Qi-Long Yan

List of Publications by Year
in descending order

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		94269	128067
124	4,481	37	60
papers	citations	h-index	g-index

126	126	126	1842
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Anti-sintering behavior and combustion process of aluminum nano particles coated with PTFE: A molecular dynamics study. Defence Technology, 2023, 24, 46-57.	2.1	4
2	Catechol-modified polymers for surface engineering of energetic crystals with reduced sensitivity and enhanced mechanical performance. Applied Surface Science, 2022, 572, 151448.	3.1	8
3	Unique thermal and combustion behaviors of composite propellants containing a high-energy insensitive nitropyrimidine derivative. Combustion and Flame, 2022, 237, 111855.	2.8	7
4	Stability, reactivity and decomposition kinetics of surface passivated Î±-AlH3 crystals. International Journal of Hydrogen Energy, 2022, 47, 8916-8928.	3.8	12
5	Tuning the reactivity of Alâ€“Ni by fine coating of halogen-containing energetic composites. Defence Technology, 2022, 18, 1810-1821.	2.1	6
6	New insight into dynamic mechanical relaxation in N-butyl-N-(2-nitroxy-ethyl) nitramine plasticized nitrocellulose through molecular dynamic simulations. Cellulose, 2022, 29, 1307-1314.	2.4	5
7	Novel powder catalysts of ferrocene-based metal-organic framework and their catalytic performance for thermal decomposition of ammonium perchlorate. Powder Technology, 2022, 397, 117035.	2.1	22
8	Decomposition mechanisms of insensitive 2D energetic polymer TAGP using ReaxFF molecular dynamics simulation combined with Pyro-GC/MS experiments. Journal of Analytical and Applied Pyrolysis, 2022, 162, 105453.	2.6	6
9	Thermal reactivity of metastable metal-based fuel Al/Co/AP: Mutual interaction mechanisms of the components. Fuel, 2022, 315, 123203.	3.4	20
10	Thermal decomposition and combustion behavior of solid propellant containing Si-based composites. Combustion and Flame, 2022, 240, 111959.	2.8	16
11	Thermal interactions between hybrid HMX/ANPyO cocrystals and commonly used propellant ingredients. Energetic Materials Frontiers, 2022, , .	1.3	0
12	Decomposition and combustion of HTPB-based composite propellants containing intercalated HMX crystals with desired high energy but low burn rate. Fuel, 2022, 321, 124067.	3.4	14
13	Phase Equilibrium and Thermodynamics Studies on Dissolving Processes of Energetic Compounds: A Brief Review. Crystal Growth and Design, 2022, 22, 909-936.	1.4	1
14	Detailed high temperature pyrolysis mechanisms of stabilized hybrid HMX crystals by intercalation of 2D energetic polymer. Fuel, 2022, 324, 124646.	3.4	10
15	Enhancing the thermal reactivity of AP crystals by coating of Al-based bi-metal nanocomposites. Fuel, 2022, 324, 124588.	3.4	6
16	Multi-scale modified nitramine crystals with conjugated structure intercalation and thin-layer catalyst coating for well-controlled energy release rate. Chemical Engineering Journal, 2022, 448, 137730.	6.6	6
17	Comparative study on compatibility of graphene-based catalysts with energetic ingredients by using DSC and VST methods. Journal of Thermal Analysis and Calorimetry, 2021, 144, 1139-1149.	2.0	7
18	Advanced crystalline energetic materials modified by coating/intercalation techniques. Chemical Engineering Journal, 2021, 417, 128044.	6.6	40

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19	High-energy Al/graphene oxide/CuFe2O4 nanocomposite fabricated by self-assembly: Evaluation of heat release, ignition behavior, and catalytic performance. Energetic Materials Frontiers, 2021, 2, 22-31.	1.3	26
20	Comparative study on thermal behavior of three highly thermostable energetic materials: z-TACOT, PYX, and TNBP. FirePhysChem, 2021, 1, 61-69.	1.5	13
