

# Lingxin Kong

## List of Publications by Year in descending order

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103  
papers

1,256  
citations

331259

21  
h-index

525886

27  
g-index

122  
all docs

122  
docs citations

122  
times ranked

644  
citing authors

#	ARTICLE	IF	CITATIONS
1	Advances in Molten Salt Synthesis of Non-oxide Materials. Energy and Environmental Materials, 2023, 6, .	7.3	13
2	Promoting Homogeneous Interfacial Li <sup>+</sup> Migration by Using a Facile N <sub>2</sub> Plasma Strategy for All-Solid-State Lithium-Metal Batteries. Advanced Functional Materials, 2022, 32, .	7.8	11
3	Thermodynamic and kinetic analyses of vacuum synthesis of AlN by the alumina carbothermal reduction nitridation method. Journal of the American Ceramic Society, 2022, 105, 3850-3861.	1.9	4
4	The lead removal evolution from hazardous waste cathode ray tube funnel glass under enhancement of red mud melting and synthesizing value-added glass-ceramics via reutilization of silicate resources. Journal of Hazardous Materials, 2022, 429, 128334.	6.5	5
5	Vapor-Liquid Equilibria for Zinc-Nickel Binary Alloy System: Measurement and Modeling Using Simplified Molecular Interaction Volume Model. Journal of Solution Chemistry, 2022, 51, 384.	0.6	0
6	Phase Relations in the CaO-B <sub>2</sub> O <sub>3</sub> -Sc <sub>2</sub> O <sub>3</sub> Ternary System. Journal of Phase Equilibria and Diffusion, 2022, 43, 98-108.	0.5	0
7	Preparation of Antimony Sulfide and Enrichment of Gold by Sulfuration-Volatilization from Electrodeposited Antimony. Minerals (Basel, Switzerland), 2022, 12, 264.	0.8	3
8	Rational Design of Electrolyte Solvation Structures for Modulating 2e <sup>-</sup> /4e <sup>-</sup> Transfer in Sodium-Air Batteries. Advanced Functional Materials, 2022, 32, .	7.8	21
9	Insight into the Self-Assembled Three-Dimensional Sandwich-Like Hollow Silicon Nanoarray/Graphene Lithium Storage Architecture by Sonication-Assisted Functionalization. Energy & Fuels, 2022, 36, 3283-3292.	2.5	2
10	A DFT Study of Al <sub>n</sub> Ti <sub>n</sub> (n = 2-12) Alloy Clusters. Physica Status Solidi (B): Basic Research, 2022, 259, .	0.7	3
11	Preparation of a Porous Flow-Through Electrode for CO <sub>2</sub> Reduction to CO in a Multi-Chamber Electrolyzer in an Organic Electrolyte. Energy & Fuels, 2022, 36, 3771-3777.	2.5	3
12	The Investigation of Removal and Occurrence State of Impurity Elements During Crude Tin Vacuum Distillation. Journal of Sustainable Metallurgy, 2022, 8, 700-714.	1.1	1
13	Ultrafine AlN synthesis by alumina carbothermal reduction under vacuum: Mechanism and experimental study. Powder Technology, 2021, 377, 843-846.	2.1	14
14	Vacuum decomposition thermodynamics and experiments of recycled lead carbonate from waste lead acid battery. Thermal Science, 2021, 25, 25-38.	0.5	1
15	Prediction of activities of all components in Sn-Ag-Cu and Sn-Ag-Cu-Zn lead-free solders using modified molecular interaction volume model. Results in Chemistry, 2021, 3, 100143.	0.9	2
16	Study on Evaporation Kinetics of Zn in Bi-Zn and Bi-Sn-Zn Systems Under Vacuum Condition. Journal of Sustainable Metallurgy, 2021, 7, 995-1003.	1.1	0
17	Hydrothermal synthesis and enhanced photocatalytic activity of Na <sub>0.5</sub> Gd <sub>0.5</sub> MoO <sub>4</sub> . Journal of Materials Science, 2021, 56, 16612-16622.	1.7	1
18	Vacuum separation of zinc-silver alloy: Measurement and modeling of vapor-liquid equilibrium. Vacuum, 2021, 189, 110245.	1.6	2

