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**PERSONAL DETAIL**

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| SURNAME: | Dong |
| FORNAMES: | Junhua |
| DATE OF BIRTH: | 21th Jun., 1963 |
| SEX: | Male |
| PLACE OF BIRTH: | Henan Province, P. R. China |
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## EDUCATION:

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|---|---|---|
| Institute of Metal Research, CAS. Shenyang, P. R. China | 1992.9-1995.9 | Ph.D Degree (Corrosion of Metals) |
| Liaoning University Shenyang, P. R. China | 1984.9-1987.7 | M.Sc Degree (Inorganic Chemistry) |
| Liaoning University Shenyang, P. R. China | 1980.9-1984.7 | B.Sc Degree (Chemistry) |

## WORK EXPERIENCE

| | | |
|---|---|---|
| **Senior Research Fellow** | Institute of Metal research, CAS, Shenyang | **2007.10 to date** |
| **Associate professor** | Shenyang Normal University, Shenyang | **1996.8-1998.6** |
| **Senior Research** | Institute of Metal Research, CAS, Shenyang | **1998.6-2007.9** |
| **Assistant professor** | Liaoning University, Shenyang | **1987.3-1995.8** |
| **Senior Research Fellow** | NIMS, Tsukuba, Japan | **2002.1-2002.12** |
| **STA fellow** | NIMS, Tsukuba, Japan | **2000.1 -2001.12** |

## TEACHING EXPERIENCE

**2004 to date,** course of principle of electrochemical corrosion of metals, for the graduate students and Ph.D candidates in IMR

## RESEARCH INTERESTINGS

Corrosion of canister materials for geological disposal of high-level radioactive waste
Atmospheric corrosion evolution and electrochemical monitoring of metal
Developing new advanced economic weathering steels

Developing corrosion resistant magnesium alloy
Marine corrosion and electrochemical test method
Concrete corrosion
Corrosion inhibitors

**PUBLICATIONS**

1. J. Wei, J. H. Dong* and W. Ke，“EIS study on corrosion evolution of chemical quenched rebar in concrete contaminated with chloride”，Corrosion Engineering, Science and Technology，VOL 47， NO 1，31（2012）37

2. Wei Jie，Fu XX，Dong Junhua， Ke Wei，“Corrosion Evolution of Reinforcing Steel in Concrete Under Dry/Wet Conditions Contaminated with Chloride”，JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY, Vol.**28,** No.**10, 905(2012)912**

3. WANG Changgang, DONG Junhua, KE Wei, CHEN Nan, LI Xiaofang, “RESEARCH ON PITTING CORROSION BEHAVIOR OF COPPER IN THE SOLUTION WITH $HCO_3^-$ AND $Cl^-$” ACTA METALLURGICA SINICA, Vol.48, No.11, 1365(2012)1373 DOI:10.3724/SP.J.1037.2011.00773

4. Wang Changgang, Deng Weimin, Zhao Guangyu, Dong Junhua, Ke Wei, Chen Xuebin, “STUDY ON THE CORROSION MECHANISM OF T2 COPPER CONDENSER TUBE UNDER THE HUMID ENVIRONMENT”. ACTA METALLURGICA SINICA, Vol. 48, No. 7, 815(2012)821, DOI: 10.3724/SP.J.1037.2012.00114

5. Hao, Long; Zhang, Sixun; Dong Junhua, Ke Wei, “Evolution of atmospheric corrosion of MnCuP weathering steel in a simulated coastal-industrial atmosphere”, CORROSION SCIENCE, Vol. 59, 270 **(**2012**)**276, **DOI:** 10.1016/j.corsci.2012.03.010

**6.** Hao Xuehui; Dong Junhua; Wei Jie; INFLUENCE OF MICROSTRUCTURE OF AH32 CORROSION RESISTANT STEEL ON CORROSION BEHAVIOR, ACTA METALLURGICA SINICA , Vol.**48**, No.**5**, **534(2012)540** DOI: **10.3724/SP.J.1037.2012.00105**