21	Further enhancing thermal stability of thermostable energetic derivatives of dibenzotetraazapentene by polydopamine/graphene oxide coating. Applied Surface Science, 2021, 543, 148825.	3.1	21
22	Assembling of Hybrid Nano-sized HMX/ANPyO Cocrystals Intercalated with 2D High Nitrogen Materials. Crystal Growth and Design, 2021, 21, 4488-4499.	1.4	13
23	Thermal decomposition and combustion behavior of ion conductive PEO-PAN based energetic composites. Combustion and Flame, 2021, 230, 111421.	2.8	12
24	Enhancing the stability and combustion of a nanofluid fuel with polydopamine-coated aluminum nanoparticles. Chemical Engineering Journal, 2021, 418, 129527.	6.6	37
25	Preparation of CNTs Coated with Polydopamineâ€“Ni Complexes and Their Catalytic Effects on the Decomposition of CL-20. ACS Omega, 2021, 6, 22866-22875.	1.6	5
26	Advanced preparation and processing techniques for high energy fuel AlH3. Chemical Engineering Journal, 2021, 421, 129753.	6.6	30
27	Catalyzed combustion of a nanofluid fuel droplet containing polydopamine-coated metastable intermixed composite n-Al/CuO. Aerospace Science and Technology, 2021, 118, 107005.	2.5	16
28	Surface fluorination of n-Al particles with improved combustion performance and adjustable reaction kinetics. Chemical Engineering Journal, 2021, 425, 131619.	6.6	17
29	Fabrication and combustion behavior of high volumetric energy density core-shell Si/Ta -based nano-energetic composites. Journal of Alloys and Compounds, 2021, 887, 161443.	2.8	3
30	Enhanced thermal and energetic properties of NC-based nanocomposites with silane functionalized GO. Dalton Transactions, 2021, 50, 17766-17773.	1.6	5
31	Isothermal decomposition of HMX before and after thermally induced Î²â€“Î´ crystal transformation. CrystEngComm, 2021, 23, 7698-7705.	1.3	2
32	Energetic metastable n-Al@PVDF/EMOF composite nanofibers with improved combustion performances. Chemical Engineering Journal, 2020, 383, 123146.	6.6	66
33	Incorporation of high explosives into nano-aluminum based microspheres to improve reactivity. Chemical Engineering Journal, 2020, 383, 123110.	6.6	50
34	Metastable energetic nanocomposites of MOF-activated aluminum featured with multi-level energy releases. Chemical Engineering Journal, 2020, 381, 122623.	6.6	79
35	Enhanced catalytic performance on the thermal decomposition of TKX-50 by Fe3O4 nanoparticles highly dispersed on rGO. Journal of Thermal Analysis and Calorimetry, 2020, 140, 1759-1767.	2.0	17
36	Metastable intermixed Core-shell Al@M(IO3)x nanocomposites with improved combustion efficiency by using tannic acid as a functional interfacial layer. Chemical Engineering Journal, 2020, 384, 123369.	6.6	32

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37	Molecular and Crystal Features of Thermostable Energetic Materials: Guidelines for Architecture of â€œBridgedâ€•Compounds. ACS Central Science, 2020, 6, 54-75.	5.3	89
38	Controlled reactivity of metastable n-Al@Bi(IO3)3 by employment of tea polyphenols as an interfacial layer. Chemical Engineering Journal, 2020, 381, 122747.	6.6	29
39	Nitramine-Based Energetic Cocrystals with Improved Stability and Controlled Reactivity. Crystal Growth and Design, 2020, 20, 8124-8147.	1.4	36
40	Catalytic effect of 2D-layered energetic hybrid crystals on the thermal decomposition of 3-nitro-2,4-dihydro-3H-1,2,4-triazol-5-one (NTO). Thermochimica Acta, 2020, 692, 178747.	1.2	42
41	Enhancing the Combustion Performance of Metastable Al@AP/PVDF Nanocomposites by Doping with Graphene Oxide. Engineering, 2020, 6, 1019-1027.	3.2	33
42	Control the combustion behavior of solid propellants by using core-shell Al-based composites. Combustion and Flame, 2020, 221, 441-452.	2.8	51
