

# **Curriculum Vitae**



## **PERSONAL DATA**

Name: Dr. Xiaoyong Tian Birth date: 1981.07.16 Birth place: Henan, China Marital status: Married Nationality: Chinese

Research topics: Innovative design and 3D printing of continuous fiber reinforced composite

structures

## **EDUCATION**

2007-2010	Ph. D in Material Science and Engineering, Institute of Non-metallic materials, Clausthal University of Technology, Clausthal, Germany
2005-2007	Ph. D Candidate in Mechanical Engineering, School of Mechanical Engineering, Xi'an Jiaotong University, Xi'an, China
2002-2005	Master in Mechanical Engineering, School of Mechanical Engineering, Zhengzhou University, Zhengzhou, China
1998-2002	Bachelor in Mechanical Engineering, School of Mechanical Engineering, Zhengzhou University, Zhengzhou, China

# **RESEARCH EXPERIENCE**

2015/6 07- 09	Visiting professor at Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany
Since 2013	Researcher at State Key Laboratory of Manufacturing System Engineering, Xi'an Jiaotong University, China
Since 2011	Researcher at School of Mechanical Engineering, Xi'an Jiaotong University, China
2007-2010	Research assistant at Institute of Non-metallic materials, Clausthal University, Germany
2005-2007	Research assistant at School of Mechanical Engineering, Xi'an Jiaotong University, China



#### **WORK EXPERIENCE**

Since 2021 Young Distinguished Professorship in Xi'an Jiaotong University

Since 2019 Full professor, School of Mechanical Engineering, State Key Laboratory of Manufacturing System Engineering, XJTU, China

- Innovative design and 3D printing for multifunctional composite and metamaterial structures, *Innovative funds by XJTU, Industrial project, Project leader*
- Smart composites and 4D printing, Innovative funds by XJTU, and other Key projects,
   Project leader

2013-2018 Associate Professor, School of Mechanical Engineering, State Key Laboratory of Manufacturing System Engineering, XJTU, China

- Large scale Powder Bed Fusion for multi-materials and composites, equipment, processes, and applications, National High-tech R&D Program (863 Program 2015AA042503, 2015-2019), Industrial project CALVT Fund (2017-2018), Project leader
- 3D printing for continuous fiber reinforced thermal plastic composites, Innovative funds by XJTU, SKLRS (2014-2016), NSFC project (51575430, 2016-2019), Industrial project CAST Fund (2016-2018), National Key Research and Development Program (2017YFB1103401, 2016YFB1100902, 2017-2022), NSFC-RFBR (China-Russian) Project (51811530107, 2018-2019), Project leader

2011-2012 Lecturer, School of Mechanical Engineering, XJTU, China

- Innovative design and application of electromagnetic metamaterials based on 3D printing, and applications on microwave cloaking and radar, NSFC project
- Fabrication process of ceramic photonic crystals and applications, NSFC project

2007-2010 Research Assistant, Institute of Non-metallic materials, TU-Clausthal, Germany

- Layer-wise Slurry Deposition (LSD) based Selective laser sintering for ceramics
- Laser surface treatment for piezoelectric ceramics

2005-2007 Research Assistant, School of Mechanical Engineering, XJTU, China

- Stereolithography (SL) by using ceramic slurry
- Reaction-formed SiC based on SL process

## **AWARDS AND FELLOWSHIPS**

- Outstanding Science and Technology Research Achievement Award for Universities in Shaanxi Province, China, 2022
- Innovation China Leading Technology List (Equipment manufacturing)- 3D printing process and equipment of continuous fiber reinforced composites, 2021
- SAMPE Innovation Award- Manufacturing Innovation Award, SAMPE China 2021
- Young scholar of K. C. Wong Education Foundation, 2020
- Composites Part A Highly Cited Paper Award, 2019
- Young Science and Technology Star and "Sanqin talent" of Shaanxi Province, 2016



- 2012 Emerald Engineering Outstanding Doctoral Research Award- Highly Commended
- Scholarship from CSC for the joint cultivation of Ph. D students, 2007-2010

