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出生年月： 1961 年 4 月

学 位： 博士

职 称： 教授

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## 个人介绍

曹茂盛，男，教授，博士生导师。中国船舶工业总公司优秀中青年专家。

从事低维材料吸波、透波、压电等功能材料研究。

完成自然科学基金课题、973 专题、863 课题、国防基础科研及预研课题等多项。

主持编写材料科学与工程系列图书 60 多部，本人编著或主编 10 部。

发明专利授权 15 项；在 *Adv. Mater.*, *Adv. Opt. Mater.*, *Nanoscale*, *Carbon* 等期刊发表论文 200 多篇，H 指数 34，论文被引用超过 4000 次。

现为 ACS, Wiley, RSC, Elsevier, Springer, AIP, IOP 等系列出版物 50 多种期刊的审稿人。

已培养博士毕业生 22 名、硕士毕业生 33 名、博士后并出站的人员 4 名。

## 教育经历

1979 年 09 月-1983 年 07 月，黑龙江大学，攻读理论物理专业，获学士学位；

1986 年 09 月-1988 年 12 月，哈尔滨工业大学，攻读光学专业，获硕士学位；

1996 年 09 月-1998 年 12 月，哈尔滨工业大学，攻读复合材料专业，获博士学位。

## 工作经历

1983 年 07 月-1995 年 10 月，齐齐哈尔大学助教、讲师、副教授、教研室副主任；

1995 年 10 月-2003 年 09 月，哈尔滨工程大学教授、博士生导师，系主任；

1999 年 03 月-2000 年 12 月，哈尔滨工程大学固体力学博士后流动站，在职博士后；

2000 年 12 月-2003 年 08 月，清华大学材料科学与工程博士后流动站，在职博士后；

2003 年 09 月至今，北京理工大学教授、博士生导师。

## 研究领域

低维吸波材料、透波材料

压电材料结构与性能

## 社会任职

中国颗粒学会理事、全国部分高校材料科学与工程系列图书编审委员会主任委员、  
《复合材料学报》、《材料工程》、《表面技术》、《黑龙江大学学报》编委。

## 获奖情况

获国家科技进步二等奖和省部级科技进步一等奖各 1 项（排名第六）；  
省部级科技进步二等奖 3 项（排名第一的 2 项、排名第四的 1 项）；  
省部级科技进步三等奖 3 项（排名第一的 2 项、排名第二的 1 项）；  
获省优秀教学成果二等奖 2 项（排名第一的 1 项、第五的 1 项）；  
获省优秀著作一等奖 2 项（排名第一）、省优秀教材奖 2 项（排名第一）。

## 科研项目

完成的课题：

国防 973 专题 1 项；

国防基础科研课题 1 项；

国家 973 子课题 1 项；

863 重点课题（子课题）1 项；

863 课题 1 项；

国防预研课题 2 项；

省重点科技攻关课题及各类基金课题多项；

国家自然科学基金、教育部博士点基金、国防预研基金等课题多项；

横向合作课题多项。

在研的课题：

自然科学基金重点项目及横向合作课题多项。

## 论文专著

2015 年（更新中）

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Lu, MM; Cao, MS\*; Chen, YH; Cao, WQ, Liu, J; Shi, HL; Zhang, DQ; Wang, WZ; Yuan, J  
Multiscale Assembly of Grape-Like Ferroferric Oxide and Carbon Nanotubes: A Smart Absorber  
Prototype Varying Temperature to Tune Intensities  
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Yang, HJ; Cao, WQ; Zhang, DQ; Su, TJ; Shi, HL; Wang, WZ; Yuan, J; Cao, MS\*  
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Cao, WQ; Wang, XX; Yuan, J; Wang, WZ; Cao, MS\*  
Temperature dependent microwave absorption of ultrathin graphene composites  
JOURNAL OF MATERIALS CHEMISTRY C DOI: 10.1039/c5tc02185e , 2015  
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Li, Y; Cao, WQ; Yuan, J; Wang DW; Cao MS\*

Nd doping of bismuth ferrite to tune electromagnetic properties and increase microwave absorption by magnetic–dielectric synergy

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Liu, J; Cao, WQ; Jin, HB; Yuan, J; Zhang, DQ; Cao, MS\*