43	Unusual Cuâ€“Co/GO Composite with Special High Organic Content Synthesized by an in Situ Self-Assembly Approach: Pyrolysis and Catalytic Decomposition on Energetic Materials. ACS Applied Materials & Interfaces, 2020, 12, 28496-28509.	4.0	38
44	Combustion performance of composite propellants containing core-shell Al@M(IO3) metastable composites. Combustion and Flame, 2020, 219, 33-43.	2.8	21
45	Highly Thermostable Insensitive Energetic Polynitrophenyl-Substituted Furazan (Furoxan)-Annelated Azepines. ACS Applied Energy Materials, 2020, 3, 7129-7137.	2.5	11
46	â€œTandem-actionâ€•ferrocenyl iodocuprates promoting low temperature hypergolic ignitions of â€œgreenâ€• EILâ€“H₂O₂bipropellants. Journal of Materials Chemistry A, 2020, 8, 14661-14670.	5.2	21
47	Thermostable Energetic Coordination Polymers Based on Functionalized GO and Their Catalytic Effects on the Decomposition of AP and RDX. Journal of Physical Chemistry C, 2020, 124, 5182-5195.	1.5	53
48	The structural diversity of hybrid qy-HMX crystals with constraint of 2D dopants and the resulted changes in thermal reactivity. Chemical Engineering Journal, 2020, 390, 124565.	6.6	31
49	Stabilization of Îµ-CL-20 crystals by a minor interfacial doping of polydopamine-coated graphene oxide. Applied Surface Science, 2020, 510, 145454.	3.1	40
50	Unexpected burning rate independence of composite propellants on the pressure by fine interfacial control of fuel/oxidizer. Chemical Engineering Journal, 2020, 388, 124320.	6.6	51
51	Melamine N-oxide based self-assembled energetic materials with balanced energy & sensitivity and enhanced combustion behavior. Chemical Engineering Journal, 2020, 395, 125114.	6.6	48
52	Recent advances on the crystallization engineering of energetic materials. Energetic Materials Frontiers, 2020, 1, 141-156.	1.3	53
53	Hybrid RDX crystals assembled under constraint of 2D materials with largely reduced sensitivity and improved energy density. Journal of Hazardous Materials, 2020, 398, 122842.	6.5	21
54	Rapid and Highâ€Yielding Formation of CLâ€20/DNDAP Cocrystals via Selfâ€Assembly in Slightly Solubleâ€Medium with Improved Sensitivity and Thermal Stability. Propellants, Explosives, Pyrotechnics, 2019, 44, 1242-1253.	1.0	10

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55	High density assembly of energetic molecules under the constraint of defected 2D materials. Journal of Materials Chemistry A, 2019, 7, 17806-17814.	5.2	51
56	The Catalytic Effect of CuO-Doped Activated Carbon on Thermal Decomposition and Combustion of AN/Mg/NC Composite. Journal of Physical Chemistry C, 2019, 123, 22941-22948.	1.5	12
57	Thermal behavior of graphene oxide and its stabilization effects on transition metal complexes of triaminoguanidine. Journal of Hazardous Materials, 2019, 368, 404-411.	6.5	34
58	Gaseous Products Evolution Analyses for Catalytic Decomposition of AP by Graphene-Based Additives. Nanomaterials, 2019, 9, 801.	1.9	23
59	Fabrication of Si@AP/NC metastable intermixed nanocomposites (MICs) by electrospray method and their thermal reactivity. Advanced Composites and Hybrid Materials, 2019, 2, 361-372.	9.9	21
60	Mussel-inspired polydopamine-directed crystal growth of core-shell n-Al@PDA@CuO metastable intermixed composites. Chemical Engineering Journal, 2019, 369, 1093-1101.	6.6	127
61	Tuning the crystal morphology and catalytic behavior of graphene-templated energetic bis-tetrazole copper coordination polymers. Advanced Composites and Hybrid Materials, 2019, 2, 289-300.	9.9	24
62	Transformation of Combustion Nanocatalysts inside Solid Rocket Motor under Various Pressures. Nanomaterials, 2019, 9, 381.	1.9	6
