# Sajjad Ur Rehman, PhD

#### Personal and contact information

Date of Birth : April 10, 1989

Nationality : Pakistan

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#### **Current position**

**Distinguished Associate Professor,** National Rare Earth Functional Materials Innovation Center, College of Rare Earths, Jiangxi University of Science and Technology, Ganzhou, China. 2023-till now

### Research funds as project leader (selected)

- 1. High-level Overseas Talent Project, Ministry of Education, Jiangxi, China, 2024-2027
- 2. Foreign Expert Fund, Ministry of Science and Technology of China, 2023-2026
- 3. Research Fund for International Scientists, National Natural Science Foundation of China (NSFC), 2022-2023
- 4. Research Funds for High Level Talents, Jiangxi Science and Technology Department, 2021-2023 & 2023-2026
- 5. Outstanding PhD Dissertation Fund, Jiangxi University of Science and Technology, 2020

## Work experience

- 1. Associate Professor, College of Rare Earths, Jiangxi University of Science and Technology, 2020-2023
- 2. **Postdoctorate Fellow,** University of Electronic Science and Technology of China, 2021-2023
- 3. **Research Fellow**, Zhejiang Tiantong Electronic Information Materials Research Institute Co., Ltd, Zhejiang 314400, China, 2021-2023
- 4. Assistant Manager/Manager, Micro Imaging System, Western Group, Olympics Corporation, Pakistan
- 5. Consultant (on production of RE magnets), Golden Dragon Rare Earths, Fujian, China (part-time)



#### Awards (selected)

- 1. Top Talent in Jiangxi Province (highly needed talent), Jiangxi Human Resource Department, 2024-2029
- 2. Outstanding Thesis Award, Ministry of Education, Jiangxi Provincial Government, 2023
- 3. Outstanding PhD (PhD with outstanding thesis), Jiangxi University of Science and Technology, China, 2020.
- 4. **Outstanding PhD Dissertation** (2018-2020), Jiangxi University of Science and Technology, Ganzhou, P. R. China.
- 5. **Outstanding PhD Student** (Three times, 2018, 2019, 2020), Jiangxi University of Science and Technology, Ganzhou, P. R. China.

### Academic qualifications

Sr. #	Qualification	Discipline	Board/ University	Year	Grade
1	PhD	Materials Science	Jiangxi University of Science and Technology, China	2020	Outstanding PhD (Provincial awards)
2	Master of Philosophy	Physics	Riphah International University, Pakistan	2016	A
3	Bachelor of Sciences	Physics	Forman Christian College University, Pakistan	2011	A

## **Publications (selected)**

 $Complete \ list \ of \ publications \ (130+) \ can \ be \ found \ at: \ \underline{https://www.researchgate.net/profile/Sajjad\_Rehman9/researchgate.pdf}$ 

#### (\*indicate the corresponding author)

- Weiwei Dong, Sihao Tu, Sajjad Ur Rehman\*, Changcai Chen, Xianguo Luo, Tongxiang Liang, Yifeng Hu, Lei Wang, Balancing electromagnetic wave loss capability and impedance matching of MOF derived porous carbon composite FeSiB based soft magnetic alloys to optimize the absorption performance, *Chemical Engineering Journal*, 517 (2025) 164370
- 2. Weiwei Dong, Mengjia Wei, **Sajad Ur Rehman\***, ..., Multifactor optimization of microwave absorption properties in Co/CNT@SiC composites via temperature-driven structural and compositional modulation, *Journal of Materials Chemistry A*, 13 (2025) 19991-20004
- 3. Sajjad Ur Rehman\*, Haihua Liu, Yongqiang Deng, ..., Optimization of an isotropic Alnico 8 alloy, *Journal of Alloys and Compounds*, 1010 (2025) 178142

