



2023

	42			
		8		6
2	4.76%	8	19.05%	3
7.14%	6	14.29%	9	21.43%
5	11.90%	3	7.14%	
11.9%				
	1			

1		3	
2		3	
3		5	
4		8	
5		2	
6		6	
7		6	
8		9	

9915  
 92.7% 724 17 9191 7.3% 6113  
 61.65% 3802 38.35% 5422  
 58.99% 3769 41.01%  
 43.56%  
 2022-2023 18 39  
 1942 1937  
 1729 89.26% 18 208 10.74%  
 2733 99.8%  
 81.62% 325  
 437 347 260  
 388 300 368  
 478 396 453  
 451 367 100%  
 480-499 12 500 23  
 1937 1921 99.17%  
 796 765 96.1%  
 690 517 113  
 207 40% 229 44.3%



		289334
		29.18
		145305
		14.66
		19471
		1.96
		8778
		0.89
		72657
		7.33
		12753
		1.29
		51199
		4.88

2023 8 23742  
23945.71 1014 4.46%  
5

	23742
	23945.71
	1014
	4.46%

2022-2023 107.46 120.27  
1011 105.9 26000  
CNKI World i b  
10 253 341  
1987 2014  
4339

179.1

180.43

108.38

340.59

41.83

2022-2023

357

11026

Worldlib

86218

67317

81%

2022—2025

2023 —2025

2

2

2

9

6

1	2020	50261		
2	2021	40106		
3	2020	080910T		
4	2020	082507T		

2020

12

2023

1

1: 350

2

2023

6

3

4

7

	2	36	

	2	36		
	2	36		

5

2

1

1

2

2022 9

8


3

2022

2021

1

3

13

10

14

50

2022-2023

43

1729

1772

5596

351

1305

29.59%

2022-2023

5

9

1	1			2020.07
2	1			2020.07
3				2019.11
4				2019.09
5				2023.08

0.53

27.65

10

				%				
1		152	40	26.32	5	3.29	25	16.45
2		153	29	18.95	7	4.58	21	13.73
3		152	39	25.66	5	3.29	35	23.03
4		149	31	20.81	5	3.36	18	12.08
5		152	36	23.68	5	3.29	23	15.13
6		150	29	19.33	5	3.33	36	24
7		158	28	17.7	5	3.16	27	17.09
8		155	36	23.23	5	3.23	31	20

105

14

69

15

6

40%

1014

2022-2023

655

2432

480

2

2

2022-2023

6

13

+

1

2

5

—

11

+

	—	
	—	
	time—	
	---	
	---	
	---	
	---	
	---	

2022

TRIZ

1

1

2

5

3

2023

3

2022-2023

2023

1

1

1



2.

7

2020  
2022

42

2022 1.

20% 30%

130	690	1	517	45	113	207
	229		81			1
	2			5	111	
	321		9		1	
1				5		8
7				3		2
				1		
				9915		17.3:1

	2022	1977.64
	2151.71	96.21
104.68	44.09	47.97

162.76	72.67	44.65%
	115.0	50.0

1900

21

35

5

46

216: 1

4

27 35 76.1%  
11 23.9%

2022  
15 12 296 148  
6281 927.5 33  
17.8 500 200  
40 40  
2484 196.58 17823  
285.168 3371 67.42  
80 9.52  
2023

2022-2023

21

17

72

17

2022-2023

100

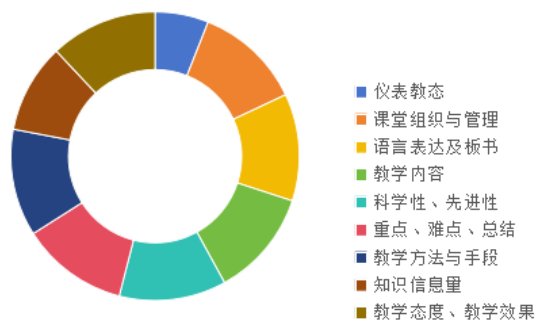
75

104

27574

166

2022-2023



2151.71	44.09	47.97
45.10	145.90	
23742	23945.71	179.1
180.64	108.38	

— — —

—

13

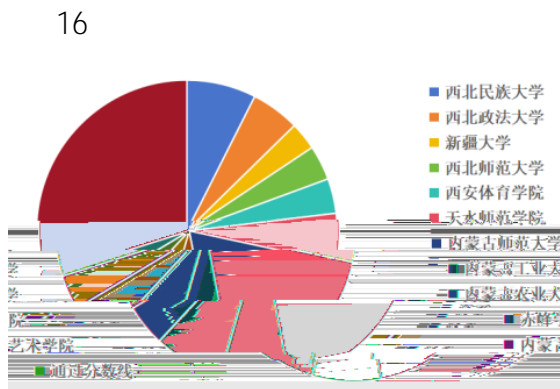
	48	24	394	403

50

94761

98.33% 98.72%

2023	2862	2670
93.29%	99.96%	
2022		40.66%
11.87%		90.02%
	99.13%	
2023	8	31
74.89%	2023	2312
50.89%	12	0.39%
527	17.07%	677
		21.93%
	150	4.86%
1.78%	52	1.68%
26	0.84%	26
	17	0.55%
		17
		0.55%
2022-2023	8	0.087%
2022-2023	27	



2022-2023	4309	11.49%
3.1%		

1013-2023

3888

1823

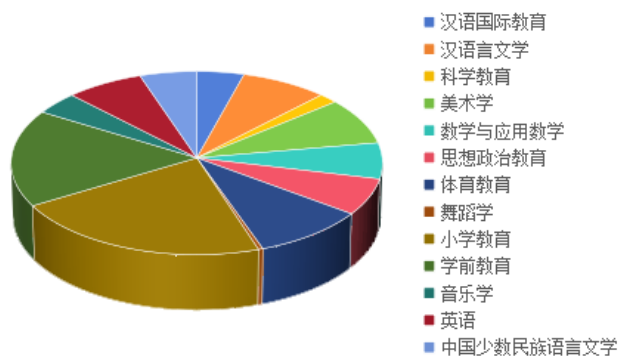
1213

		120		360	
	3		4	2023	3
			-		2022
12					
	18				
2023	6			7	
					9915
	9191			92.7%	

61.65%      17      6113  
 3802      38.35%      5422  
 58.99%      3769      41.01%      2023  
 6

13

+ + +



3

4267

42

6

8

11.9%

1.

2.

1.

+

+

2.