Jian Luo

List of Publications by Year in Descending Order

172 papers	7,749 citations	45 h-index	83 g-index
186 ext. papers	9,911 ext. citations	8.4 avg, IF	6.68 L-index

#	Paper	IF	Citations
172	Oxidative Stabilization of Dilute Ether Electrolytes via Anion Modification. *ACS Energy Letters*, **2022**, 7, 675-682	20.1	1
171	Rapid Synthesis of High-Entropy Oxide Microparticles.. *Small*, **2022**, e2104761	11	3
170	Multi-principal elemental intermetallic nanoparticles synthesized via a disorder-to-order transition.. *Science Advances*, **2022**, 8, eabm4322	14.3	5
169	Thermodynamics-driven interfacial engineering of alloy-type anode materials. *Cell Reports Physical Science*, **2022**, 3, 100694	6.1	1
168	A new type of compositionally complex M5Si3 silicides: Cation ordering and unexpected phase stability. *Scripta Materialia*, **2022**, 212, 114557	5.6	3
167	21-Component compositionally complex ceramics: Discovery of ultrahigh-entropy weberite and fergusonite phases and a pyrochlore-weberite transition. *Journal of Advanced Ceramics*, **2022**, 11, 641-655	10.7	2
166	Rapid Pressureless Sintering of Glasses.. *Small*, **2022**, e2107951	11	1
165	High-entropy nanoparticles: Synthesis-structure-property relationships and data-driven discovery.. *Science*, **2022**, 376, eabn3103	33.3	19
164	Discovery of a reversible redox-induced order-disorder transition in a 10-component compositionally complex ceramic. *Scripta Materialia*, **2022**, 215, 114699	5.6	2
163	Short-Range Order and Origin of the Low Thermal Conductivity in Compositionally Complex Rare-Earth Niobates and Tantalates. *Acta Materialia*, **2022**, 118056	8.4	1
162	Atomistic observation of in situ fractured surfaces at a V-doped WC-Co interface. *Journal of Materials Science and Technology*, **2021**, 110, 103-103	9.1	0
161	Grain boundary segregation transitions and critical phenomena in binary regular solutions: A systematics of complexion diagrams with universal characters. *Acta Materialia*, **2021**, 221, 117375	8.4	2
160	Interfacial superstructures and chemical bonding transitions at metal-ceramic interfaces. *Science Advances*, **2021**, 7,	14.3	8
159	High-entropy intermetallic compound with ultra-high strength and thermal stability. *Scripta Materialia*, **2021**, 194, 113674	5.6	12
158	Discovery of electrochemically induced grain boundary transitions. *Nature Communications*, **2021**, 12, 2374	17.4	10
157	High-entropy rare earth tetraborides. *Journal of the European Ceramic Society*, **2021**, 41, 2968-2973	6	10
156	Single-phase duodenary high-entropy fluorite/pyrochlore oxides with an order-disorder transition. *Acta Materialia*, **2021**, 211, 116858	8.4	11

155	High-Temperature Ultrafast Sintering: Exploiting a New Kinetic Region to Fabricate Porous Solid-State Electrolyte Scaffolds. *Advanced Materials*, **2021**, 33, e2100726	24	8
154	Tailoring grain growth and densification toward a high-performance solid-state electrolyte membrane. *Materials Today*, **2021**, 42, 41-48	21.8	13
153	Abnormal grain growth in iron-containing SiC fibers. *Journal of the European Ceramic Society*, **2021**, 41, 2306-2311	6	3
152	A new class of high-entropy M3B4 borides. *Journal of Advanced Ceramics*, **2021**, 10, 166-172	10.7	13
151	Sand corrosion, thermal expansion, and ablation of medium- and high-entropy compositionally complex fluorite oxides. *Journal of the American Ceramic Society*, **2021**, 104, 448-462	3.8	18
150	Denary oxide nanoparticles as highly stable catalysts for methane combustion. *Nature Catalysis*, **2021**, 4, 62-70	36.5	45
149	Far-from-equilibrium effects of electric and electromagnetic fields in ceramics synthesis and processing. *MRS Bulletin*, **2021**, 46, 26-35	3.2	4