- 4. Yongqiang Deng, **Sajjad Ur Rehman\***, Zhihao Liu, Haihua Liu, Shuwei Zhong, Xiaoqiang Yu, Jiajie Li, Munan Yang, Tailoring the magnetic properties of Ce-Fe-B alloys by controlling the CeFe<sub>2</sub> paramagnetic phase, *Intermetallics*, 176 (2025) 108571
- 5. Zhihao Liu, Yongqiang Deng, **Sajjad Ur Rehman\***, ..., Refining Alnico 8 magnets with composition optimization of matrix phase, directional solidification and magnetic field annealing, *Journal of Alloys and Compounds*, 1006 (2024) 176329
- 6. Liang Hui, **Sajjad Ur Rehman\***, ..., Fabrication and application prospects of Pr–Fe–B/Alnico nanocomposite alloys, *Journal of Rare Earths*, 42(9) (2024) 1717-1723
- Sajjad Ur Rehman, Xiang Li, Qingfang Huang, ..., An exploration of nanocomposite Nd-Fe-B/Alnico alloys
  with enhanced intergrain interactions and improved magnetic properties, *Journal of Alloys and Compounds*, 858
  (2021) 158238
- Sajjad Ur Rehman, Chen Wei, Qingfang Huang, ..., Tailoring the microstructure, magnetic properties and interaction mechanisms of Alnico-Ta alloys by magnetic field treatment, *Journal of Alloys and Compounds*, 857 (2021) 157586
- 9. **Sajjad Ur Rehman\***, Haihua Liu, Shuwei Zhong, ..., Retaining the Curie temperature of Ce substituted Nd-Fe-B nano-ribbons by Alnico elements substitution, Intermetallics, 141 (2022) 107428
- 10. Sajjad Ur Rehman, Chen Wei, Ruibiao Zhang, Haihua Liu, Shaoxiong Li, Zhong Minglong, Munan Yang, Qingzheng Jiang, Jun Wang, Zhenchen Zhong, Tailoring the magnetic properties and microstructure of Alnico 8 magnets by various Ti contents and processing conditions, *Intermetallics*, 143 (2022) 107486
- 11. Munan Yang, Sangen Luo, **Sajjad Ur Rehman\***, ..., Effect of lattice distortion induced by Ce chemical valence on coercivity of Nd-Ce-Fe-B alloy, *Journal of Alloys and Compounds* 894 (2021) 162486
- 12. Lili Zhang, Wenmiao Zhang, **Sajjad Ur Rehman\***, ..., Optimization of microwave absorption properties of flaky FeSiAl magnetic alloy by surface modification, *Journal of Alloys and Compounds*, 949 (2023) 169756
- 13. **Sajjad Ur Rehman\***, Qingfang Huang, Rizwan Ur Rehman Sagar, ..., Interaction mechanism, magnetic properties and microstructure of Ce-Fe-B/ Alnico spark plasma sintered magnets, *Journal of Magnetism and Magnetic Materials*, 537 (2021) 168237
- 14. **Sajjad Ur Rehman**, Qingzheng Jiang, Kai Liu, ..., Phase constituents, magnetic properties, intergranular exchange interactions and transition temperatures of Ge-doped CeFeB alloys. *Journal of Physics and Chemistry of Solids*, 132 (2019) 182–186
- 15. **Sajjad Ur Rehman**, Han Ouyang, Qingzheng Jiang, ..., Magnetic properties, phase transition temperatures and microstructure of CeFeB-alnico ribbons, *Journal of Magnetism and Magnetic Materials*, 486 (2019) 165252
- 16. **Sajjad Ur Rehman**, Qingzheng Jiang, Weikai Lei, ..., Microstructure, magnetic properties, thermal stabilities and coercivity mechanisms of Ta doped Nd-Fe-B ribbons, *Journal of Physics and Chemistry of Solids*, 124 (2019) 261–265

- 17. **Sajjad Ur Rehman**, Qingzheng Jiang, Lunke He, ..., Microstructure and magnetic properties of NdFeB alloys by co-doping alnico elements, *Physics Letters A*, 383 (2019) 125878
- 18. **Sajjad Ur Rehman**, Qingzheng Jiang, Qing Ge, ..., Microstructure and magnetic properties of alnico permanent magnetic alloys with Zr-B additives, *Journal of Magnetism and Magnetic Materials*, 451(2018) 243–247
- 19. **Sajjad Ur Rehman**, Qingzheng Jiang, Lunke He, ..., Synthesis, Microstructures, Magnetic Properties and thermal stabilities of isotropic alnico ribbons, *Journal of Magnetism and Magnetic Materials*, 466 (2018) 277–282
- 20. Dezhi Lu, Lei Wang, ..., Sajjad Ur Rehman\*, MoS<sub>2</sub> composite FeSiCr soft magnetic alloy materials and their wave-absorbing properties, Journal of Alloys and Compounds 1010 (2025) 177835
- 21. Minglong Zhong, Li Tao, ..., **Sajjad Ur Rehman\***, Tailoring the magnetic properties and microstructure of NdFeB ribbon alloys by Hf addition, Journal of Alloys and Compounds 876 (2021) 160197
- 22. Ziyuan Shi, ..., Sajjad Ur Rehman\*,..., Lei Wang Introducing wave-transparent material SiO<sub>2</sub> as a modification to optimize the microwave absorption performance of porous carbon composite MnFe<sub>2</sub>O<sub>4</sub> ferrites, Ceramics International, 2025

### **Conference proceedings and presentations (selected)**

- 1. **Sajjad Ur Rehman**, *Keynote presentation*, International Conference on the Cooperation and Integration of Industry, Education, Research, and Application (Ganzhou), 2024.
- 2. **Sajjad Ur Rehman**, *Plenary presentation*, International Conference on Sustainable Development in Nanotechnology, Pakistan, 2023.
- 3. Sajjad Ur Rehman, Keynote presentations (2), International Symposium on Advanced Materials (ISAM), Pakistan, 2023.
- 4. **Sajjad Ur Rehman**, *Invited presentation*, International Conference on the Cooperation and Integration of Industry, Education, Research, and Application (Nanchang), 2022.
- 5. **Sajjad Ur Rehman,** *keynote presentation*, International Conference on the Cooperation and Integration of Industry, Education, Research, and Application (Nanchang), 2021.