

## Lect. PhD KEMAL AYDIN

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### Research Areas

Construction and Manufacturing, Testing and Control of Materials, Mechanical Properties, Joining and Cutting, Nondestructive Testing, Intermetallics, Metallic Materials

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effects of Temperature and Time on the Diffusion Bonding of 316L Stainless Steel and H13 Hot Work Tool Steel**  
AYDIN K., YILDIRIM M. S., Kaya Y.  
STEEL RESEARCH INTERNATIONAL, 2024 (SCI-Expanded)
- II. **Optimizing Advanced High-Strength Steel Joints via Regional Rapid Cooling in Resistance Spot Welding**  
Hidiroglu M., Aydin K., Kahraman N.  
STEEL RESEARCH INTERNATIONAL, vol.95, no.9, 2024 (SCI-Expanded)
- III. **Enhancing weld strength in high-strength steels: The role of regional preheating in RSW**  
AYDIN K., Hidiroglu M., Kahraman N.  
Materialprüfung/Materials Testing, vol.66, no.3, pp.328-346, 2024 (SCI-Expanded)
- IV. **Optimizing Advanced High-Strength Steel Welds: The Role of Regional Pre-heating in the Heat-Affected Zone**  
AYDIN K., Kahraman N.  
Journal of Materials Engineering and Performance, 2024 (SCI-Expanded)
- V. **Characterization of the Welding Zone of Automotive Sheets of Different Thickness (DP600 and DP800) Joined by Resistance Spot Welding**  
Aydin K., Hidiroglu M., Kahraman N.  
TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS, vol.75, no.5, pp.1279-1291, 2022 (SCI-Expanded)
- VI. **An investigation into the joining of titanium with copper through diffusion welding/bonding**  
**Titanyum ve bakir malzemelerin difüzyon kaynak yöntemi ile birleştirilebilirliğinin araştırılması**  
Aydin K., Hidiroğlu M., Kaya Y., Kahraman N.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.28, no.1, pp.15-26, 2013 (SCI-Expanded)
- VII. **Experimental study of diffusion welding/bonding of titanium to copper**  
Aydin K., Kaya Y., Kahraman N.  
MATERIALS & DESIGN, vol.37, pp.356-368, 2012 (SCI-Expanded)