

Selected Publications and Abstracts on Coupled Multielectrode Array Sensors for Corrosion Monitoring

2010

1. “High-Temperature Electrochemical Sensor for Online Corrosion Monitoring,” K.T. Chiang and L. Yang Corrosion, 66, 2010. 095002.
2. “High-Temperature Electrochemical Sensor for Online Corrosion Monitoring,” Kuang-Tsan Kenneth Chiang and Lietai Yang, CORROSION/2010, 10168, Houston, TX: NACE International, 2010.
3. “Distributed Node Electrodes for Corrosion Monitoring of Concrete Rebars and Buried Pipes,” Lietai Yang, Kuang-Tsan Kenneth Chiang, and Pavan K. Shukla, CORROSION/2010, 10166, Houston, TX: NACE International, 2010.
4. “Corrosion Monitoring Techniques”, in “Understanding and Mitigating Ageing in Nuclear Power plants: Materials and Operational Aspects of Plant Life Management (PLiM),” Lietai Yang and Kuang-Tsan Chiang, P. G. Tipping ed., Woodhead Publishing, Chapter 14, November, 2010.
5. “Internal Current Effects on Localized Corrosion Rate Measurements Using Coupled Multielectrode Array Sensors,” L. Yang, K.T. Chiang, P.K. Shukla and N. Shiratori, Corrosion, 66, 2010. 115005-115017

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3. “A Method to Reduce The Internal Current Effect On Localized Corrosion Measurements With Coupled Multielectrode Array Sensors,” Lietai Yang and Xiaodong Sun, CORROSION/2008, 08395, Houston, TX: NACE, 2008.
4. “A Coupled Multielectrode Array Sensor for Corrosion Monitoring at High Temperatures,” Kuang-Tsan Kenneth Chiang and Dr. Boffardi Bennett, CORROSION/2008, 08607, Houston, TX: NACE, 2008.
5. “Corrosion monitoring under cathodic protection conditions using coupled multielectrode probe techniques,” in “Techniques for Corrosion Monitoring,” X. Sun, Lietai Yang ed., 26, Cambridge, United Kingdom: Woodhead Publishing, 2008.
6. “Multielectrode Systems”, L. Yang in “Techniques for Corrosion Monitoring,” Lietai Yang ed., 10, : Cambridge, United Kingdom: Woodhead Publishing, 2008.
7. “Electrochemical Behavior and Internal Current of the Most Anodic Electrode in a Coupled Multielectrode Array Sensor,” L. Yang and K.T. Chiang, Proceedings of the 17th international Corrosion Congress, 2008.
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9. “Controlled Atmosphere Brazing of Aluminum Heat Exchangers and Effects of Flux Residues on Corrosion of the Cooling System Components in Engine Coolants,” B. Yang, A. V. Gershun and P. M. Woyciesjes, Proceedings of the 17th international Corrosion Congress, 3787, Houston, TX: NACE, 2008.

10. "Development of Crevice-Free Electrodes for Multielectrode Array Sensors for Applications at High Temperatures," K.T. Chiang and L. Yang, *Corrosion*, 64, 2008. 805-812
11. "Development of diamond-like carbon-coated electrodes for corrosion sensor applications at high temperatures," K.T. Chiang, L. Yang, R. Wei and K. Coulter, *Thin Solid Films*, 517; 2008. 1120–1124
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4. "Measurement of Cumulative Localized Corrosion Rate Using Coupled Multielectrode Array Sensors," Lietai Yang and Xiaodong Sun, *CORROSION/2007*, 07378, Houston, TX: NACE, 2007.
5. "Development of Crevice-Free Multielectrode Sensors for Elevated Temperature Applications," Kuang-Tsan Kenneth Chiang and Lietai Yang, *CORROSION/2007*, 07376, Houston, TX: NACE, 2007.
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8. "New Electrochemical Methods for the Evaluation of Localized Corrosion in Engine Coolants," B. Yang, F.J., Marinho and A.V. Gershun, *Journal of ASTM* 4(1), 2007.
9. "Corrosion Monitoring of a Crude Oil Pipeline A Comparison of Multiple Methods," T. Pickthall, V. Morris and H. Gonzalez, *CORROSION/07*, 07340, Houston, TX: NACE, 2007.
10. "Correlation of In-Situ VCI Adsorption Monitoring with Real-Time Corrosion Rate Measurements," Garth Tormoen, James Dante and Narasi Sridhar, *CORROSION/2007*, 07356, Houston, TX: NACE, 2007.
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7. "Use of the Multiple-Array-Sensor to Determine the Effect of Environmental Parameters on Microbial Activity and Corrosion Rates," P. Angell, *CORROSION/2006*, 06671, Houston, TX: NACE, 2006.
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2. "Online Monitoring of Undercoating Corrosion Using Coupled Multielectrode Sensors", X.

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