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代表性学术成果:

1.ShaoyangQin, Liang Gao, Long Cheng, Yue Yuan, Wolfgang Jacob, Guang-Hong Lu and **Jinliang Wang**, Effect of exposure temperature on deuterium retention and surface blistering of tungsten exposed to sequential nitrogen and deuterium plasma. Nucl. Fusion 58, 106027 (2018).

2.ShaoyangQin, **Jinliang Wang**, Long Cheng, Jun Wang, Yue Yuan, Guang-Hong Lu, Influence of nitrogen pre-irradiation at different temperatures on surface blistering and deuterium retention in tungsten. Fusion Eng. Des. 129, 1–5(2018).

3.ShaoyangQin, **Jinliang Wang**, Liang Gao, Long Cheng, Yue Yuan, Wolfgang Jacob, Guang-Hong Lu, Surface blistering and deuterium retention in tungsten exposed to low-energy deuterium plasma at different temperatures. Nucl. Instruments Methods Phys. Res. Sect. B Beam Interact. with Mater. Atoms (2018).

4.Xu, Huaizhe; Feng, Sheng; \*Zhang, Yaping; **Wang, Jinliang**; Zhang, Shichao, Resonant tunneling through an asymmetrical two-magnetic-barrier structure on single layer graphene,

OPTICAL AND QUANTUM ELECTRONICS, 49(7), pp 250, 7-2017

5. Ze-Sheng Chen, Ben Ma, Xiang-Jun Shang, Hai-Qiao Ni, **Jin-Liang Wang**, Zhi-Chuan Niu, Bright Single-Photon Source at 1.3  $\mu\text{m}$  Based on InAs Bilayer Quantum Dot in Micropillar, **Nanoscale Research Letters**, (2017) 12: 378.

6. Ze-Sheng Chen, Ben Ma, Xiang-Jun Shang, Yu He, Li-Chun Zhang, Hai-Qiao Ni, **Jin-Liang Wang**, Zhi-Chuan Niu, Telecommunication Wavelength-Band Single-Photon Emission from Single Large InAs Quantum Dots Nucleated on Low-Density Seed Quantum Dots, **Nanoscale Research Letters**, (2016) 11: 382.1-7.

7. Guoke Wei, Jun Yu, **Jinliang Wang**, Peng Gu, David. J. S. Birch and Yu. Chen, Hairpin DNA-functionalized gold nanorods for mRNA detection in homogenous solution, **Journal of Biomedical Optics**, September, 2016, Vol. 21(9), 097001-1-097001-9.

8. Guoke Wei, D. Simionesie, J. Sefcik, J.U. Sutter, Q. Xue, J. Yu, **Jinliang Wang**, D. J. S. Birch and Y. Chen, "Revealing Photophysics of Gold-Nanobeacons via Time-Resolved Fluorescence Spectroscopy" , **Optics Letters**, December 15, 2015, V40(24), 5738-5741.

9. Guoke Wei, **Jinliang Wang** and Yu Chen, "Electromagnetic Enhancement of Ordered Silver Nanorod Arrays Evaluated by Discrete Dipole Approximation" , **Beilstein Journal of Nanotechnology**, 2015, 6, 686-696.

10. Yang C. T., **Wang J. L.**, Mei L. R., Wang X. Y. Enhanced Photocatalytic Degradation of Rhodamine B by Cu<sub>2</sub>O Coated Silicon Nanowire Arrays in Presence of H<sub>2</sub>O<sub>2</sub>. **Journal of Materials Science & Technology**, 2014, V30:1124-1129

11. Wang X. Y., **Wang J. L.**, Wang H. Improvement of Output Performance of Solar Cells Using Small Nanoparticles, **Journal of Nanoparticle Research**, 2014, V16: 2458, 1-5

12. Wang X. Y., Wang **J. L.**, Wang H. Improvement of the Efficiency and Power Output of Solar Cells Using Nanoparticles and Annealing [J]. **Solar Energy**, 2014, V101: 100-104

13. Wang X. Y., **Wang J. L.**, Yang S. C. Mechanical Properties of Hydrogenated Nanocrystalline Silicon Thin Film Studied by Finite Element Method [J]. **Materials Research Innovations**, 2014. V18:S4, 1017-1020

14. Mei L. R., **Wang J. L.**, Wang X. Y., Yang C. T. Antimicrobial Activity of Ag-surfaces Sputtered by Magnetron Sputtering [J]. **Materials Research Innovations**, 2014. V18:S4, 875-878

15.XiaoyuWang, Hai Wang, Hongwei Jiang, Peijie Wang, and**Jinliang Wang**.Structureand Magnetic Property of the FePt/CrPt Bilayer.**Journal of Nanoscience and Nanotechnology**, Vol. 12(2), 1032-1035 (2012).

16.BoZhou, Zhisong Xiao, Lu Yan, Fang Zhu, Feng Zhang, Anping Huang,**JinliangWang**,Improved Infrared Emissions of Er<sup>3+</sup>-Tm<sup>3+</sup> Codoped Al<sub>2</sub>O<sub>3</sub> ThinFilms: The Role of Cross Relaxation Among Rare Earth Ions,**Journal ofNanoscience and Nanotechnology**, 11, 10673-10676 (2011)

17.ChaoFan,**Jinliang Wang**,Ning Tang, Hengxing Xu, Guoke Wei, haizhe Xu,Fabrication and photoluminescence of Er<sup>3+</sup>-doped Al<sub>2</sub>O<sub>3</sub> thin films with sol-gelmethode,**Journal of Nanoscience and Nanotechnology**, 11, 11147-11150(2011)

18.FangZhu, Zhisong Xiao, Feng Zhang, Lu Yan,**Jinliang Wang**, AnpingHuang, Donor doping process and white light generation in CaMoO<sub>4</sub> powders withmultivalence Pr codoping,**J. Luminescence**,2011, 131 (1), 22-24.

