

# 庄子哲雄教授業績目録

平成 24 年 3 月  
東北大学史料館  
(著作目録第 1181 号)

## 庄子哲雄教授略歴

生年月日	昭和22年11月16日
本籍地	宮城県
職名	教授
所属	東北大学大学院工学研究科附属エネルギー安全科学国際研究センター 破壊物理化学研究部門 エネルギー材料長期信頼性研究分野

### 最終学歴

昭和45年3月	東北大学工学部機械工学科卒業
昭和47年3月	東北大学大学院工学研究科機械工学専攻 修士課程修了
昭和50年3月	東北大学大学院工学研究科 機械工学専攻 博士課程修了

### 職歴

昭和50年4月～昭和58年9月	東北大学助手 工学部一般工学教室
昭和57年5月～昭和58年8月	英国 Newcastle upon Tyne 大学 金属及び材料科学科 博士研究員
昭和58年9月～昭和63年3月	東北大学助教授 工学部附属材料強度研究施設
昭和63年3月～平成元年3月	東北大学教授 工学部機械工学第二学科 材料計測・評価学研究室
平成元年3月～平成8年2月	東北大学教授 工学部附属破壊力学応用研究施設 破壊力学基礎部門
平成6年4月～平成6年9月	米国 Massachusetts Institute of Technology 原子力工学科 客員教授
平成8年2月～平成10年3月	東北大学教授 工学部附属破壊力学応用研究施設長
平成10年4月～平成11年3月	東北大学教授 大学院工学研究科附属破壊力学応用研究施設長

平成11年 4 月～平成16年 3 月	東北大学教授 大学院工学研究科 附属破壊制御システム研究施設長
平成12年 4 月～平成14年 3 月	東北大学 評議員
平成15年 4 月～平成16年 3 月	東北大学 学務審議会副委員長、 教育担当特別補佐、研究推進審議会研究情報委員会 委員及び研究推進室室員
平成16年 4 月～平成17年 3 月	東北大学教授 エネルギー安全科学国際研究センター長
平成16年 4 月～平成17年 3 月	東北大学 工学研究科副研究科長
平成17年 4 月～平成18年11月	東北大学 理事（研究担当） 東北大学教授 大学院工学研究科（併任）
平成17年 4 月～平成20年11月	東北大学 研究推進・知的財産本部長
平成18年11月～平成20年 3 月	東北大学 理事（研究・国際交流担当） 東北大学教授 大学院工学研究科（併任）
平成20年 4 月～現在に至る	東北大学教授 大学院工学研究科
平成20年 4 月～平成22年 3 月	東北大学 総長顧問
平成20年 4 月～平成23年 3 月	東北大学 ディスティングイッシュトプロフェッサー
平成20年12月～現在に至る	東北大学 日仏ジョイントラボラトリー共同所長
平成21年 6 月～現在に至る	東北大学教授 未来科学技術共同研究センター（併任）
平成21年 9 月～平成21年10月	フランス INSA de Lyon 客員教授
平成23年 9 月～平成23年10月	フランス INSA de Lyon 客員教授
平成24年 3 月	東北大学を定年退職

## 学 位

昭和50年 3 月	工学博士（東北大学） 「大規模降伏不安定破壊に関する研究」
-----------	----------------------------------

## 受 賞

昭和52年 3 月	米国腐食学会 (NACE International) A.B.Campbell Award
昭和58年 2 月	日本機械学会奨励賞
平成 2 年 4 月	日本機械学会論文賞
平成 2 年10月	日本地熱学会論文賞
平成 7 年 3 月	日本機械学会東北支部技術研究賞
平成10年 3 月	米国腐食学会 (NACE International) W. R. Whitney Award
平成10年11月	日本機械学会材料力学部門賞業績賞
平成13年 3 月	日本機械学会フェロー
平成13年 3 月	ASTM（米国材料試験・評価学会）ASTM 賞年間最優秀論文賞
平成14年10月	日本機械学会材料力学部門国際交流表彰
平成15年 6 月	日本溶射協会論文賞
平成15年12月	Institute of Theoretical and Applied Mechanics SB Russian Academy of Science, First Prime in the competition on fundamental investigations in the Institute of Theoretical and Applied Mechanics for 2003
平成16年 6 月	日本溶射協会論文賞（丹野昌利，小川和洋，庄子哲雄，左相玉，大森明， レーザー再溶融処理による熱遮へいコーティングの界面強度改善）
平成16年12月	日本溶射協会優秀賞

平成18年 5月	日本非破壊検査協会奨励賞（庄子哲雄，小川和洋，鈴木美紀子， 高周伝送特性によるセラミックス材料およびセラミックコーティングの 非破壊評価）
平成18年 6月	Institute of Metal Research（中国科学院金属研究所）Lee Hsun Award
平成19年10月	日本機械学会材料力学部門賞功績賞
平成19年10月	日本機械学会創立110周年記念功労者表彰
平成21年10月	経済産業省原子力安全・保安院原子力安全功労者
平成23年 1月	フランス国立応用科学院リヨン校（INSA de Lyon）名誉博士号

#### 学会等における活動（役職等）

Advisory Board of Materials Chemistry and Physics（平成 4 年 2 月）  
 社団法人日本プラントメンテナンス協会 疲労損傷計測・評価委員会主査  
 （平成 6 年 4 月～平成 8 年 3 月）  
 社団法人日本電気協会 高速炉高温構造設計調査特別委員会委員  
 （平成 6 年 6 月～平成 9 年 3 月）  
 社団法人日本非破壊検査協会 電位差法研究会主査（平成 6 年 9 月～平成12年 3 月）  
 Honored Member of Russian International Academy of Engineering（平成 6 年10月）  
 財団法人発電設備技術検査協会 実用原子力発電設備環境中材料等疲労信頼性実証  
 試験実施委員会委員（平成 6 年11月～平成 9 年 3 月）  
 社団法人腐食防食協会 理事（平成 8 年 1 月～平成10年 3 月）  
 社団法人日本設備管理学会 評議員（平成 9 年 6 月～平成11年 6 月）  
 社団法人日本工学教育協会 国際委員会委員（平成 9 年10月～平成10年 7 月）  
 社団法人日本機械学会 材料力学部門副部門長（平成10年 4 月～平成11年 3 月）  
 社団法人日本非破壊検査協会 評議委員（平成10年 4 月～平成12年 3 月）  
 社団法人腐食防食協会 東北支部長（平成10年 4 月～平成12年 3 月）  
 社団法人腐食防食協会 評議員（平成10年 4 月～平成12年 3 月）  
 社団法人日本機械学会 材料力学部門部門長（平成11年 4 月～平成12年 3 月）  
 社団法人日本プラントメンテナンス協会 TPM 優秀賞審査委員（平成11年 4 月～現在）  
 社団法人日本機械学会 評議員（平成12年 4 月～平成13年 3 月）  
 社団法人日本工学教育協会 国際委員会委員（平成12年 9 月～平成14年 7 月）  
 財団法人発電設備技術検査協会 照射誘起応力腐食割れ評価技術開発委員会  
 （平成12年12月～平成14年 3 月）  
 社団法人日本機械学会 論文編集委員会委員（平成13年 4 月～平成14年 3 月）  
 社団法人日本機械学会 発電用設備規格委員会委員（平成13年 4 月～平成17年12月）  
 社団法人日本機械学会 評議員（平成14年 4 月～平成16年 3 月）  
 社団法人日本機械学会 理事（平成14年 4 月～平成16年 3 月）  
 社団法人日本電気協会 原子力規格委員会構造分科会委員（平成14年 4 月～現在）  
 社団法人日本機械学会広報情報部 部会長（平成15年 4 月～平成16年 3 月）  
 社団法人腐食防食協会 原子力発電所 SCC 試験規格化検討委員会（SCCT）  
 （平成15年12月～平成16年3月）  
 Expert Panel Member of The US Nuclear Regulatory Commission,  
 Proactive Materials Degradation Assessment（平成16年 4 月～平成20年）  
 社団法人日本非破壊検査協会 PD 諮問委員会委員（平成18年 2 月～現在）  
 社団法人日本溶接協会 原子力研究委員会中立委員（平成18年 4 月～現在）  
 社団法人日本非破壊検査協会 評議員（平成18年 5 月～平成20年 5 月）  
 社団法人日本機械学会 日本機械学会賞審査委員（平成18年12月～平成19年12月）  
 財団法人発電設備技術検査協会 理事（平成19年 4 月～現在）  
 NPO 法人日本保全学会 理事（副会長）（平成19年 7 月～現在）

日本学術会議 日本学術会議連携委員（平成20年10月～現在）  
 社団法人日本溶接協会 講師（平成20年11月）  
 NPO 法人日本保全学会 東北・北海道支部支部長（平成21年4月～現在）  
 社団法人腐食防食協会 原子力関連 SCC 試験法の JIS 規格化委員会委員長  
 （平成21年4月～現在）  
 社団法人腐食防食協会 講演会講師（平成21年7月）  
 NPO 法人日本保全学会 EJAM 論文委員会委員長（平成21年10月～現在）  
 独立行政法人日本学術振興会 科学研究費委員会専門委員（平成21年12月～現在）  
 日本設備管理学会 評議員・東北支部幹事（平成22年4月～現在）  
 NPO 法人日本保全学会 International Seminar 組織委員（平成22年8月）  
 社団法人日本機械学会 校閲委員（平成23年5月～現在）  
 公益社団法人日本材料学会 講演会講師（平成23年5月24日）

## 社会における活動

日本原子力研究所 構造安全研究委員会専門委員（昭和58年10月～平成5年3月）  
 日本原子力研究所 船舶用炉研究委員会専門委員（昭和63年12月～平成4年3月）  
 新エネルギー産業技術総合開発機構 高温岩体検討委員会・貯溜層部会委員  
 （平成元年5月～平成5年3月）  
 科学技術庁金属材料研究所 超伝導・極低温構造材料 WG 委員  
 （平成元年12月～平成4年3月）  
 日本原子力研究所 核融合炉研究委員会専門委員（平成2年2月～平成10年3月）  
 文部省・核融合科学研究所 共同研究員（平成2年2月～平成2年3月）  
 通産省工業技術院 流動研究員（東北工業試験所）（平成2年12月～平成2年12月）  
 通産省工業技術院 流動研究員（公害資源研究所）（平成3年7月～平成3年7月）  
 通産省工業技術院 水反応研究員（公害資源研究所）（平成3年7月～平成3年7月）  
 日本原子力研究所 嘱託（平成4年4月～平成10年3月）  
 宇宙開発事業団 客員開発部員（平成4年7月～平成5年3月）  
 社団法人日本溶接協会 平成4年度 FSD 小委員会委員（平成4年8月～平成5年3月）  
 岩手大学 非常勤講師（平成4年10月～平成5年3月）  
 日本原子力研究所 原子力材料研究委員会専門委員（平成5年4月～平成7年3月）  
 日本原子力研究所 機器信頼性研究委員会委員（平成5年4月～平成10年3月）  
 科学技術庁原子力委員会 核融合会議 ITER/EDA 技術部会委員  
 （平成5年5月～平成6年3月）  
 日本原子力研究所 船舶用炉研究委員会専門委員（平成6年6月～平成7年3月）  
 日本原子力研究所 核融合炉材料研究委員会専門委員（平成6年11月～平成7年3月）  
 財団法人発電設備技術検査協会 実証試験実施委員会委員（平成6年11月～平成8年3月）  
 環境庁国立環境研究所 兼務（平成7年2月～平成7年3月）  
 財団法人東北産業技術開発協会 産学協同研究助成審査委員会委員  
 （平成7年7月～平成11年3月）  
 財団法人宮城県高度技術振興財団 地域技術企業化助成審査委員会委員  
 （平成7年7月～平成11年3月）  
 財団法人宮城県高度技術振興財団 債務保証審査委員会委員  
 （平成7年7月～平成9年3月）  
 大阪大学 非常勤講師（平成7年10月～平成8年3月）  
 高知県工業技術センター 客員研究員（平成8年5月～平成9年3月）  
 東北電力株式会社研修センター専門部 講師（平成9年8月～平成10年7月）  
 財団法人原子力安全研究協会 核融合実験炉構造基準案検討専門委員会委員  
 （平成10年10月～平成11年3月）

経済産業省原子力安全・保安院 総合資源エネルギー調査会 臨時委員  
(平成14年4月～現在)

大学評価・学位授与機構大学評価委員会 評価員 (平成15年6月～平成17年6月)

独立行政法人原子力基盤機構 材料評価技術検討委員会委員 (平成16年2月～平成22年9月)

独立行政法人原子力基盤機構 SCC 技術検討会委員 (平成16年2月～現在)

独立行政法人原子力基盤機構 材料研究企画検討会委員 (平成16年2月～平成18年1月)

独立行政法人日本学術振興会 「化学プラントのリスクベース保全技術」先導的研究  
開発委員会委員 (平成16年3月～平成19年2月)

独立行政法人原子力基盤機構 構造健全性評価技術調査検討会委員 (平成16年3月～現在)

経済産業省 総合資源エネルギー調査会原子力安全・保安部会臨時委員  
高経年化対策検討委員会委員 (平成16年12月～現在)

Scientific Advisory Committee Member of European Commission, PERFECT Project  
(平成17年3月～平成20年6月)

財団法人かき研究所 理事 (平成17年4月～平成20年3月)

財団法人みやぎ産業振興機構 理事 (平成17年5月～平成22年3月)

経済産業省東北経済産業局 東北地域産業創造戦略会議委員  
(平成17年5月～平成20年9月)

株式会社東北テクノアーチ 取締役 (平成17年6月～平成21年6月)

文部科学省研究振興局 先端融合領域イノベーション促進拠点事業 (仮称) に関する  
懇談会委員 (平成17年11月～平成18年3月)

独立行政法人原子力基盤機構 技術情報調整委員会委員 (平成17年12月～現在)

財団法人青葉工学振興会 非常勤研究員 (平成18年1月～現在)

株式会社ツムラ シンポジウム討議への参加 (平成18年2月)

株式会社富士電機システムズ 委託調査員 (平成18年2月～平成18年11月)

財団法人東北大学研究教育振興財団 東北大学創立百周年記念事業推進実行委員会委員  
および同常任実行委員会委員 (平成18年2月～平成20年2月)

独立行政法人科学技術振興機構 知的財産委員会委員 (平成18年3月～平成21年3月)

財団法人社会開発研究センター 非常勤理事 (平成18年5月～平成22年6月)

内閣府 高速増殖炉サイクルに関する専門家との意見交換会協力者 (平成18年5月)

経済産業省原子力安全・保安院 高経年化対策強化基盤整備事業  
東北・北海道クラスター研究統括者 (事業名: 経年劣化事象の解明等)  
(平成18年8月～現在)

株式会社トヨタ自動車 トヨタ技術会研究発表会技術指導員 (平成18年8月)

財団法人中華経済研究員 講演会講師 (平成18年9月)

独立行政法人原子力基盤機構 NEA-SCAP 運営検討会委員およびNEA-SCAP 運営検討会  
SCC 作業会委員 (平成18年11月～平成22年10月)

SCC-WG, OECD-NEA Stress Corrosion Cracking and Cable Aging Project Member  
(平成18年11月～平成22年3月)

大阪科学技術センター 講演会講師 (平成18年12月)

福島大学 外部評価委員会委員 (平成18年12月～平成19年3月)

株式会社三菱総合研究所 高経年化対策強化基盤整備事業総括検討会委員  
(平成18年12月～現在)

株式会社ツムラ シンポジウム討議への参加 (平成19年2月)

株式会社東日本旅客鉄道 講演会講師 (平成19年2月)

東京農工大学 シンポジウムパネラー (平成19年2月)

東京農工大学 総合評価委員会委員 (平成19年2月～平成21年3月)

財団法人電力中央研究所 DH 最適化検討委員会主査 (平成19年6月～現在)

社団法人みやぎ工業会 第42回産学官交流大会パネルディスカッションパネリスト  
(平成19年 6月)

独立法人科学技術振興機構 原子力システム研究開発事業革新技術中間評価委員会委員  
(平成19年 7月～平成20年 7月)

株式会社トヨタ自動車 トヨタ信頼性分野技術指導会指導員 (平成19年 7月)

株式会社トヨタ自動車 トヨタ技術会研究発表会技術指導員 (平成19年 7月)

株式会社三菱総合研究所 高経年化対策強化基盤整備事業 SCC 検討会主査  
(平成19年 9月～現在)

株式会社原子力安全システム研究所 国際シンポジウム講師および運営会議議長  
(平成19年10月)

第7回 NDE 国際会議組織委員会委員 (平成20年 1月～平成21年 5月)

財団法人みやぎ産業振興機構 みやぎカーインテリジェント人材育成センター運営会議  
議長 (平成20年 1月～平成22年 3月)

独立行政法人原子力基盤機構 SCC 技術検討会委員長 (平成20年 2月～現在)

株式会社トヨタ自動車 トヨタ信頼性分野技術指導会指導員 (平成20年 7月)

株式会社トヨタ自動車 トヨタ技術会研究発表会技術指導員 (平成20年 7月)

EdF MAI, Scientific Partner (平成21年 4月～現在)

株式会社産業科学システムズ 講師 (平成21年 7月)

株式会社トヨタ自動車 トヨタ信頼性分野技術指導会指導員 (平成21年 7月)

株式会社トヨタ自動車 トヨタ技術会研究発表会技術指導員 (平成21年 7月)

株式会社三菱総合研究所 高経年化対策強化基盤整備事業  
SCC メカニズム解明ロードマップ策定検討タスクフォース主査 (平成21年 8月～現在)

財団法人エネルギー総合工学研究所 次世代軽水炉等技術開発連絡調整会議

BWR 分科会炉構材作業会委員 (平成22年 3月～現在)

独立行政法人科学技術振興機構 基盤研究開発分野評価委員会委員  
(平成22年 7月～平成22年12月)

株式会社トヨタ自動車 トヨタ信頼性分野技術指導会指導員 (平成22年 7月)

株式会社トヨタ自動車 トヨタ技術会研究発表会技術指導員 (平成22年 7月)

財団法人みやぎ産業振興機構 みやぎカーインテリジェント人材育成センター運営会議  
議長 (平成22年 8月)

the member of the Editorial Board, Corrosion Science (平成22年 8月～現在)

宮城県企業立地セミナー実行委員会 講師 (平成22年11月)

the member of the External Advisory Committee of WPI

(World Premier International Research Center Initiative)

[独立行政法人日本学術振興会 世界トップレベル研究拠点プログラム外部諮問委員]  
(平成22年11月～現在)

独立法人日本学術振興会 科学研究費委員会専門委員 (平成22年12月～現在)

株式会社トヨタ自動車 トヨタ信頼性分野技術指導会指導員 (平成23年 7月)

株式会社トヨタ自動車 トヨタ技術会研究発表会技術指導教授 (平成23年 7月)

財団法人電力中央研究所 福島第一原子力発電所腐食対策検討会委員  
(平成23年 7月～現在)

IFRAM (International Forum on Reactor Aging Management) Steering Committee

[原子炉の経年劣化管理に関する国際フォーラム国際運営会議メンバー]  
(平成23年 8月～現在)

the member of the High Panel on Science for Development of UNESCO (平成23年 9月～現在)

