxyl radical. Chemical Physics Letters, 2022, 801, 139714.	2.6	0