

**Welding in the World. Volume 67, Issue 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  | | --- | | In this issue | | |  | | --- | |  | | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Experimental study of measures preventing welders from fume exposure](http://links.springernature.com/f/a/zdCEfEuPGfLtbysUnARQYg~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5NS0xP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | S. A. Egerland, M. Wiesinger, R. Sharma, B. Ebert | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/zdCEfEuPGfLtbysUnARQYg~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5NS0xP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/zdCEfEuPGfLtbysUnARQYg~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5NS0xP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/XXgjpHLNpybWzt5FvfpqFQ~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDEzOTUtMT91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Reduction of Cr6+ formation in the stellite hardfacing operation by a novel thin film of zinc coating on a stellite filler rod](http://links.springernature.com/f/a/SAwdn-gUQTgXSAT4db0hRA~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQwOC16P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | R. K. Raajesh Kannan, S. P. Sivapirakasam, Sreejith Mohan, M. Rahul, B.R.Vishnu | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/SAwdn-gUQTgXSAT4db0hRA~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQwOC16P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/SAwdn-gUQTgXSAT4db0hRA~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQwOC16P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/gKaTYPyu0yTj646WlTK-pg~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MDgtej91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Analytical estimation of thermomechanical distortion and interface layer thickness for gas metal arc lap joining of dissimilar sheets](http://links.springernature.com/f/a/eUl3J3FBK1QnQA4ZQLF_Gw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyNi14P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Atanu Das, Prashant K. Chaurasia, Gopi K. Mandal, Sven F. Goecke, Amitava De | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/eUl3J3FBK1QnQA4ZQLF_Gw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyNi14P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/eUl3J3FBK1QnQA4ZQLF_Gw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyNi14P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/Ypn2L2Llat64bEGcFfuTMA~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MjYteD91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | | Open Access | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Grain growth and precipitation behaviour of AISI 430 ferritic stainless steel subjected to pulsed laser beam welding using free-form pulse shaping](http://links.springernature.com/f/a/0p0SV78myvg7laYw2jK_OA~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5OC15P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | N. Sommer, F. Stredak, M. Wiegand, S. Böhm | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/0p0SV78myvg7laYw2jK_OA~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5OC15P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/0p0SV78myvg7laYw2jK_OA~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5OC15P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/kpbPPN4vF4Hz1w3luWf9Hw~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDEzOTgteT91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper (unsolicited) | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Experimental and numerical investigation of residual stress and post-weld-shift of coaxial laser diodes during the optoelectronic packaging process](http://links.springernature.com/f/a/JIH4ZKU5ksYMmtVau9PeLw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQwNC0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Ziyang Wang, Haibo Zhou, Wangwang Zhou, Zhiqiang Li, Xia Ju, Yichang Peng, Ji’an Duan | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/JIH4ZKU5ksYMmtVau9PeLw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQwNC0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/JIH4ZKU5ksYMmtVau9PeLw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQwNC0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/pckUYSTqpv4VrOxGeNK5lA~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MDQtMz91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | | Open Access | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Dissimilar micro beam welding of titanium to Nitinol and stainless steel using biocompatible filler materials for medical applications](http://links.springernature.com/f/a/QZ40UJujZ3vUK0ag3Tbtug~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxMi0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Michael Wiegand, Linda Marks, Niklas Sommer, Stefan Böhm | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/QZ40UJujZ3vUK0ag3Tbtug~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxMi0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/QZ40UJujZ3vUK0ag3Tbtug~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxMi0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/mmjQR61T0adDlue9Ce4arg~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MTItMz91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | | Open Access | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Direction-independent laser-GMA hybrid welding with coaxial wire feed and annular beam](http://links.springernature.com/f/a/gHj8ZBRJBXcp4MFrkHVv0w~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyNy13P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Michael Clemens, Lucas Warnecke, Simon Olschok, Uwe Reisgen, Max Fabian Steiner | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/gHj8ZBRJBXcp4MFrkHVv0w~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyNy13P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/gHj8ZBRJBXcp4MFrkHVv0w~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyNy13P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/w_1Tn69x90ZlR0SVS6xyuQ~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0Mjctdz91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Bead-on-plate welding of pure copper with a 1.5-kW high-power blue diode laser](http://links.springernature.com/f/a/JwLAIS8o-xEM25NB0eqIlw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQwMS02P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Keisuke Takenaka, Yuji Sato, Shumpei Fujio, Keisuke Nishida, Rika Ito, Eiji Hori, Susumu Kato, Masaya Suwa, Shingo Uno, Koji Tojo, Masahiro Tsukamoto | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/JwLAIS8o-xEM25NB0eqIlw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQwMS02P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/JwLAIS8o-xEM25NB0eqIlw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQwMS02P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/D5plVF4LQ6SzDOltBKl0XA~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MDEtNj91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Distortion simulation of gas metal arc welding (GMAW) processes for automotive body assembly](http://links.springernature.com/f/a/qcBTFz7yuA2XS7fah6I1Zg~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM2OS0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Wayne Cai, Miguel Saez, Patrick Spicer, Debejyo Chakraborty, Richard Skurkis, Blair Carlson, Fernando Okigami, Jeff Robertson | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/qcBTFz7yuA2XS7fah6I1Zg~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM2OS0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/qcBTFz7yuA2XS7fah6I1Zg~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM2OS0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/IN5JAVlUalhq87gGhNNQhg~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDEzNjktMz91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Effect of electromagnetic stirring on microstructure formation in 12%Ni steel ESW weld metal](http://links.springernature.com/f/a/R2iZhIpY0ZknZLnnECkbpQ~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyMC0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Takanori Ito, Osamu Ozaki, Tomohiro Nishimura, Hiroshi Hashimoto, Hidenori Nako, Keito Ishizaki | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/R2iZhIpY0ZknZLnnECkbpQ~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyMC0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/R2iZhIpY0ZknZLnnECkbpQ~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyMC0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/bl_D1PL9VGBGPw8YvRBatw~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MjAtMz91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Predicting the quantity and type of intermetallic phases in aluminum–steel dissimilar joints produced by zinc interlayer](http://links.springernature.com/f/a/0FX0DnrX7YRh84d21-hfig~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM4OC0wP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Emad Cheraghi Rizi, Eslam Ranjbarnodeh, Seyyed Ehsan Mirsalehi | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/0FX0DnrX7YRh84d21-hfig~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM4OC0wP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/0FX0DnrX7YRh84d21-hfig~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM4OC0wP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/hvlCg2Z3B-yTWwjJ6HITew~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDEzODgtMD91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Microstructure and corrosion resistance of friction stir–welded AZ61A/AZ40M Mg-alloy dissimilar joint](http://links.springernature.com/f/a/ArBpnTO3aAvLwsXSudktOg~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5My0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Peishan Zhou, Liang Wang, Hangwei Tang, Chengwu Cui, Ming Xu, Deng Wu | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/ArBpnTO3aAvLwsXSudktOg~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5My0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/ArBpnTO3aAvLwsXSudktOg~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5My0zP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/SowB-7aeQZgISRNVUiRXLQ~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDEzOTMtMz91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | | Open Access | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Hydrogen effect on mechanical properties and cracking of creep-resistant 9% Cr P92 steel and P91 weld metal](http://links.springernature.com/f/a/7LqgX5F71SEJf4-Fbpqs9A~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxMC01P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Michael Rhode, Jonathan Nietzke, Tim Richter, Tobias Mente, Peter