日本学術会議 会員 (平成23年10月～現在)

経済産業省 原子力安全・保安院 高経年化技術評価に関する意見聴取会委員  
(平成23年11月～現在)





## 業 績 目 録

## I. 著書・編書（共著書等含む）

1. 岩石破壊力学とその応用（社団法人日本機械学会編）  
庄子哲雄ほか，1989年 5 月，コロナ社
2. 金属便覧  
庄子哲雄ほか，1990年 4 月，丸善株式会社
3. 最新応力・ひずみ測定・評価技術（河田幸三編）  
庄子哲雄ほか，1992年 5 月，総合技術センター
4. 傾斜機能材料（社団法人未踏科学技術協会・傾斜機能材料研究会編）  
庄子哲雄ほか，1993年 2 月，工業調査会
5. 火力・原子力及び化学プラント機器・構造部材の経年劣化と寿命評価  
庄子哲雄，1994年 4 月，リアライズ社
6. 機械工学事典（社団法人日本機械学会編）  
庄子哲雄ほか，1997年 8 月，日本機械学会
7. 金属便覧（社団法人日本金属学会編）  
庄子哲雄ほか，2000年 5 月，丸善株式会社
8. 材料力学（機械工学便覧基礎編）  
庄子哲雄ほか，2005年 4 月，社団法人日本機械学会
9. 高度状態監視技術の研究開発状況（状態監視保全技術の現状と課題）  
[ 原子力 eye 2008年 4 月号 ]  
庄子哲雄，2008年 3 月，株式会社日刊工業出版プロダクション
10. Stress corrosion cracking  
Edited by V. S. Raja and Tetsuo Shoji, 2011年11月，Woodhead Publishing Limited

## II. 原著論文

1. Crack-Tip Blunting and Crack-Opening Displacement under Large-Scale Yielding  
Metal Science, Vol. 10, No. 5, 1976, 65-169  
T. Shoji

2. THE ENVIRONMENT ENHANCED CRACK GROWTH EFFECTS IN  
STRUCTURAL STEELS FOR WATER COOLED NUCLEAR REACTORS  
The Influence of Environment on Fatigue, Institution of Mechanical Engineers,  
London, 1977, 161-169  
M. SUZUKI, H. TAKAHASHI, T. SHOJI, T. KONDO and H. NAKAJIMA
3. Stress Corrosion Cracking and Corrosion Fatigue in Cr-Mo Low Alloy Steel  
Corrosion, Vol. 34, No. 10, 1978, 325-331  
SIGEKI AIYAMA, TETSUO SHOJI, HIDEAKI TAKAHASHI, and MASAHICO  
SUZUKI
4. EFFECT OF STRESS INTENSITY RATE K AND STRESS RATIO R ON  
CORROSION FATIGUE CRACK GROWTH ENHANCEMENT BELOW KISCC  
Corrosion, Vol. 34, No. 8 , 1978, 276-282  
T. SHOJI, S. AIYAMA, H. TAKAHASHI and M. SUZUKI
5. Intergranular Corrosion Fatigue Crack Growth of Sensitized Type 304 Stainless  
Steel in Oxygenated Pure Water at 85C  
Corrosion, Vol. 34, No. 10, 1978, 366-367  
T. SHOJI, T. ISE, H. TAKAHASHI, and M. SUZUKI
6. Corrosion Fatigue Aspects in BWR Pipe Cracking  
Predictive Methods for Assessing Corrosion Damage to BWR Piping and PWR  
Steam Generators  
NACE, May 28-June 2 , 1978, 58-72  
TETSUO SHOJI, HIDEKI TAKAHASHI and MASAHICO SUZUKI
7. Significance of crack opening displacement and crack tip plastic strain energy in  
fracture initiation  
Metal Science, Vol. 12, No. 12, 1978, 579-586  
T. Shoji, H. Takahashi and M. Suzuki
8. 破壊靱性試験におけるき裂端強変形域の再結晶による評価  
非破壊検査 , 27巻 , 8 号 , 1978, 499-505  
庄子哲雄, 伊達和博, 高橋秀明, 鈴木正彦
9. Reactor Surveillance Test and Fracture Mechanics Evaluation of Irradiation  
Embrittlement in Reactor Pressure Vessel Steels  
Journal of Engineering Materials and Technology, Vol. 102, No. 10, 1980, 317-326  
Hideaki Takahashi, Kiyoshi Saito, Tetsuo Shoji, Kazuhiro Date, Masahiko Suzuki

10. TRIAXIALITY EFFECTS ON DUCTILE FRACTURE AND ACOUSTIC EMISSION CHARACTERISTICS  
Res Mechanica, Vol. 2 , 1981, 21-38  
T. SHOJI, M. A. KHAN, H. TAKAHASHI and M. SUZUKI
11. VIRTUAL INITIATION ANALYSIS OF A DUCTILE CRACK IN PLANE STRAIN LARGE-SCALE YIELDING  
Res Mechanica Letters, Vol. 1 , 1981, 35-38  
MASUMI SAKA, TETSUO SHOJI, HIDEAKI TAKAHASHI and HIROYUKI ABE
12. 大規模降伏状態におけるき裂材の有限変形解析  
日本機械学会論文集 (A 編), 47巻, 414号, 1981, 148-157  
坂真澄, 庄子哲雄, 高橋秀明, 阿部博之
13. 低合金鋼の85℃純水中における腐食疲労  
日本機械学会論文集 (A 編), 47巻, 416号, 1981, 391-399  
庄子哲雄, 大谷行雄, 高橋秀明, 鈴木正彦
14. SIGNIFICANCE OF THE ACOUSTIC EMISSION TECHNIQUE IN MONITORING CLEAVAGE CONTROLLED INSTABILITY  
Res Mechanica Letters, Vol. 1 , No. 3 , 1981, 133-138  
M. A. KHAN, T. SHOJI and H. TAKAHASHI
15. Determination of Crack Tip Energy Dissipation and Elastic-Plastic Fracture Toughness Parameter with Ductile Crack Extension  
Journal of Testing and Evaluation, Vol. 9 , No. 6 , 1981, 324-334  
Tetsuo Shoji
16. 伝ばする延性き裂先端近傍の強変形域と無次元伝ばパラメータ  
日本機械学会論文集 (A 編), 47巻, 424号, 1981, 1301-1308  
坂真澄, 庄子哲雄, 高橋秀明, 阿部博之
17. A New Parameter for Characterizing Corrosion Fatigue Crack Growth  
Journal of Engineering Materials and Technology, Vol. 103, 1981, 298-304  
T. Shoji, H. Takahashi, M. Suzuki, T. Kondo
18. Evaluation of Radiation Damage in Reactor Pressure Vessel Steel by Elastic-Plastic Fracture Mechanics  
Transactions of the ASME, Journal of Engineering Materials and Technology, Vol. 103, No. 3, 1981, 276-281  
M. A. Khan, T. Shoji, H. Takahashi, M. Suzuki

19. ボイラ S/H 管の高温腐食およびクリーブ環境下における寿命予測  
防食技術, 31巻, 3号, 1981, 196-201  
庄子哲雄, 斎藤喜久, 高橋秀明, 鈴木正彦
  
20. Detecting Acoustic Emission during Cyclic Crack Growth in Simulated BWR Environment  
Proceedings of Symposium on Fatigue Crack Growth Measurement and Data Analysis, ASTM STP 738, Eds., S. J. Hudak, Jr., and R. J. Bucci, American Society for Testing and Materials, 1981, 139-160  
H. Nakajima, T. Shoji, M. Kikuchi, H. Niitsuma and M. Shindo
  
21. Characterization of the Crack Toughness Behavior of Structural Steels by the Tearing Modulus Parameter and Acoustic Emission  
Journal of Testing and Evaluation, Vol. 10, No. 1, 1982, 3-11  
M. A. Khan, Tetsuo Shoji, and Hideaki Takahashi
  
22. Acoustic emission from cleavage microcracking in alloy steels  
Metal Science, Vol. 16, No. 2, 1982, 118-126  
M. A. Khan, T. Shoji, and H. Takahashi
  
23. ACOUSTIC EMISSION RATING PARAMETER FOR PREDICTION OF TEARING INSTABILITY IN STRUCTURAL MATERIALS  
Engineering Fracture Mechanics, Vol. 16, No. 5, 1982, 645-658  
M. A. KHAN, T. SHOJI, H. NIITSUMA and H. TAKAHASHI
  
24. 小型破壊じん性試験片による延性破壊抵抗の評価  
日本機械学会論文集 (A 編), 48巻, 433号, 1982, 1111-1119  
橋田俊之, 坂真澄, 安斎英哉, 庄子哲雄, 高橋秀明
  
25. ボイラ過熱器管寿命評価のための複層合成灰腐食試験法  
防食技術, 31巻, 3号, 1982, 232-238  
斎藤喜久, 庄子哲雄
  
26. FINITE DEFORMATION ANALYSIS OF COD, J-INTEGRAL AND CRACK TIP INTENSE STRAIN REGION IN PLANE STRAIN LARGE-SCALE YIELDING  
Journal Mechanics and Physics of Solids, Vol. 30, No. 4, 1982, 209-224  
M. SAKA, T. SHOJI, H. TAKAHASHI and H. ABE

27. Evaluation of Structural Integrity by Acoustic Emission and Fracture Mechanics Techniques  
 Proceedings of 6th International Acoustic Emission Symposium, the Japanese Society for Non Destructive Inspection, 1982, 531-541  
 M. A. Khan, T. Shoji and H. Takahashi
  
28. 腐食疲労き裂成長に及ぼす力学的因子の役割  
 材料, 31巻, 346号, 1982, 703-709  
 庄子哲雄, 中島甫, 近藤達男, 高橋秀明
  
29. SA533B 鋼溶接熱影響部の疲労き裂成長に及ぼす高温水環境の影響  
 材料, 31巻, 346号, 1982, 710-716  
 中島甫, 庄子哲雄, 辻宏和, 高橋秀明, 近藤達男
  
30. AE 周波数解析による Cr-Mo-V 鋼のポップイン型粒界割れの検知  
 鉄と鋼, 69年, 16号, 1983, 118-125  
 下村慶一, 庄子哲雄, 高橋秀明
  
31. テアリングモジュラス  $T_w$  とき裂端近傍の応力ならびにひずみ場に基づくその評価  
 日本機械学会論文集 (A 編), 49巻, 438号, 1983, 166-171  
 坂真澄, 庄子哲雄, 高橋秀明, 阿部博之
  
32. 延性き裂伝ば抵抗としてのテアリングモジュラス ( $T_j, T_\delta, T_w$ ) の有効性に関する実験的検証,  
 日本機械学会論文集 (A 編), 49巻, 443号, 1983, 829-837  
 坂真澄, 安斎英哉, 庄子哲雄, 高橋秀明, 阿部博之
  
33. A Criterion Based on Crack-Tip Energy Dissipation in Plane Strain Crack Growth under Large-Scale Yielding  
 ASTM STP 803, Vol.1, Eds., C. F. Shih and J. P. Gudas, American Society for Testing and Materials, 1983, I-130-I-158  
 M. Saka, T. Shoji, H. Takahashi, and H. Abe
  
34. Effect of Microstructure and Strength of Low-Alloy Steels on Cyclic Crack Growth in High-Temperature Water  
 ASTM STP 801, Eds., T. W. Crooker and B. N. Leis, American Society for Testing and Materials, 1983, 256-286  
 Tetsuo Shoji, Hajime Nakajima, Hirokazu Tsuji, Hideaki Takahashi, and Tatsuo Kondo

35. Combined Elastic-Plastic and Acoustic Emission Methods for the Evaluation of Tearing and Cleavage Crack Extension  
ASTM STP 803, Vol.II, Eds., C. F. Shih and J.P. Gudas, American Society for Testing and Materials, 1983, II-508-II-530  
M. A. Khan, T. Shoji, H. Takahashi and H. Niitsuma
  
36. DETERMINATION OF INTERGRANULAR-CLEAVAGE MODE FRACTURE TOUGHNESS OF RETIRED STEAM TURBINE ROTOR STEEL (CrMoV) BY MEANS OF ACOUSTIC EMISSION TECHNIQUE  
Progress in Acoustic Emission II, The 7th International Symposium, ZAO, 1984, 89-96  
K. Shimomura, T. Shoji, H. Takahashi and K. Saito
  
37. APPLICATION OF ACOUSTIC EMISSION TO FRACTURE TOUGHNESS TEST OF ROCKS UNDER THE SIMULATED GEOTHERMAL RESERVOIR CONDITIONS  
Progress in Acoustic Emission II, The 7th International Symposium, ZAO, 1984, 616-623,  
T. SHOJI, K. TAMAKAWA, H. TAKAHASHI and T. WAKABAYASHI
  
38. 蒸気タービン・発電機部材の新しい非破壊的経年劣化診断技術  
電気現場技術, 23巻, 261号, 1984, 1-7  
高橋秀明, 庄子哲雄, 鈴木正彦, 村松正光, 木村和成, 斎藤潔, 鈴木雅行
  
39. THE STRESS CORROSION CRACKING OF REACTOR PRESSURE VESSEL STEEL IN HIGH TEMPERATURE WATER  
Corrosion Science, Vol. 25, No. 8/9, 1985, 633-650  
J. CONGLETON, T. SHOJI and R. N. PARKINS
  
40. THE STRESS CORROSION CRACKING OF TYPE 316 STAINLESS STEEL IN OXYGENATED AND CHLORINATED HIGH TEMPERATURE WATER  
Corrosion Science, Vol. 25, No. 8/9, 1985, 769-788  
J. CONGLETON, H. C. SHIH, T. SHOJI and R. N. PARKINS
  
41. 低ひずみ速度破壊じん性試験による原子炉圧力容器鋼の環境割れ感受性の評価  
日本機械学会論文集 (A 編), 51巻, 463号, 1985, 714-722  
安斉英哉, 庄子哲雄, 高橋秀明, 中島甫, 近藤達男
  
42. 核融合炉大形超伝導マグネット構造材料の極低温における破壊じん性評価  
日本機械学会論文集 (A 編), 51巻, 470号, 1985, 2256-2264  
竹内正道, 庄子哲雄, 高橋秀明, 穴山武

43. 再結晶法による延性不安定破壊の評価（破壊じん性試験片と表面き裂試験片の対比）  
日本機械学会論文集 (A 編), 51巻, 462号, 1985, 514-517  
鬼沢邦雄, 庄子哲雄, 高橋秀明, 安藤柱
  
44. GROWTH BEHAVIOR OF HYDRAULICALLY CREATED CRACK AND ITS SIZE EVALUATION USING WELL LOGGING DATA - CRUSTAL ROCK FRACTURE MECHANICS APPROACH -  
Geothermal Resources Council, Transactions, Vol. 9, Part II, 1985, 579-584  
Tetsuo Shoji, Kazuo Hayashi, Takashi Kojima, Takatoshi Ito, Hideaki Takahashi and Hiroyuki Abe
  
45. A NEW IN-SITU TECTONIC STRESS MEASUREMENTS AND ITS APPLICATION TO A GEOTHERMAL MODEL FIELD  
Geothermal Resources Council, Transactions, Vol. 9, Part II, 1985, 99-104  
K. Hayashi, T. Shoji, H. Niitsuma, T. Ito and H. Abe
  
46. QUANTITATIVE PREDICTION OF ENVIRONMENTALLY ASSISTED CRACKING BASED ON CRACK TIP STRAIN RATE  
Proceedings of Predictive Capabilities in Environmentally Assisted Cracking-PVP-Vol.99, 1985, 127-142  
T. Shoji
  
47. 極低温用構造材料溶接部の微視破壊過程と破壊じん性評価  
日本機械学会論文集 (A 編), 52巻, 473号, 1986, 170-173  
大西慶太, 庄子哲雄, 高橋秀明
  
48. Cr-Mo-V 鋼の遷移温度域における粒界割れ破壊靱性の試験片寸法効果  
鉄と鋼, 72年, 11号, 1986, 1744-1750  
下村慶一, 庄子哲雄, 高橋秀明, 斎藤潔
  
49. FRACTURE, ACOUSTIC EMISSION AND ADIABATIC HEATING OF AUSTENITIC STAINLESS STEELS AT LIQUID HELIUM TEMPERATURE  
Progress in Acoustic Emission III, The 8th International Acoustic Emission Symposium, Eds., K. Yamaguchi, K. Aoki, and T. Kishi, The Japanese Society of NDI, 1986, 453-461  
R. L. TOBLER, T. SHOJI, H. TAKAHASHI, and K. OHNISHI
  
50. 流動海水環境における高張力鋼の腐食疲労  
防食技術, 35巻, 9号, 1986, 503-508  
張舜植, 庄子哲雄, 高橋秀明, 渡辺豊

51. ボイラ過熱器 SUS316H 鋼管の経年劣化  
日本機械学会論文集 (A 編), 52巻, 473号, 1986, 165-169  
斎藤喜久, 庄子哲雄, 高橋秀明
52. エポキシ樹脂を用いた地下き裂進展挙動のシミュレーション  
日本機械学会論文集 (A 編), 52巻, 480号, 1986, 1906-1912  
橋田俊之, 庄子哲雄, 村松正浩
53. 火力発電高温部材の経年劣化と非破壊診断技術  
火力原子力発電, 37巻, 8号, 1986, 858-871  
高橋秀明, 庄子哲雄
54. MATERIALS DEGRADATION AND ITS RELEVANCE TO LIFE  
ASSESSMENT OF SUPERHEATER TUBES OF FOSSIL BOILERS  
Proceedings of Conference on Life Extension and Assessment of Fossil Plants,  
EPRI, EEI, ASME and ASM, Washington, June 1986, 3-8  
Yoshihisa Saito, Tetsuo Shoji, Hideaki Takahashi
55. NON-DESTRUCTIVE EVALUATION OF MATERIALS DEGRADATION  
DURING SERVICE OPERATION BY MEANS OF ELECTRO-CHEMICAL  
METHOD  
Proceedings of Conference on Life Extension and Assessment of Fossil Plants,  
EPRI, EEI, ASME and ASM, Washington, June 1986, 4-8  
T. Shoji and H. Takahashi
56. 花崗岩の破壊じん性とその初期接線縦弾性係数依存性  
材料, 35巻, 389号, 1986, 145-151  
和田千春, 庄子哲雄
57. 高温高压水中における花崗岩の破壊じん性評価  
日本機械学会論文集 (A 編), 52巻, 476号, 1986, 1082-1088  
和田千春, 庄子哲雄, 高橋秀明
58. ELECTROCHEMICAL POLARIZATION TECHNIQUE TO DETECT IN-  
SERVICE DEGRADATION OF MATERIAL TOUGHNESS  
Proceedings of Fossil Plant Inspection Workshop, EPRI and ASME, San Antonio,  
September 1986, 4-9  
K. Saito, K. Kimura, M. Muramatsu, H. Kashiwaya, Y. S. Lu, T. Shoji and H.  
Takahashi