**7.** Xu, Shanna; Ikpi, Magdalene Edet; Dong Junhua, Ke Wei, Effects of Cadmium alloying on the Corrosion and Mechanical Properties of Magnesium, INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, Vol.7, No.5, 4735(2012)4755

8. Hao, Long; Zhang, Sixun; Dong Junhua; Ke, Wei; Evolution of corrosion of MnCuP weathering steel submitted to wet/dry cyclic tests in a simulated coastal atmosphere, CORROSION SCIENCE, Vol. **58, 175(2012)180,** DOI: **10.1016/j.corsci.2012.01.017**

9. Hao, Long; Zhang, Sixun; Dong Junhua; Ke, Wei; Rusting Evolution of MnCuP Weathering Steel Submitted to Simulated Industrial Atmospheric Corrosion, METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, Vol.**43A, 51724(2012)1730**，DOI: **10.1007/s11661-011-0977-4**

10. Mu Xin; Wei Jie; Dong Junhua; Ke, Wei; ELECTROCHEMICAL STUDY ON CORROSION

BEHAVIORS OF MILD STEEL IN A SIMULATED TIDAL ZONE，ACTA METALLURGICA SINICA， Vol. **48**, No. **4**, **420(2012)426,** DOI: **10.3724/SP.J.1037.2011.00666**

11. Wei Xin, Dong Junhua, Tong Jian, Zheng Zhi, Ke Wei, INFLUENCE OF TEMPERATURE ON PITTING CORROSION RESISTANCE OF Cr26Mo1 ULTRA PURE HIGH CHROMIUM FERRITE STAINLESS STEEL IN 3.5%NaCl SOLUTION, ACTA METALLURGICA SINICA, Vol.**48, No.4, 502(2012)507,** DOI: **10.3724/SP.J.1037.2011.00489**

12. Wang Changgang; Dong Junhua; Ke Wei; : EFFECTS OF HCO3- AND SO42- ON THE PITTING CORROSION BEHAVIOR OF Cu, ACTA METALLURGICA SINICA, Vol.**48,** No.**1**, **85(2012)93** DOI: **10.3724/SP.J.1037.2011.00537**

13. Wei Jie; Dong Junhua; Ke Wei, NUMERICAL SIMULATION AND EXPERIMENTAL STUDY ON TEMPERATURE FIELD DURING CHEMICAL REAGENT COOLING PROCESS OF HOT ROLLED REBAR, ACTA METALLURGICA SINICA, Vol.**48**, No.**1, 115(2012)121,** DOI: **10.3724/SP.J.1037.2011.00474**

14. Hao, Long; Zhang, Sixun; Dong Junhua; Ke Wei, A study of the evolution of rust on Mo-Cu-bearing fire-resistant steel submitted to simulated atmospheric corrosion, CORROSION SCIENCE, Vol. **54**, **244(2012)250** DOI: **10.1016/j.corsci.2011.09.023**

15. Hao, Long; Zhang, Sixun; Dong Junhua; Ke Wei, Atmospheric corrosion resistance of MnCuP weathering steel in simulated environments, CORROSION SCIENCE, Vol.**53,** No.**12, 4187(2011)4192** DOI: **10.1016/j.corsci.2011.08.028**

16. Yang Jingfeng; Dong Junhua; Ke Wei, EFFECTS OF SO42- AND Cl- ON ACTIVE/PASSIVE CORROSION BEHAVIORS OF LOW CARBON STEEL IN DEAERATED BICARBONATE SOLUTION, ACTA METALLURGICA SINICA, Vol.**47,** No.**10, 1321(2011)1326,** DOI: **10.3724/SP.J.1037.2011.00134**

17. Wang Changgang; Dong Junhua; Ke Wei;, EFFCTS OF pH AND Cl- CONCENTRATION ON THE CORROSION BEHAVIOR OF COPPER IN BORIC ACID BUFFER SOLUTION, ACTA METALLURGICA SINICA, Vol. **47,** No.**3, 354(2011)360** DOI: **10.3724/SP.J.1037.2010.00440**

