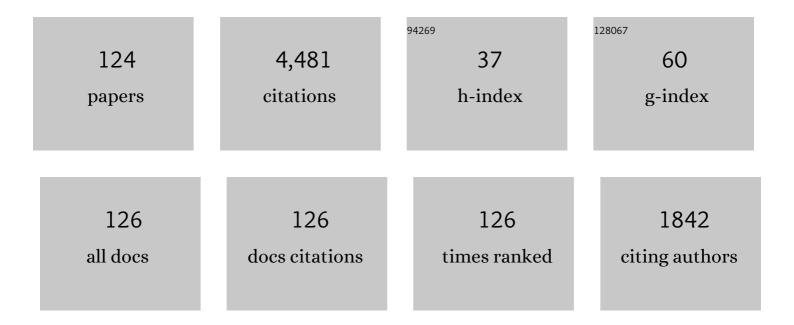
Qi-Long Yan

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Highly energetic compositions based on functionalized carbon nanomaterials. Nanoscale, 2016, 8, 4799-4851.	2.8	290
2	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
3	Highly Reactive Metastable Intermixed Composites (MICs): Preparation and Characterization. Advanced Materials, 2018, 30, e1706293.	11.1	217
4	Fabrication of high-performance graphene oxide doped PVDF/CuO/Al nanocomposites via electrospinning. Chemical Engineering Journal, 2019, 368, 129-137.	6.6	135
5	Recent advances in thermal analysis and stability evaluation of insensitive plastic bonded explosives (PBXs). Thermochimica Acta, 2012, 537, 1-12.	1.2	129
6	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
7	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
8	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
9	Molecular and Crystal Features of Thermostable Energetic Materials: Guidelines for Architecture of "Bridged―Compounds. ACS Central Science, 2020, 6, 54-75.	5.3	89
10	Highly Thermostable and Insensitive Energetic Hybrid Coordination Polymers Based on Graphene Oxide–Cu(II) Complex. Chemistry of Materials, 2016, 28, 6118-6126.	3.2	85
11	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
12	Metastable energetic nanocomposites of MOF-activated aluminum featured with multi-level energy releases. Chemical Engineering Journal, 2020, 381, 122623.	6.6	79
13	Energetic metastable n-Al@PVDF/EMOF composite nanofibers with improved combustion performances. Chemical Engineering Journal, 2020, 383, 123146.	6.6	66
14	Thermal behavior and decomposition kinetics of Viton A bonded explosives containing attractive cyclic nitramines. Thermochimica Acta, 2013, 562, 56-64.	1.2	64
15	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
16	Highly insensitive and thermostable energetic coordination nanomaterials based on functionalized graphene oxides. Journal of Materials Chemistry A, 2016, 4, 9941-9948.	5.2	58
17	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
18	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

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19	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
20	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
21	Recent advances on the crystallization engineering of energetic materials. Energetic Materials Frontiers, 2020, 1, 141-156.	1.3	53
22	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
23	Control the combustion behavior of solid propellants by using core-shell Al-based composites. Combustion and Flame, 2020, 221, 441-452.	2.8	51
24	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
25	Incorporation of high explosives into nano-aluminum based microspheres to improve reactivity. Chemical Engineering Journal, 2020, 383, 123110.	6.6	50
26	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
27	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
28	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
29	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
30	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
31	lodocuprate-containing ionic liquids as promoters for green propulsion. Journal of Materials Chemistry A, 2018, 6, 22819-22829.	5.2	44
32	A layered 2D triaminoguanidine–glyoxal polymer and its transition metal complexes as novel insensitive energetic nanomaterials. Journal of Materials Chemistry A, 2016, 4, 18401-18408.	5.2	43
33	Effects of <i>closo</i> -icosahedral periodoborane salts on hypergolic reactions of 70% H ₂ O ₂ with energetic ionic liquids. Journal of Materials Chemistry A, 2018, 6, 19989-19997.	5.2	43
34	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
35	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
36	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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37	Non-isothermal decomposition behavior of Fluorel bonded explosives containing attractive cyclic nitramines. Thermochimica Acta, 2013, 574, 10-18.	1.2	40
38	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
39	Advanced crystalline energetic materials modified by coating/intercalation techniques. Chemical Engineering Journal, 2021, 417, 128044.	6.6	40
40	Unusual Cu–Co/GO Composite with Special High Organic Content Synthesized by an <i>in Situ</i> Self-Assembly Approach: Pyrolysis and Catalytic Decomposition on Energetic Materials. ACS Applied Materials & Interfaces, 2020, 12, 28496-28509.	4.0	38
41	Kinetics for Inhibited Polymorphic Transition of HMX Crystal after Strong Surface Confinement. Journal of Physical Chemistry C, 2019, 123, 11011-11019.	1.5	37
42	Enhancing the stability and combustion of a nanofluid fuel with polydopamine-coated aluminum nanoparticles. Chemical Engineering Journal, 2021, 418, 129527.	6.6	37
43	Nitramine-Based Energetic Cocrystals with Improved Stability and Controlled Reactivity. Crystal Growth and Design, 2020, 20, 8124-8147.	1.4	36
44	Thermodynamic properties, decomposition kinetics and reaction models of BCHMX and its Formex bonded explosive. Thermochimica Acta, 2012, 547, 150-160.	1.2	35
45	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
46	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
47	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
48	Noniso-thermal analysis of C4 bonded explosives containing different cyclic nitramines. Thermochimica Acta, 2013, 556, 6-12.	1.2	33
49	Enhancing the Combustion Performance of Metastable Al@AP/PVDF Nanocomposites by Doping with Graphene Oxide. Engineering, 2020, 6, 1019-1027.	3.2	33
50	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
51	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
52	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
53	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
54	Advanced preparation and processing techniques for high energy fuel AlH3. Chemical Engineering Journal, 2021, 421, 129753.	6.6	30