59. Characterization of Fracture Behavior in Small Punch Test by Combined Recrystallization-Etch Method and Rigid Plastic Analysis  
Journal of Testing and Evaluation, Vol.15, No.1, 1987, 30-37  
Xinyuan Mao, Tetsuo Shoji, and Hideaki Takahashi
  
60. クロム・モリブデン・バナジウム耐熱鋼（タービンロータ鋼）の新しい経年劣化診断技術  
日本機械学会論文集 (A 編), 53巻, 492号, 1987, 1550-1557  
盧友紹, 庄子哲雄, 高橋秀明
  
61. 小型パンチ (SP) 試験法ならびに電気化学的再活性化法 (EPR) によるオーステナイト系ステンレス鋼の材質経年劣化診断技術  
材料, 36巻, 402号, 1987, 296-302  
盧友紹, 庄子哲雄, 高橋秀明, 斎藤喜久
  
62. へき開破壊の弾塑性破壊靱性評価に関する確率・統計論的研究  
日本機械学会論文集 (A 編), 53巻, 495号, 1987, 2121-2127  
下村慶一, 庄子哲雄, 高橋秀明
  
63. Evaluation of Intergranular Fracture Initiation in Transition Region of Retired Steam Turbine Rotor Steel Using Small Specimens and the Acoustic Emission Technique  
Journal of Testing and Evaluation, Vol. 15, No.5, 1987, 257-264  
K. Shimomura, T. Shoji, and H. Takahashi
  
64. 花こう岩の混合モードき裂進展挙動に及ぼす異方性の影響  
日本機械学会論文集 (A 編), 53巻, 489号, 1987, 894-898  
村田裕之, 橋田俊之, 庄子哲雄, 高橋秀明
  
65. Time domain analysis for quantitative evaluation of EAC and its relevance to life evaluation procedure of RPV  
TRANSACTIONS OF THE 9TH INTERNATIONAL CONFERENCE ON STRUCTURAL MECHANICS IN REACTOR TECHNOLOGY, Ed., FOLKER H. WITTMANN, Vol. F, August 1987, 233-238  
H. Takahashi, T. Shoji, T. Kondo, N. Nakajima and J. Kuniya
  
66. Recent Progress and Future of  $\Gamma$  Project at Tohoku University  
Geothermics, 16巻, 4号, 1987, 409-418  
H. Takahashi, T. Shoji and H. Abe

67. Critical cracking potential for stress corrosion cracking of nuclear pressure vessel steels in pressurized high temperature waters  
TRANSACTIONS OF THE 9TH INTERNATIONAL CONFERENCE ON STRUCTURAL MECHANICS IN REACTOR TECHNOLOGY, Ed., FOLKER H. WITTMANN, Vol. A, August 1987, 119-124  
T. Shoji and H. Takahashi
  
68. Slow strain rate testing of RPV steels in high temperature water  
TRANSACTIONS OF THE 9TH INTERNATIONAL CONFERENCE ON STRUCTURAL MECHANICS IN REACTOR TECHNOLOGY, Ed., FOLKER H. WITTMANN, Vol. H, August 1987, 265-270  
J. Congleton and T. Shoji
  
69. DETECTION OF MATERIAL DEGRADATION ON CrMo STEEL DURING SERVICE OPERATION BY A CHEMICAL ETCHING TEST  
Proceedings of the Fifth International Conference on Mechanical Behavior of Materials-V, ICM-5, Eds., M. G. Yan, S. H. Zhang and Z. M. Zheng, June 1987, 1109-1114  
Fumio Nogata, Kenji Seo, Hideaki Takahashi, Tetsuo Shoji, Lu You Sho, Koji Kawano, Se-Hi Chung and Yang-Bing-Xian
  
70. A MAGNETO-FRACTURE MECHANICS APPROACH TO THE STRUCTURAL INTEGRITY ASSESSMENT SYSTEM OF A SUPER-CONDUCTING MAGNET FOR A FUSION REACTOR  
Electromagnetomechanical Interactions in Deformable Solids and Structures, Eds., Y. Yamamoto and K. Miya, 1987, 131-136  
Yasuhide Shindo, Tetsuo Shoji and Masumi Saka
  
71. Non-Destructive Diagnostics Technique by means of Electrochemical, Polarization method for Materials Degradation of S/H Tubes of Fossil Boilers  
Proceedings of the International Conference on Advances in Material Technology for Fossil, Power Plants, Chicago, Illinois, ASM International and EPRI, September 1987, 1-8  
Yashihisa Saito, Tetsuo Shoji and Hideaki Takahashi
  
72. AE によるマルテンサイト及びフェライト・マルテンサイト鋼の焼もどし脆化の評価  
非破壊検査, 36巻, 7号, 1987, 481-487  
盧友紹, 高橋秀明, 庄子哲雄

73. 岩石 / 熱水相互作用の基礎特性とその工学利用  
地熱エネルギー, 13巻, 4号, 1988, 28-38  
庄子哲雄, 中塚勝人
74. 地下き裂貯溜層性能に及ぼす岩石 / 熱水相互作用  
日本地熱学会誌, 10巻, 3号, 1988, 193-210  
高橋秀明, 庄子哲雄, 二藤学, 小島隆
75. 連続式オートクレーブによるゾノトライト長繊維の直接合成  
Gypsum & Lime, No.216, 1988, 288-294  
梶座圭太郎, 槻山興一, 寺村敏史, 湯田周二, 井須紀文, 庄子哲雄  
高橋秀明
76. 水素ガス環境下での低合金鋼のき裂進展挙動と AE 放出特性の評価  
日本機械学会論文集 (A 編), 54巻, 497号, 1988, 50-56  
鄭熙敦, 中川裕二, 庄子哲雄, 高橋秀明
77. 海洋環境下における高張力鋼応力腐食割れ挙動の SSRT 法による評価  
日本機械学会論文集 (A 編), 54巻, 500号, 1988, 746-752  
斎藤幹男, 庄子哲雄, 高橋秀明, 三浦健蔵, 熊田誠
78. 軽水炉水環境下における原子炉压力容器鋼の応力腐食割れ  
日本機械学会論文集 (A 編), 54巻, 502号, 1988, 1251-1257  
庄子哲雄, 相沢周二, 高橋秀明
79. 炭素鋼の気液二相流中エロージョン・コロージョン損傷の電気化学的機構  
日本機械学会論文集 (A 編), 54巻, 505号, 1988, 1807-1813  
渡辺豊, 庄子哲雄, 高橋秀明, 森谷信一
80. 化学プラント高温構造部材の経年劣化機構と電気化学的手法による非破壊評価  
非破壊検査, 37巻, 2号, 1988, 79-85  
八重樫彰, 松尾憲之助, 盧友紹, 庄子哲雄, 高橋秀明
81. 炭素鋼の気液 2 相流中エロージョン・コロージョンにおける電気化学的作用  
防食技術, 37巻, 2号, 1988, 69-74  
渡辺豊, 庄子哲雄, 高橋秀明
82. Development of a Miniaturized Specimen Technique for Fracture Toughness JIc Measurement  
Journal of Testing and Evaluation Vol. 16, No. 2, 1988, 229-240  
Xinyuan Mao, Tetsuo Shoji and Hideaki Takahashi

83. Non-destructive Evaluation of Materials Degradation after Long Term Operation in Chemical Plants by Means of Electro-chemical Method  
Proceedings of International Conference of Life Assessment and Extension  
The Hague, The Netherlands, June 13-15, 1988, 130-135  
E. Nishihara, A. Yaegashi, Y. Murakami, T. Shoji and H. Takahashi
84. Residual Life Assessment and Non-destructive Evaluation of Material Degradation in Fossil Power Components by Means of Small Punch Test  
Proceedings of International Conference of Life Assessment and Extension,  
The Hague, The Netherlands, June 13-15, 1988, 24-32  
H. Takahashi, T. Shoji, H. D. Jeong, Y. Saito and S. Ishizaki
85. Size, Side-Grooving and Pre-cracking Effects on the JIC Data for an SUS 304 Stainless Steel at 4 K  
Advanced Cryomechanics and Engineerings, Vol. 34, 1988, 251-258  
M. Shimada, R. L. Tobler, T. Shoji and H. Takahashi
86. Acoustic Emission and its Applications to Fracture Studies of Stainless Steels at 4K  
Advanced Cryomechanics and Engineerings, Vol. 34, 1988, 387-395  
H. Takahashi, T. Shoji and R. L. Tobler
87. Geochemical Reactor for Advanced Geothermal Energy Utilization  
1988 ASME/GRC, 1988, 33-38  
H. Takahashi, T. Shoji, K. Nakatsuka and H. Abe
88. EFFECTS OF SULFATE CONTAMINATION, SULFUR IN STEEL AND STRAIN RATE ON CRITICAL CRACKING POTENTIAL FOR SCC OF PRESSURE VESSEL STEELS IN PRESSURIZED HIGH TEMPERATURE WATERS  
Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, 1988, 251-259  
T. Shoji, H. Takahashi, S. Aizawa and M. Saito
89. MATERIALS ENGINEERING ASPECTS OF AGEING PHENOMENA IN STRUCTURAL MATERIALS OF LWRS AND THEIR RELEVANCE TO R&D IN PLANT LIFE EXTENSION PROGRAMMES  
Proceedings of International Symposium on Safety Aspects of the Ageing and Maintenance of Nuclear Power Plants, IAEA-SM-295/44, 1988, 379-395  
H. Nakajima, T. Shoji, N. Nakajima, H. Takahashi, T. Kondo

90. 高温岩体破碎における破壊力学の応用  
 圧力技術, 26 巻, 4 号, 241-248, 1988  
 阿部博之, 林一夫, 庄子哲雄
  
91. 花こう岩の高温高压水中応力腐食割れ挙動と時間依存型き裂進展抵抗  
 日本機械学会論文集 (A 編), 55巻, 512号, 1989, 837-842  
 橋田俊之, 平野明彦, 庄子哲雄, 高橋秀明
  
92. 炭素鋼表面き裂材の腐食疲労き裂進展挙動に関する破壊力学的研究  
 日本機械学会論文集 (A 編), 55巻, 514号, 1989, 1281-1285  
 鄭熙敦, 庄子哲雄, 高橋秀明, 八巻健一
  
93. シャルピー衝撃試験と小型パンチ試験における破面遷移挙動の相関について  
 日本機械学会論文集 (A 編), 55巻, 515号, 1989, 1619-1622  
 松下敬, Maribel L. SAUCEDO, 四辻美年, 庄子哲雄, 高橋秀明
  
94. 炭素鋼の気液二相流中エロージョン・コロージョン損傷機構と損傷発生条件  
 日本機械学会論文集 (A 編), 55巻, 519号, 1989, 2294-2298  
 渡辺豊, 庄子哲雄, 高橋秀明
  
95. A NEW HIGH-Tc SUPERCONDUCTOR YBa<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>x</sub>  
 Modern Physics Letters B, Vol. 3, No. 16, 1989, 1233-1236  
 A. SHIMA, T. SHOJI, M. UKAKU, Y. WATANABE, Y. TAZAWA and H. SAKAI
  
96. 酸化物超伝導体の破壊強度・靱性評価と破壊過程での超伝導性  
 日本機械学会論文集 (A 編), 55巻, 512号, 1989, 843-846  
 渡辺豊, 庄子哲雄
  
97. A NOVEL NDE METHOD FOR CREEP DAMAGE EVALUATION BY MEANS OF ELECTRODE IMPEDANCE METHOD (EIM)  
 The 1989 ASME Pressure Vessels and Piping Conference-JSME Co Sponsorship  
 Honolulu, Hawaii, July 23-27, 1989, 213-220  
 T. Matsushita, T. Shoji and Y. Watanabe, Y. Saito
  
98. EFFECT OF INHIBITOR UPON SCC OF PRESSURE VESSEL STEELS IN PRESSURIZED HIGH TEMPERATURE WATERS  
 Advances in Fracture and Fatigue for the 1990's Vol. I, JSME Co-Sponsorship,  
 Honolulu, Hawaii, July 23-27, 1989, 77-84  
 T. Shoji, K. Yoshida

99. Materials Compatibility with High Temperature Waters and Long Term Stability in Nuclear Reactor Environments  
 Proceedings of the Fourth International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Jekyll Island, Georgia, August 6-10, 1989, 1-63-1-82  
 T. Shoji, K. Kikuchi, T. Kondo
  
100. Computer Simulation of Environmentally Assisted Cracking of RPV Steels in LWR Environments  
 Proceedings of the Fourth International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Jekyll Island, Georgia, August 6-10, 1989, 8-28-8-47  
 Tetsuo Shoji, Shin-ichi Moriya, Makoto Tada
  
101. Electrochemical and Mechanical Aspects of Corrosion Fatigue Crack Growth Behavior of High Strength Steels in Synthetic Sea Water  
 THE IRON AND STEEL INSTITUTE OF JAPAN, INTERNATIONAL CONFERENCE on EVALUATION OF MATERIALS PERFORMANCE IN SEVERE ENVIRONMENTS, Kobe, Japan, November 20-23, 1989, 175-182  
 T. SHOJI, K. YAMAKI AND H. TASHIRO
  
102. Long Term Performance of Geothermal Circulation System -Significance of Water/Rock Interaction-  
 CAMBORNE SCHOOL OF MINES INTERNATIONAL CONFERENCE, HOT DRY ROCK GEOTHERMAL ENERGY, 1990, 436-445  
 T. SHOJI, K. WATANABE, H. TAKAHASHI
  
103. 電気化学的手法による高温使用オーステナイト系ステンレス鋼の劣化評価技術  
 材料, 39巻, 446号, 1990, 1596-1601  
 松下敬, 庄子哲雄, 斎藤喜久
  
104. Effect of Inhibitor on SCC of A533B CL. 1 and Sensitized Type 304 Stainless Steels in Pressurized High-Temperature Waters  
 CORROSION, Vol. 46, No. 9, 1990, 770-773  
 T. Shoji and K. Yoshida

105. Stress Corrosion Cracking of High Strength Steels and their Weldments in Synthetic Sea water  
 Proceedings of the KSME/JSME Joint conference, Fracture and Strength '90, Seoul, Korea, July 6-7, 1990, 164-169  
 Key Engineering Materials, vol.51-52, 1991, 113-118  
 J. K. Lim, T. Shoji, J. W. Who, S. H. Chung, H. Takahashi
  
106. Surface Crack Growth Behavior in Corrosion Fatigue of Off-Shore Structural Steel  
 Proceedings of the KSME/JSME Joint Conference, Fracture and Strength '90, Seoul, Korea, July 6-7, 1990, 302-307  
 Key Engineering Materials, vol.51-52, 1991, 227-232  
 JONG-GI LEE, TETSUO SHOJI, HIDEAKI TAKAHASHI, JAE-KYOO LIM, SE-HI CHUNG
  
107. DBTT ESTIMATION OF FERRITIC LOW ALLOY STEELS IN SERVICE PLANT BY MEANS OF SMALL PUNCH TEST  
 Proceedings of the KSME/JSME Joint Conference, Fracture and Strength '90, Seoul, Korea, July 6-7, 1990, 340-345  
 Key Engineering Materials, vol.51-52, 1991, 259-264  
 TAKASHI MATSUSHITA, MARIBEL L. SAUCEDO, Y. H. JOO, TETSUO SHOJI
  
108. NONDESTRUCTIVE DETECTION AND EVALUATION OF MATERIALS DEGRADATION OF 2.25Cr-1 Mo STEEL BY MEANS OF ELECTROCHEMICAL METHOD  
 Proceedings of the KSME/JSME Joint Conference, Fracture and Strength '90, Seoul, Korea, July 6-7, 1990, 702-707  
 Yutaka WATANABE and Tetsuo SHOJI
  
109. 電気化学的手法を用いた2.25Cr- 1 Mo 鋼の経年劣化の非破壊評価  
 材料, 40巻, 448号, 1991, 89-95  
 渡辺豊, 庄子哲雄
  
110. Cr-Mo-V 鋼および2.25Cr-1Mo 鋼の焼戻し脆化の新しい電気化学的評価手法  
 日本機械学会論文集 (A 編), 57巻, 537号, 1991, 1233-1239  
 渡辺豊, 庄子哲雄
  
111. The Evaluation of In-Service Materials Degradation of Low-Alloy Steels by the Electrochemical Method  
 Metallurgical Transactions A, Vol. 22A, 1991, 2097-2106  
 YUTAKA WATANABE and TETSUO SHOJI

112. 電気化学的手法によるステンレス鋼の材質劣化現位置評価技術の開発  
日本機械学会論文集 (A 編), 57巻, 538号, 1991, 1442-1448  
斎藤喜久, 庄子哲雄, 渡辺豊
113. 超伝導マグネット初期不整合の非破壊検出と剛性評価  
低温工学, 26巻, 6号, 1991, 472-479  
庄子哲雄, 坂根正道, 近藤武志
114. 硝酸塩溶液を用いた電気化学的手法による Cr-Mo-V 鋳鋼の焼もどし脆化の  
非破壊評価  
鉄と鋼, 77年, 4号, 1991, 566-573  
渡辺豊, 庄子哲雄
115. Deformation and fracture characteristics and its effect on the superconductivity  
of a high Tc superconductor (YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub>)  
Materials Science and Engineering, A143, 1991, 241-245  
Tetsuo Shoji and Yutaka Tazawa
116. Quantitative Evaluation of Stress Corrosion Crack Growth Behavior on Inconel  
600 in a High Temperature Water Environment  
Life Prediction of Corrodible Structure, Volume II, 1991, 1075-1103  
Tetsuo Shoji and Satoshi Mori, Hideya Anzai and Jiro Kuniya
117. 超伝導マグネットの剛性評価法－実験的検証－  
低温工学, 26巻, 6号, 1991, 467-471  
庄子哲雄, 進藤裕英, 中島美樹子, 坂根正道, 笠場孝一, 中嶋秀夫, 杉本誠,  
吉田清, 辻博史
118. 引張軟化モデルに基づく花こう岩の封圧依存破壊挙動の数値シミュレー  
ションと実験的検証  
資源と素材, 107巻, 4号, 1991, 195-200  
荻窪裕樹, 橋田俊之, 庄子哲雄, 高橋秀明
119. Effects of Sensitization and Crevices on Critical Cracking Potential for SCC of  
Alloy 600 Proceedings of the Fifth International Symposium on Environmental  
Degradation of Materials in Nuclear Power Systems-Water Reactors, 1991, 219-  
225  
H. Anzai, J. Kuniya, T. Shoji and K. Yoshida



120. GRAIN BOUNDARY SEGREGATION AND INTERGRANULAR STRESS CORROSION CRACKING SUSCEPTIBILITY OF AUSTENITIC STAINLESS STEELS IN HIGH TEMPERATURE WATER  
 Proceedings of the Fifth International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, 1991, 827-831  
 T. Shoji, K. Yamaki, R. G. Ballinger, and I. S. Hwang
  
121. 機器・構造物の寿命診断と長寿命化技術  
 日本機械学会誌, 94巻, 866号, 1991, 52-58  
 庄子哲雄
  
122. より丈夫で長持ちする原子炉の技術開発  
 日本原子力学会誌, 33巻, 3号, 205-242  
 庄子哲雄
  
123. 超電導マグネットの力学的挙動とコイル剛性  
 低温工学, 27巻, 1号, 1992, 57-62  
 進藤裕英, 庄子哲雄, 中島美樹子, 中嶋秀夫, 杉本誠, 吉田清, 辻博史
  