#	ARTICLE	IF	CITATIONS
19	Vacuum Gasification-Directional Condensation for Separation of Tellurium from Lead Anode Slime. <i>Metals</i> , 2021, 11, 1535.	1.0	4
20	Effective separation and recovery of valuable metals from high value-added lead anode slime by sustainable vacuum distillation. <i>Journal of Cleaner Production</i> , 2021, 319, 128731.	4.6	15
21	Kinetics study of Pb evaporation from pure Pb and Pb–Ag alloy in vacuum evaporation process. <i>Journal of Materials Research and Technology</i> , 2021, 15, 7012-7021.	2.6	5
22	Study on the effective distribution coefficient of impurity separation in the preparation of high purity aluminum. <i>Journal of Materials Research and Technology</i> , 2020, 9, 10366-10376.	2.6	6
23	Recycling of Spent Indium–Gallium–Zinc Oxide Based on Molten Salt Electrolysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 16296-16303.	3.2	14
24	Theoretical Study on Growth Mechanism of Al <sub>n</sub> N <sub>n</sub> (n = 2–9) Clusters. <i>Russian Journal of Physical Chemistry A</i> , 2020, 94, 1456-1463.	0.1	3
25	Experimental Investigation of Molybdenum Disulfide Purification Through Vacuum Distillation. <i>Journal of Sustainable Metallurgy</i> , 2020, 6, 419-427.	1.1	5
26	Highly Hierarchical Fibrillar Biogenic Silica with Mesoporous Structure Derived from the Perennial Plant <i>Equisetum Fluviatile</i> . <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 35259-35265.	4.0	7
27	Purification of crude selenium by vacuum distillation and analysis. <i>Journal of Materials Research and Technology</i> , 2020, 9, 2926-2933.	2.6	41
28	Electrode heating effects on preparation of Al-65V alloy. <i>Journal of Central South University</i> , 2020, 27, 1-9.	1.2	4
29	Prediction of Partial Molar Enthalpies and Mixing Enthalpies for Sn-Based Binary Alloys by the Wilson Equation. <i>Journal of Solution Chemistry</i> , 2020, 49, 458-465.	0.6	0
30	Preparation of High-Purity Tin by Zone Melting. <i>Russian Journal of Non-Ferrous Metals</i> , 2020, 61, 9-20.	0.2	5
31	Phase relations of CaO–Al <sub>2</sub> O <sub>3</sub> –Sc <sub>2</sub> O <sub>3</sub> ternary system. <i>Journal of the American Ceramic Society</i> , 2019, 102, 2863-2870.	1.9	6
32	Study on Hardness, Microstructure, Distribution of the Self-lubricating Phase, Friction and Wear Property of 1Cr13MoS after Heat Treatment. <i>Materials</i> , 2019, 12, 3171.	1.3	0
33	Lattice Boltzmann Method Modeling of Flow Structures and Level Fluctuations in a Continuous Casting Process. <i>ACS Omega</i> , 2019, 4, 13131-13142.	1.6	1
34	Theoretical study on Sn–Sb-based lead-free solder by ab initio molecular dynamics simulation. <i>Journal of Materials Research</i> , 2019, 34, 2543-2553.	1.2	6
35	A Novel Method of Fabricating Al-V Intermetallic Alloy through Electrode Heating. <i>Metals</i> , 2019, 9, 558.	1.0	10
36	Dynamic Simulation and Experimental Study of Magnesia Formed Between Magnesium Vapor and CO Under Vacuum. <i>Jom</i> , 2019, 71, 2791-2797.	0.9	7