63	Kinetics for Inhibited Polymorphic Transition of HMX Crystal after Strong Surface Confinement. Journal of Physical Chemistry C, 2019, 123, 11011-11019.	1.5	37
64	Fabrication of high-performance graphene oxide doped PVDF/CuO/Al nanocomposites via electrospinning. Chemical Engineering Journal, 2019, 368, 129-137.	6.6	135
65	Effects of Nanosized Metals and Metal Oxides on the Thermal Behaviors of Insensitive High Energetic Compound ICM-102. Journal of Physical Chemistry C, 2019, 123, 31108-31118.	1.5	11
66	Study on the thermal decomposition mechanism of graphene oxide functionalized with triaminoguanidine (GO-TAG) by molecular reactive dynamics and experiments. RSC Advances, 2019, 9, 33268-33281.	1.7	12
67	Insensitive Energetic Materials Containing Two-Dimensional Nanostructures as Building Blocks. , 2019, , 81-111.		5
68	Photosensitive but mechanically insensitive graphene oxide-carbohydrazide-metal hybrid crystalline energetic nanomaterials. Chemical Engineering Journal, 2018, 338, 240-247.	6.6	28
69	Crystal lattice free volume in a study of initiation reactivity of nitramines: Friction sensitivity. Defence Technology, 2018, 14, 132-136.	2.1	7
70	Sensitivity and Stability Improvements of NEPE Propellants by Inclusion of FOXâ€7. Propellants, Explosives, Pyrotechnics, 2018, 43, 308-314.	1.0	19
71	Decomposition kinetics and thermolysis products analyses of energetic diaminotriazole-substituted tetrazine structures. Thermochimica Acta, 2018, 667, 19-26.	1.2	8
72	Crystal lattice free volume in a study of initiation reactivity of nitramines: Impact sensitivity. Defence Technology, 2018, 14, 93-98.	2.1	12

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73	The correlations among detonation velocity, heat of combustion, thermal stability and decomposition kinetics of nitric esters. Journal of Thermal Analysis and Calorimetry, 2018, 131, 1391-1403.	2.0	15
74	Iodocuprate-containing ionic liquids as promoters for green propulsion. Journal of Materials Chemistry A, 2018, 6, 22819-22829.	5.2	44
75	Thermal Behavior and Thermolysis Mechanisms of Ammonium Perchlorate under the Effects of Graphene Oxide-Doped Complexes of Triaminoguanidine. Journal of Physical Chemistry C, 2018, 122, 26956-26964.	1.5	46
76	Preparation and Evaluation of Effective Combustion Catalysts Based on Cu(I)/Pb(II) or Cu(II)/Bi(II) Nanocomposites Carried by Graphene Oxide (GO). Propellants, Explosives, Pyrotechnics, 2018, 43, 1087-1095.	1.0	19
77	Effects of closo-icosahedral periodoborane salts on hypergolic reactions of 70% H₂O₂ with energetic ionic liquids. Journal of Materials Chemistry A, 2018, 6, 19989-19997.	5.2	43
78	Reaction kinetics and a physical model of the charring layer by depositing Al2O3 at ultra-high temperatures. Physical Chemistry Chemical Physics, 2018, 20, 24418-24426.	1.3	5
79	Tuning the Reactivity of Metastable Intermixed Composite n-Al/PTFE by Polydopamine Interfacial Control. ACS Applied Materials & Interfaces, 2018, 10, 32849-32858.	4.0	126
80	Stabilizing Metastable Polymorphs of Metalâ€“Organic Frameworks via Encapsulation of Graphene Oxide and Mechanistic Studies. ACS Applied Materials & Interfaces, 2018, 10, 32828-32837.	4.0	16
81	Highly Reactive Metastable Intermixed Composites (MICs): Preparation and Characterization. Advanced Materials, 2018, 30, e1706293.	11.1	217
82	Catalytic Reactivity of Graphene Oxide Stabilized Transition Metal Complexes of Triaminoguanidine on Thermolysis of RDX. Journal of Physical Chemistry C, 2018, 122, 14714-14724.	1.5	48
83	Combustion of energetic iodine-rich coordination polymer â€“ Engineering of new biocidal materials. Chemical Engineering Journal, 2018, 350, 1084-1091.	6.6	18