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55	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
56	Photosensitive but mechanically insensitive graphene oxide-carbohydrazide-metal hybrid crystalline energetic nanomaterials. Chemical Engineering Journal, 2018, 338, 240-247.	6.6	28
57	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
58	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
59	Formation of Highly Thermostable Copper-Containing Energetic Coordination Polymers Based on Oxidized Triaminoguanidine. ACS Applied Materials & Interfaces, 2016, 8, 21674-21682.	4.0	25
60	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
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	Gaseous Products Evolution Analyses for Catalytic Decomposition of AP by Graphene-Based Additives. Nanomaterials, 2019, 9, 801.	1.9	23
63	Multistep Thermolysis Mechanisms of Azido- <i>s</i> -triazine Derivatives and Kinetic Compensation Effects for the Rate-Limiting Processes. Journal of Physical Chemistry C, 2015, 119, 14861-14872.	1.5	22
64	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
65	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
66	Combustion performance of composite propellants containing core-shell Al@M(IO3) metastable composites. Combustion and Flame, 2020, 219, 33-43.	2.8	21
67	"Tandem-action―ferrocenyl iodocuprates promoting low temperature hypergolic ignitions of "green― ElL–H ₂ O ₂ bipropellants. Journal of Materials Chemistry A, 2020, 8, 14661-14670.	5.2	21
68	Further enhancing thermal stability of thermostable energetic derivatives of dibenzotetraazapentene by polydopamine/graphene oxide coating. Applied Surface Science, 2021, 543, 148825.	3.1	21
69	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
70	Thermal reactivity of metastable metal-based fuel Al/Co/AP: Mutual interaction mechanisms of the components. Fuel, 2022, 315, 123203.	3.4	20
71	Effect of potassium chlorate on thermal decomposition of cyclotrimethylenetrinitramine (RDX). Journal of Analytical and Applied Pyrolysis, 2012, 93, 160-164.	2.6	19
72	Sensitivity and Stability Improvements of NEPE Propellants by Inclusion of FOXâ€7. Propellants, Explosives, Pyrotechnics, 2018, 43, 308-314.	1.0	19