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37	Sustainable extraction of lead and re-use of valuable metals from lead-rich secondary materials. <i>Journal of Cleaner Production</i> , 2019, 219, 110-116.	4.6	59
38	Color-tunable and upconversion luminescence of Gd <sub>2</sub> O <sub>2</sub> S:Er,Tm phosphor: experimental investigations and first-principles calculation. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	4
39	Fabrication of Ag <sub>2</sub> S electrode for CO <sub>2</sub> reduction in organic media. <i>Ionics</i> , 2019, 25, 1921-1927.	1.2	13
40	Effect of CH <sub>3</sub> COOH on Hydrometallurgical Purification of Metallurgical-Grade Silicon Using HCl-HF Leaching. <i>Jom</i> , 2018, 70, 527-532.	0.9	10
41	Cooperative upconversion luminescence of Er <sup>3+</sup> in Gd <sub>2</sub> O <sub>3</sub> ·xS <sub>x</sub> phosphor. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 190, 312-317.	2.0	3
42	Reactions and microstructure evolution in Al <sub>2</sub> O <sub>3</sub> /Al system in vacuum. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2018, 13, e2144.	0.8	2
43	Effect of CaCl <sub>2</sub> on Microstructure of Calciothermic Reduction Products of Ti <sub>2</sub> O <sub>3</sub> to Prepare Porous Titanium. <i>Metals</i> , 2018, 8, 698.	1.0	4
44	The Density Functional Theory Investigation on the Structural, Relative Stable and Electronic Properties of Bimetallic PbnSbn (n = 2-12) Clusters. <i>Journal of Cluster Science</i> , 2018, 29, 1305-1311.	1.7	6
45	Preparation of Nickel Nanoparticles by Direct Current Arc Discharge Method and Their Catalytic Application in Hybrid Na-Air Battery. <i>Nanomaterials</i> , 2018, 8, 684.	1.9	16
46	Calculation of the second virial coefficients of alkali metals by modified Peng-Robinson equation. <i>Journal of Mathematical Chemistry</i> , 2018, 56, 2768-2784.	0.7	3
47	Selection of Low-Cost Ionic Liquid Electrocatalyst for CO <sub>2</sub> Reduction in Propylene Carbonate/Tetrabutylammonium Perchlorate. <i>ChemElectroChem</i> , 2018, 5, 2295-2300.	1.7	14
48	Decomposition of Al <sub>4</sub> O <sub>4</sub> C in the presence of C at high temperatures in vacuum. <i>International Journal of Materials Research</i> , 2018, 109, 399-404.	0.1	4
49	Direct calciothermic reduction of porous calcium titanate to porous titanium. <i>Materials Science and Engineering C</i> , 2018, 91, 125-134.	3.8	14
50	Measurement and modeling of phase equilibria for Sb-Sn and Bi-Sb-Sn alloys in vacuum distillation. <i>Fluid Phase Equilibria</i> , 2017, 442, 62-67.	1.4	16
51	Theoretical insights into the structural, relative stable, electronic, and gas sensing properties of Pb <sub>n</sub> Au <sub>n</sub> (n = 2-12) clusters: a DFT study. <i>RSC Advances</i> , 2017, 7, 45432-45441.	1.7	28
52	Prediction of Vapor-Liquid Equilibria for Pb-Pd and Pb-Pt Alloys Using Ab Initio Methods in Vacuum Distillation. <i>Journal of Solution Chemistry</i> , 2017, 46, 1514-1521.	0.6	5
53	Structural, Relative Stable, and Electronic Properties of PbnSnn (n = 2-12) Clusters were Investigated Using Density Functional Theory. <i>Journal of Cluster Science</i> , 2017, 28, 2503-2516.	1.7	7
54	Ab Initio Molecular Dynamics Studies of Pb <sub>m</sub> Sb <sub>n</sub> (m+n=9) Alloy Clusters. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 4905-4913.	1.1	3