124. Computer Simulation of Stress Corrosion Cracking Behavior of Reactor Pressure Vessel (RPV) Steels in Light Water Reactor (LWR) Environments in Slow Strain Rate Tests(SSRT)  
 Computer Modeling in Corrosion, ASTM STP 1154. R. S. Munn, 1992, 44-66  
 Testuo Shoji, Shin-ichi Moriya, and Ken-ichi Yoshida
  
125. MICROSTRUCTURAL CHARACTERISTICS AND MECHANICAL PROPERTIES OF POLYMER INJECTION WELD  
 Proceedings of the Joint ASME / JSME Advances in Electronic Packaging, EEP-Vol. 2, 1992, 637-648  
 Jae Kyoo Lim, Tetsuo Shoji
  
126. 高温水中における Ni 基合金の応力腐食割れに関する研究  
 日本機械学会論文集 (A 編), 58巻, 550号, 1992, 980-986  
 庄子哲雄, 吉田謙一, 森聡
  
127. 原子炉压力容器用鋼の疲労特性と損傷評価  
 材料, 41巻, 469号, 1992, 1558-1564  
 庄子哲雄, 河守裕二, 渡辺豊, 深倉寿一

128. Study on environmentally assisted cracking of polymer composites by means of SSRT International Conference on Corrosion-Deformation Interactions CDF'92, Fontainebleau, France, October 5-7, 1992, 219-235  
Jae Kyoo Lim and Tetsuo Shoji
  
129. 構造材料の経年劣化とその非破壊計測・評価に関する研究  
日本設備管理学会誌, 3 巻, 3 号, 1992, 61-70  
庄子哲雄, 渡辺豊, 岩渕義昌, 斎藤喜久
  
130. 照射誘起応力腐食割れ感受性評価のための基礎的研究  
材料と環境, 42巻, 1号, 1993, 2-8  
岩渕義昌, 藤本隆裕, 渡辺豊, 庄子哲雄
  
131. Fiber Orientation and Weld Strength of Short-Glass-Fiber-Filled Polycarbonate  
JSME International Journal, Series A, Vol. 36, No. 3, 1993, 319-326  
Jae Kyoo LIM and Tetsuo SHOJI
  
132. Fiber Orientation of Polymer Injection Weld and its Strength Evaluation  
KSME Journal, Vol. 7, No. 2, 1993, 173-181  
Jae Kyoo Lim and Tetsuo Shoji
  
133. A Study on Fracture Toughness Evaluation of Polymer Composite Materials Using Acoustic Emission Technique  
Proceedings of Asian Pacific Conference on Fracture and Strength '93 JSME, Tsuchiura, Japan, July 26-28, 1993, 739-744  
Song Jun-Hee, Lim Jae-Kyoo, Tetsuo Shoji
  
134. Significance of Loading Mode on Stress Corrosion Cracking  
Proceedings of Sixth International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, San Diego, California, August 1-5, 1993, 61-69  
S. Moriya, S. Takata, T. Shoji and S. Isaka
  
135. Nondestructive detection of fatigue damage accumulation of RPV steel  
Proceedings of Sixth International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, San Diego, California, August 1-5, 1993, 433-441  
Tetsuo Shoji, Yuji Kawamori, and Yutaka Watanabe

136. Computer simulation of stress corrosion cracking  
International Conference on Corrosion -Deformation Interactions CDI'92,  
Fontainebleau, France, October 5-7, 1992, 859-873  
T. Shoji and S. Moriya
  
137. 超伝導マグネットの応力解析と剛性および安定性評価  
低温工学, 28巻, 12号, 1993, 671-680  
笠場孝一, 庄子哲雄
  
138. Electrochemical Evaluation of Thermal Aging Embrittlement of 2 1/4Cr-1Mo  
Steel for a Nuclear Pressure Vessel  
ASTM STP 1204, American Society for Testing and Materials, 1993, 16-26  
Yutaka Nishiyama, Kiyoshi Fukaya, Masahide Suzuki, Motokuni Eto, and Tetsuo  
Shoji
  
139. STUDY ON FIBER ORIENTATION AND LOW CYCLE FATIGUE BEHAVIOR  
OF POLYMER INJECTION WELDS  
Proceedings of 9th International Conference of Composite Materials, 1993, 205-  
211  
Jae Kyoo Lim, Mikiko Nakajima, Tetsuo Shoji
  
140. Non-destructive Evaluation of Thermal Aging Embrittlement of Duplex Stainless  
Steels  
Proceedings of Sixth International Symposium on Environmental Degradation of  
Materials in Nuclear Power Systems-Water Reactors, San Diego, California,  
August 1-5, 1993, 409-417  
YS. Yi, T. Tomobe, Y. Watanabe and T. Shoji
  
141. Numerical simulation with experimental verification of the fracture behavior in  
granite under confining pressures based on the tension-softening model  
International Journal of Fracture, Vol. 59, 1993, 227-244  
T. HASHIDA, H. OGHIKUBO, H. TAKAHASHI and T. SHOJI
  
142. 模擬地熱環境における花崗岩の応力腐食割れ特性  
日本地熱学会誌, 16巻, 3号, 1994, 311-326  
小島隆, 庄子哲雄, 高橋秀明
  
143. SSRT および定荷重下的高温高压水中応力腐食割れにおけるき裂先端ひずみ  
速度の定量的評価に関する研究  
日本機械学会論文集 (A 編), 60巻, 579号, 1994, 2573-2580  
森谷信一, 庄子哲雄

144. 集中誘導型交流電位差法に関する研究－欠陥寸法の評価精度および周波数依存性の検討－  
材料 43巻, 494号, 1994, 1482-1488  
金堯, 庄子哲雄
145. Electrochemical monitoring of aging embrittlement of 21/4Cr-1Mo steel for gas-cooled reactor pressure boundary components  
Theoretical and Applied Fracture Mechanics 21, 1994, 51-57  
Y. Nishiyama, K. Fukaya, M. Suzuki, M. Eto, T. Shoji
146. Application of Impedance Spectroscopy to Evaluate Temperature, Stress and Internal Structure in Electronic Packages  
Mechanics and Materials for Electronic Packaging, AMD-Vol.195, 1994, 133-139  
Mikiko Nakajima and Tetsuo Shoji
147. FRACTURE TOUGHNESS OF YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> SUPERCONDUCTOR CONTAINING Y<sub>2</sub>BaCuO<sub>5</sub> AND AG PREPARED BY MPMG PROCESS  
Mechanics and Materials for Electronic Packaging, AMD-Vol. 193, 1994, 39-45  
Tohru Nakaya and Tetsuo Shoji
148. IMPROVEMENT OF PREDICTIVE CAPABILITY OF ENVIRONMENTALLY ASSISTED CRACKING BY MEANS OF COMPUTER SIMULATION OF CRACK PROPAGATION  
Proceedings of Fracture Mechanics Applications ASME 1994,  
PVP-Vol.287/MD-Vol. 47, 1994, 107-113  
T. Shoji and S. Moriya and H. Arai and M. Higashi
149. 超伝導量子干渉素子による YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> 酸化物超伝導体の微視破壊挙動に関する研究  
低温工学, 29巻, 7号, 1994, 298-303  
中川理, 庄子哲雄, 笠場孝一, 西条哲弘
150. 超伝導マグネット巻線の励磁過程におけるひずみ挙動  
低温工学, 29巻, 8号, 1994, 367-374  
笠場孝一, 庄子哲雄, 柴田直樹, 中川理, 中島秀夫, 杉本誠
151. 極値解析データを基にした冷却水環境における炭素鋼製熱交換器の寿命予測  
材料と環境, 43巻, 11号, 1994, 624-631  
中原正大, 庄子哲雄

152. 2.25Cr-1Mo 鋼の水素助長割れ下限界応力拡大係数とき裂先端の塑性変形に関する研究  
日本機械学会論文集 (A 編), 61巻, 582号, 1995, 283-288  
駒村貴幸, 庄子哲雄
153. 集中誘導型交流電位差法に関する研究－探触子改良および2次元表面欠陥評価への適用－  
材料, 44巻, 500号, 1995, 669-674  
金堯, 庄子哲雄
154. インピーダンス・スペクトロスコピー法による炭化珪素の材質・欠陥の非破壊評価  
日本機械学会論文集 (A 編), 61巻, 585号, 1995, 940-945  
中島美樹子, 庄子哲雄, 蓮田久
155. 集中誘導型交流電位差法による傾斜欠陥の評価  
非破壊検査, 44巻, 9号, 1995, 730-735  
金堯, 庄子哲雄
156. 交流電位差法による焼結鍛造材未焼結部の非破壊検査  
非破壊検査, 44巻, 9号, 1995, 736-743  
高橋和彦, 庄子哲雄
157. Effects of loading modes on environmentally assisted cracking of pressure vessel steels in high temperature water  
Fatigue and Crack Growth: Environmental Effects, Modeling Studies, and Design Considerations, PVP-Vol. 306, 1995, 29-33  
T. Shoji, Y. Watanabe, S. Moriya and S. Takata
158. CREEP LIFE EVALUATION OF 2.25Cr-1Mo STEEL COMPONENTS AND IN-SITU NDE BY ELECTROCHEMICAL TECHNIQUE  
Fitness-For-Service and Decisions for Petroleum and Chemical Equipment, PVP-Vol. 315, 1995, 397-405  
Yutaka Watanabe and Tetsuo Shoji
159. Theoretical Prediction of SCC Growth Behavior-Threshold and Plateau Growth Rate-  
Proceedings of Seventh International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Breckenridge, Colorado, USA, Vol.1, 1995, 881-889  
T. Shoji, S. Suzuki, R. G. Ballinger

160. Lead Induced Stress Corrosion Cracking of Alloy 690 in High Temperature Water  
 Proceedings of Seventh International Symposium on Environmental Degradation of  
 Materials in Nuclear Power Systems-Water Reactor, Breckenridge, Colorado, USA,  
 1995, 233-244  
 Koo Kab Chung, Jae Kyu Lim, Shinichi Moriya, Yutaka Watanabe, Tetsuo Shoji
  
161. SCC INITIATION AND PRPPAGATION STUDY OF SUS 304 IN HIGH  
 TEMPERTURE WATER BY ACPD  
 Proceedings of International Symposium on Plant Aging and Life Prediction of  
 Corrodible Structures, Sapporo, Japan, 1995, 379-387  
 S. Suzuki and T. Shoji
  
162. 化学装置で用いられたタンタル製部材の水素ぜい化の非破壊的評価と寿命管  
 理  
 日本機械学会論文集 (A 編), 62巻, 595号, 1996, 371-377  
 中原正大, 庄子哲雄
  
163. Stress Corrosion Cracking Susceptibility of Nickel-Molybdenum Alloys by Slow  
 Strain Rate and Immersion Testing  
 Corrosion, Vol. 52, No. 8, 1996, 634-642  
 M. Nakahara and T. Shoji
  
164. 鉄系焼結鍛造材の疲労特性に及ぼす表面欠陥の影響  
 日本金属学会誌, 60巻, 9号, 1996, 816-825  
 高橋和彦, 庄子哲雄, 中島美樹子
  
165. SUS316鋼の高温高圧水中低ひずみ速度試験における電気化学的ノイズ  
 材料と環境, 45巻, 11号, 1996, 667-673  
 渡辺豊, 木村史貴, 庄子哲雄
  
166. Detection and evaluation of material degradation of thermally aged duplex  
 stainless steels:electrochemical polarization test and AFM surface analysis  
 Journal of Nuclear Materials, Vol. 231, Issue 1-2, 1996, 20-28  
 Y. S. Yi and T. Shoji
  
167. Quantitative evaluation of material degradation of thermally aged duplex stainless  
 steelsusing chemical immersion test  
 Journal of Nuclear Materials, Vol. 240, Issue 1, 1996, 62-69  
 Y. S. Yi, T. Shoji

168. APPLICATION OF ACOUSTIC EMISSION TECHNIQUE FOR OPTIMIZATION OF WOOD DRYING METHOD BY USE OF CARBON DIOXIDE  
Progress in Acoustic Emission VIII, The Japanese Society for Non-Destructive Inspection, 1996, 327-332  
Toshio KONO, Hayato SHINOHARA, Nakamichi YAMASAKI, Hideaki TAKAHASHI, Toshiyuki HASHIDA, Kinji TAMAGAWA and Tetsuo SHOJI
  
169. Development of a Cut End Air Pressurization under Hydrothermal Conditions and Penetration Characteristics  
Proceedings of The Second International Conference on Solvothermal Reactions, Japan, 1996, 18-20  
H. Shinohara, T. Kono, N. Yamasaki, H. Takahashi, T. Hashida and T. Shoji
  
170. Quantitative Evaluation of Stress Corrosion Crack Growth Behavior on Inconel 600 in a Simulated LWR Environment  
Life Prediction of Corrodible Structure, 1997, 23-26  
T. Shoji, S. Mori, H. Anzai and J. Kuniya
  
171. SCC INITIATION AND PROPAGATION STUDY OF SUS 304 IN HIGH TEMPERATURE WATER BY ACPD  
Proceedings of International Symposium on Plant Aging and Life Prediction of Corrodible Structures, Sapporo, Japan, May 15-18, 1997, 379-388  
S. Suzuki and T. Shoji
  
172. SURFACE CRACK GROWTH BEHAVIOR OF PRESSURE VESSEL STEELS IN OXYGENATED HIGH TEMPERATURE WATER  
Proceedings of International Symposium on Plant Aging and Life Prediction of Corrodible Structures, Sapporo, Japan, May 15-18, 1997, 937-942  
S. Mori and T. Shoji
  
173. CATHODIC PROTECTION TECHNIQUE FOR POWER PLANT CONDENSER USING NUMERICAL METHOD  
Proceedings of International Symposium on Plant Aging and Life Prediction of Corrodible Structures, Sapporo, Japan, May 15-18, 1997, 827-834  
Shuichi Inagaki, Juichi Fukakura and Matuso Miyazaki, Tetsuo Shoji

174. A NOVEL NON DESTRUCTIVE INSPECTION AND MONITORING  
TECHNIQUE FOR PLANT LIFE MANAGEMENT - INDUCED CURRENT  
FOCUSING POTENTIAL DROP TECHNIQUE  
Proceedings of International Symposium on Plant Aging and Life Prediction of  
Corrodible Structures, Sapporo, Japan, May 15-18, 1997, 371-377  
T. Shoji, H. Kim, T. Maeda, Y. Sato and Y. Watanabe
  
175. THERMAL AGING EMBRITTLEMENT OF CAST DUPLEX STAINLESS  
STEELS AND ITS NONDESTRUCTIVE EVALUATION  
Proceedings of International Symposium on Plant Aging and Life Prediction of  
Corrodible Structures, Sapporo, Japan, May 15-18, 1997, 343-351  
Y. S. Yi and T. Shoji
  
176. 集中誘導型交流電位差法による3次元表面き裂の形状計測  
日本機械学会論文集(A編), 63巻, 605号, 1997, 68-72  
李鎔宣, 庄子哲雄
  
177. 集中誘導型交流電位差法による疲労損傷の非破壊評価  
日本機械学会論文集(A編), 63巻, 609号, 1997, 1119-1125  
村山稔, 庄子哲雄, 渡辺豊, 佐藤康元
  
178. Ni基超合金 INCONEL718の高温低サイクル疲労に伴うすべり帯エッチング  
特性の変化  
日本機械学会論文集(A編), 63巻, 611号, 1997, 1481-1488  
駒崎慎一, 渡辺豊, 庄子哲雄
  
179. 水熱条件下での木口加圧法による含浸前処理技術(第1報)  
木材工業, 52巻, 2号, 1997, 61-66  
篠原速都, 河野敏夫, 山崎仲道, 高橋秀明, 橋田俊之, 庄子哲雄
  
180. 二酸化炭素を用いたスギ材の乾燥技術の開発  
ウェイスト・リソース, No. 35, 1997, 5-13  
河野敏夫, 篠原速都, 山崎仲道, 橋田俊之, 庄子哲雄
  
181. 木口含浸水熱法による含浸前処理技術  
ウェイスト・リソース, No. 35, 1997, 14-22  
篠原速都, 河野敏夫, 山崎仲道, 橋田俊之, 庄子哲雄
  
182. Formation of the Al-Rich Phase on Grain Boundary and the Creep Damage  
Mechanism in Directionally Solidified Ni-Base Superalloy  
Metallurgical and Materials Transactions A, Vol. 28A, 1997, 1945-1949  
S. KOMAZAKI and T. SHOJI



183. CHARACTERISTICS OF THE SCC SURFACE CRACK PROPAGATION IN THE LOW K REGION IN OXYGENATED HIGH TEMPERATURE WATER  
 Proceedings of the Eighth International Symposium on ENVIRONMENTAL DEGRADATION OF MATERIALS IN NUCLEAR POWER SYSTEMS-WATER REACTORS, Amelia Island, Florida, August 10-14, 1997, 685-694  
 S. Suzuki, T. Shoji
  
184. THEORETICAL SCC CRACK GROWTH PREDICTION UNDER VARIOUS LOADING MODES IN HIGH TEMPERATURE WATER  
 Proceedings of the Eighth International Symposium on ENVIRONMENTAL DEGRADATION OF MATERIALS IN NUCLEAR POWER SYSTEMS-WATER REACTORS, Amelia Island, Florida, August 10-14, 1997, 695-703  
 S. Suzuki, T. Shoji, Yong-Sun Yi, Jeong-Ki Kim
  
185. Mechanistics and Mechanisms of Environmentally Assisted Cracking -Formulation of Corrosion Deformation Interactions  
 The 2nd International Conference on Corrosion Deformation Interactions 1997  
 S. Suzuki, T. Shoji and Y. S. Yi
  
186. ELECTROCHEMICAL NOISE CHARACTERISTICS OF IGSCC IN STAINLESSSTEELS IN PRESSURIZED HIGH-TEMPERATURE WATER  
 Corrosion, 1998, Paper No.129/1-7  
 Y. Watanabe, T. Shoji, and T. Kondo
  
187. 磁気光学素子を用いた新しい非破壊探傷  
 日本機械学会論文集 (A 編), 64巻, 619号, 1998, 825-830  
 李鎮伊, 庄子哲雄, Dorian MINKOV, 石原道章
  
188. 熱応力緩和層を有する ZrO<sub>2</sub> / Ni 系遮熱コーティング材料の NTO/MMH 燃焼ガス加熱場におけるレーザー改質効果  
 日本機械学会論文集 (A 編), 64巻, 621号, 1998, 1168-1175  
 黒田行郎, 森谷信一, 只野真, 佐藤政裕, 毛呂明夫, 新野正之, 張清杰, 須藤孝幸, 庄子哲雄
  
189. Application of Magneto-Optical Method for Inspection of the Internal Surface of a Tube Electromagnetic Nondestructive Evaluation (II), 1998, 49-57  
 Jinyi LEE, Hyoungno LEE, Tetsuo SHOJI and Dorian MINKOV
  
