u ¤ Ÿ p

ú ± f Z x _ u ˜ H

1988

“ ” “

”

“ ” “

” “ ” “ ” “ ”

“ 2015 ”

¡ © _ ¶ o• e g e B /

1999.3

2000.9

2006.6

2009 2

2008.1

2011.5

2010.8

2014.5

( )2009.5

2006.9

2015.9

2014.5

2010.8

20

“ ” “

”

“ ”

L f Z € | ¥ u

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ” VI

“ ”

“ ”

“ ”

“ ”

“ 100 ”

“ ”

“ ” VI

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ” 60 “ ”

“ ” “ ”

“ Epoch ” “ ”

“ ”

ç Qª Æ ú ± f Z x _ ÿ _

ÿ _ * JÃĐ x

Ý R · ± " j j s

1

2

3 “ ”

“ ” ——

4

4 2024 5

5 2017 9 “ ”

6 2012 12

7 2012 9 “ ”

8 2011 9

9 2011 1 2010 2011

10 2011 VI 2011

11 2010 1 VI “ 2009 ”

ú ± f Z x ³ 5 V / b o• 6 [ ÿ _ u &^?ädÍ

º ³ s g [ V c g JÃĐ g # 8 Ý R | Ò b ož

2013—2014 “ ”

2015 “ ”

2017 “ ”

2017 “ ”

2018

2019

2021

2022

2023

2024

§ G § £ f Z _ _ u ç Ý "

É 5 u _ *

J ^ O u

/

/ /

( )

( ) 10 10

CAD

F = e g u

[1] , . “ ” —— “ ”

[J]. ( ),2024,2(01):120-124.

[2] . —— “ ” [J]. ( ),2021,2(07):141-143.

[3] . “ ” [J]. ( ), 2021,2(05):96-98.

[4] . [J]. ,2021,43(09): 58-59.

[5] . —— “ ” [J]. ( ),2021,2(03):134-136.

[6] . [J]. ( ),2016,2(03):80-82.

[7] . [J]. , 2016,(01): 86-90.

[8] . [J]. ,2015,(09):60-63.

[9] . [J]. ,2015,44(01):49-52.

[10] .“ ” “ ” [J]. ( ),2015,2(03):152-154.

[11] . [J]. ,2015,(02):82-83.

[12] Tianpeng Liu. The research on layout and design of Construction scheme for Garment Technology Laboratory of Fashion Design major which belongs to independent college[J]. Energy Education Science and Technology Part A: Energy Science and Research), 2014,32(2): 965-970

[13] , . ( ) [C]//Intelligent Information Technology Application Association. Proceedings of 2011 International Conference on Applied Social Science(ICASS 2011 V3). ;,2011: 6.

[14] . [J]. ,2010,39(05):43-44.

[15] . [C]// Jiangsu Teachers University of Technology, China, Intelligent Information Technology Application

Research Association, Hong Kong, IEEE Communications Society Beijing (Changsha) Chapter. Proceedings of 2010 International Conference on Future Information Technology and Management Engineering(FITME 2010)Volume 3.

;,2010:4.

[16] , , . [J].

,2023,39(05):153-159+164.

[17] , . [J].

,2015,7(04):96-98.

[18] . [J]. , 2018, 35 (23): 2.

[19] . [J]. , 2014, (12): 272.

ü » • ù u

1.

,2020.11-2023.9,

2.

2020.12-2023.9,

3. --- “ ”

2018.12-2021.4

4.

2020.6-2021.4,

5. PBL

2017.12-2018.1,

6. ( )

2011.4-2014.7,

7.

§ G § £ f Z _ c u 8 ¹

É 5 u ³ ƒ V 8 c

J ^ O u

3 1

> q f u

L c * • 8 u

F = e g B u

[1] . [J]. ,2018(06):7-10.

[2] . [J]. ,2014,(02):51-54.

[3] . [J]. ,2018(03):9-11.

[4] . [J]. ,2014(03):4-8

[5] , , . [J]. ,2019(02):9-11.