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55	Experimental and modeling vapor-liquid equilibria: Separation of Bi from Sn by vacuum distillation. <i>Vacuum</i> , 2017, 135, 109-114.	1.6	18
56	(Vapor + Liquid) Equilibrium (VLE) for Binary Lead-Antimony System in Vacuum Distillation: New Data and Modeling Using Nonrandom Two-Liquid (NRTL) Model. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 4494-4501.	1.1	3
57	Vapor-liquid phase equilibria of binary tin-antimony system in vacuum distillation: Experimental investigation and calculation. <i>Fluid Phase Equilibria</i> , 2016, 415, 176-183.	1.4	22
58	Color-tunable and upconversion luminescence of Gd <sub>2</sub> O <sub>2</sub> S:Er,Tb phosphor. <i>Materials Chemistry and Physics</i> , 2016, 169, 113-119.	2.0	15
59	Prediction of Covalent Interactions Between Si and B, Fe, Al or Ca in Metallurgical Grade Silicon Using ab initio Molecular Dynamic Simulations. <i>Silicon</i> , 2015, 7, 253-259.	1.8	6
60	Vapor-liquid phase diagrams of Pb-Sn and Pb-Ag alloys in vacuum distillation. <i>Vacuum</i> , 2015, 119, 179-184.	1.6	35
61	A secret handshake scheme for mobile-hierarchy architecture based underground emergency response system. , 2015, , .		2
62	Application of MIVM for Sn-Zn System in Vacuum Distillation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 1205-1213.	1.1	13
63	Study on Al Removal from MG-Si by Vacuum Refining. <i>Silicon</i> , 2015, 7, 269-274.	1.8	27
64	Calculation of interaction of AlCl, AlCl <sub>2</sub> and AlCl <sub>3</sub> on Al <sub>4</sub> C <sub>3</sub> (001) Al <sub>4</sub> CO <sub>4</sub> (001) and Al <sub>2</sub> CO (001) planes. <i>Journal of Central South University</i> , 2015, 22, 43-58.	1.2	3
65	Synthesis of vanadium doped LiMnPO <sub>4</sub> by an improved solid-state method. <i>Ceramics International</i> , 2015, 41, 8171-8176.	2.3	18
66	Magnesium production by carbothermic reduction in vacuum. <i>Journal of Magnesium and Alloys</i> , 2015, 3, 149-154.	5.5	22
67	Boron Removal from Metallurgical Grade Silicon using a Refining Technique of Calcium Silicate Molten Slag Containing Potassium Carbonate. <i>Silicon</i> , 2015, 7, 247-252.	1.8	19
68	Analysis of Magnesia Carbothermic Reduction Process in Vacuum. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2014, 45, 1936-1941.	1.0	27
69	Impurities Removal From Metallurgical Grade Silicon Using Gas Blowing Refining Techniques. <i>Silicon</i> , 2014, 6, 79-85.	1.8	38
70	Influence of vacuum upon preparation and luminescence of Si <sup>4+</sup> and Ti <sup>4+</sup> codoped Gd <sub>2</sub> O <sub>2</sub> S:Eu phosphor. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 126, 46-52.	2.0	11
71	Removal of impurities from crude lead with high impurities by vacuum distillation and its analysis. <i>Vacuum</i> , 2014, 105, 17-20.	1.6	37
72	Thermodynamics of removing impurities from crude lead by vacuum distillation refining. <i>Transactions of Nonferrous Metals Society of China</i> , 2014, 24, 1946-1950.	1.7	30