## **LIST OF PUBLICATIONS (Until March. 2022)**

- Peer-reviewed articles in international journals (\* Corresponding author)
- [1] Xiaoyong Tian\*, Jens Günster, Jörg Melcher, Dichen Li, Jürgen G. Heinrich, Process parameters analysis of direct laser sintering and post treatment of porcelain components using Taguchi's method, J. Eur. Ceram. Soc., 2009, 29, 1903-1915;
- [2] Xiaoyong Tian\*, and Dichen Li, Rapid manufacture of net-shape SiC components, Int. J. Adv. Manuf. Technol., 2010, 5-8, 579-587;
- [3] Xiaoyong Tian\*, Bo Sun, Jürgen G. Heinrich, and Dichen Li, Stress relief mechanism in layer-wise laser directly sintered porcelain ceramics, Mater. Sci. & Eng. A, 2010, 7-8, 1695-1703;
- [4] **Xiaoyong Tian\***, Anne Dittmar, Jörg Melcher, Jürgen G. Heinrich, Laser surface densification of K<sub>0.5</sub>Na<sub>0.5</sub>NbO<sub>3</sub> lead-free piezoelectric ceramic, **Appl. Surf. Sci.**, 2010, 256, 5918-5923;
- [5] Xiaoyong Tian\*, Thomas Muehler, C. Gomes, Jens Günster, J. G. Heinrich, Feasibility Study on Rapid Prototyping of Porcelain Products, J. Ceram. Sci. Tech., 02[04]217-226 (2011)
- [6] Xiaoyong Tian\*, Weigang Zhang, Dichen Li, Reaction-bonded SiC derived from resin precursors by Stereolithography, Ceramic International, 2012, 1, 589-59)
- [7] Ming Yin, Xiaoyong Tian\*, Haoxue Han, Dichen Li, Free-space carpet-cloak based on gradient index rod-connected diamond-structured photonic crystals in metamaterial regime, Applied physics Letter, 100, 124101 (2012)
- [8] Xiaoyong Tian\*, Juergen G. Heinrich, Dichen Li, Rapid prototyping of porcelain products by layer-wise slurry deposition (LSD) and direct laser sintering, Rapid prototyping J., (18/5 2012) 362–373
- [9] Xiaoyong Tian\*, Dichen Li, Zhangwei Chen & Weizhao Zhou: Study on the fabrication accuracy of ceramic parts by direct stereolithography, Virtual and Physical Prototyping, 7:3, 195-202, (2012)
- [10] Haoxue Han, Lingling Wu, Xiaoyong Tian\*, Dichen Li, Ming Yin, Broadband gradient refractive index planar lens based on a compound liquid medium, J. Appl. Phys. 112, 114913 (2012)
- [11] Xiaoyong Tian\*, Bo Sun, Juergen G. Heinrich, Dichen Li, Scan pattern, stress and mechanical strength of laser directly sintered ceramics, Int. J. Adv. Manuf. Technol., 64, 1-4, 239-246, 2013
- [12] Tian Xiaoyong\*, Li Dichen, Zhang Anfeng, Lu Zhongliang, Lu Bingheng, New development on additive manufacturing technology and its applications, Engineering Sciences, 11:1, 51-56, 2013
- [13] Hangyuan Lv, **Xiaoyong Tian\***, Yu Wang, and Dichen Li, Vibration energy harvesting using a phononic crystal with point defect states, **Applied Physics Letter**, 102, 034103, (2013)
- [14] Lingling Wu, Xiaoyong Tian\*, Huifeng Ma, Ming Yin and Dichen Li, Broadband flattened Luneburg lens with ultra-wide angle based on a liquid medium, Applied physics letter, 102, 034103 (2013)
- [15] Lingling Wu, Xiaoyong Tian\*, Ming Yin, Dichen Li, and Yiping Tang, Three-dimensional liquid flattened Luneburg lens with ultra-wide viewing angle and frequency band, Appl. Phys. Lett. 103, 084102 (2013)
- [16] Ming Yin, Xiao Yong Tian\*, Ling Ling Wu, Di Chen Li, All-dielectric three-dimensional broadband Eaton lens with large refractive index range, APPLIED PHYSICS LETTERS 104, 094101 (2014)
- [17] Ming Yin, **Xiao Yong Tian\***, Ling Ling Wu, and Di Chen Li, A Broadband and omnidirectional electromagnetic wave concentrator with gradient woodpile structure, Vol. 21, No. 16