148	Low-Cost Li||SPAN Batteries Enabled by Sustained Additive Release. *ACS Applied Energy Materials*, **2021**, 4, 6422-6429	6.1	
147	Synergic grain boundary segregation and precipitation in W- and W-Mo-containing high-entropy borides. *Journal of the European Ceramic Society*, **2021**, 41, 5380-5387	6	4
146	Bulk high-entropy hexaborides. *Journal of the European Ceramic Society*, **2021**, 41, 5775-5781	6	5
145	Accelerating materials discovery with Bayesian optimization and graph deep learning. *Materials Today*, **2021**,	21.8	4
144	The interfacial structure underpinning the Al-Ga liquid metal embrittlement: disorder vs. order gradients. *Scripta Materialia*, **2021**, 204, 114149	5.6	4
143	Avoiding dendrite formation by confining lithium deposition underneath Li_3Sn coatings. *Journal of Materials Research*, **2021**, 36, 797-811	2.5	0
142	Efficient Direct Recycling of Degraded LiMnO Cathodes by One-Step Hydrothermal Relithiation. *ACS Applied Materials & Interfaces*, **2020**, 12, 51546-51554	9.5	23
141	A general method to synthesize and sinter bulk ceramics in seconds. *Science*, **2020**, 368, 521-526	33.3	153
140	Formation of stacking faults in tungsten carbide during sintering. *Ceramics International*, **2020**, 46, 15851-15857	5.1	2
139	A step forward from high-entropy ceramics to compositionally complex ceramics: a new perspective. *Journal of Materials Science*, **2020**, 55, 9812-9827	4.3	62
138	Part II: Experimental verification of computationally predicted preferential oxidation of refractory high entropy ultra-high temperature ceramics. *Acta Materialia*, **2020**, 197, 81-90	8.4	25

137	Size disorder as a descriptor for predicting reduced thermal conductivity in medium- and high-entropy pyrochlore oxides. *Scripta Materialia*, **2020**, 181, 76-81	5.6	71
136	A development mechanism of graded microstructures in iron-containing SiC fibers revealed by electron microscopy. *Materials Characterization*, **2020**, 162, 110177	3.9	3
135	Genetic algorithm-guided deep learning of grain boundary diagrams: Addressing the challenge of five degrees of freedom. *Materials Today*, **2020**, 38, 49-57	21.8	21
134	Cryogenic Milling Method to Fabricate Nanostructured Anodes. *ACS Applied Energy Materials*, **2020**, 3, 11285-11292	6.1	1
133	Dissolving and stabilizing soft WB2 and MoB2 phases into high-entropy borides via boron-metals reactive sintering to attain higher hardness. *Journal of the European Ceramic Society*, **2020**, 40, 4348-4353	6	23
132	Dual-phase high-entropy ultra-high temperature ceramics. *Journal of the European Ceramic Society*, **2020**, 40, 5037-5050	6	33
131	Advanced Materials for High-Temperature Thermal Transport. *Advanced Functional Materials*, **2020**, 30, 1904815	15.6	34
130	From high-entropy ceramics to compositionally-complex ceramics: A case study of fluorite oxides. *Journal of the European Ceramic Society*, **2020**, 40, 2120-2129	6	71
129	Grain growth and interfacial structures in SiC fibers. *Ceramics International*, **2020**, 46, 10279-10283	5.1	5
128	Thermal conductivity and hardness of three single-phase high-entropy metal diborides fabricated by borocarbothermal reduction and spark plasma sintering. *Ceramics International*, **2020**, 46, 6906-6913	5.1	41
127	High-entropy monoborides: Towards superhard materials. *Scripta Materialia*, **2020**, 189, 101-105	5.6	23
126	Part I: Theoretical predictions of preferential oxidation in refractory high entropy materials. *Acta Materialia*, **2020**, 197, 20-27	8.4	30
125	Printable, high-performance solid-state electrolyte films. *Science Advances*, **2020**, 6,	14.3	25
124	A fabrication process for flexible single-crystal perovskite devices. *Nature*, **2020**, 583, 790-795	50.4	143