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73	Process optimization for vacuum distillation of Sn-Sb alloy by response surface methodology. Vacuum, 2014, 109, 127-134.	1.6	25
74	Selective removal of heavy metal ions from aqueous solutions with surface functionalized silica nanoparticles by different functional groups. Journal of Central South University, 2014, 21, 3575-3579.	1.2	30
75	Application of Molecular Interaction Volume Model for Phase Equilibrium of Sn-Based Binary System in Vacuum Distillation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4405-4410.	1.1	21
76	Application of MIVM for Pb-Sn-Sb ternary system in vacuum distillation. Vacuum, 2014, 101, 324-327.	1.6	26
77	Application of MIVM for phase equilibrium of Sn-Pb-Sb system in vacuum distillation. Fluid Phase Equilibria, 2014, 364, 1-5.	1.4	16
78	Purification of indium by vacuum distillation and its analysis. Journal of Central South University, 2013, 20, 337-341.	1.2	18
79	Application of molecular interaction volume model in separation of Sn-Zn alloy by vacuum distillation. Journal of Central South University, 2013, 20, 3372-3378.	1.2	6
80	Extraction of aluminum from alumina by disproportionation process of AlCl <sub>3</sub> in vacuum. Transactions of Nonferrous Metals Society of China, 2013, 23, 2781-2785.	1.7	4
81	Deeply removing lead from Pb-Sn alloy with vacuum distillation. Transactions of Nonferrous Metals Society of China, 2013, 23, 1822-1831.	1.7	30
82	Application of molecular interaction volume model in separation of Pb-Sn-Sb ternary alloy by vacuum distillation. Transactions of Nonferrous Metals Society of China, 2013, 23, 2408-2415.	1.7	12
83	Application of vacuum distillation in refining crude indium. Rare Metals, 2013, 32, 627-631.	3.6	27
84	Carbothermal reduction-chlorination-disproportionation of alumina in vacuum. Transactions of Nonferrous Metals Society of China, 2012, 22, 215-221.	1.7	17
85	Thermodynamic calculation and experimental investigation on the products of carbothermal reduction of Al <sub>2</sub> O <sub>3</sub> under vacuum. Vacuum, 2012, 86, 2005-2009.	1.6	17
86	Application of MIVM for Pb-Sn System in Vacuum Distillation. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2012, 43, 1649-1656.	1.0	27
87	Carbothermic reduction of alumina with carbon in vacuum. Journal of Central South University, 2012, 19, 1813-1816.	1.2	7
88	Calculation and Characterization of Silicon-Boron Phases in Metallurgical Grade Silicon. Silicon, 2012, 4, 289-295.	1.8	13
89	Influence of Dy <sup>3+</sup> coactivator on the luminescence properties of Gd <sub>2</sub> O <sub>3</sub> :Tb <sup>3+</sup> phosphor. Journal of Applied Physics, 2012, 111, 023101.	1.1	7
90	Behavior Analysis of CaF <sub>2</sub> in Magnesia Carbothermic Reduction Process in Vacuum. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2012, 43, 657-661.	1.0	38

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91	Calculation of phase equilibrium in vacuum distillation by molecular interaction volume model. Fluid Phase Equilibria, 2012, 314, 78-81.	1.4	22
92	Investigation of chlorination process in aluminum production by carbothermic-chlorination reduction of Al <sub>2</sub> O <sub>3</sub> under vacuum. Vacuum, 2012, 86, 1113-1117.	1.6	6
93	Application of molecular interaction volume model in vacuum distillation of Pb-based alloys. Vacuum, 2012, 86, 1296-1299.	1.6	46
94	Silica behavior in the alumina carbothermic reduction-chlorination process. Jom, 2011, 63, 116-119.	0.9	4
95	Molecular dynamics simulation on thermodynamic properties of Pb-Ag alloys. Rare Metals, 2010, 29, 323-326.	3.6	4
96	Molecular dynamics simulation on diffusion properties of Pb-Mg alloy. Science China Technological Sciences, 2010, 53, 2328-2332.	2.0	6
97	Theory Study of AlCl Disproportionation Reaction Mechanism on Al (110) Surface. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2010, 41, 137-145.	1.0	7
98	Effect of Sn <sup>4+</sup> content on properties of indium tin oxide nanopowders. Transactions of Nonferrous Metals Society of China, 2010, 20, 643-648.	1.7	8
99	Aluminum production by carbothermo-chlorination reduction of alumina in vacuum. Transactions of Nonferrous Metals Society of China, 2010, 20, 1505-1510.	1.7	19
100	Synthesis and characterization of LiCo <sub>x</sub> Mn <sub>2-2x</sub> O <sub>4</sub> cathode materials. Journal Wuhan University of Technology, Materials Science Edition, 2007, 22, 307-310.	0.4	4
101	Application of MIVM for Sn-Ag and Sn-In Alloys in Vacuum Distillation. , 0, , 367-374.		0
102	Mechanism of Carbothermic Reduction of Magnesia and Reverse Reaction. , 0, , 511-516.		0
103	Vacuum Distillation Refining of Crude Tin - Thermodynamics Analysis and Experiments on the Removal of Arsenic from the Crude Tin. , 0, , 223-230.		0