190. Sizing of 3-D surface cracks using leakage field  
 Electromagnetic Nondestructive Evaluation (II), 1998, 271-279  
 Dorian Minkov and Tetsuo Shoji

191. Method for sizing of 3-D surface breaking flaws by leakage flux  
NDT & E International, Vol. 31, No. 5, 1998, 317-324  
D. Minkov, T. Shoji
  
192. 一方向凝固 Ni 基超合金のクリープに伴う電気化学的特性の変化と損傷評価  
日本機械学会論文集 (A 編), 64巻, 623号, 1998, 1997-2004  
駒崎慎一, 庄子哲雄, 武市徹也, 佐藤実
  
193. 核融合炉超伝導マグネット・ケーブルインコンジット導体の剛性評価法  
日本機械学会論文集 (A 編), 64巻, 623号, 1998, 2012-2017  
笠場孝一, 庄子哲雄, 中山浩樹
  
194. OPTIMIZATION OF FUNCTIONAL DISTRIBUTION OF MATERIALS TO  
MINIMIZE WEIGHT AND COST OF MACHINE ELEMENTS USING  
GENETIC ALGORITHM  
Proceedings of DETC98, 1998 ASME Design Engineering Technical Conference,  
Atlanta, GA, September 13-16, 1998, 1-12  
Y. Ohtani and T. Shoji
  
195. 高温高压水中における軽水炉压力容器用鋼の環境助長割れ内部環境の計測に  
関する研究  
材料と環境, 47巻, 12号, 1998, 783-788  
李倫柱, 松田力, 李鎔宣, 庄子哲雄
  
196. Quantitative Analysis of Environmentally Assisted Crack Tip Chemistry of  
reactor pressure vessel steel in high temperature water  
Proceedings of EUROCORR'98-THE EUROPEAN CORROSION CONGRESS,  
Utrecht, The Netherlands, September 28- October 1, 1998, CD-ROM  
Yunju Lee and Tetsuo Shoji
  
197. 熱応力緩和型  $ZrO_2/Ni$  系傾斜機能材料の再生冷却燃焼器への適用に関する研  
究 (その 2) - 完全 FGM 型再生冷却エンジンの高空性能試験  
日本航空宇宙学会誌, 46巻, 539号, 1998, 695-704  
黒田行郎, 毛呂明夫, 日下和夫, 青木由雄, 新野正之, 三木陽一郎,  
下田信之, 寺木潤一, 河内山治朗, 庄子哲雄
  
198. Current status and future of IASCC research  
Journal of Nuclear Materials, Vol. 258-263, Part 1, 1998, 241-251  
Tetsuo Shoji, Shun-ichi Suzuki, K. S. Raja

199. Quantitative prediction of environmentally assisted cracking based on a theoretical model and computer simulation  
Journal of Nuclear Materials, Vol. 258-263, Part 2, 1998, 2054-2058  
T. Satoh, T. Nakazato, S. Moriya, S. Suzuki and T. Shoji
  
200. Fatigue crack growth under compressive loading  
Journal of Nuclear Materials, Vol. 258-263, 1998, 2059-2063  
Koichi Kasaba, Takahiro Sano, Souichi Kudo, Tetsuo Shoji, Kazumune Katagiri, Tadashi Sato
  
201. 磁気光学損傷計測システムによる常磁性材料構造物の非破壊検査に関する基礎研究  
日本 AEM 学会誌, 6巻, 4号, 1998, 337-342  
李鎮伊, 庄子哲雄
  
202. Nondestructive evaluation of degradation of thermal barrier coating by an impedance spectroscopy method  
Proceedings of the 9th Asia-Pacific Conference on Nondestructive Testing in conjunction with ASNT's 1998 Spring Conference and 7th Annual Research Symposium, Anaheim, California, USA, March 23-27, 1998, 43-46  
K. Ogawa, D. Minkov, M. Sato, H. Hashimoto and T. Shoji
  
203. Sizing of 3-D Surface Cracks with Complex Cross-Sections and Different Orientations Using Leakage Field  
Proceedings of 7TH EUROPEAN CONFERENCE ON NON-DESTRUCTIVE TESTING, Copenhagen, May 26-29, 1998, 2944-2950  
D. Minkov, T. Shoji
  
204. Sizing of 3-D Surface Cracks by Using Hall Element Probe  
The 4th International Workshop on Electromagnetic Non-Destructive Evaluation, Chatou, France, September 17-18, 1998, 74-75 Electromagnetic Nondestructive(Ⅲ), Vol.15, 1999, 283-291  
D. Minkov and T. Shoji
  
205. An Improved Method for Sizing of 3-D Surface Cracks Using Leakage Field  
ASNT Fall Conference and Quality Testing Show, Nashville, Tennessee, October 19-23, 1998, 180-182  
Dorian Minkov and Tetsuo Shoji

206. SIZING OF 3-D SURFACE BREAKING FLAWS FROM THE DISTRIBUTION OF LEAKAGE FIELD  
 Proceedings of the Eighth International Symposium on Nondestructive Characterization of Materials VIII, Boulder, Colorado, June 15-20, 1998, 787-792  
 Dorian Minkov, and Tetsuo Shoji
  
207. PREDICTION OF ENVIRONMENTALLY ASSISTED CRACKING BEHAVIOR OF STRUCTURAL MATERIAL IN LWR SYSTEMS: THEORY AND EXPERIMENTS  
 Proceedings of the 1998 ASME/JSME Joint Pressure Vessels and Piping Conference, San Diego, California, July 26-30, 1998, 201-205  
 Tetsuo Shoji, Yunju Lee, Takeshi Satoh and Shun-ichi Suzuki
  
208. Measuring the Crack Tip Water Chemistry of Reactor Vessel Steels in Oxygenated High-Temperature Water  
 Corrosion Engineering, Vol.47, No.12, 1998, 935-943  
 Yun Ju Lee, Chikara Matsuda, Yong Sun Yi and Tetsuo Shoji
  
209. インピーダンス・スペクトロスコピー法による熱遮へいコーティングの経年劣化評価(第1報-感度解析によるインピーダンス挙動の検討)  
 非破壊検査, 48巻, 2号, 1999, 91-97  
 小川和洋, 庄子哲雄
  
210. インピーダンス・スペクトロスコピー法による熱遮へいコーティングの経年劣化評価(第2報-セラミックコーティング厚さの評価)  
 非破壊検査, 48巻, 2号, 1999, 98-105  
 小川和洋, 庄子哲雄, 李鎮伊
  
211. 磁気光学効果を用いた非破壊損傷計測システムの開発に関する研究(第1報-損傷計測システムの開発)  
 非破壊検査, 48巻, 3号, 1999, 165-171  
 李鎮伊, 庄子哲雄
  
212. 磁気光学効果を用いた非破壊損傷計測システムの開発に関する研究(第2報-新しいシステムによる遠隔探傷)  
 非破壊検査, 48巻, 4号, 1999, 231-236  
 李鎮伊, 庄子哲雄
  
213. NDE of degradation of thermal barrier coating by means of impedance spectroscopy  
 NDT&E International, Vol.32, 1999, 177-185  
 Kazuhiro Ogawa, Dorian Minkov, Tetsuo Shoji, Minoru Sato, Hideo Hashimoto

214. 微小アンテナによる新しい電磁探傷法の開発に関する研究  
日本機械学会論文集 (A 編), 65巻, 632号, 1999, 925-931  
佐藤雅子, 庄子哲雄, 佐藤康元, 佐藤源之
  
215. Quantitative Evaluation of Gastric Emptying Behavior by Use of Magnetic Fluid and Perturbation Field Measurements  
Proceedings of The Second Japan-US Symposium on Advances in NDT, Kahuku, Hawaii, USA, June 21-25, 1999, 313-316  
T. Shoji, H. Kawakita, T. Yamada, J. Lee, K. Nakatsuka, I. Sasaki, H. Naito and S. Matsuno
  
216. Sizing of Small 3-D Surface Cracks by Using Leakage Magnetic Field and Hall Element Probe  
Proceedings of The Second Japan-US Symposium on Advances in NDT, Kahuku, Hawaii, USA, June 21-25, 1999, 313-316  
Dorian Minkov and Tetsuo Shoji
  
217. 電気化学的手法を用いたガスタービン用 Ni 基超合金のクリープ寿命評価  
日本機械学会論文集 (A 編), 65巻, 633号, 1999, 1147-1155  
駒崎慎一, 庄子哲雄, 佐藤実
  
218. High Sensitivity Inspection of Defects in Welds by Remotely Induced Current Potential Drop Technique  
Nondestructive Characterization of Materials IX, American Institute of Physics, 1999, 107-112  
Yasumoto Sato and Tetsuo Shoji
  
219. Nondestructive Evaluation of Creep Damage and Life Prediction of Ni-Base Superalloy Used in Advanced Gas Turbine Blades by Electrochemical Technique  
Nondestructive Characterization of Materials IX, American Institute of Physics, 1999, 113-119  
Shin-ichi Komazaki, Tetsuo Shoji, Iwao Abe, and Ikuro Okada
  
220. Sizing of 3-D Surface Cracks with Varying Width by using Leakage Magnetic Field and Hall Element Probe  
Nondestructive Characterization of Materials IX, American Institute of Physics, 1999, 220-227  
Dorian Minkov and Tetsuo Shoji
  
221. Health Diagnosis of Functionally Graded C/SiC Coating on C/C Composites  
Materials Science Forum, Vol. 308-311, 1999, 416-421  
Y. Wakamatsu, T. Shoji, K. Ogawa and I. Hino

222. OXIDATION DAMAGE PROCESS OF C/C COMPOSITES WITH  
FUNCTIONALLY GRADED C/SiC COATING  
9th International Space Planes and Hypersonics Systems and Technologies  
Conference, Norfolk, Virginia, November 1-4, 1999, AIAA 99-4913, 1-10  
Yoshio Wakamatsu, Tetsuo Shoji, Isao Hino, and Toshihito Saito
  
223. 高温工学試験研究炉圧力容器用2 1/4Cr-1 Mo 鋼の熱時効脆化の電気化学的評価  
耐熱金属材料第123委員会研究報告 Vol. 32, No. 2 : 第1・2分科会 ,  
1999, 169-175  
西山裕孝, 深谷清, 鈴木雅秀, 衛藤基邦, 庄子哲雄
  
224. Theoretical Formulation and Life Prediction of Environmentally Assisted  
Cracking of Pressure Boundary Components in Light Water Reactor Water  
Environments  
Proceedings of the Asian Pacific Conference for Fracture and Strength'99, Xi'an,  
China, June 3-6, 1999, LAI01  
T. Shoji
  
225. Theoretical Prediction of Environmentally Assisted Cracking of Structural  
Materials in LWR Systems-Threshold and Plateau Growth Behavior-  
International Conference on ADVANCED TECHNOLOGY IN EXPERIMENTAL  
MECHANICS'99, Ube, JAPAN, July 21-24, 1999, 408-413  
Tetsuo SHOJI, Yunju Lee, Krishnan Selva Raja and Guangfu.LI
  
226. Effects of Minor Elements and Thermal Treatment on EAC of Austenitic  
Simulated Steels in PWR Primary Water and Implication to IASCC  
9th International Conference on Environmental Degradation on Materials in  
Nuclear Power Systems-Water Reactors, Newport Beach, CA, August 1-5, 1999,  
1115-1223  
G. Li, H. Kaneshima, and T. Shoji
  
227. Studies on Surface Oxide Films of Stainless Steels Having Simulated Post-  
Irradiated Grain Boundary Chemistries  
9th International Conference on Environmental Degradation on Materials in  
Nuclear Power Systems-Water Reactors, Newport Beach, CA, August 1-5, 1999,  
1125-1123  
K. S. Raja, T. Masuda, T. Shoji, and Y. Lee

228. Evaluation of Crack Tip Solution Chemistry of Low Alloy Steels in Oxygenated High Temperature Water  
9th International Conference on Environmental Degradation on Materials in Nuclear Power Systems-Water Reactors, Newport Beach, CA, August 1-5, 1999, 893-899  
Y. Lee, T. Shoji and K. S. Raja
  
229. EFFECT OF Ce ADDITION ON THE SENSITIZATION PROPERTIES OF STAINLESS STEELS  
Scripta mater, Vol. 42, 2000, 307-312  
Y. Watanabe, V. Kain, T. Tonozuka, T. Shoji, T. Kondo and F. Masuyama
  
230. Effects of Water Flow Rate on Fatigue Life of Carbon Steel in High Temperature Pure Water Environment  
ASME PVP, Vol. 410-2, 2000, 13  
Akihiko Hirano, Michiyoshi Yamamoto, Katsumi Sakaguchi, Tetsuo Shoji, Kunihiro Iida
  
231. Effects of Impurities on Environmentally Assisted Crack Growth of Solution-Annealed Austenitic Steels in PWR Primary Water  
CORROSION, Vol. 56, No. 5, 2000, 460-469  
G. F. Li, Y. Kaneshima, and T. Shoji
  
232. STUDY OF THE DIPOLE MODEL OF A CRACK  
REVIEW OF PROGRESS IN QUANTITATIVE NONDESTRUCTIVE EVALUATION, Vol. 19, 2000, 521-528  
D. Minkov and T. Shoji, J. Lee
  
233. Improvement of the Dipole Model of a Surface Crack  
Materials Evaluation, Vol.58, No.31, 2000, 661-666  
Dorian Minkov, Jinyi Lee, and Tetsuo Shoji
  
234. Study of crack inversions utilizing dipole model of a crack and Hall element measurements  
Journal of Magnetism and Magnetic Materials, Vol. 217, 2000, 207-215  
Dorian Minkov, Jinyi Lee, Tetsuo Shoji
  
235. Experimental study of sizing of surface cracks by using leakage magnetic field and Hall element probe  
PROCEEDING OF THE 2ND INTERNATIONAL CONFERENCE ON EMERGING TECHNOLOGIES IN NDT, 2000, 223-227  
Dorian Minkov and Tetsuo Shoji, Jinyi Lee

236. In situ NDT of Degradation of Thermal Barrier Coatings Using Impedance Spectroscopy  
Materials Evaluation, Vol.58, No.31, 2000, 476-481  
Kazuhiro Ogawa, Tetsuo Shoji, Iwao Abe, and Hideo Hashimoto
  
237. CRITICAL PARAMETERS OF ENVIRONMENTALLY ASSISTED CRACKING IN NUCLEAR SYSTEMS  
CORROSION 2000, Orlando, Florida, USA, March 26-31, 2000, Paper 00190/1-14  
T. Shoji, K. S. Raja, G. F. Li and Y. J. Lee, Anna Brozova
  
238. Creep Life Prediction of Ni-Base Superalloy Used in Advanced Gas Turbine Blades by Electrochemical Method  
JSME International Journal, Series A, Vol. 43, No. 2, 2000, 156-165  
Shin-ichi KOMAZAKI, Tetsuo SHOJI and Minoru SATO
  
239. 熱遮へいコーティング (TBC) 材の経年劣化機構解析  
日本機械学会論文集 (A 編), 66巻, 647号, 2000, 124-129  
小川和洋, 庄子哲雄, 青木久彦, 藤田範生, 鳥越泰治
  
240. Development of Small Punch Tests for Creep Property Measurement of Tungsten-Alloyed 9 %Cr Ferritic Steels  
Journal of Testing and Evaluation, 2000, 249-256  
Shin-chi Komazaki, Toshiyuki Hashida, Tetsuo Shoji, and Koshi Suzuki
  
241. W 強化型9%Cr フェライト系耐熱鋼の熱時効ぜい化と電気化学的手法によるその評価  
材料, 49巻, 8号, 2000, 919-926  
駒崎慎一, 岸繁男, 庄子哲雄, 千葉秀樹, 鈴木康吏
  
242. Development of a Multiple Linear Regression Model to Estimate the Ductile-Brittle Transition Temperature of Ferritic Low Alloy Steels Based on the Relationship Between Small Punch and Charpy V-Notch Tests  
Journal of Testing and Evaluation, 2000, 352-358  
Maribel L. Saucedo-Munoz, Takashi Matsushita, Toshiyuki Hashida, Tetsuo Shoji and Hideaki Takahashi
  
243. W 強化型 9 %Cr フェライト系耐熱鋼のクリープ中の材料劣化に及ぼす Laves 相析の影響  
材料, 49巻, 12号, 2000, 1330-1337  
駒崎慎一, 岸繁男, 庄子哲雄, 樋口康二郎, 鈴木康吏



244. Effect of microstructure evolution on fracture toughness in isothermally aged austenitic stainless steels for cryogenic applications  
Cryogenics, Vol. 40, 2000, 693-700  
M. L. Saucedo-Munoz, Y. Watanabe, T. Shoji, H. Takahashi
245. Mechanistic Understanding for Degraded Thermal Barrier Coatings  
JSME International Journal Series A, Vol. 44, No. 4, 2001, 507-513  
Kazuhiro OGAWA, Tetsuo SHOJI, Hisahiko AOKI, Norio FUJITA
246. 高効率ガスタービン用 Ni 基超合金のクリープ条件下でのき裂形劣化挙動  
日本機械学会論文集 (A 編), 67巻, 654号, 2001, 280-287  
駒崎慎一, 庄子哲雄, 千葉秀樹, 阿部宏紀
247. 高温環境下における熱遮へいコーティング経年の非破壊評価  
非破壊検査, 第50巻, 3号, 2001, 164-169  
小川和洋, 庄子哲雄, 千葉秀樹, 阿部宏紀, 鳥越泰治
248. INSPECTION OF METAL SURFACE CONTAINING CRACKS BY SMALL ANTENNAS  
Review of Progress in Quantitative Evaluation, Vol. 20, 2001, 338-345  
K. Yagi, K. Tamakawa, D. Minkov, Y. Sato, T. Shoji
249. Determining the sizes of 3-D surface cracks using dipole model of a crack and Hall element measurements  
Journal of The Japan Society of Applied Electromagnetics and Mechanics, Vol. 9, No. 1, 2001, 78-84  
Dorian Minkov, Jinyi Lee, Tetsuo Shoji
250. Creep Damage Evaluation of W Alloyed 9 %Cr Ferritic Steel by Electrochemical Method  
JOURNAL OF THE SOCIETY OF MATERIALS SCIENCE JAPAN, Vol. 50, No. 5, 2001, 503-509  
Shin-ichi KOMAZAKI, Shigeo KISHI, Tetsuo SHOJI, Kojiro HIGUCHI and Koshi SUZUKI
251. Effect of Ce doping on passive film electrical resistance of 316 stainless steel exposed to oxygenated pure water at 288 degrees C and its relation to stress corrosion cracking  
JOURNAL OF MATERIALS SCIENCE LETTERS, Vol. 20, Number 10, 965-968  
K.S. RAJA, Y. WATANABE, T. SHOJI

252. EFFECTS OF WATER FLOW RATE ON FATIGUE LIFE OF CARBON STEEL IN SIMULATED LWR ENVIRONMENT UNDER LOW STRAIN RATE CONDITIONS  
 PVP- Vol. 419 Pressure Vessel and Piping Codes and Standards -2001, Presented July 22-26, 2001, 1-9  
 Akihiko Hirano, Michiyoshi Yamamoto, Katsumi Sakaguchi, Tetsuo Shoji and Kunihiro Iida  
  