123	A Perspective on interfacial engineering of lithium metal anodes and beyond. *Applied Physics Letters*, **2020**, 117, 080504	3.4	9
122	A highly asymmetric interfacial superstructure in WC: expanding the classic grain boundary segregation and new complexion theories. *Materials Horizons*, **2020**, 7, 173-180	14.4	16
121	Let thermodynamics do the interfacial engineering of batteries and solid electrolytes. *Energy Storage Materials*, **2019**, 21, 50-60	19.4	13
120	Reactive flash spark plasma sintering of high-entropy ultrahigh temperature ceramics. *Scripta Materialia*, **2019**, 170, 106-110	5.6	61

119	Single-phase high-entropy intermetallic compounds (HEICs): bridging high-entropy alloys and ceramics. *Science Bulletin*, **2019**, 64, 856-864	10.6	41
118	First-principles study of impurity segregation in zirconia, hafnia, and yttria-stabilized-zirconia grain boundaries. *Journal of the European Ceramic Society*, **2019**, 39, 3812-3820	6	3
117	A high-entropy silicide: (Mo0.2Nb0.2Ta0.2Ti0.2W0.2)Si2. *Journal of Materiomics*, **2019**, 5, 337-343	6.7	90
116	Deformation and Transitions at Interfaces and Grain Boundaries. *Jom*, **2019**, 71, 1198-1199	2.1	4
115	First-order grain boundary transformations in Au-doped Si: Hybrid Monte Carlo and molecular dynamics simulations verified by first-principles calculations. *Scripta Materialia*, **2019**, 158, 11-15	5.6	12
114	Flash sintering activated by bulk phase and grain boundary complexion transformations. *Acta Materialia*, **2019**, 181, 544-554	8.4	7
113	Combining cold sintering and Bi2O3-Activated liquid-phase sintering to fabricate high-conductivity Mg-doped NASICON at reduced temperatures. *Journal of Materiomics*, **2019**, 5, 237-246	6.7	7
112	The effects of external fields in ceramic sintering. *Journal of the American Ceramic Society*, **2019**, 102, 5-31	3.8	27
111	Phase stability and mechanical properties of novel high entropy transition metal carbides. *Acta Materialia*, **2019**, 166, 271-280	8.4	213
110	First-Order Interfacial Transformations with a Critical Point: Breaking the Symmetry at a Symmetric Tilt Grain Boundary. *Physical Review Letters*, **2018**, 120, 085702	7.4	31
109	Water-assisted flash sintering: Flashing ZnO at room temperature to achieve ~ 98% density in seconds. *Scripta Materialia*, **2018**, 142, 79-82	5.6	68
108	High-entropy fluorite oxides. *Journal of the European Ceramic Society*, **2018**, 38, 3578-3584	6	223
107	Controlled Homoepitaxial Growth of Hybrid Perovskites. *Advanced Materials*, **2018**, 30, e1705992	24	51
106	Oxygen vacancy formation in the SrTiO3 Σ5 [001] twist grain boundary from first-principles. *Journal of the American Ceramic Society*, **2018**, 101, 3118-3129	3.8	2
105	Cold sintering and ionic conductivities of Na3.256Mg0.128Zr1.872Si2PO12 solid electrolytes. *Journal of Power Sources*, **2018**, 391, 170-179	8.9	38
104	A new class of high-entropy perovskite oxides. *Scripta Materialia*, **2018**, 142, 116-120	5.6	318
103	Role of disordered bipolar complexions on the sulfur embrittlement of nickel general grain boundaries. *Nature Communications*, **2018**, 9, 2764	17.4	31
102	Aimsgb: An algorithm and open-source python library to generate periodic grain boundary structures. *Computational Materials Science*, **2018**, 155, 92-103	3.2	16

101	Stabilizing Nanocrystalline Oxide Nanofibers at Elevated Temperatures by Coating Nanoscale Surface Amorphous Films. *Nano Letters*, **2018**, 18, 130-136	11.5	16
100	The scientific questions and technological opportunities of flash sintering: From a case study of ZnO to other ceramics. *Scripta Materialia*, **2018**, 146, 260-266	5.6	45
99	Enhancing the electrochemical performance of Li-rich layered oxide Li1.13Ni0.3Mn0.57O2 via WO3 doping and accompanying spontaneous surface phase formation. *Journal of Power Sources*, **2018**, 375, 21-28	8.9	47