- DOI:10.1364/OE.21.019082 | OPTICS EXPRESS, 19082
- [18] Xiaoyong Tian\*, et al., Additive manufacturing: controllable fabrication for integrated micro and macro structures, J. Ceram. Sci. Tech., 05 [04] 261-268 (2014), DOI: 10.4416/JCST2014-00044
- [19] Xiaoyong Tian\* et al., Digital design and fabrication of metamaterials structure driven by microwave transmittance performance and 3D printing, Scientia Sinica Informationis, 2015, 45: 224 234, doi:10.1360/N112014-00240
- [20] **田小永\***, 殷鸣与李涤尘, 渐变折射率人工电磁介质设计与 3D 打印制造. **机械工程学报**, 2015(07): 第 124-129 页.
- [21] Lu, B., D. Li and **X. Tian**, Development Trends in Additive Manufacturing and 3D Printing. Engineering, 2015. 1(1): p. 085-089.
- [22] **田小永\***, 殷鸣与李涤尘, 功能驱动的超材料结构数字化设计与 **3D** 打印. **中国科学: 信息 科学**, 2015. 45(2): 第 224-234 页.
- [23] Feng, M., **Tian X\*** et al., Broadband abnormal reflection based on a metal-backed gradient index liquid slab: an alternative to metasurfaces. J. Phys. D: Appl. Phys., 2015. 48: p. 245501.
- [24] 田小永\*等, 宽频大角度新型龙勃透镜设计与快速制造. 机械工程学报, 2015: 第 1-8 页.
- [25] **Tian, X.\***, M. Yin and D. Li, 3D printing: a useful tool for the fabrication of artificial electromagnetic (EM) medium. Rapid Prototyping J, 2016. 22(2): p. 251-257.
- [26] **田小永\***等, 金属颗粒冷态高速微喷射增材制造工艺研究. **机械工程学报**, 2016(3): 第 205-212 页.
- [27] **田小永\***等, 高性能纤维增强树脂基复合材料 3D 打印及其应用探索. **航空制造技术**, 2016(12): 第 48-53 页.
- [28] **Tian, X.\*,** et al., Interface and performance of 3D printed continuous carbon fiber reinforced PLA composites. Composites Part A: Applied Science and Manufacturing, 2016. 88: p. 198-205.
- [29] **田小永\***, 李涤尘,卢秉恒, 空间 3D 打印技术现状与前景. **载人航天**, 2016. 22(4): 第 329-334 页.
- [30] Mengxue Yan, **Tian X\*** et al., Design and Selective Laser Sintering of complex porous polyamide mould for pressure slip casting. Materials and Design, 2016. 111: p. 198-205.
- [31] **Tian, X.\***, et al., Recycling and remanufacturing of 3D printed continuous carbon fiber reinforced PLA composites. Journal of Cleaner Production, 2017. 142: p. 1609-1618.
- [32] Yang, C., **Tian X\***et al., 3D printing for continuous fiber reinforced thermoplastic composites: mechanism and performance. Rapid Prototyping Journal, 2017. 23(1): p. 209-215.
- [33] Sun, C., **Tian X\***et al., Effect of particle size gradation on the performance of glass-ceramic 3D printing process. Ceramics International, 2017. 43: p. 578-584.
- [34] Yang, C., **Tian X** et al., Modelling and characterisation for the responsive performance of CF/PLA and CF/PEEK smart materials fabricated by 4D printing. Virtual and Physical Prototyping, 2017.DOI: 10.1080/17452759.2016.1265992
- [35] Yan, M., **Tian X\*** et al., Hierarchically porous materials prepared by selective laser sintering. Materials & Design, 2017. 135: p. 62-68.
- [36] **田小永\***, 尹丽仙, 李涤尘, 三维超材料制造技术现状与趋势. **光电工程**, 2017. 44(1): 第 69-76 页.
- [37] Yang, C., **Tian X\*** et al., Influence of thermal processing conditions in 3D printing on the crystallinity and mechanical properties of PEEK material. **Journal of Materials Processing Technology**, 2017. 248: p. 1-7.