 Effects of Water Flow Rate on Fatigue Life of Carbon Steel in Simulated LWR Environment Under Low Strain Rate Conditions  
 J. Pressure Vessel Technol, Vol. 125, Issue 1, 2003, 52-58  
 Akihiko Hirano, Michiyoshi Yamamoto, Katsumi Sakaguchi, Tetsuo Shoji and Kunihiro Iida
  
253. Nondestructive Evaluation of Fatigue and Creep-Fatigue Damage in 12%Cr Stainless Steel by the Induced Current Focusing Potential Drop Technique  
 Journal of Testing and Evaluation, JTEVA, Vol. 29, No. 6, 2001, 544-555  
 Mitsuo Yamashita, Shinji Tada, Yasumoto Sato, and Tetsuo Shoji
  
254. The In-Situ Measurement of a Local Chemical Reaction by Raman Spectroscopy-Time Dependent Enrichment of Chloride Ions on the Surface of 304L Stainless Steel-  
 APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan, (JSME No.01-203), 76-81  
 Masao TAKEGOSHI, Yutaka WATANABE and Tetsuo SHOJI
  
255. Analysis of Crack Growth Kinetics and Crack Tip Strain Rates of Sensitized Type 304 Stainless Steel in Simulated Boiling Water Reactor Environment - Experiments and Theory  
 APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan, (JSME No.01-203), 82-87  
 Qunjia PENG, Junhyun KWON and Tetsuo SHOJI
  
256. Effect of Yield Strength on Stress Corrosion Crack Growth of Stainless Steel in High Temperature Water Environment  
 APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan, (JSME No.01-203), 88-92  
 G.uangfu LI, Kentaro OHASHI and Tetsuo SHOJI

257. SCC Growth Behavior of Surface Cracked Specimens in High Temperature Water  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 93-101  
Shunishi SUZUKI and Tetsuo SHOJI
258. In-Situ Measurement of Contact Electric Resistance of Oxide Films on Sensitised  
304 Stainless Steel during Slow Strain Rate Test in High Temperature Water  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 114-119  
Yoichi TAKEDA, Takashi MATSUDA and Tetsuo SHOJI
259. Development of Magnetic Camera Using 2-D Arrayed Hall Elements  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 222-227  
Jin-Yi LEE, Min-Soo KIM, Moon-Phil KANG, Dae-Jung KIM, Won-Ha CHOE,  
Tetsuo Shoji, Hiroshi KATO and Kensuke KAGEYAMA
260. NDE of Fatigue Damage by Induced Current Focusing Potential Drop  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 270-274  
Jinwoo. PARK, Tetsuo SHOJI
261. Estimation of Crack Detectability of Remotely Induced Current Potential Drop  
Technique Based on POD Curve  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 275-280  
Yasumoto SATO, Tetsuo SHOJI
262. Crack Detection by Means of Electromagnetic Field Measurement with Micro  
Antennas  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 281-285  
Kenichi YAGI, Yasumoto SATO, and Tetsuo SHOJI
263. High Temperature Oxidation Behavior of the Interface Between Thermal Barrier  
Coatings and MCrAlY Bond Coatings  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 297-302  
Kazuhiro OGAWA, Noritake GOTOH, Tetsuo SHOJI, and Minoru SATO

264. Nondestructive Evaluation of High-Temperature Oxidation Behaviour in Thermal Barrier Coatings  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 303-308  
Norisuke GOTOH, Kazuhiro OGAWA, Tetsuo SHOJI and Hiroyuki TOGASHI
265. Small Punch Creep Behavior of Service-Exposed SUS 316 HTB Superheater Boiler Tube  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 316-321  
Shin-ichi KOMAZAKI, Maribel L. SAUCEDO-MUNOZ, Toru TAKAHASHI,  
Toshiyuki HASHIDA, Tetsuo SHOJI
266. A Study on Development of Safety Monitoring System for Structure Using a Laser and 2-D Arrayed Photo Sensors  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 815-820  
Jin-Yi LEE, Moon-Phil KANG, Min-Soo KIM, Dae-Jung KIM, Won-Ha CHOE  
and Tetsuo SHOJI
267. Change in Work Function of Fatigue Damaged Surface and Its Relevance to Fatigue Failure  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 1063-1067  
Yoichi TAKEDA and Tetsuo SHOJI
268. Thermal Aging Embrittlement of Service-Exposed Udimet 520 Gas Turbine Blade  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 1086-1090  
Yuuya OGAWA, Tetsuo SHOJI, Shin-ichi KOMAZAKI, Kazuhiro OGAWA and Masahide MARUYAMA
269. Environmentally Assisted Cracking of Simulated Alloys for Grain Boundaries of Irradiated 304 Stainless Steel in High Temperature Water Environments  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 1091-1096  
Ryosuke KANETANI, Guanfu LI and Tetsuo SHOJI

270. A Study of Braking Performance of Brake Disk Pad for Railway Vehicle  
Considering the Groove Number of Friction Surface  
APCFS & ATEM '01, JSME-MIMD, October 20-22, 2001, Sendai, Japan,  
(JSME No.01-203), 1103-1108  
Seok Jin KWON and Tetsuo SHOJI
  
271. Development of novel NDE techniques and their significance in the COE  
program on the physics and chemistry of fracture and failure prevention  
International Journal of Applied Electromagnetics and Mechanics 14, 2001/2002,  
467-476  
Tetsuo Shoji, Yasumoto Sato, Dorian Minkov, Kenichi Yagi, Toshimitsu Baba and  
Kini Tamakawa
  
272. Non-destructive evaluation of fatigue and creep-fatigue damaged by means of the  
induced-current focused potential drop technique  
Fatigue Fract Engng Mater Struct, Vol.24, 2001, 885-893  
Y. SATO, Y. TAKEDA and T. SHOJI
  
273. Dependence of the Rate of Granite Dissolution on Temperature and Fluid  
Velocity under Simulated Geothermal Reservoir Environments  
J. Geotherm. Res. Soc. Japan, Vol.24, No.1, 2002, 47-56  
Yuko SUTO, Koji TANIFUJI, Kimio WATANABE, Toshiyuki HASHIDA, Tetsuo  
SHOJI and Hideaki Takahashi
  
274. Influence of Pre-Aging on Creep Rupture Strength of Tungsten Alloyed 9%Cr  
Ferritic Steel and Creep Damage Evaluation by Electrochemical Method  
JSME International Journal, Series A, Vol. 45, No.1, 2002, 30-38  
Shin-Ichi KOMAZAKI, Shigeo KISHI, Tetsuo SHOJI, Tetsuo KUMAZAWA,  
Kojiro HIGUCHI and Koshi SUZUKI
  
275. Estimating the sizes of surface cracks based on Hall element measurements of  
the leakage magnetic field and a dipole model  
Applied Physics A 74, 2002, 169-176  
D. Minkov, Y. Takeda, T. Shoji, J. Lee
  
276. Development of Thermal Barrier Coatings for Enhancement of Delamination  
Resistant Property  
Japan Thermal Spraying Society, Vol. 39, No. 2, 2002, 52-57  
Toshiki KATO, Kazuhiro OGAWA, Tetsuo SHOJI

277. Effect of Creep Damage on the Impact Energy-Absorption of Talc-Reinforced Polypropylene Copolymers  
JOURNAL OF THE SOCIETY OF MATERIALS SCIENCE JAPAN, Vol. 51,  
No. 2, 2002, 233-238  
Hidetoshi TAKEDA, Mikiko NAKAJIMA and Tetsuo SHOJI
  
278. Creep property measurement of service-exposed SUS 316 austenitic stainless steel by the small-punch creep-testing technique  
Journal of MATERIALS RESEARCH, Vol. 17, No. 8, 2002, 1945-1953  
Maribel L. Saucedo-Munoz, Shin-ichi Komazaki, Toru Takahashi,  
Toshiyuki Hashida, and Tetsuo Shoji
  
279. Development of novel NDE techniques and their significance in the COE program on the physics and chemistry of fracture and failure prevention  
International Journal of Applied Electromagnetics and Mechanics, Vol.14, 2002, 467-476  
Tetsuo Shoji, Yasumoto Sato, Dorian Minkov, Kenichi Yagi, Toshimitsu Baba and Kinji Tamakawa
  
280. 照射誘起応力腐食割れメカニズム研究と今後の課題  
原子力高度技術研究会議事録, 2002  
庄子哲雄
  
281. Special Issue on Strength and Fracture, and Experimental Mechanics JSME International Journal Series A, Solid Mechanics and Material Engineering, Vol. 45, No. 4, 2002, 459  
Tetsuo Shoji
  
282. Model Studying Zirconia Droplet Deposition and Solidification on Substrate Under Plasma Spraying:Theory and Experimental Verification  
The Fifth JSME-KSME Fluids Engineering Conference, November. 17-21, Nagoya, Japan, 2002  
Oleg SOLONENKO, ALEXANDR.MIKHALCHENKO, Evgeni KARTAEV, Kazuhiro OGAWA, Tetsuo SHOJI
  
283. Thermal Ageing Embrittlement of Tungsten-Alloyed 9 % Cr Ferritic Steels and Electrochemical Evaluation  
MATERIALS SCIENCE RESEARCH INTERNATIONAL, Vol. 9, No. 1, 2003, 42-49  
Shin-ichi KOMAZAKI, Shigeo KISHI, Tetsuo SHOJI, Hideki CHIBA and Koshi SUZUKI

284. The Crack Tip Solution Chemistry in Sensitized Stainless Steel in Simulated Boiling Water Reactor Water Studied Using a Microsampling Technique  
Journal of NUCLEAR SCIENCE and TECHNOLOGY, Vol. 40, No.6, 2003, 397-404  
Qunjia PENG, Guangfu LI and Tetsuo SHOJI
  
285. Detection and evaluation of the depth of surface cracks in conductive materials by using a loop antenna  
Appl. Phys. A 77, 2003, 461-468  
K.YAGI, N.SATO, Y.SATO, K.TAMAKAWA, D.MINKOV, T.SHOJI
  
286. Investigation of Dendrite-Boundary Microchemistry in Alloy 182 using Auger Election Spectroscopy Analysis  
METALLURGICAL AND MATERIALS TRANSACTIONS A, Vol. 34A, 2003, 1891-1899  
Q.J.PENG, H.YAMAUCHI and T.SHOJI
  
287. Environmentally Assisted Crack Growth Behavior of Simulated Grain Boundary Materials in PWR Primary Water  
TECHNICAL MEETING ON CORROSION, FATIGUE AND OTHER TIME AND LOAD DEPENDENT DEGRADATION MECHANISMS OTHER THAN IRRADIATION, Stretton Warrington, Cheshire, England, March 11-13, 2003, INTERNATIONAL ATOMIC EERGY AGENCY (IAEA) Publication in CD-ROM  
Zhanpeng LU, Ryosuke KANETANI, Guangfu LI, Qunjia PENG, and Tetsuo SHOJI
  
288. MICROSAMPLING OF THE CRACK-TIP SOLUTION IN AUSTENITIC STEELS IN SIMULATED LIGHT WATER REACTOR WATER  
Proceedings of the 2003 International Conference on Environmental Degradation of Engineering Materials, June 29-July 2, 2003, Bordeaux, France, CD-ROM, Published by European Federation of Corrosion  
Qunjia PENG, Guangfu LI, Tetsuo SHOJI
  
289. pH Probes for Crevice / Crack Tip Solution Chemistry at Elevated Temperature  
Proceedings of the 2003 International Conference on Environmental Degradation of Engineering Materials (EDEM 2003), CD-ROM, 2003, No. C3108  
R. Srinivasan Y. Takeda and Tetsuo Shoji

290. ボンドコートをレーザー再溶融した TBC の界面強度評価  
日本溶射協会（第77回全国講演大会）2003  
丹野昌利, 小川和洋, 庄子哲雄, 左相玉, 大森明  
  
ボンドコートをレーザー再溶融した TBC の界面強度評価  
溶射, Vol.41, No.3, 2003, 99  
丹野昌利, 小川和洋, 庄子哲雄, 左相玉, 大森明
291. 耐酸化・耐はく離性に優れた熱遮へいコーティングの開発  
耐熱金属材料123委員会研究報告, Vol. 44, No. 2, 2003, 177-187  
小川和洋, 丹野昌利, 庄子哲雄
292. 3D-FEM Simulation of EAC Crack Growth Based on the Deformation / Oxidation Mechanism  
11th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, August 10-14, 2003, Stevenson, Washington, ANS Paper No, 71592, 855-861  
Tetsuo Shoji, Takumi Yamamoto, Kimio Watanabe and Zhanpeng Lu
293. Effects of Specimen Size and Thickness on CGR in High Temperature Waters  
11th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors. August 10-14, 2003, Stevenson, Washington, ANS Paper No, 71579, 862-869  
Takahiko Sato and Tetsuo Shoji
294. Progress in the mechanistic Understanding of BWR SCC and Its Implication to the Prediction of SCC Growth Behavior in Plants  
11th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, August 10-14, 2003, Stevenson, Washington, ANS Paper No, 81906, 588-599  
Tetsuo Shoji
295. Dendrite Boundary Microchemistry in Alloy 182 Weld Metal  
11th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, August 10-14, 2003, Stevenson, Washington, USA, ANS Paper No. 71582, 1203-1211  
Qunjia Peng, Hiroyuki Yamauchi, and Tetsuo Shoji
296. Investigation of dendrite-boundary microchemistry in alloy 182 using auger electron spectroscopy analysis  
Metallurgical and Materials Transactions A, Vol. 34, No. 9, 2003, 1891-189  
Qunjia Peng, Hiroyuki Yamauchi, and Tetsuo Shoji



297. Effect of Strain on Electric Properties of Oxide Films Growing on AISI 316L Steel in Simulated BWR Conditions  
11th International Conference on Environmental Degradation of Mechanicals in Nuclear Power Systems-Water Reactors, Aug.10-14, 2003, Stevenson, Washington, ANS Paper, 661-616  
Y.Takeda, M.Bojinov, H.Hanninen, P.Kinnunen, T.Latinen, K.Makela, T.Saario, K.Sakaguchi, T.Shoji, P.Sirkia, A.Toivonen
  
298. A system Safety Benchmark facility for SCC Pipe Tests with High and Low Flow Rate Condition and Some Preliminary Test Results in BWR Environment  
11th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, August 10-14, 2003, Stevenson, Washington, ANS Paper No60526, 805-815  
Yonggang Lu, Kazuhiko Sakaguchi, Yosuke Tsujimoto, Nozomi Sakurai, Tetsuya Uchimoto, Makoto Takahashi, Yoshiyuki Takagi, Masaharu Kitamura, Tetsuo Shoji
  
299. Quantification of Yield Strength Effects on IGSCC of Austenitic Stainless Steels in High Temperature Water  
11th International Conference on Environmental Degradation of Maerials in Nuclear Power Systems-Water Reactors, August 10-14, 2003, Stevenson, Washington, ANS Paper No.71574, 834-844  
Tetsuo Shoji, Guangfu Li, Junhyun Kwon, Shinobu Matsushima and Zhanpeng Lu
  
300. Environmentally Assisted Cracking Mechanism and Lifetime Prediction of Austenitic Alloys in High Temperature Waters  
The 11th Symposium on Fracture and Fracture Mechanics, 2-3 October, 2003, Otsu, JAPAN,  
破壊力学シンポジウム講演論文集, 11巻, 103-108  
Zhanpeng Lu and Tetsuo Shoji
  
301. The Influence of thermal Barrier Top Coating on The Initiation and Growth of Thermally Grown Oxide  
Thermal Spray 2003, Advancing the Science and Applying the Technology, ASM International, Ohio, USA, 2003, 1565-1571  
K. Ogawa, N. Gotoh, T. Shoji
  
302. Some Peculiarities of YSZ Splats Formation Under Plasma Spraying of Thermal Barrier  
Proceedings of 16th International Symposium on Plasma Chemistry (ISPC16), June 22-27, 2003, Taormina, Italy  
O. Solonenko, A. Mikhachenko, E. Kartaev, K. Ogawa, T. Shoji and M. Tanno

303. CHARACTERIZATION OF FRACTURE MECHANICS OF HIGH SPEED TRAIN WHEELSETS DEPENDING ON AGING EFFECTS AND ON THE LOCATION EXAMINED

Proceedings of International Symposium on Speed-up and Service Technology for Railway and Maglev Systems, STECH03, August 19-22, 2003, Tokyo, Japan, 287-292

Seok Jin Kwon, Kazuhiro Ogawa and Tetsuo Shoji

304. Sensitivity of a Stress Measurement Method for Copper Electroplating Using the Effects of Stress Concentration Computational Methods and Experimental Measurements XI, Southampton, Boston, 231-240

S. J. Kwon, T. Kinji, K. Ogawa & T. Shoji

305. Application of the small-punch test on the evaluation of cryogenic toughness of isothermally aged austenitic stainless steels

REVISTA DE METALURGIA, Vol. 39, Number 5, 2003, 378-386

Saucedo-Munoz ML, Komazaki SI, Hashida T, Shoji T, Lopez-Hirata VM

306. In Situ Micro Raman Spectroscopy for Characterization of Oxide Film Formed on the New Surface and for Measurements of the Stress of Oxide Film Formed on 340L Stainless Steel

Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai Japan, IV02-238

Akira Kai, Masao Takegoshi and Tetsuo Shoji

In Situ Micro Raman Spectroscopy for Characterization of Oxide Film Formed on the New Surface and for Measurements of the Stress of Oxide Film Formed on 340L Stainless Steel Key Engineering Materials, Vol. 261-263, 2004, 913-918

Akira Kai, Masao Takegoshi and Tetsuo Shoji

307. Effects of Environmental Factors on Electronic Properties of Interfacial Oxide Film on 304L Stainless Steel in High Temperature Pure Water

Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan, IV04-243

Zhanpeng Lu, Yoichi Takeda and Tetsuo Shoji

Effects of Environmental Factors on Electronic Properties of Interfacial Oxide Film on 304L Stainless Steel in High Temperature Pure Water Key Engineering Materials, Vol. 261-263, 2004, 919-924

Zhanpeng Lu, Yoichi Takeda and Tetsuo Shoji

308. Comparison of the Electric Properties and ESCA Result of Oxide Films Formed on AISI 316L Steel in Simulated BWR Conditions During SSRT

Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan, IV04-262

Y. Takeda, M. Bojinov, H. Hanninen, P. Kunnunen, T. Laitinen, K. Makela, T. Saario, K. Sakaguchi, T. Shoji, P. Sirkia and A. Toivonen

Comparison of the Electric Properties and ESCA Result of Oxide Films Formed on AISI 316L Steel in Simulated BWR Conditions During SSRT Key Engineering Materials, Vol. 261-263, 2004, 925-930

Y. Takeda, M. Bojinov, H. Hanninen, P. Kunnunen, T. Laitinen, K. Makela, T. Saario, K. Sakaguchi, T. Shoji, P. Sirkia and A. Toivonen