98	Quantum-accurate spectral neighbor analysis potential models for Ni-Mo binary alloys and fcc metals. *Physical Review B*, **2018**, 98,	3.3	35
97	First-principles studies of polar perovskite KTaO surfaces: structural reconstruction, charge compensation, and stability diagram. *Physical Chemistry Chemical Physics*, **2018**, 20, 18515-18527	3.6	26
96	Comparison Studies of Interfacial Electronic and Energetic Properties of LaAlO/TiO and TiO/LaAlO Heterostructures from First-Principles Calculations. *ACS Applied Materials & Interfaces*, **2017**, 9, 7682-7690	9.5	10
95	Divalent-doped Na3Zr2Si2PO12 natrium superionic conductor: Improving the ionic conductivity via simultaneously optimizing the phase and chemistry of the primary and secondary phases. *Journal of Power Sources*, **2017**, 347, 229-237	8.9	77
94	Liquid-like grain boundary complexion and sub-eutectic activated sintering in CuO-doped TiO2. *Acta Materialia*, **2017**, 130, 329-338	8.4	25
93	The role of ceramic and glass science research in meeting societal challenges: Report from an NSF-sponsored workshop. *Journal of the American Ceramic Society*, **2017**, 100, 1777-1803	3.8	17
92	Probing the densification mechanisms during flash sintering of ZnO. *Acta Materialia*, **2017**, 125, 465-475	8.4	100
91	Calculation and validation of a grain boundary complexion diagram for Bi-doped Ni. *Scripta Materialia*, **2017**, 130, 165-169	5.6	17
90	Enhancing the Ion Transport in LiMnNiO by Altering the Particle Wulff Shape via Anisotropic Surface Segregation. *ACS Applied Materials & Interfaces*, **2017**, 9, 36745-36754	9.5	32
89	Segregation-induced ordered superstructures at general grain boundaries in a nickel-bismuth alloy. *Science*, **2017**, 358, 97-101	33.3	96
88	Doping Effects on Electronic and Energetic Properties of LaAlO3/SrTiO3 Heterostructure: First-Principles Analysis of 23 Transition-Metal Dopants. *Advanced Materials Interfaces*, **2017**, 4, 1700579	4.6	6
87	Two-step flash sintering of ZnO: Fast densification with suppressed grain growth. *Scripta Materialia* , **2017**, 141, 6-9	5.6	28
86	Stabilization of nanocrystalline alloys at high temperatures via utilizing high-entropy grain boundary complexions. *Scripta Materialia*, **2016**, 124, 160-163	5.6	67
85	Composites of sodium manganese oxides with enhanced electrochemical performance for sodium-ion batteries: Tailoring properties via controlling microstructure. *Science China Technological Sciences*, **2016**, 59, 1042-1047	3.5	3
84	Pseudocapacitive Properties of Two-Dimensional Surface Vanadia Phases Formed Spontaneously on Titania. *ACS Applied Materials & Interfaces*, **2016**, 8, 12871-80	9.5	6

83	Synthesis of NiCo2S4-based nanostructured electrodes supported on nickel foams with superior electrochemical performance. *Journal of Materials Science*, **2016**, 51, 1903-1913	4.3	53
82	Communication: Enhancing the Electrochemical Performance of Lithium-Excess Layered Oxide Li1.13Ni0.3Mn0.57O2 via a Facile Nanoscale Surface Modification. *Journal of the Electrochemical Society*, **2016**, 163, A971-A973	3.9	22
81	Etching anisotropy mechanisms lead to morphology-controlled silicon nanoporous structures by metal assisted chemical etching. *Nanoscale*, **2016**, 8, 3085-92	7.7	25
80	A Short Review of High-Temperature Wetting and Complexion Transitions with a Critical Assessment of Their Influence on Liquid Metal Embrittlement and Corrosion. *Corrosion*, **2016**, 72, 897-910	1.8	15
79	Nb and Ta layer doping effects on the interfacial energetics and electronic properties of LaAlO3/SrTiO3 heterostructure: first-principles analysis. *Physical Chemistry Chemical Physics*, **2016**, 18, 2379-88	3.6	20