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73	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
74	Combustion of energetic iodine-rich coordination polymer – Engineering of new biocidal materials. Chemical Engineering Journal, 2018, 350, 1084-1091.	6.6	18
75	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
76	Surface fluorination of n-Al particles with improved combustion performance and adjustable reaction kinetics. Chemical Engineering Journal, 2021, 425, 131619.	6.6	17
77	Stabilizing Metastable Polymorphs of Metal–Organic Frameworks via Encapsulation of Graphene Oxide and Mechanistic Studies. ACS Applied Materials & Interfaces, 2018, 10, 32828-32837.	4.0	16
78	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
79	Thermal decomposition and combustion behavior of solid propellant containing Si-based composites. Combustion and Flame, 2022, 240, 111959.	2.8	16
80	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
81	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
82	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
83	New findings on thermal degradation properties of fluoropolymers. Journal of Thermal Analysis and Calorimetry, 2017, 128, 675-685.	2.0	13
84	Comparative study on thermal behavior of three highly thermostable energetic materials: z-TACOT, PYX, and TNBP. FirePhysChem, 2021, 1, 61-69.	1.5	13
85	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
86	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
87	Crystal lattice free volume in a study of initiation reactivity of nitramines: Impact sensitivity. Defence Technology, 2018, 14, 93-98.	2.1	12
88	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
89	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
90	Thermal decomposition and combustion behavior of ion conductive PEO-PAN based energetic composites. Combustion and Flame, 2021, 230, 111421.	2.8	12

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91	Stability, reactivity and decomposition kinetics of surface passivated α-AlH3 crystals. International Journal of Hydrogen Energy, 2022, 47, 8916-8928.	3.8	12
92	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
93	Highly Thermostable Insensitive Energetic Polynitrophenyl-Substituted Furazan (Furoxan)-Annelated Azepines. ACS Applied Energy Materials, 2020, 3, 7129-7137.	2.5	11
94	Thermal decomposition and kinetics studies on 1,4-dinitropiperazine (DNP). Journal of Hazardous Materials, 2008, 151, 515-521.	6.5	10
95	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
96	Thermobaric effects formed by aluminum foils enveloping cylindrical charges. Combustion and Flame, 2016, 166, 148-157.	2.8	10
97	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
98	Detailed high temperature pyrolysis mechanisms of stabilized hybrid HMX crystals by intercalation of 2D energetic polymer. Fuel, 2022, 324, 124646.	3.4	10
99	Novel nitrogen-rich energetic macromolecules based on 3,6-dihydrazinyl-1,2,4,5-tetrazine. RSC Advances, 2015, 5, 106971-106980.	1.7	9
100	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
101	Decomposition kinetics and thermolysis products analyses of energetic diaminotriazole-substituted tetrazine structures. Thermochimica Acta, 2018, 667, 19-26.	1.2	8
102	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
103	Crystal lattice free volume in a study of initiation reactivity of nitramines: Friction sensitivity. Defence Technology, 2018, 14, 132-136.	2.1	7
104	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
105	Unique thermal and combustion behaviors of composite propellants containing a high-energy insensitive nitropyrimidine derivative. Combustion and Flame, 2022, 237, 111855.	2.8	7
106	Transformation of Combustion Nanocatalysts inside Solid Rocket Motor under Various Pressures. Nanomaterials, 2019, 9, 381.	1.9	6
107	Tuning the reactivity of Al–Ni by fine coating of halogen-containing energetic composites. Defence Technology, 2022, 18, 1810-1821.	2.1	6
108	Decomposition mechanisms of insensitive 2D energetic polymer TACP using ReaxFF molecular dynamics simulation combined with Pyro-GC/MS experiments. Journal of Analytical and Applied Pyrolysis, 2022, 162, 105453.	2.6	6

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109	Enhancing the thermal reactivity of AP crystals by coating of Al-based bi-metal nanocomposites. Fuel, 2022, 324, 124588.	3.4	6
110	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
111	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
112	Insensitive Energetic Materials Containing Two-Dimensional Nanostructures as Building Blocks. , 2019, , 81-111.		5
113	Preparation of CNTs Coated with Polydopamine–Ni Complexes and Their Catalytic Effects on the Decomposition of CL-20. ACS Omega, 2021, 6, 22866-22875.	1.6	5
114	Enhanced thermal and energetic properties of NC-based nanocomposites with silane functionalized GO. Dalton Transactions, 2021, 50, 17766-17773.	1.6	5
115	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
116	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
117	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
118	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
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	Isothermal decomposition of HMX before and after thermally induced β–Î′ crystal transformation. CrystEngComm, 2021, 23, 7698-7705.	1.3	2
121	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
122	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
123	Thermal interactions between hybrid HMX/ANPyO cocrystals and commonly used propellant ingredients. Energetic Materials Frontiers, 2022, , .	1.3	0
124	Toughening Effect of Oxiraneâ€Tetrahydrofuran Polyether (PEOT) on Blended and Crossâ€Linked Nitrocellulose. Propellants, Explosives, Pyrotechnics, 0, , .	1.0	0