

()

1), 2)

1995, 1997

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1995~1997 " "

{ }

1. (700 - 800MPa), ()

2. (510 - 560MPa), (10 - 12%)

3.가 (760 - 1000 1050 - 1250
2 - 6% 10 - 28MPa m)

4. (1.4T, 150000, 2W/Kg) (55mGssE, 9kEr, 10Css)

5.

37 - 49, 0.1 - 0.3mm

(2 - 5μm)

1100MPa (500MPa)

6. 1000MPa, 25%, 30% 가 Fe -

7. 가 30% 가 Fe, Al Ti (nano - crystalline)
(micro - crystalline),

8. 10 - 15 가

9. (fullerene)

10. 가 (900 - 1000MPa)

11. Sc 가 (530 - 550MPa) (K=37MPa m) 가

12. Al - Zn - Mg - Cu

13. 400 - 450MPa 370MPa 가

14. , , (700MPa) (600) (450MPa)

15. , , (0.2MJ/m²) (0.07MJ/m²)

16. 10 - 100 가 가

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1. (1000MPa), (15MPa m) -

2. (/ / , / /)

3. (: 50mm) (partially stabilized)

4.

(1000MPa 7MPa m)

(900 가)

(590MPa 6MPa m)

5. ,

6. (90 - 98%, 0.1 - 0.4W/m·K) 0.5 - 2μm () (1 - 3MPa m,

7. (: 5mm, 200 - 300μm)

[]

(1)

1. (比) 가 (30 - 50%) (-) + (-)

2. , (< 500) , (+)

3. (spark) , -

4. (硬) (600 - 650MPa)

(2)

1. (無機) (150MPa 400 - 800)

2. - - (poly - carbo - silane) (< 1400)

3. - (2 - 3 가) (不燃性)

4. , , (basalt)

(3)

1. 1.5 - 3

2.

3. (,)

4. (1000MPa), (< 200) polycarbonate

5. (2500MPa, 200 - 300GPa) -

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1. (1000MPa, 50 - 10KJ/m²)

2. 50 - 150MPa, 50 - 65KJ/m², 150 - 200

3. (液晶)

4. (Hydro - gel) (< 80)

5.

6.

7. (, ,) (, 99%, 4.5)

8. 가 (< 1J/g) (laser stereo - lithography) 가

9. (2500MPa, 200GPa, 3MJ/m², < 200)

10. , (- 60~ + 600 , pH 5 - 8)

11. (,)

12. (active photo electric layer) (photo - resistant) (100MJ/cm²)

13. (holographic) (100MJ/cm²)

14. (10⁻⁴ - 10⁻³ cm⁻¹, < 40dB, 0.05, 10nsec)

15. (< 150)

16. 가 (< 1 - 3)

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1. > 10kV/cm

2. / , (輻射熱)

3. ,

4.

5. 30%, 33% 12%) (, 가

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1. 1000 /cm

2. 가 50MPa

3. (dielectric insulation)

4. - (: 1000/cm)

5. - (: 500/cm)

6. (: 8×10^4 /cm)

7. : In_2O_3 , In_2S_3 , SnO_2 , BN, SiN , CdS/ Cd_2S , ZnS

8. 50nm >

9. < 10ppm, < 10 - 4ppm : (silicide), / /

10. (2300 - 12000 $\mu\text{F/g}$)

11. (開閉) < Insec -

12. (0.2 - 0.5 μm)

13. 170 가 가 0.5 μm

14. 6 5

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1. (2 - 3)

2.

3.

[]

(1)

1.

2. ,

(2)

1. (異狀)

(3)

1.

2.

3.

4. (異狀) (-)

5.

(4)

1. " "

2. Ni - Ti

3.

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