- [38] **田小永\*等**, 高性能树脂基复合材料轻质结构 3D 打印与性能研究. **航空制造技术**, 2017(10): 第 34 页.
- [39] Hou, Z., **Tian X\*** et al., 3D printed continuous fibre reinforced composite corrugated structure. **Composite Structures**, 2018. 184: p. 1005-1010.
- [40] Yin, L., **Tian X\* et** al., Design and characterization of radar absorbing structure based on gradient-refractive-index metamaterials. **Composites Part B: Engineering**, 2018. 132: p. 178-187.
- [41] **Tian, X.\***, et al., Process prediction of selective laser sintering based on heat transfer analysis for polyamide composite powders. **International Journal of Heat and Mass Transfer**, 2018. 120: p. 379-386.
- [42] Yin L, **Tian X\***, Shang Z, Li D. Ultra-broadband metamaterial absorber with graphene composites fabricated by 3D printing. **MATERIALS LETTERS.**2019.
- [43] **田小永\***, 王清瑞, 李涤尘, 卢秉恒.可控变形复合材料结构 4D 打印. **航空制造技术**. 2019 年,第 62 卷第 1/2 期, 20-27.
- [44] Huang X, Tian X\*, Cao Y, Tong Z, Li D. Research of Large Scale SLS Equipment Preheating Strategy Based on Subarea Control. **Journal of Mechanical Engineering**, 2018;54:160-6.
- [45] Peng G, Yan M, **Tian X\***, Li D. Fabrication Process and Properties of Porous Polyamide Produced by Selective Laser Sintering. **Polymer Materials Science & Engineering**. 2018;34:145-50.
- [46] Luo M, Tian X\*, Zhu W, Li D. Controllable interlayer shear strength and crystallinity of PEEK components by laser-assisted material extrusion. JOURNAL OF MATERIALS RESEARCH.2018;33:1632-41.
- [47] Wang Q, Tian X\*, Huang L, Li D, Malakhov AV, Polilov AN. Programmable morphing composites with embedded continuous fibers by 4D printing. MATERIALS & DESIGN.2018;155:404-13.
- [48] Yan M, Tian X\*, Peng G, Li D, Zhang X. High temperature rheological behavior and sintering kinetics of CF/PEEK composites during selective laser sintering. **COMPOSITES SCIENCE** AND TECHNOLOGY.2018;165:140-7.
- [49] Liu T, Tian X\*, Zhang M, Abliz D, Li D, Ziegmann G. Interfacial performance and fracture patterns of 3D printed continuous carbon fiber with sizing reinforced PA6 composites.

  Composites Part A: Applied Science and Manufacturing. 2018;114:368-76.
- [50] Polilov AN, Tatus NA, **Tian X**. Some features of design of tapered composite elements. **AIP Conference Proceedings**.2018;2053.
- [51] Malakhov AV, Polilov AN, **Tian X**. Progressive failure analysis of variable stiffness composite structures. **AIP Conference Proceedings**.2018;2053.
- [52] Yin, L., et al., Ultra-broadband metamaterial absorber with graphene composites fabricated by 3D printing. MATERIALS LETTERS, 2019.
- [53] 田小永等, 可控变形复合材料结构 4D 打印. 航空制造技术, 2019(Z1): 第 20-27 页.
- [54] Luo, M., et al., Impregnation and interlayer bonding behaviours of 3D-printed continuous carbon-fiber-reinforced poly-ether-ether-ketone composites. Composites Part A: Applied Science and Manufacturing, 2019. 121: p. 130-138.
- [55] Yin, L., et al., Characterizations of continuous carbon fiber-reinforced composites for electromagnetic interference shielding fabricated by 3D printing. Applied Physics A, 2019. 125(4).
- [56] 田小永等, 石墨烯超材料吸波结构 3D 打印. 航空制造技术, 2019.