Enhanced permittivity and multi-region microwave absorption of nanoneedle-like ZnO in the X-band at elevated temperature

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Cao, MS\*; Wang, XX; Cao, WQ; Yuan, J

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Li, Y; Wang, DW; Cao, WQ; Li, B; Yuan, J; Zhang, DQ; Zhang, SJ; Cao, MS\*

Effect of MnO<sub>2</sub> addition on relaxor behavior and electrical properties of PMNST ferroelectric ceramics

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2014 年（选择）

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Wen, B, Cao, MS\*, Lu, MM, Cao, WQ, Shi, HL, Liu, J, Wang, XX, Jin, HB, Fang, XY, Wang, WZ, Yuan, J

Reduced Graphene Oxides: Light-Weight and High-Efficiency Electromagnetic Interference Shielding at Elevated Temperatures

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Yang, HJ, Cao, MS\*, Li, Y, Shi, HL, Hou, ZL, Fang, XY, Jin, HB, Wang, WZ, Yuan, J

Enhanced Dielectric Properties and Excellent Microwave Absorption of SiC Powders Driven with NiO Nanorings

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Wen, B, Wang, XX, Cao, WQ, Shi, HL, Lu, MM, Wang, G, Jin, HB, Wang, WZ, Yuan, J, Cao, MS\*

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Lu, MM, Cao, WQ, Shi, HL, Fang, XY, Yang, J, Hou, ZL, Jin, HB, Wang, WZ, Yuan, J, Cao, MS\*

Multi-wall carbon nanotubes decorated with ZnO nanocrystals: mild solution-process synthesis and highly efficient microwave absorption properties at elevated temperature

JOURNAL OF MATERIALS CHEMISTRY A, 2, 27, 10540, 2014

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2013 年（选择）

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Wang, DW, Cao, MS\*, Zhang, SJ\*  
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Zhao, YN; Cao, MS\*; Jin, HB; Shi, XL; Li, X; Agathopoulos, S

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Chen, YJ; Cao, MS; Wang, TH; Wan, Q

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Chen, Z; Shan, ZW; Cao, MS; Lu, L; Mao, SX\*

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Cao, MS\*; Zhu, J; Yuan, J; Peng, ZH; Xiao, G

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Cao, MS\*; Zhu, J; Yuan, J; Zhang, TF; Peng, ZH; Gao, ZJ; Xiao, G; Qin, SM

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MATERIALS & DESIGN 23, 6, 557, 2002

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Cao, MS\*; Wang, RG; Fang, XY; Cui, ZX; Chang, TJ; Yang, HJ

Preparing gamma'-Fe<sub>4</sub>N ultrafine powder by twice-nitriding method

专 利

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钙钛矿压电陶瓷纳米粉体的溶胶-水热复合法制备技术, ZL 2004 1 0044033.2

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曹茂盛 林海波 金海波

一种纳米-微米双尺度晶粒复合 PZT 压电陶瓷的制备方法, ZL 2006 1 0137609.9

曹茂盛 史晓玲 周 伟 雷义龙

一种 ZnO 晶须增强的多波段响应结构型吸波复合材料制备方法, ZL 2006 1 0120690.X

曹茂盛 周 伟 史晓玲

一种高动态力学性能的隐身复合材料及制备技术, ZL 2007 1 0080980.0

曹茂盛 熊蓝天

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曹茂盛 林海波 赵全亮 段中夏

氧化锌晶须增强锆钛酸铅压电复合陶瓷的制备方法, ZL 2007 1 0081713.5

曹茂盛 林海波 刘海涛

钙钛矿压电陶瓷纳米粉体的溶胶-水热复合法制备技术, ZL 2007 1 080477.5

曹茂盛 张 亮 金海波

一种氮化硅-二氧化硅热透波陶瓷制备方法, ZL 2007 1 0081108.8

曹茂盛 张 亮 熊蓝天

一种钇二硅二氧七热透波陶瓷材料及制备方法, ZL 2008 1 0076380.1

曹茂盛 王大伟 张德庆

蒸气氧化法合成氧化锌空心球及制备方法, ZL 2009 1 0180509.8

曹茂盛 段中夏 赵全亮 袁 杰 路 冉

ZnO 纳米晶须增强硅基锆钛酸铅压电复合厚膜的制备方法, ZL 2009 1 0082803.5