Mayr, Alexander Nitsche | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/7LqgX5F71SEJf4-Fbpqs9A~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxMC01P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/7LqgX5F71SEJf4-Fbpqs9A~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxMC01P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/Cmw-vg5a1w3N2Yk_aqXilQ~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MTAtNT91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | | Open Access | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Investigations on the microstructure of drawn arc stud welds on structural steels by quantitative metallography](http://links.springernature.com/f/a/wZlqcksPM08gKhrPAq8VOw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxNy15P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Oliver Brätz, Knuth-Michael Henkel | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/wZlqcksPM08gKhrPAq8VOw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxNy15P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/wZlqcksPM08gKhrPAq8VOw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxNy15P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/eyZxgzgxB3scuA9Gh3IMdA~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MTcteT91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | | Open Access | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Keyhole TIG welding of newly developed nickel-based superalloy VDM Alloy 780](http://links.springernature.com/f/a/8RxLWv2tj38XKKsjmyTzxw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyNS15P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Achmad Ariaseta, Nima Sadeghinia, Joel Andersson, Olanrewaju Ojo | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/8RxLWv2tj38XKKsjmyTzxw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyNS15P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/8RxLWv2tj38XKKsjmyTzxw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQyNS15P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/lu41NJ2b2rloKhbMnrEXtQ~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MjUteT91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Hardness prediction for sub-critically and inter-critically reheated HAZs of low alloy steels](http://links.springernature.com/f/a/vn7Z_6vySHgdP2XSgm7ZFw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQzNC14P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | T. Kasuya, M. Inomoto, Y. Okazaki, S. Aihara, M. Enoki | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/vn7Z_6vySHgdP2XSgm7ZFw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQzNC14P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/vn7Z_6vySHgdP2XSgm7ZFw~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQzNC14P3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/mARgnCpDXfeSfRn-WOY9PA~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MzQteD91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Effect of welding heat input on microstructural evolution and impact toughness of the simulated coarse-grained heat-affected zone of Q960 steel](http://links.springernature.com/f/a/f6uzat9MqEQYF2Ef-tiO3Q~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxMy0yP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Bing Cui, Zhengwei Liu, Zheng Liu, Mengdu Peng, Mengyang Shi, Quanbin Du, Junqiang Cong | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/f6uzat9MqEQYF2Ef-tiO3Q~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxMy0yP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/f6uzat9MqEQYF2Ef-tiO3Q~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTQxMy0yP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/t9w4zT7VzWXNp1HNM3to_w~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDE0MTMtMj91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | Research Paper | | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | [Recognition of GTAW weld penetration based on the lightweight model and transfer learning](http://links.springernature.com/f/a/UHrWRCQwZ-vOAzrVGwCZzA~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5Ni0wP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) | | Zhenmin Wang, Liuyi Li, Haoyu Chen, Sanbao Lin, Jianwen Wu, Tao Ding, Jiyu Tian, Mengjia Xu | | | | | |
| |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | [**» Abstract**](http://links.springernature.com/f/a/UHrWRCQwZ-vOAzrVGwCZzA~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5Ni0wP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce)    [**» Full text HTML**](http://links.springernature.com/f/a/UHrWRCQwZ-vOAzrVGwCZzA~~/AABE5gA~/RgRln-MJP0SbaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9hcnRpY2xlLzEwLjEwMDcvczQwMTk0LTAyMi0wMTM5Ni0wP3V0bV9zb3VyY2U9dG9jJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPXRvY180MDE5NF82N18xJnV0bV9jb250ZW50PWV0b2Nfc3ByaW5nZXJfMjAyMzAxMTBXA3NwY0IKY7UJXr1j6lGMD1ISY3dzLWFuYkBjd3MtYW5iLmN6WAQAAAce) [**» Full text PDF**](http://links.springernature.com/f/a/FU_OmX92r0lRDQmj2RL71A~~/AABE5gA~/RgRln-MJP0SfaHR0cHM6Ly9saW5rLnNwcmluZ2VyLmNvbS9jb250ZW50L3BkZi8xMC4xMDA3L3M0MDE5NC0wMjItMDEzOTYtMD91dG1fc291cmNlPXRvYyZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj10b2NfNDAxOTRfNjdfMSZ1dG1fY29udGVudD1ldG9jX3NwcmluZ2VyXzIwMjMwMTEwVwNzcGNCCmO1CV69Y-pRjA9SEmN3cy1hbmJAY3dzLWFuYi5jelgEAAAHHg~~) | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | |  | | | | | |