- [57] 晏梦雪等,轻质复合材料飞行器仪器支架选择性激光烧结成形与性能研究. 机械工程学报, 2019:第1-7页.
- [58] 刘腾飞等,连续碳纤维增强聚乳酸复合材料 3D 打印及回收再利用机理与性能. 机械工程学报,2019.55(7):第 128-134 页.
- [59] 晏梦雪, 田小永与李涤尘, 高性能聚芳醚酮及其复合材料粉末床熔融成形的现状与挑战. 精密成形工程, 2019. 11(04): 第 64-72 页.
- [60] Polilov, A.N., et al., Design of composite members with curvilinear fiber trajectories. Journal of Physics: Conference Series, 2019. 1347: p. 12045
- [61] .Tian, X., Q. Wang and D. Li, Design of a Continuous Fiber Trajectory for 4D Printing of Thermally Stimulated Composite Structures. SCIENCE CHINA Technological Sciences, 2020.
- [62] Liu, T., et al., High-pressure interfacial impregnation by micro-screw in-situ extrusion for 3D printed continuous carbon fiber reinforced nylon composites. Composites Part A: Applied Science and Manufacturing, 2020: p. 105770.
- [63] Hou, Z., et al., Design and 3D printing of continuous fiber reinforced heterogeneous composites. Composite Structures, 2020. 237: p. 111945
- [64] .Meng, L., et al., Bi-scale interfacial bond behaviors of CCF/PEEK composites by plasma-laser cooperatively assisted 3D printing process. Composites Part A: Applied Science and Manufacturing, 2020: p. 105812.
- [65] Quan, C., et al., 3d printed continuous fiber reinforced composite auxetic honeycomb structures. Composites Part B: Engineering, 2020. 187: p. 107858.
- [66] Hou, Z., et al., A constitutive model for 3D printed continuous fiber reinforced composite structures with variable fiber content. Composites Part B: Engineering, 2020: p. 107893.
- [67] Shang, J., et al., Controllable inter-line bonding performance and fracture patterns of continuous fiber reinforced composites by sinusoidal-path 3D printing. Composites Science and Technology, 2020. 192: p. 108096.
- [68] Wu, H., et al., A Study on the Fused Deposition Modeling Process of Graphene/Nano-Fe3O4 Composite Absorber and its Absorbing Properties of Electromagnetic Microwave. Applied Sciences, 2020. 10(4): p. 1508.
- [69] Malakhov, A., et al., A modeling method of continuous fiber paths for additive manufacturing (3D printing) of variable stiffness composite structures. Applied Composite Materials, 2020.
- [70] Hou, Z., et al., Optimization design and 3D printing of curvilinear fiber reinforced variable stiffness composites. Composites Science and Technology, 2021. 201: p. 108502.
- [71] Wang, Y., et al., Poly ether ether ketone and its composite powder prepared by thermally induced phase separation for high temperature selective laser sintering. Materials & Design, 2021. 201: p. 109510.
- [72] Xing, X., et al., Reconfigurable liquid electromagnetic metamaterials driven by magnetic fields. Applied Physics Express, 2021. 14(4): p. 041002.
- [73] Huo, C., et al., Hierarchically porous alumina catalyst carrier with biomimetic vein structure prepared by direct ink writing. Journal of the European Ceramic Society, 2021. 41(7): p. 4231-4241
- [74] 田小永等, 石墨烯/柔性聚乳酸自传感复合材料结构 3D 打印与性能研究. 机械工程学报, 2021. 57(07): 第 215-223 页.
- [75] Zhong, Q., et al., Using feedback control of thermal history to improve quality consistency of parts fabricated via large-scale powder bed fusion. Additive Manufacturing, 2021. 42: p. 101986.