78	Elastic Properties of Alkali Superionic Conductor Electrolytes from First Principles Calculations. *Journal of the Electrochemical Society*, **2016**, 163, A67-A74	3.9	188
77	Correlations between microstructure, fracture morphology, and fracture toughness of nanocrystalline Ni-W alloys. *Scripta Materialia*, **2016**, 113, 84-88	5.6	22
76	Effects of phase and doping on flash sintering of TiO2. *Journal of the Ceramic Society of Japan*, **2016**, 124, 296-300	1	33
75	High-Entropy Metal Diborides: A New Class of High-Entropy Materials and a New Type of Ultrahigh Temperature Ceramics. *Scientific Reports*, **2016**, 6, 37946	4.9	409
74	Native point defect formation in flash sintered ZnO studied by depth-resolved cathodoluminescence spectroscopy. *Journal of Applied Physics*, **2016**, 120, 105302	2.5	20
73	Grain boundary complexions in multicomponent alloys: Challenges and opportunities. *Current Opinion in Solid State and Materials Science*, **2016**, 20, 268-277	12	44
72	Layering transitions at grain boundaries. *Current Opinion in Solid State and Materials Science*, **2016**, 20, 225-230	12	26
71	Interfacial Stability of Li Metal-Solid Electrolyte Elucidated via in Situ Electron Microscopy. *Nano Letters*, **2016**, 16, 7030-7036	11.5	239
70	Computational study of metallic dopant segregation and embrittlement at molybdenum grain boundaries. *Acta Materialia*, **2016**, 117, 91-99	8.4	43
69	Experimental and Computational Evaluation of a Sodium-Rich Anti-Perovskite for Solid State Electrolytes. *Journal of the Electrochemical Society*, **2016**, 163, A2165-A2171	3.9	29
68	Interface Energetics and Charge Carrier Density Amplification by Sn-Doping in LaAlO3/SrTiO3 Heterostructure. *ACS Applied Materials & Interfaces*, **2015**, 7, 14294-302	9.5	23
67	Interfacial engineering of solid electrolytes. *Journal of Materiomics*, **2015**, 1, 22-32	6.7	33
66	Thermal runaway, flash sintering and asymmetrical microstructural development of ZnO and ZnO-Bi2O3 under direct currents. *Acta Materialia*, **2015**, 94, 87-100	8.4	174

65	Developing grain boundary diagrams for multicomponent alloys. *Acta Materialia*, **2015**, 91, 202-216	8.4	40
64	Suppressed phase transition and giant ionic conductivity in La2Mo2O9 nanowires. *Nature Communications*, **2015**, 6, 8354	17.4	32
63	An Order–Disorder Transition in Surface Complexions and Its Influence on Crystal Growth of Boron-Rich Nanostructures. *Crystal Growth and Design*, **2015**, 15, 3547-3551	3.5	9
62	The local stress state of a running shear band in amorphous solids. *Journal of Materials Research*, **2015**, 30, 1979-1987	2.5	5
61	Embedding Ba Monolayers and Bilayers in Boron Carbide Nanowires. *Scientific Reports*, **2015**, 5, 16960	4.9	6
60	Promoting the flash sintering of ZnO in reduced atmospheres to achieve nearly full densities at furnace temperatures of . *Scripta Materialia*, **2015**, 106, 26-29	5.6	72
59	Intrinsic ductility of glassy solids. *Journal of Applied Physics*, **2014**, 115, 043528	2.5	61
58	A facile nitridation method to improve the rate capability of TiO2 for lithium-ion batteries. *Journal of Power Sources*, **2014**, 245, 594-598	8.9	25
57	Developing thermodynamic stability diagrams for equilibrium-grain-size binary alloys. *Materials Letters*, **2014**, 115, 268-271	3.3	21
56	Observation of an unusual case of triple-line instability. *Scripta Materialia*, **2014**, 88, 45-48	5.6	6
55	A facile and generic method to improve cathode materials for lithium-ion batteries via utilizing nanoscale surface amorphous films of self-regulating thickness. *Physical Chemistry Chemical Physics* , **2014**, 16, 7786-98	3.6	25