[6] . [M]. : 2015.3

, Ï F = e g u

[1] , , . [J].

,2019(10):20-21.

[2] , , . APP [J].

,2019(10):181-182.

ü » • ù u

1. “ ”

2021.4-2021.12

2. ( ) 2020.6-2021.6

3. ( ) “ ”

2018.6-2019.6

4. ( ) — IP

2018.6-2019.6

TÛX B ê u

1. 2017 ( ) 2017.6,

2. 2013.7,

3. ,2012

4. ,2015,

5. 2021.4

6. “ ” “ + ”

2018

7. “ ” “ + ”

2019

8. “ + ”

2020

9. — IP “ + ”

2020

º Ê f Z _ _ u ¶ T

É 5 u _ *

É u º Ê f Z _ _

J ^ O u

> q f u

L c * • 8 u

F = e g u

1. [J]. ,2019,40(04):117-122.

2.VR —— “ ” [J].

( ),2023,2(02):150-152.

3. [C]// .2018

. ; ;2018:8.

4. [J]. ,2018,40(04):75.

5. [C]// .

—— .

; ;,2017:12.

6. [J]. ( ),2016,2(05):131-133.

7. [J]. (

),2016,2(04):142-144.

8. [J]. ,2015,(04):198-199.

9. [J]. ,2021,49(05):92.

10. [J].

,2022,39(19):164.

11. [J]. ( ),2022,2(04):24.

_ ¶ B u

1. 2014 6

2. 2016 6

3. —— 2022 10

ü » • ù u

1. —— 2019.5

2. —— 2019.12

3. 2018.12

4.

2014.12-2020.6

5. 100 “ ——

” 2021.12

6.

2017.12-2022.11

7.2022 “ ”

“ ” 2022.12

8. New platform 2020.6

TÛX B ê u

1. —— 2018

2. ——

2022

3. 2022.7

4. —— “ ”

2022.8

5. —— 2022.8

6. 2023.5

7. —— MOBA 2022.8

8. —— “ ”

2022.8

9. 2018-2019 “ ” 2019.7

10. 2023.11

× _ _ u { Æ

É 5 u _ *

ú ± x _ V U%•³ V / b

J ^ O u



1

L c * • 8 u

F = e g u

[1] [J]. ,2022(01):104-106.

[2] [J]. ,2021,49(10):95.

[3] [J]. ,2021,38(13):164.

[4] [J]. ( ),2021,2(05):67-69.

[5] “ + ” —— [J]. ( ),2021,2(04):32-34.

[6] [J]. ,2021,49(03):77.

[7] [J]. ( ),2021,2(01):24.

[8] [J]. ,2021(01):109-110.

[9] [J]. ,2020,41(22):251-257.

[10] [J]. ( ),2020,2(06):72-74.

[11]AR [J]. ,2018(04):111-113.

[12] [J]. ,2017(16):114-116.

[13] [J]. ,2017(07):131-132.

[14] CG [J]. ( ),2016,2(08):87-89.

[15] ——

[J]. ,2015(10):120-122.

[16] [J]. ( ),2014,3.x

[17] —— [J]. 2014 06

[18] GUI —— App [J].

( ),2013,2(09):117-119.

[19] [J]. ,2013(09):106-107.

[20] [J]. ,2013(16):99-100.

[21] [C]// , James Madison ,

.Proceedings of International Conference on Engineering and Business

Management EBM2010).Scientific Research Publishing,2010:4.

_ ¶ u

1. UI 2015 11

2. 2016 8

ü » • ù u

1. “ + ”

2020.08

2.

2020.06

3. —— “

” 2018.12

4.

2020.03

5. 2015.3

5.