- [76] Wang, X., X. Tian and D. Li, Dual mechanisms of fiber dispersion of CF/Sn50Pb50 composites fabricated by double-layer printing head 3D printing process. Journal of Materials Research and Technology, 2021. 13: p. 971-979.
- [77] Wang, Q., X. Tian and D. Li, Multimodal soft jumping robot with self-decision ability. Smart Materials and Structures, 2021. 30(8): p. 085038.
- [78] Huo, C., et al., Regulation mechanism of the specific surface area of alumina ceramic carriers with hierarchical porosity fabricated by powder bed fusion. Ceramics International, 2021. 47(21): p. 30954-30962.
- [79] Zhang, M., X. Tian and D. Li, Interfacial Transcrystallization and Mechanical Performance of 3D-Printed Fully Recyclable Continuous Fiber Self-Reinforced Composites. Polymers, 2021. 13(18): p. 3176.
- [80] Malakhov, A.V., et al., Increasing the Bearing Capacity of Composite Plates in the Zone of Bolted Joints by Using Curvilinear Trajectories and a Variable Fiber Volume Fraction. Mechanics of composite materials, 2021. 57(3): p. 287-300.
- [81] 田小永等, 连续碳纤维增强尼龙复合材料预浸丝制备与 3D 打印性能研究. 航空制造技术, 2021. 64(15): 第 24-33 页.
- [82] Wu, L., et al., Modular Design for Acoustic Metamaterials: Low Frequency Noise Attenuation. Advanced Functional Materials, 2021: p. 2105712.
- [83] Huang, Y., et al., Multiscale concurrent design and 3D printing of continuous fiber reinforced thermoplastic composites with optimized fiber trajectory and topological structure. Composite Structures, 2022. 285: p. 115241.
- [84] 吴玲玲等, 2021 年机械超材料热点回眸. 科技导报, 2022. 40(01): 第 161-167 页.
- [85] Zocca, A., et al., Challenges in the Technology Development for Additive Manufacturing in Space. Chinese Journal of Mechanical Engineering: Additive Manufacturing Frontiers, 2022: p. 100018.
- [86] Tian, X., et al., Roadmap for Additive Manufacturing: Toward Intellectualization and Industrialization. Chinese Journal of Mechanical Engineering: Additive Manufacturing Frontiers, 2022. 1(1): p. 100014.
- [87] Tian, X., et al., 3D Printing of Continuous Fiber Reinforced Polymer Composites: Development, Application, and Prospective. Chinese Journal of Mechanical Engineering: Additive Manufacturing Frontiers, 2022. 1(1): p. 100016.
- [88] 侯章浩等, 连续纤维增强复合材料变刚度结构 3D 打印与性能研究. 机械工程学报, 2022. 58(05): 第 170-177 页.

List of publication can also be found on Researchgate:

https://www.researchgate.net/profile/Xiaoyong\_Tian

Conference presentation

(Poster)

- [1] DKG-Jahrestagung, 2009,23,March, Archen, Germany Xiaoyong Tian, Jens Günster, Jörg Melcher, Jürgen G. Heinrich, Process parameters analysis of direct laser sintering and post treatment of porcelain components using Taguchi's method;
- [2] **11**<sup>th</sup> International Conference and Exhibition of ECerS, June **26**, **2009**, Cracow, Poland Xiaoyong Tian, Jens Günster, Jörg Melcher, Jürgen G. Heinrich, Rapid manufacturing of ceramic



components by laser direct sintering process parameters analysis; (Oral presentation)