54	Improvement of hydrothermally synthesized MnO2 electrodes on Ni foams via facile annealing for supercapacitor applications. *Journal of Materials Science*, **2014**, 49, 6118-6126	4.3	35
53	Nanolithography. Large-scale nanoshaping of ultrasmooth 3D crystalline metallic structures. *Science*, **2014**, 346, 1352-6	33.3	113
52	Discovery of nanoscale reduced surfaces and interfaces in VO2 thin films as a unique case of prewetting. *Scripta Materialia*, **2014**, 78-79, 41-44	5.6	6
51	Grain boundary complexions. *Acta Materialia*, **2014**, 62, 1-48	8.4	497
50	Grain-boundary layering transitions in a model bicrystal. *Surface Science*, **2013**, 618, 88-93	1.8	25
49	Enhancing the visible-light photocatalytic activity of TiO2 by heat treatments in reducing environments. *Materials Letters*, **2013**, 98, 205-208	3.3	26
48	Grain boundary complexion transitions in WO3- and CuO-doped TiO2 bicrystals. *Acta Materialia*, **2013**, 61, 1691-1704	8.4	27

47	Identification of a bilayer grain boundary complexion in Bi-doped Cu. *Scripta Materialia*, **2013**, 68, 146-149	3.6	61
46	A grain boundary phase transition in Si□Au. *Scripta Materialia*, **2012**, 66, 203-206	5.6	34
45	Construction and testing of coin cells of lithium ion batteries. *Journal of Visualized Experiments*, **2012**, e4104	1.6	4
44	Effects of sintering aids on the densification of Mo□Si□B alloys. *Journal of Materials Science*, **2012**, 47, 8308-8319	4.3	10
43	Impurity effects on the intergranular liquid bismuth penetration in polycrystalline nickel. *Acta Materialia*, **2012**, 60, 149-165	8.4	23
42	Developing Interfacial Phase Diagrams for Applications in Activated Sintering and Beyond: Current Status and Future Directions. *Journal of the American Ceramic Society*, **2012**, 95, 2358-2371	3.8	61
41	Developing grain boundary diagrams as a materials science tool: A case study of nickel-doped molybdenum. *Physical Review B*, **2011**, 84,	3.3	55
40	The role of a bilayer interfacial phase on liquid metal embrittlement. *Science*, **2011**, 333, 1730-3	33.3	204
39	Long range interactions in nanoscale science. *Reviews of Modern Physics*, **2010**, 82, 1887-1944	40.5	304
38	Decreasing the grain boundary diffusivity in binary alloys with increasing temperature. *Physical Review Letters*, **2010**, 105, 236102	7.4	26
37	Layer-by-layer assembly of sol□gel oxide □glued□ montmorillonite-zirconia multilayers. *Journal of Materials Chemistry*, **2010**, 20, 4925		13
36	Evaluation of the elasticity normal to the basal plane of non-expandable 2:1 phyllosilicate minerals by nanoindentation. *American Mineralogist*, **2010**, 95, 863-869	2.9	20
35	Grain boundary wetting and prewetting in Ni-doped Mo. *Applied Physics Letters*, **2009**, 94, 251908	3.4	60
34	Surface adsorption and disordering in LiFePO4 based battery cathodes. *Applied Physics Letters*, **2009**, 95, 221905	3.4	44
33	A simple method for evaluating elastic modulus of thin films by nanoindentation. *Journal of Materials Research*, **2009**, 24, 801-815	2.5	29
32	Grain boundary complexions in ceramics and metals: An overview. *Jom*, **2009**, 61, 38-44	2.1	71
31	Grain boundary complexions: The interplay of premelting, prewetting, and multilayer adsorption. *Applied Physics Letters*, **2009**, 95, 071911	3.4	50
30	Interface Stabilized Nanoscale Quasi-Liquid Films. *Microscopy Today*, **2009**, 17, 22-27	0.4	8

29	Layer-by-layer deposition of zirconia thin films from aqueous solutions. *Materials Letters*, **2008**, 62, 117-120	3.3	9
28	Wetting and Prewetting on Ceramic Surfaces. *Annual Review of Materials Research*, **2008**, 38, 227-249	12.8	113
27	Liquid-like interface complexion: From activated sintering to grain boundary diagrams. *Current Opinion in Solid State and Materials Science*, **2008**, 12, 81-88	12	82