84	Unravelling the Effect of Anthraquinone Metal Salts as Wide-range Plateau Catalysts to Enhance the Combustion Properties of Solid Propellants. Central European Journal of Energetic Materials, 2018, 15, 376-390.	0.5	4
85	Bioinspired interfacial reinforcement of polymer-based energetic composites with a high loading of solid explosive crystals. Journal of Materials Chemistry A, 2017, 5, 13499-13510.	5.2	83
86	New findings on thermal degradation properties of fluoropolymers. Journal of Thermal Analysis and Calorimetry, 2017, 128, 675-685.	2.0	13
87	Catalytic effects of nano additives on decomposition and combustion of RDX-, HMX-, and AP-based energetic compositions. Progress in Energy and Combustion Science, 2016, 57, 75-136.	15.8	283
88	Formation of Highly Thermostable Copper-Containing Energetic Coordination Polymers Based on Oxidized Triaminoguanidine. ACS Applied Materials & Interfaces, 2016, 8, 21674-21682.	4.0	25
89	Highly Thermostable and Insensitive Energetic Hybrid Coordination Polymers Based on Graphene Oxideâ€“Cu(II) Complex. Chemistry of Materials, 2016, 28, 6118-6126.	3.2	85
90	A layered 2D triaminoguanidineâ€“glyoxal polymer and its transition metal complexes as novel insensitive energetic nanomaterials. Journal of Materials Chemistry A, 2016, 4, 18401-18408.	5.2	43

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91	Highly insensitive and thermostable energetic coordination nanomaterials based on functionalized graphene oxides. Journal of Materials Chemistry A, 2016, 4, 9941-9948.	5.2	58
92	Crystal structure and thermal behaviors of the tetrapotassium salt of octahydroimidazo-[4,5-d]imidazol-1,3,4,6-tetrasulfonic acid (TACOS-K). Journal of Thermal Analysis and Calorimetry, 2016, 126, 391-397.	2.0	1
93	Highly energetic compositions based on functionalized carbon nanomaterials. Nanoscale, 2016, 8, 4799-4851.	2.8	290
94	Thermobaric effects formed by aluminum foils enveloping cylindrical charges. Combustion and Flame, 2016, 166, 148-157.	2.8	10
95	Multistep Thermolysis Mechanisms of Azido-s-triazine Derivatives and Kinetic Compensation Effects for the Rate-Limiting Processes. Journal of Physical Chemistry C, 2015, 119, 14861-14872.	1.5	22
96	Novel nitrogen-rich energetic macromolecules based on 3,6-dihydrazinyl-1,2,4,5-tetrazine. RSC Advances, 2015, 5, 106971-106980.	1.7	9
97	Preparation, morphologies and thermal behavior of high nitrogen compound 2-amino-4,6-diazido-s-triazine and its derivatives. Thermochimica Acta, 2015, 604, 106-114.	1.2	15
98	Thermal behavior of 1,3,5-trinitroso-1,3,5-triazinane and its melt-castable mixtures with cyclic nitramines. Thermochimica Acta, 2015, 615, 51-60.	1.2	8
99	The mechanisms for desensitization effect of synthetic polymers on BCHMX: Physical models and decomposition pathways. Journal of Hazardous Materials, 2015, 294, 145-157.	6.5	10
100	Thermal behavior and decomposition kinetics of ETN and its mixtures with PETN and RDX. Journal of Thermal Analysis and Calorimetry, 2014, 115, 289-299.	2.0	24
101	The effect of polymer matrices on the thermal hazard properties of RDX-based PBXs by using model-free and combined kinetic analysis. Journal of Hazardous Materials, 2014, 271, 185-195.	6.5	34
102	Multi-stage decomposition of 5-aminotetrazole derivatives: kinetics and reaction channels for the rate-limiting steps. Physical Chemistry Chemical Physics, 2014, 16, 24282-24291.	1.3	31
103	The Mitigation Effect of Synthetic Polymers on Initiation Reactivity of CL-20: Physical Models and Chemical Pathways of Thermolysis. Journal of Physical Chemistry C, 2014, 118, 22881-22895.	1.5	46
104	Synthesis and thermal behaviors of 1,8-dihydroxy-4,5-dinitroanthraquinone barium salt. Journal of Analytical and Applied Pyrolysis, 2014, 105, 295-300.	2.6	12