19.Zhou, B, Xiao, ZS, Yan, L, Zhang, F, Huang, AP,**Wang, JL**,Improved Infrared Emissions of Er(3+)-Tm(3+) Codoped Al(2)O(3) Thin Films: TheRole of Cross Relaxation among Rare Earth Ions,**3rd IEEE InternationalNanoelectronics Conference**, 2010-1-3 ~ 2010-1-8, pp 738-739, 2010-1-3

20.Chao Fan, **JinliangWang**, Ning Tang,Hengxing Xu, Guoke Wei. Fabrication and photoluminescence of Er<sup>3+</sup>-dopedAl<sub>2</sub>O<sub>3</sub>thin films with sol-gel method.**3rd IEEEInternational Nanoelectronics Conference**, 2010-1-3 ~ 2010-1-8, pp1286-1286, 2010-1-3

21.GuokeWei,**Jinliang Wang**and Chao Fan, Structural and PhotoluminescenceProperties of Er-doped ZnO Thin Films Prepared by RF Magnetron Sputtering,**3rdIEEE International Nanoelectronics Conference**,2010-1-3 ~ 2010-1-8, pp1284-1285, 2010-1-3

22.TANGNing,**WANG JinLiang**, XU HengXing, PENG HongYong and FAN Chao,Optical characterization of ZnO thin films deposited by RF magnetron sputteringmethod,**Sci. China. Ser E-Tech. Sci.**, Aug.2009, 52(8), 2200-2203.

23.HongyongPeng, **JinliangWang**, Li Wang, Bo Zhou,TheInfluence of Annealing on Mechanical Properties of Hydrogenated NanocrystallineSilicon Thin Films,**Journal of Physics: Conference Series**152 (2009) 012016.

24.ZhouBo, Xiao Zhisong, Huang Anping, Yan Lu, Zhu Fang,**Wang Jinliang**,Yin Penggang and Wang Hao. Effect of the Tm-Er Concentration Ratio on thePhotoluminescence of Er-Tm:Al<sub>2</sub>O<sub>3</sub> Thin Films Fabricated by Pulsed LaserDeposition.**Progress in Natural Science**, 2008, Vol 18, 661-664.

25.Zhisong Xiao, Lu Yan, Bo Zhou, Fang Zhu, Anping Huang,**Jinliang Wang**,Optical Properties of Tm-Er Codoped Aluminate Glasses,**Journal of The KoreanPhysical Society**,2008, vol52, S54-S57.

26.BoZhou,**Jinliang Wang**, Yadong Pan, Li Wang, Hongyong Peng.Fabrication and physical properties of high-quality zinc oxide thin films,**Proc.of SPIE**, 2008, vol6984, 69840S-1-69840S-4.

27.LiWang,**Jinliang Wang**, Jinzhao Lin, Bo Zhou, Hongyong Peng.Investigations on the mechanical properties of P-doped nc-Si:H films,**Proc.of SPIE**, 2008, vol6984, 698411-1-698411-4.

28.**WangJin-liang**, Wu Er-xing, Characterization of Doped HydrogenatedNanoocrystalline Silicon Films Prepared by PECVD ,**Chin. Phys.**,2007, 16(3), 848-853.

29.WenshengWei, Gangyi Xu,**Jinliang Wang**and Tianmin Wang, Raman spectra ofintrinsic and doped hydrogenated nanocrystalline silicon films,**Vacuum**,2007, 81, 656-662.

30.JinzhaoLin,**Jinliang Wang**, Bo Zhou, Erxing Wu, Effects of thefabrication processes of nc-Si:H films on their mechanical properties, **Chinese Journal ofAeronautics**, 2006, 19, S202-S205.

31.**JinliangWang**and Tianmin Wang, Transition Metal (Thin Film) / Si (Substrate)Contacts: Buried Interface Study by Soft X-ray Emission Spectroscopy,**MaterialsScience and Engineering B**, 2000, 72, 156-159.

32.Y.L.He,G.Y.Hu, M.B.Yu, M.Liu,**J.L.Wang**and G.Y.Xu, Conduction mechanismof hydrogenated nanocrystalline silicon films,**Phy.Rev.B**,1999,59,15352-15357.

33.**J.L.Wang**,M.Hirai, M.Kusaka, M.Iwami, T.Morii and H. Watabe, Mn(Thin-Film)/Si(Substrate)Contacts: Analysis of the Buried Interface by Soft X-ray Emission Spectroscopy,**Jpn. J.Appl. Phys**, 1999, 38, 198-200.

34.**J.L.Wang**,M.Hirai, M.Kusaka and M.Iwami, Valence Band Density of States of the ManganeseSilicides Studied by Soft X-ray Emission Spectroscopy,**J.Phys.Soc.Jpn**,1998, 67,230-233.

35.T.jikimoto,**J.L.Wang**, T.Saito, M.Hirai, M.Kusaka, M.Iwami and T.Nakata,Atomic and electronic structures of heat treated 6H-SiC surface,**AppliedSurface Science**, 1998, 132, 593 -597.

36.**J.L.Wang**,M.Hirai, M.Kusaka and M.Iwami, Preparation of manganese silicide thin film bysolid phase reaction,**Applied Surface Science**, 1997, 113/114, 53-56.

37.K.Kakitani,**J.L.Wang**and A.Yoshimori, Theoretical Analyses of ThermalDesorption Spectra of Alkali Adsorbed Si(100) Surface, “**The Structure ofSurfaces IV**” , **World Scientific 1993**, 359-364.

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