2014.11

6. 2013.7

TÛX B ê u

1. 2020-2021 “ ” 2021.07

2. 2020 2020.12

3. 2018 2018.12

4. 2019 2019.07

5. 2018 2018.06

6. 2018.04

7. 2015.06

8. 2015,07

9. 2014.12

10. 2012.12

11. ,2012.08

÷ c u %, %

Q S m Ö _ c

É 5 u _ *

J ^ O u 1982

8

> q f u

L c * • 8 u

F = e g u

1. [J]. 2004.12

2. [J]. 2005.4

3. [J]. 2006.1

4. [J]. 2006.6

5. [J]. 2009.12

6. [J]. 2010.4

7. [J]. 2011.3

8. “ ” “ ” [J]. 2011.5

9. [J]. 2011.8

10. [J]. 2012.2

11. [J]. 2012.8

12. — [J]. 2014.9

13. [J]. 2015.7

14. [J]. 2016.12

ü » • ù u

1. E08039

2009.5-2010.6

2. B10009

2011.5-2012.6

3.

2009.12-2010.2

4. VI 2010.5-2010.10

5.

2011.5-2011.9

6. 2002.5

7. 2002.9

8. \ \ 2003.8

9. \ \ \ 2003.-3. n

16.

17.

18.

19.

20.

21.

22.

23.

24. 2021-2022

25.

26. 16 2

27. 16

28. 16

29. 16

‹ MÍ4æg ÿ _ *

· º ú ± _ c

2018 “ ”

2019 11 “ ”

2021 10

ç N g ÿ _ *

· º ú ± _ c

$ 5. æ g ÿ _ *

· º ú ± _ c

10

3 1 1

5 3

÷ c u ³ GKU{

É 5 u ÿ _ *

º Ê f Z _ c

J ^ O u

5 2 3

1 1 4

F = e g u

1. —— [J] 2015 01 131-132

2. [J] 2015 02 198-199

3. [J] 2015 03 228

4. [J] 2021 06 228-229

5. [J] 2021 07 205

_ ¶ c d B € | u

1. 2020 5

2. 2018 10

3. 3 2020 2

ü » • ù u

1. 2013.11-2015.5

2. 2021.3-2022.5

3.

2011-2012.9

4.

2016.11-2019.9

5. 2017 11 -2019.9

6.2022 “ - ”

2022.4-2024.3

TÛX B ê u

1. 2023

2. “ ” 2016-2017

3. · “ ” 2017.11;

4. --

2023.10

5. “ ” —

2022.5

º Ê f Z _ _ c u q T7

8 1

1 2 2

TÛX B ê u

1 2023

2

3 • 2023 16

4 “ • ” 2023

5 “ ” 2024

6 “ ” 2024

7 2023

8 2023 16

9 • 2023 ICAD

÷ c u ô Fç

É 5 u ÿ _ *

Q S m Ö f Z _ c

J ^ O u

2025TGDE 10 3

3

1

> q f u

L c * • 8 u AI+

F = e g u

1. —— [J].

,2024,(03):92-94.

2. SPOC —— “ ” [J].

( ),2023,2(08):146-149.

3. ——

[J]. ,2025,(18):78-80.

4. [J]. ,2020,(18):49-50.

5. [J]. ,2020,(01):74.

€ | u

1. - (1)(2) 2019.12

2. “ ” + 100 ·

2021.9

3. - “ ”

2022.9

4. 2022

2024.4

5. “ ” 2024 · 2024.5

ü » • ù u

1. -

2023.3-2026.1.30

2.

2020.5-2022.10

3.

2021.11.17

4. “ ” - “ ” +

2022.5

5. SPOC -

2022.4

6. “ ”

2020.4

7. “ 20 ”

2019.11

TÛX B ê u

1. 2020-2025

2. “ ” 2021-22 2024-25

3.

“ + ”

÷ c u ~ ~

É 5 u ÿ _ * º Ê f Z _ c

J ^ O u

> q f u

_ 5ŠÐ

( )

± É È u

(1) ---

(2)

(3) ( ) 9 3

(4) ( ) 8

ü » ê u

(1) 2013-2014

(2) 2014

(3) 2015 “ ”

(4) 2017

(5)

(6) 2025

(7)2012- 10 ( )