105	Notes on the use of the vacuum stability test in the study of initiation reactivity of attractive cyclic nitramines in the C4 matrix. Journal of Thermal Analysis and Calorimetry, 2013, 112, 1433-1437.	2.0	40
106	The effect of crystal structure on the thermal reactivity of CL-20 and its C4 bonded explosives (I): thermodynamic properties and decomposition kinetics. Journal of Thermal Analysis and Calorimetry, 2013, 112, 823-836.	2.0	54
107	The effect of crystal structure on the thermal reactivity of CL-20 and its C4-bonded explosives. Journal of Thermal Analysis and Calorimetry, 2013, 112, 837-849.	2.0	33
108	The effect of molecular structure on thermal stability, decomposition kinetics and reaction models of nitric esters. Thermochimica Acta, 2013, 566, 137-148.	1.2	40

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109	Theoretical evaluation of sensitivity and thermal stability for high explosives based on quantum chemistry methods: A brief review. International Journal of Quantum Chemistry, 2013, 113, 1049-1061.	1.0	110
110	Note on the use of the vacuum stability test in the study of initiation reactivity of attractive cyclic nitramines in Formex P1 matrix. Journal of Thermal Analysis and Calorimetry, 2013, 111, 1503-1506.	2.0	27
111	Non-isothermal decomposition behavior of Fluorel bonded explosives containing attractive cyclic nitramines. Thermochimica Acta, 2013, 574, 10-18.	1.2	40
112	Noniso-thermal analysis of C4 bonded explosives containing different cyclic nitramines. Thermochimica Acta, 2013, 556, 6-12.	1.2	33
113	Thermal behavior and decomposition kinetics of Viton A bonded explosives containing attractive cyclic nitramines. Thermochimica Acta, 2013, 562, 56-64.	1.2	64
114	Thermal behavior and decomposition kinetics of Formex-bonded explosives containing different cyclic nitramines. Journal of Thermal Analysis and Calorimetry, 2013, 111, 1419-1430.	2.0	53
115	Thermodynamic properties, decomposition kinetics and reaction models of BCHMX and its Formex bonded explosive. Thermochimica Acta, 2012, 547, 150-160.	1.2	35
116	Effect of potassium chlorate on thermal decomposition of cyclotrimethylenetrinitramine (RDX). Journal of Analytical and Applied Pyrolysis, 2012, 93, 160-164.	2.6	19
117	Recent advances in thermal analysis and stability evaluation of insensitive plastic bonded explosives (PBXs). Thermochimica Acta, 2012, 537, 1-12.	1.2	129
118	Combustion efficiency and pyrochemical properties of micron-sized metal particles as the components of modified double-base propellant. Acta Astronautica, 2011, 68, 1098-1112.	1.7	49
119	Thermal Behavior and Thermolysis Kinetics of the Explosive Transâ€1,4,5,8â€Tetranitroâ€1,4,5,8â€Tetraazadecalin (TNAD). Propellants, Explosives, Pyrotechnics, 2009, 34, 357-362.	1.0	2
120	Combustion mechanism of double-base propellant containing nitrogen heterocyclic nitroamines (I): The effect of heat and mass transfer to the burning characteristics. Combustion and Flame, 2009, 156, 633-641.	2.8	55
121	Combustion mechanism of double-base propellant containing nitrogen heterocyclic nitroamines (II): The temperature distribution of the flame and its chemical structure. Acta Astronautica, 2009, 64, 602-614.	1.7	31
122	Thermal decomposition and kinetics studies on 1,4-dinitropiperazine (DNP). Journal of Hazardous Materials, 2008, 151, 515-521.	6.5	10
123	Compatibility study of trans-1,4,5,8-tetranitro-1,4,5,8-tetraazadecalin (TNAD) with some energetic components and inert materials. Journal of Hazardous Materials, 2008, 160, 529-534.	6.5	59
124	Toughening Effect of Oxiraneâ€Tetrahydrofuran Polyether (PEOT) on Blended and Crossâ€Linked Nitrocellulose. Propellants, Explosives, Pyrotechnics, 0, , .	1.0	0