309. Effects of Dissolved Hydrogen on the Primary Water Stress Corrosion Cracking Behavior of Alloy 600 at 325°C

Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan

Q. J. Peng and T. Shoji

Effects of Dissolved Hydrogen on the Primary Water Stress Corrosion Cracking Behavior of Alloy 600 at 325°C Key Engineering Materials, Vol. 261-263, 2004, 943-948

Q. J. Peng and T. Shoji

310. Stress Corrosion Cracking of Stainless Steel Pipe Weldments in BWR Environment

Proceeding of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan, IV22-237

Y. Lu, K. Sakaguchi and T. Shoji

Stress Corrosion Cracking of Stainless Steel Pipe Weldments in BWR Environment Key Engineering Materials, Vol. 261-263, 2004, 1017-1022

Y. Lu, K. Sakaguchi and T. Shoji

311. 3D-FEM Simulation for EAC Crack Growth Evaluation and its Implication to Specimen Size Effects on Crack Growth Behavior  
 Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan, IV23-241  
 K. Watanabe, T. Yamamoto and T. Shoji

3D-FEM Simulation for EAC Crack Growth Evaluation and its Implication to Specimen Size Effects on Crack Growth Behavior Key Engineering Materials, Vol. 261-263, 2004, 1023-1030  
 K. Watanabe, T. Yamamoto and T. Shoji

312. SSRT-CER and Impedance Measurements of Oxide Films on Stainless Steels in Oxygenated High Temperature Water  
 Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan  
 S. Rangarajan, Douglas Shukert, Y. Takeda, K. Sakaguchi and Tetsuo Shoji

SSRT-CER and Impedance Measurements of Oxide Films on Stainless Steels in Oxygenated High Temperature Water Key Engineering Materials, Vol. 261-263, 2004, 993-998  
 S. Rangarajan, Douglas Shukert, Y. Takeda, K. Sakaguchi and Tetsuo Shoji

313. Theoretical Modeling and Experimental Study of Thermal Barrier Coatings Materials Transactions, MATERIALS TRANSACTIONS, Vol. 44, No. 11, 2003, 2311-2321  
 Oleg Pavlovich Solonenko, Mikhailchenko Alexandr Anatol'yevich, Kartaev Evgenii Vladimirovich, Bondar' Mariya Petrovna,  
 Kazuhiro Ogawa, Tetsuo Shoji and Masatoshi Tanno

314. Electrochemical Potentiodynamic Reactivation: Developmet and Applications of the EPR Test  
 Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan  
 Vladimir Cihal, Rudolf Stefec, Tetsuo Shoji, Yutaka Watanabe and Vivenakand Kain

Electrochemical Potentiodynamic Reactivation: Developmet and Applications of the EPR Test Key Engineering Materials, Vol. 261-263, 2004, 855-864  
 Vladimir Cihal, Rudolf Stefec, Tetsuo Shoji, Yutaka Watanabe and Vivenakand Kain

315. Mechanism of Hydrogen Embrittlement Due to the interaction of a Crack, Moving Dislocations and Hydrogen Cluster  
Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan  
S. Taketomi, A.T. Yokobori, Jr. and T. Shoji  
  
Mechanism of Hydrogen Embrittlement Due to the interaction of a Crack, Moving Dislocations and Hydrogen Cluster Key Engineering Materials, Vol. 261-263, 2004, 937-942  
S. Taketomi, A.T. Yokobori, Jr. and T. Shoji
316. Development of Novel Non-Destructive Inspection Technique Using High-Frequency Signal Transmission Characteristics  
Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan  
T. Baba, K. Ogawa and T. Shoji  
  
Development of Novel Non-Destructive Inspection Technique Using High-Frequency Signal Transmission Characteristics Key Engineering Materials, Vol. 261-263, 2004, 949-954  
T. Baba, K. Ogawa and T. Shoji
317. Effects of water flow rate on fatigue life of carbon steel in simulated LWR environment under low strain rate conditions  
J. Pressure Vessel Technol , Vol. 125, Issue 1, 2003, 52-58  
Hirano A, Yamamoto M, Sakaguchi K, Shoji T, Iida K
318. Thermal aging embrittlement of tungsten-alloyed 9 %Cr ferritic steels and electrochemical evaluation  
Materials Science Research International, Vol. 9, No. 1, 2003, 42-49  
Shun-ichi Komazaki, Shigeo Kishi, Tetsuo Shoji, Hideki Chiba and Koshi Suzuki
319. Semiconducting properties of surface oxide films of pure iron, nickel and chromium metals in pure water at 288°C  
JOURNAL OF MATERIALS SCIENCE LETTERS, Vol. 22, 2003, 1347-1349  
K. S. Raja, T. Shoji

320. Application of the small-punch test on the evaluation of cryogenic toughness of isothermally aged austenitic stainless steels  
Revista de metalurgia, Vol. 39, 2003, 378-386  
M. L. Saucedo-Munoz, S. I. Komazaki, T. Hashida, T. Shoji, V. M. Lopez-Hirata
321. Multiple Scattering of Elastic Waves in a Fiber-Reinforced Cementitious Composite  
Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan  
Hirotaka Sato, Michihiro Kitahara and Tetsuo Shoji  
  
Multiple Scattering of Elastic Waves in a Fiber-Reinforced Cementitious Composite  
Key Engineering Materials, Vol. 261-263, 2004, 975-980  
Hirotaka Sato, Michihiro Kitahara and Tetsuo Shoji
322. Measurement of Compositional Profile of ID Facets by FEG-AES and its Relevance to IDSCC of Alloy 182 in a Simulated BWR Environment  
Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan  
Hiroyuki Yamauchi, Q. J. Peng and T. Shoji  
  
Measurement of Compositional Profile of ID Facets by FEG-AES and its Relevance to IDSCC of Alloy 182 in a Simulated BWR Environment  
Key Engineering Materials, Vol. 261-263, 2004, 1011-1016  
Hiroyuki Yamauchi, Q. J. Peng and T. Shoji
323. Aging of High Speed Train Wheelsets and its Quantitative Characteristics Based on Fracture Mechanics for Optimization of In-Service Inspection  
Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan  
S. J. Kwon, K. Ogawa and T. Shoji  
  
Aging of High Speed Train Wheelsets and its Quantitative Characteristics Based on Fracture Mechanics for Optimization of In-Service Inspection  
Key Engineering Materials, Vol. 261-263, 2004, 1037-1042  
S. J. Kwon, K. Ogawa and T. Shoji

324. Effect of Cerium and Silicon Additions to MCrAlY on the High-Temperature Oxidation Behavior and Bond Strength of Thermal Barrier Coatings  
Proceedings of The Fifth International Conference on Fracture and Strength of Solids and The Second International Conference on Physics and Chemistry of Fracture and Failure Prevention, October 20-22, 2003, Sendai, Japan  
Masatoshi Tanno, Kazuhiro Ogawa and Tetsuo Shoji  
  
Effect of Cerium and Silicon Additions to MCrAlY on the High-Temperature Oxidation Behavior and Bond Strength of Thermal Barrier Coatings  
Key Engineering Materials, Vol. 261-263, 2004, 1061-1066  
Masatoshi Tanno, Kazuhiro Ogawa and Tetsuo Shoji
325. Development of a fundamental crack tip strain rate equation and its application to quantitative prediction of stress corrosion cracking of stainless steels in high temperature oxygenated water  
Journal of Nuclear Materials, Vol. 324, Issue 1, 2004, 52-61  
Q. J. Peng, J. Kwon, T. Shoji
326. Observation of the Oxide Film Formed in High Temperature Water by Applying Electroless Ni-P Coating  
Journal of Nuclear Science and Technology, Vol. 41, No. 7, 2004, 777-779  
Shenchun WANG, Yoichi TAKEDA, Tetsuo SHOJI, and Nobuaki KAWAGUCHI
327. Nondestructive Evaluation of Defects in Conductive and Non-Conductive Materials by High-Frequency Signal Transmission Characteristics Technique  
Key Engineering Materials, Vol. 270-273, 2004, 1712-1718  
Kazuhiro Ogawa, Toshimitsu Baba, Mikiko Suzuki and Tetsuo Shoji
328. Numerical Consideration of Magnetic Camera for Quantitative Nondestructive Evaluation  
Key Engineering Materials, Vol. 270-273, 2004, 630-635  
Jinyi Lee, Do-Won Seo and Tetsuo Shoji
329. Theoretical Consideration of nondestructive Testing by use of Vertical Magnetization and Magneto-Optical Sensor  
KSME International Journal, Vol. 18, No. 4, 2004, 640-648  
Jinyi Lee, Tetsuo Shoji, Do-Won Seo

330. Modeling and Quantitative Prediction of Environmentally Assisted Cracking Based Upon A Deformation-Oxidation Mechanism  
PVP-Vol. 479, Residual Stress, Fracture and Stress Corrosion Cracking, July 25-29, 2004, San Diego, California, USA, PVP2004-2662, 175-184  
Tetsuo Shoji, Zhanpeng Lu, Qunjia Peng, Shengchun Wang, Yoichi Takeda, Akira Kai
  
331. Unified Interpretation of Crack Growth Rates of Ni-Base Alloys in LWR Environments  
PVP-Vol. 475, Flaw Evaluation, Service Experience and Materials for Hydrogen Service, July 25-29, 2004, San Diego, California, USA, PVP2004-2558, 175-185  
Zhanpeng Lu, Tetsuo Shoji
  
332. Computational Chemistry Study of Accelerated Oxidation Mechanism of IGSCC of Structural Materials in LWR Environments and Theoretical Design of SCC Resistant Alloys  
Proceedings of ICAPP '04, Pittsburgh, PA USA, June 13-17, 2004, Paper No. 4227, 1937-1941  
Ken Suzuki, Yo-ichi Takeda, Zhanpeng Lu and Tetsuo Shoji
  
333. Effects of Ce, Y and Mo Addition on the Stress Accelerated Oxidation of Austenitic Stainless Steel in Oxygenated High Temperature Water  
Proceedings of ICAPP '04, Pittsburgh, PA USA, June 13-17, 2004, Paper No. 4228, 2046-2054  
Shengchun Wang, Nobuaki Kawaguchi and Tetsuo Shoji
  
334. In-situ Eddy Current Monitoring under High Temperature Environment  
International Journal of Applied Electromagnetics and Mechanics Vol.20, 2004, 163-170  
Takashi Kasuya, Takeshi Okuyama, Nozomu Sakurai, Haoyu Huang, TetsuyaUchimoto, Toshiyuki Takagi, Yonggang Lu and Tetsuo Shoji
  
335. Effect of pre-oxidation and corrosion potential on electronic properties of passive films on Ni-Cr-Fe alloys in pure water at 288°C  
JOURNAL OF MATERIALS SCIENCE, Vol. 39, No. 3, 2004, 1033-1036  
K. S. RAJA, T. SHOJI
  
336. Crack detection in press fit railway axle using induced current focusing potential drop technique  
Key Engineering Materials, Vol. 270-273, 2004, 1002-1007  
Kwon S J, Shoji T



337. Fracture toughness tests of wheelset materials used in the Japanese Shinkansen express trains  
Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, Vol. 218, No. 4, 2004, 263-271  
J Dzugan, Y Ito, S Kwon, K Ogawa, T Shoji
338. Quantification of the effects of crack tip plasticity on environmentally-assisted crack growth rates in LWR environments  
Proceedings of the Second International Conference on Environment-induced Cracking of Metals (EICM-2), Vol. 2, September 19-23, 2004, The Banff Centre, Banff, Alberta, Canada, 107-122  
Tetsuo Shoji, Zhanpeng Lu, He Xue, Kentaro Yoshimoto, Mikiro Itow, Jiro Kuniya, Kimio Watanabe
339. Development of a fundamental crack tip strain rate equation and its application to quantitative prediction of stress corrosion cracking  
Corrosion 2005, April 3-7, 2005, George R Brown Convention Center, Houston Texas, USA  
Tetsuo Shoji
340. Initiation of Environmentally Assisted Cracking in High Temperature Water Corrosion 2005, April 3-7, 2005, George R Brown Convention Center, Houston Texas, USA  
S. Wang, T. Shoji and N. Kawaguchi  
  
Initiation of Environmentally Assisted Cracking in High Temperature Water Corrosion, Vol. 61, No. 2, 2005, 137-144  
S. Wang, T. Shoji and N. Kawaguchi
341. Cracking Paths During Initiation of Environmentally Assisted Cracking in High Temperature Water  
Journal of Nuclear Science and Technology, Vol. 42, No. 7, 2005, 670-672  
Shengchun WANG, Yoichi TAKEDA, Kazuhiko SAKAGUCHI and Tetsuo SHOJI
342. THE INITIATION OF ENVIRONMENTALLY ASSISTED CRACKING IN BWR HIGH TEMPERATURE WATER  
Proceedings of the 12th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, TMS(The Minerals, Metals & Materials Society), August 14-18, 2005, Utah, USA, CD-ROM, 49-55  
Shenchun Wang, Yoichi Takeda, Kazuhiko Sakaguchi, Tetsuo Shoji

343. Effect of Grain Boundary Microchemistry on IGSCC of Alloy 132 in a Simulated BWR Environment  
Key Engineering Materials, Vol. 297-300, November 2005, 986-992  
Yo-ichi Takeda, Hiroyuki Yamauchi, Qunjia Peng and Tetsuo Shoji
  
344. An ATEM study of oxidation behavior of SCC crack tips in 304L stainless steel in high temperature oxygenated water  
Journal of Nuclear Materials Vol. 347, 2005, 52-68  
Y. H. Lu, Q. J. Peng, T. Sato and T. Shoji
  
345. Evaluation of Thermal Aging Embrittlement in Directionally Solidified Ni-Base Superalloy by Small Punch Test  
JOURNAL OF ENGINEERING MATERIALS AND TECHNOLOGY, Vol. 127, 2005, 476-482  
Shin-ichi Komazaki, Tetsuo Shoji, Kazumune Takamura
  
346. Characterization of Oxide Film Formed on Austenitic Stainless Steel by in-situ Micro Raman Spectroscopy  
Key Engineering Materials, Vol. 297-300, 2005, 2806-2812  
Akira Kai, Yuichiro Terayama, Kazuhiro Ogawa, Tetsuo Shoji
  
347. Modeling of Characteristics of Magneto-Optical Sensor Using FEM and Dipole Model for Nondestructive Evaluation  
Key Engineering Materials, Vol. 297-300, 2005, 2022-2027  
Ji Nyi Lee, Ji Seong Hwang, Tetsuo Shoji and Jae Kyu Lim
  
348. Boundary Element Analysis of Multiple Scattering Waves in High Performance Concretes  
Journal of Applied Mechanics-Transactions of the ASME, Vol. 72, Issue 2, 2005, 165-171  
Hiroataka Sato, Michihiro Kitahara, Tetsuo Shoji
  
349. Effect of grain boundary character distribution on stress corrosion cracking behavior in austenitic stainless steels  
Materials Science Forum, Vol. 475-479, 2005, 3863-3866  
R. Ishibashi, T. Horiuchi, J. Kuniya, M. Yamamoto, S. Tsurekawa, H. Kokawa, T. Watanabe, and T. Shoji

350. Fracture toughness tests of wheelset materials used in the Japanese Shinkansen express trains  
 Proceedings of the Institution of Mechanical Engineers Vol. 218 Part L : J. Materials: Design and Applications, 2004, 263-271  
 J Dzugan, Y Ito, S Kwon, K Ogawa and T Shoji
  
351. Development of Small Punch Test for EAC Evaluation  
 Key Engineering Materials, Vol. 297-300, 2005, 980-985  
 Jerome Isselin, Sheng Chun Wang, Shinichi Komazaki, Tetsuo Shoji
  
352. SCC BEHAVIOR IN THE TRANSITION REGION OF AN ALLOY 182-SA 508 CL.2 DISSIMILAR WELD JOINT UNDER SIMULATED BWR-NWC CONDITIONS  
 Proceedings of the 12th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, TMS (The Minerals, Metals & Materials Society), 2005, Warrendale, PA, USA, 589-599  
 Qunjia Peng, Tetsuo Shoji, Stefan Ritter, Hans-Peter Seifert
  
353. Effect of Temperature on the Microscopic Appearance on the Fracture Surface of Alloy 690TI under SSRT Testing  
 JSME International Journal, Series A, Vol. 49, No. 3, 2006, 355-362  
 Yuzuru ITO, Zhanpeng LU, Hideo MIURA, Toshio YONEZAWA and Tetsuo SHOJI
  
354. Role of Work-Hardened Surface Layer in Initiation of Environmentally Assisted Cracking in High-Temperature Water  
 Corrosion, Vol. 62, No. 8, 2006, 651-656  
 S. Wang, Y. Takeda, K. Sakaguchi, T. Shoji
  
355. Unified Interpretation of Crack Growth Rates of Ni-Base Alloys in LWR Environments  
 Journal of Pressure Vessel Technology, Vol. 128, Issue 3, 2006, 318-327  
 Zhanpeng Lu, Tetsuo Shoji
  
356. Application of Mechanically Ground and Refractory Ultra-Fine Powders For Thermal Barrier Coatings  
 Proceedings of 18th International Conference on Surface Modification Technologies XVII, 2006, 45-51  
 Kazuhiro Ogawa, Oleg P. Solonenko, Yuji Ichikawa, Masatoshi Tanno, Vladimir A. Poluboyarov, Anatoly N. Cherepanov, Andrei E. Lapin, and Tetsuo Shoji

357. Quantitative NDE of Surface Cracks in Ceramic Materials by means of a High-Frequency Electromagnetic Wave  
Materials Transactions, Vol. 47, No. 6, 2006, 1605-1610  
Mikiko Suzuki, Kazuhiro Ogawa and Tetsuo Shoji
358. Effects of Ce and Si Additions to CoNiCrAlY Bond Coat Materials on Oxidation Behavior and Crack Propagation of Thermal Barrier Coatings  
Journal of Thermal Spray Technology, Vol. 15, Issue 4, 2006, 640-651  
K. Ogawa, K. Ito, T. Shoji, H. Tezuka, and H. Kato
359. 電位差法を用いた裏面応力腐食割れ進展の連続モニタリング  
日本機械学会論文集, 72巻, 724号, A 編, 2006, 139-144  
佐藤康元, 渥美健夫, 庄子哲雄
360. The Detection of Defects in Paramagnetic Materials Using Locally Focused Electromagnetic Field Technique  
Key Engineering Materials, Vol. 270-273, 2004, 625-629  
Hoon Kim and Tetsuo Shoji
361. 遠隔誘導型電位差法による裏面き裂計測と有限要素法解析  
日本機械学会論文集, 72巻, 723号, A 編, 2006, 117-122  
佐藤康元, 庄子哲雄
362. In situ and Ex situ Characterisation of Oxide Film Formed on Strained Stainless Steel Surface in High-temperature Water  
Applied Surface Science, Vol. 252, Issue 24, 2006, 8580-8588  
Yoichi Takeda, Tetsuo Shoji, Martin Bojinov, Petri Kinnunen, Timo Saario
363. Numerical analysis of magneto-optical eddy current imaging using FEM  
Key Engineering Materials, Vol. 321-323, 2006, 1451-1456  
Jin Yi Lee, Ji Seong Hwang, Tetsuo Shoji
364. Towards Proactive Materials Degradation Management in NPP-Today and Future  
Proceedings of 14 Asia Pacific Corrosion Control Conference (14APCCC), Plenary speech, 2006  
Tetsuo Shoji, Zhanpeng Lu, Yo-ichi Takeda, Yasumoto Sato