- [3] **20**<sup>th</sup> SFF symposium, August **3**, **2009**, Austin, USA

  Xiaoyong Tian, Jens Günster, and Jürgen G. Heinrich, Experimental and simulation analysis of the stress relief hypothesis for laser direct sintering porcelain ceramics; (Oral presentation)
- [4] 1st Laser material processing, April 22, 2010, Clausthal, Germany
  Xiaoyong Tian, Jürgen G. Heinrich, Laser direct sintering of ceramics using Layer-wise Slurry
  Deposition —Process parameters analysis experimentally and by simulation; (Oral presentation)
- 12<sup>th</sup> International Ceramics Congress, June 9, 2010, Montecatini, Italy
   X. Tian, A. Dittmar, E. Kivitz, J. G. Heinrich, and W. Braze, Rapid prototyping of ceramics by *LSD* and *LSS*. (Oral presentation)
- [6] 12<sup>th</sup> Conference of the European Ceramic Society, June 19-23, 2011, Stockholm, Sweden Xiaoyong Tian, Jens, Guenster, Feasibility Study on Rapid Prototyping of Porcelain Products; (Oral presentation)
- [7] PIERS 2012 (Progress In Electromagnetics Research Symposium), Kuala Lumpur, Malaysia Xiaoyong Tian, Ming Yin, Haoxue Han, and Dichen Li, "A New Tunable Metamaterial Using Lowloss Ferrouid and Its Application on Lens Antenna" and "Fabrication of Gradient Index 3D Photonic Crystals Structure in Metamaterial Regime"; (Oral presentation)
- [8] 23th International SFF Symposium An Additive Manufacturing Conference, August 4, 2012 Austin, Texas, USA, USA
  Xiaoyong Tian, Dichen Li, Bingheng Lu, R&D and education activities for RP&M technologies in

Xiaoyong Tian, Dichen Li, Bingneng Lu, R&D and education activities for RP&IVI technologies in Xi'an Jiaotong University, China (Invited Oral presentation)

- [9] The 3rd International Symposium on Materials Processing Science with Lasers as Energy Sources, Berlin, Germany, April, 20-23, 2014 Xiaoyong Tian, Dichen Li, Ling Wang, Review: Research activities on laser-based additive manufacturing processes in Xi'an Jiaotong University
- [10] Sino-German Symposium and Academic Visit "Laser additive Manufacturing and processing of High-performance Materials", 2015.1.20, Aachen, Germany Xiaoyong Tian, R&D activities on laser-based AM processes in Xi'an Jiaotong University, China
- [11] **2016 6 22, The i-SAIRAS 2016**,北京
  Xiaoyong Tian,Zhanghao Hou, Dichen Li, Bingheng Lu, 3D Printing of Continuous Fiber Reinforced Composites with A Robotic System for Potential Space Applications
- [12] **2016-10-21,IUMRS-ICA**,亚洲材料大会,青岛,邀请报告
  Xiaoyong Tian, Recycling and remanufacturing of 3D printed continuous carbon fiber reinforced PLA composites.
- [13] [24]2017-08-20~25,21st International Conference on Composites Materials, Xi'an China, Xiaoyong Tian, Tengfei Liu, Dichen Li, 3D printing for continuous fiber reinforced thermoplastic composites Xiaoyong Tian, Exploration on 3D printing processes and applications for Advanced Fiber Reinforced Composites (Invited)
  - Book and chapter
- [1] Xiaoyong Tian, Advanced Manufacturing technologies for fiber reinforced polymer matrix composites (in Chinese), National Defense Industry Press, Beijing, China, ISBN 978-7-118-12409-5, 2021



- [2] **X. Tian**, "Rapid prototyping of ceramics by direct laser sintering", Dissertation, TU-Clausthal, Papierflieger Verlag, Clausthal-Zellerfeld, Germany, ISBN 978-3-86948-107-4;
- [3] **X. Tian** et al., "Net-shaping of ceramic components by using rapid prototyping technologies" in 'Ceramic Materials', InTech Open Access Publisher, Vienna, Austria, ISBN 978-953-307-217-3.

## **RELATED ACADEMIC WORK**

- Deputy Editor-in-Chief, Chinese Journal of Mechanical Engineering: Additive Manufacturing Frontiers
- Committee member of SAMPE China
- Vice Chairman of the Sub-committee of thermoplastic composites of SAMPE China
- Committee member of ISO TC 261, WG2/4 (Additive manufacturing)
- Associate Editor of Process in Additive Manufacturing (PAM, Springer journal)
- Senior member of Chinese Mechanical Engineering Society (CMES)