18. Yang Jingfeng; Dong Junhua; Ke Wei; INFLUENCE OF pH VALUES AND CORROSION PRODUCTS ON LOW CARBON STEEL CORROSION SUSCEPTIBILITY IN BORATE BUFFER SOLUTION, ACTA METALLURGICA SINICA, Vol.**47,** No.**2, 152(2011)156,** DOI: **10.3724/SP.J.1037.2010.00439**

19. Ke Wei; Dong Junhua, STUDY ON THE RUSTING EVOLUTION AND THE PERFORMANCE OF RESISTING TO ATMOSPHERIC CORROSION FOR Mn-Cu STEEL, ACTA METALLURGICA SINICA, Vol.**46,** No.**11**, **1365(2010)1378,** DOI: **10.3724/SP.J.1037.2010.00489**

20. Wang Lei; Dong Junhua; Ke Wei, Corrosion behavior of MnCu cost-effective weathering steel under cyclic load in a wet/dry cyclic corrosion environment, Journal of Chinese Society for Corrosion and Protection, Vol.**30,** No**4, 257(2010)61.**

21. Wang Lei; Zhang Sixun; Dong Junhua; SURFACE CRAZING OF Mn-Cu WEATHERING STEEL, ACTA METALLURGICA SINICA, Vol.**46,** No.**6, 723(2010)728,** DOI: **10.3724/SP.J.1037.2009.00501**

22. Dong Jun-hua, Rusting Evolution of Mn-Cu Alloying Steel in a Simulated Coastal Environment, Corrosion Science and Protection Technology, Vol.**22,** No.**4, 261(2010)265**

23. Dong Junhua; Xu, Shanna; Ke, Wei; The Effect of Cd Addition on NDE of As-Cast Mg-Cd Alloy in 0.1M NaCl Solution, : **7th Pacific Rim International Conference on Advanced Materials and Processing, Cairns, AUSTRALIA, AUG 02-06, 2010**

24. Fu, Xinxin; Dong Junhua; Han, Enhou; A New Experimental Method for in Situ Corrosion Monitoring Under Alternate Wet-Dry Conditions, SENSORS, Vol.**9,** No.**12, 10400(2009)10410** DOI: **10.3390/s91210400**

25. Dong Jie; Dong Jun-hua; Han En-hou; Rusting evolvement of mild steel under wet/dry cyclic condition with pH 4 $NaHSO_3$ solution, Corrosion Science and Protection Technology, Vol. **21,** No. **1, 1(2009)4**

**26.** Liu Guo-chao; Dong Jun-hua; Han En-hou; Influence of Cu and Mn on corrosion behavior of low alloy steel in a simulated coastal environment, Corrosion Science and Protection Technology, Vol.**20,** No. **4, 235(2008)238**

27. Chen, Jian; Dong Junhua; Wang, Jianqiu; Effect of magnesium hydride on the corrosion behavior of an AZ91 magnesium alloy in sodium chloride solution, CORROSION SCIENCE, Vol. **50,** No.**12, 3610 (2008)3614** DOI: **10.1016/j.corsci.2008.09.013**

28. Chen Jian, Wang Jianqiu, Han Enhou, Dong Junhua, Ke Wei, States and transport of hydrogen in the corrosion process of an AZ91 magnesium alloy in aqueous solution, CORROSION SCIENCE, **Vol.** 50, No.5, 1292(2008)1305 **DOI:** 10.1016/j.corsci.2008.01.028

**29.** Dong Junhua; Han, Enhou; Ke, Wei; Introduction to atmospheric corrosion research in China,

SCIENCE AND TECHNOLOGY OF ADVANCED MATERIALS, Vol.**8,** No.**7-8, 559(2007)565,** DOI: **10.1016/j.stam.2007.08.010**

**30.** Chen, Xinhua; Dong Junhua; Han, Enhou; Effect of Ni on the ion-selectivity of rust layer on low alloy steel, MATERIALS LETTERS, Vol.**61,** No.**19-20, 4050(2007)4053** DOI: **10.1016/j.matlet.2007.01.014**