26	Synthesis of Nanostructured Nanoclay-Zirconia Multilayers: a Feasibility Study. *Journal of Nanomaterials*, **2008**, 2008, 1-8	3.2	7
25	An Overview of Mechanical Strength of Optical Fiber Fusion Splices: Examples of Fractographic Analysis of Break Causes. *Fiber and Integrated Optics*, **2008**, 27, 45-60	0.8	2
24	Grain boundary disordering in binary alloys. *Applied Physics Letters*, **2008**, 92, 101901	3.4	60
23	Anisotropic wetting of ZnO by Bi2O3 with and without nanometer-thick surficial amorphous films. *Acta Materialia*, **2008**, 56, 862-873	8.4	26
22	Nanoscale surficial films and a surface transition in V2O5□TiO2-based ternary oxide systems. *Acta Materialia*, **2008**, 56, 4702-4714	8.4	26
21	Solution-based synthesis of oxide thin films via a layer-by-layer deposition method: Feasibility and a phenomenological film growth model. *Surface and Coatings Technology*, **2008**, 202, 2690-2697	4.4	12
20	Stabilization of Nanoscale Quasi-Liquid Interfacial Films in Inorganic Materials: A Review and Critical Assessment. *Critical Reviews in Solid State and Materials Sciences*, **2007**, 32, 67-109	10.1	145
19	Thin intergranular films and solid-state activated sintering in nickel-doped tungsten. *Acta Materialia*, **2007**, 55, 3131-3142	8.4	171
18	Vanadia-based equilibrium-thickness amorphous films on anatase (101) surfaces. *Applied Physics Letters*, **2007**, 91, 061909	3.4	31
17	. *Journal of Lightwave Technology*, **2007**, 25, 3575-3579	4	6
16	Interface-Stabilized Nanoscale Quasi-Liquid Films and Interfacial Prewetting and Premelting Transitions. *Materials Research Society Symposia Proceedings*, **2006**, 979, 1		
15	Pressure-balance and diffuse-interface models for surficial amorphous films. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 422, 19-28	5.3	40
14	Nanometer-thick surficial films in oxides as a case of prewetting. *Langmuir*, **2005**, 21, 7358-65	4	60
13	Segregation-induced grain boundary premelting in nickel-doped tungsten. *Applied Physics Letters*, **2005**, 87, 231902	3.4	120
12	Growth, nitrogen doping and characterization of isolated single-wall carbon nanotubes using liquid precursors. *Chemical Physics Letters*, **2005**, 412, 269-273	2.5	71

11	Growth, Nitrogen Doping and Characterization of Isolated Single-Wall Carbon Nanotubes using Liquid Precursors. *Materials Research Society Symposia Proceedings*, **2004**, 858, 146		
10	Microcathodoluminescence spectroscopy of defects in Bi2O3-doped ZnO grains. *Journal of Applied Physics*, **2002**, 92, 5072-5076	2.5	6
9	Existence and stability of nanometer-thick disordered films on oxide surfaces. *Acta Materialia*, **2000** , 48, 4501-4515	8.4	76
8	Direct structure depth profiling of polycrystalline thin films by X-ray diffraction and its application. *Thin Solid Films*, **1999**, 353, 56-61	2.2	5
7	Equilibrium-thickness Amorphous Films on {112 0} surfaces of Bi2O3-doped ZnO. *Journal of the European Ceramic Society*, **1999**, 19, 697-701	6	40
6	Origin of Solid-State Activated Sintering in Bi2O3-Doped ZnO. *Journal of the American Ceramic Society*, **1999**, 82, 916-920	3.8	123
5	Studies on nondestructive depth resolved XRD method. *Powder Diffraction*, **1996**, 11, 117-120	1.8	3
4	Quantitative X-ray diffraction analysis of surface layers by computed depth profiling. *Thin Solid Films*, **1996**, 279, 53-58	2.2	12
3	Studies on quantitative x-ray diffraction characterization of phase depth profiles. *Review of Scientific Instruments*, **1996**, 67, 2859-2862	1.7	3
2	Polarization of Pd atoms in Ni/Pd magnetic multilayers. *Journal of Physics Condensed Matter*, **1995**, 7, 1121-1128	1.8	16
1	Ultrafast Sintering of Solid-State Electrolytes with Volatile Fillers. *ACS Energy Letters*,3753-3760	20.1	7