365. Experimental Investigation of Isothermal Degradation of VPS NiCrAlY Overlay Coatings in Simulated Gas Turbine Environments  
The 2nd Asian Thermal Spray Conference, Gyeongju, Korea, ATSC, November. 6-8, 2006, 68-69  
Dowon Seo, Kazuhiro Ogawa, Tetsuo Shoji  
  
Experimental Investigation of Isothermal Degradation of VPS NiCrAlY Overlay Coating in Simulated Gas Turbine Environment  
Journal of Thermal Spray Technology, 2007  
D. Seo, K. Ogawa, T. Shoji, S. Murata
366. Comparative study on oxidation resistant compositions of selected MCrAlY overlay coatings under isothermal exposure  
The 2nd Asian Thermal Spray Conference (ATSC2006), November. 6-8, 2006, Gyeongju, Korea, 68-69  
Do Won Seo, Kazuhiro Ogawa, Tetsuo Shoji, Shozo Murata, Jinyi Lee
367. Influence of heat exposure time on isothermal degradation of plasma sprayed CoNiCrAlY coatings  
Surface & Coatings Technology Vol. 201, Issue 15, 2007, 7952-7960  
D. Seo, K. Ogawa, M. Tanno, T. Shoji, S. Murata
368. UNDERSTANDING THE THRESHOLD CONDITIONS FOR STRESS CORROSION CRACKING IN LIGHT WATER REACTOR ENVIRONMENTS BASED ON THE DEFORMATION/OXIDATION MECHANISM  
Proceedings of PVP2007, 2007 ASME Pressure Vessels and Piping Division Conference, July 22-26, 2007, San Antonio, Texas, PVP2007-26183, 315-326  
Tetsuo Shoji, Zhanpeng Lu, Yoichi Takeda
369. EFFECTS OF WATER FLOW RATE ON FATIGUE LIFE OF STRUCTURAL STEELS under SIMULATED BWR ENVIRONMENT  
Proceedings of PVP2007, 2007 ASME Pressure Vessels and Piping Division Conference, July 22-26, 2007, San Antonio, Texas, PVP2007-26423, 231-242  
Akihiko Hirano, Katsumi Sakaguchi, Tetsuo Shoji
370. Intergranular environmentally assisted cracking of Alloy 182 weld metal in simulated normal water chemistry of boiling water reactor  
Corrosion Science, Vol. 49, Issue 6, 2007, 2767-2780  
Qunjia Peng, Tetsuo Shoji, Hiroyuki Yamauchi, Yoichi Takeda

371. Development of a Stress Corrosion Cracking Test Methodology Using Tube-shaped Specimens  
Journal of Testing and Evaluation, Vol. 35, No. 3, 2007, 254-258  
Yasumoto Sato, Xue He, Yoichi Takeda, and Tetsuo Shoji
  
372. Continuous monitoring of back wall stress corrosion cracking growth in sensitized type 304 stainless steel weldment by means of potential drop techniques  
International Journal of Pressure Vessels and Piping, Vol. 84, Issue 5, 2007, 274-283  
Y. Sato, T. Atsumi, T. Shoji
  
373. Evaluation of Adhesive Strength of Thermal-Sprayed Hydroxyapatite Coatings Using the LAser Shock Adhesion Test (LASAT)  
Materials Transactions, Vol. 48, No. 4, 2007, 793-798  
Yuji Ichikawa, Sophie Barradas, François Borit, Vincent Guipont, Michel Jeandin, Mariette Nivard, Laurent Berthe, Kazuhiro Ogawa and Tetsuo Shoji
  
374. Quantitative Prediction of EAC Crack Growth Rate of Sensitized Type 304 Stainless Steel in Boiling Water Reactor Environments Based on EPFEM  
Journal of Pressure Vessel Technology - Transactions of the ASME, Vol. 129, 2007, 460-467  
He Xue, Tetsuo Shoji
  
375. MECHANISTIC UNDERSTANDING OF LOW TEMPERATURE CRACK PROPAGATION FOR ALLOY 690 IN HYDROGENATED WATER  
Proceedings of 13th International Conference on Environmental Degradation of Materials in Nuclear Power Systems, Whistler, British Columbia, August 19-23, 2007, 1-11  
Tetsuo Shoji, Yuzuru Ito, Zhanpeng Lu, Toshio Yonezawa
  
376. EFFECTS OF ELECTROCHEMICAL POTENTIAL ON CRACK GROWTH RATE OF 316L WELD HAZ AND WELD METAL MATERIAL IN 288°C PURE WATER  
Proceedings of 13th International Conference on Environmental Degradation of Materials in Nuclear Power Systems, Whistler, British Columbia, August 19-23, 2007, 1-16  
Zhanpeng Lu, Tetsuo Shoji, Yoichi Takeda, Yuzuru Ito, Akira Kai, Nobuhisa Tsuchiya

377. MEMORY EFFECTS AND STEADY STATE GROWTH KINETICS FOR STRESS CORROSION CRACKING OF A COLD WORKED 316L STAINLESS STEEL IN HIGH TEMPERATURE PURE WATER  
Proceedings of 13th International Conference on Environmental Degradation of Materials in Nuclear Power Systems, Whistler, British Columbia, August 19-23, 2007, 1-16  
Zhanpeng Lu, Tetsuo Shoji, Yoichi Takeda, Yuzuru Ito, Akira Kai and Seiya Yamazaki
378. EFFECTS OF LOADING MODE AND TEMPERATURE ON STRESS CORROSION CRACKING GROWTH BEHAVIOR OF STRAIN-HARDENED 316L STAINLESS STEELS IN OXYGENATED PURE WATER  
Proceedings of 13th International Conference on Environmental Degradation of Materials in Nuclear Power Systems, Whistler, British Columbia, August 19-23, 2007, 1-20  
Zhanpeng Lu, Tetsuo Shoji, Yoichi Takeda, Yuzuru Ito, Seiya Yamazaki and Nobuhisa Tsuchiya
379. Effects of Loading Mode and Temperature on Stress Corrosion Crack Growth Rates of a Cold-Worked Type 316L Stainless Steel in Oxygenated Pure Water  
Corrosion Science, Vol. 63, No. 11, 2007, 1021-1032  
Z. Lu, T. Shoji, Y. Takeda, A. Kai, and Y. Ito
380. Effect of Particle Size Distribution on Isothermal Oxidation Characteristics of Plasma Sprayed CoNi- and CoCrAlY Coatings  
Journal of Thermal Spray Technology, Vol. 16, Issue 5-6, 2007, 954-966  
Dowon Seo, Kazuhiro Ogawa, Tetsuo Shoji, and Shozo Murata
381. Application of induced current potential drop technique for measurements of cracks on internal wall of tube-shaped specimens  
NDT & E International, Vol. 40, No.7, 2007, 497-504  
Yasumoto Sato, Takeo Atsumi, Tetsuo Shoji
382. Segregation of Alloying Elements of Directionally Solidified Nickel Based Superalloy CM247LC during Creep Degradation Process  
Key Engineering Materials, Vol. 353-358, 2007, 537-540  
Takahiro Niki, Kazuhiro Ogawa and Tetsuo Shoji

383. Integral Layer Profile Analysis Investigation of High Temperature Oxidation of MCrAlY Coatings  
 Proceedings of International Gas Turbine Congress 2007 Tokyo (IGTC07),  
 December 3-7, 2007, 1-7, Tokyo, Japan, Gas Turbine Society of Japan, TS-080  
 D. Seo, K. Ogawa, Y. Suzuki, K. Ichimura, T. Shoji, and S. Murata
  
384. Time-dependent Transition of Chemical Elements in Plasma Sprayed MCrAlY Coatings under High Temperature Oxidation  
 Proceedings of 21st International Conference on Surface Modification  
 Technologies XXI (SMT21), September 24-26, 2007, Paris, France, Ecole des  
 Mines de Paris, 1-8  
 D. Seo, K. Ogawa, Y. Suzuki, K. Ichimura, T. Shoji, Shozo Murata
  
385. Effect of Particle Size Range on Thermally Grown Oxide Scale Formation on Vacuum Plasma Sprayed CoNi- and CoCrAlY Coatings  
 The 2007 International Thermal Spray Conference & Exposition (ITSC2007),  
 May 14-16, 2007, 948-953, Beijing, China, ASM International, Paper No. 15657  
 D. Seo, K. Ogawa, T. Shoji, S. Murata
  
386. High-temperature Oxidation Behavior and Surface Roughness Evolution of VPS NiCrAlY Coating  
 Journal of Thermal Spray Technology, Vol. 17, No.1, 2008, 136-143  
 D. Seo, K. Ogawa, T. Shoji, and S. Murata
  
387. Simulation of stress corrosion cracking behavior in a tube-shaped specimen of nickel-based alloy 600  
 Nuclear Engineering and Design, Vol. 238, Issue 1, 2008, 1-7  
 Yasumoto Sato, Kimio Watanabe, Tetsuo Shoji
  
388. Computational simulation of cold spray process assisted by electrostatic force  
 Powder Technology, Vol. 185, No. 2, 2008, 116-123  
 Hidemasa Takana, Kazuhiro Ogawa, Tetsuo Shoji and Hideya Nishiyama
  
389. Transient and steady state crack growth kinetics for stress corrosion cracking of a cold worked 316L stainless steel in oxygenated pure water at different temperatures  
 Corrosion Science, Vol. 50, No. 2, 2008, 561-575  
 Zhanpeng Lu, Tetsuo Shoji, Yoichi Takeda, Yuzuru Ito, Akira Kai, Seiya Yamazaki



390. Effects of loading mode and water chemistry on stress corrosion crack growth behavior of 316L HAZ and weld metal materials in high temperature pure water  
Corrosion Science, Vol. 50, No. 3, 2008, 625-638  
Zhanpeng Lu, Tetsuo Shoji, Yoichi Takeda, Yuzuru Ito, Akira Kai, Nobuhisa Tsuchiya
391. The dependency of the crack growth rate on the loading pattern and temperature in stress corrosion cracking of strain-hardened 316L stainless steels in a simulated BWR environment  
Corrosion Science, Vol. 50, No. 3, 2008, 698-712  
Zhanpeng Lu, Tetsuo Shoji, Yoichi Takeda, Yuzuru Ito, Seiya Yamazaki
392. The effect of prior deformation on stress corrosion cracking growth rates of Alloy 600 materials in a simulated pressurized water reactor primary water  
Corrosion Science, Vol. 50, No. 3, 2008, 835-846  
Seiya Yamazaki, Zhangpeng Lu, Yuzuru Ito, Yoichi Takeda, Tetsuo Shoji
393. Assessment of the Effects of Cold Work on Crack Initiation in a Light Water Environment using the Small-Punch Test  
Metallurgical and Materials Transactions, Vol. 39, No. 5, 2008, 1099-1108  
JEROME ISSELIN, AKIRA KAI, KAZUHIKO SAKAGUCHI, and TETSUO SHOJI
394. Quantum chemical molecular dynamics study of stress corrosion cracking behaviour for fcc Fe and Fe-Cr surfaces  
Corrosion Science, Vol. 50, No. 6, 2008, 1701-1706  
Nishith Kumar Das, Ken Suzuki, Yoichi Takeda, Kazuhiro Ogawa, Tetsuo Shoji
395. Theoretical Design of SCC Resistant Ni-base Alloy by a Computational Chemistry Approach  
Proceedings of The International Congress on Advances in Nuclear Power Plants (ICAPP'08), June 8-12, 2008, Anaheim, California, USA, Paper No.8048, 2175-2182  
Nishith Kumar Das, Ken Suzuki, Yoichi Takeda, Kazuhiro Ogawa and Tetsuo Shoji
396. Stress Corrosion Cracking Analysis of Fe (111) and Fe-Cr (111) Surface at Different Temperatures by Quantum Chemical Molecular Dynamics  
16th Pacific Basin Nuclear Conference, October 13-18, 2008, Aomori, Japan, Paper No. P16P1100  
Nishith Kumar DAS, Ken SUZUKI, Yoichi TAKEDA, Kazuhiro OGAWA and Tetsuo SHOJI

397. Environmentally-assisted cracking behaviour in the transition region of an Alloy182/SA 508 Cl.2 dissimilar metal weld joint in simulated boiling water reactor normal water chemistry environment  
Journal of Nuclear Materials, Vol. 378, Issue 2, 2008, 197-210  
H.P. Seifert, S. Ritter, T. Shoji, Q.J. Peng, Y. Takeda, Z.P. Lu
398. Some fundamental aspects of thermally activated processes involved in stress corrosion cracking in high temperature aqueous environments  
Journal of Nuclear Materials, Vol. 383, Issue 1-2, 2008, 92-96  
Zhanpeng Lu, Yoichi Takeda, Tetsuo Shoji
399. Computational Simulation on Performance Enhancement of Cold Gas Dynamic Spray Processes With Electrostatic Assist  
Journal of Fluids Engineering, Transactions of the ASME, Vol. 130, No. 8, 2008, 080201.1-081703.9  
Hidemasa Takana, Kazuhiro Ogawa, Tetsuo Shoji, Hideya Nishiyama
400. Multiscale Modeling Approach to Stress Corrosion Cracking  
Proceedings of The International Congress on Advances in Nuclear Power Plants, June 8-12, 2008, Anaheim, California, USA, Paper No. 8210, 2081-2089  
Ismail Tirtom, Nishith Kumar Das, Ken Suzuki, Kazuhiro Ogawa and Tetsuo Shoji
401. Deterministic Prediction of Stress Corrosion Crack Growth Rates in High Temperature Water by Combination of Interface Oxidation Kinetics and Crack Tip Asymptotic Field  
ASEM Pressure Vessel & Piping Conference, July 27-31, (2008), Chicago, Illinois. Paper No. PVP2008-61417  
Tetsuo Shoji, Zhanpeng Lu, Yoichi Takeda, Hiroyoshi Murakami, Chaoyang Fu
402. Comparative study on oxidation behavior of selected MCrAlY coatings by elemental concentration profile analysis  
Applied Surface Science, Vol. 255, Issue 5, Part 2, 2008, 2581-2590  
Do. Seo, K. Ogawa, Y. Suzuki, K. Ichimura, T. Shoji, S. Murata
403. Non-destructive testing in the high-temperature regime by using a magneto-optical film  
NDT & E International, Vol. 41, Issue 6, 2008, 420-426  
Jinyi Lee, Renliang Wang, Tetsuo Shoji, Seongpyo Hong

404. Role of high-temperature creep stress in thermally grown oxide growth of thermal barrier Coatings  
The 2008 International Thermal Spray Conference & Exposition, June 2-4, 2008, ITSC2008, Thermal Spray 2008, Crossing Borders, 876-880  
K. Ogawa, Y. Nakao, D. Seo, H. Miura, T. Shoji
  
405. Python based combined continuum-atomic modeling for single crystal Nickel Multiscale Materials Modeling (MMM) 2008  
4th International Conference, Florida, USA, October 27-31, 2008, 258-261  
Ismail Tirtom, Tetsuo Shoji
  
406. Quantitative Estimation of the Growth of Environmentally Assisted Cracks at Flaws in Light Water Reactor Components  
Journal of Pressure Vessel Technology, 2009, Vol.131, Issue 1, 011404.1-9  
H. Xue, Y. Sato, T. Shoji
  
407. Influence of high-temperature creep stress on growth of thermally grown oxide in thermal barrier coatings  
Surface and Coatings Technology, Vol. 203, Issue 14, 2009, 1979-1983  
D. Seo, K. Ogawa, Y. Nakao, H. Miura, T. Shoji
  
408. Early stage SCC initiation analysis of fcc Fe-Cr-Ni ternary alloy at 288°C : A quantum chemical molecular dynamics approach  
Corrosion Science, Vol. 51, Issue 4, 2009, 908-913  
Nishith Kumar Das, Ken Suzuki, Kazuhiro Ogawa, Tetsuo Shoji
  
409. A Quantum Chemical Molecular Dynamics Study of the Strain Effect on Oxygen Diffusion in fcc Fe (111) and Fe-Cr (111) Surfaces at 288°C  
12th International Conference on Fracture, 2009, Ottawa, Canada, 1-8  
N. K. Das, T. Shoji, K. Suzuki, and Y. Takeda
  
410. Effect of welded mechanical heterogeneity on local stress and strain ahead of stationary and growing crack tips  
Nuclear Engineering and Design, Vol. 239, Issue 4, 2009, 628-640  
He Xue, Kazuhiro Ogawa, Tetsuo Shoji

411. MODELING STRESS CORROSION CRACKING GROWTH RATES BASED UPON THE EFFECT OF STRESS/STRAIN ON CRACK TIP INTERFACE DEGRADATION AND OXIDATION REACTION KINETICS  
 Proceedings of PVP 2009: 2009 ASME Pressure Vessels and Piping Division Conference, July 26-30, 2009, Prague, Czech Republic, PVP2009-77615, 1081-1100  
 Tetsuo Shoji, Zhanpeng Lu, Nishith Kumar Das, Hiroyoshi Murakami, Yoichi Takeda, Ismail Tirtom
  
412. LOCALLY DELAMINATING STRESS CORROSION CRACKING GROWTH OF STRAIN-HARDENED AUSTENITIC ALLOYS IN HYDROGENATED HIGH TEMPERATURE WATER ENVIRONMENTS  
 Proceedings of PVP 2009: 2009 ASME Pressure Vessels and Piping Division Conference, July 26-30, 2009, Prague, Czech Republic, PVP2009-77622, 1-8  
 Zhanpeng Lu, He Xue, Hiroyoshi Murakami, Tetsuo Shoji
  
413. EFFECT OF UNEVEN CRACK FRONT ON CRACK TIP MECHANICS AND THE IMPLICATION TO STRESS CORROSION CRACK GROWTH  
 Proceedings of PVP 2009: 2009 ASME Pressure Vessels and Piping Division Conference, July 26-30, 2009, Prague, Czech Republic, PVP2009-77625, 1-8  
 He Xue, Zhanpeng Lu, Hiroyoshi Murakami, Tetsuo Shoji
  
414. Effects of Dissolved Hydrogen on the Electronic Properties of the Oxide Film on Alloy 600 in High Temperature Water  
 Proceedings of 14th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, August 24-27, 2009, Virginia Beach, VA, USA, 119-128  
 Q.J. Peng, Y. Takeda, J. Kuniya, T. Shoji
  
415. Yield Strength Evaluation by Small-Punch Test  
 Journal of Testing and Evaluation, Vol. 37, No. 6, Paper ID JTE101657, 2009, 531-537  
 Jerome Isselin and Tetsuo Shoji
  
416. The effect of strain-hardening on PWSCC of Nickel-base Alloys 600 and 690  
 Proceedings of 14th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, (2009), 220-238  
 Tetsuo Shoji, Zhanpeng Lu, Seiya Yamazaki

417. Quantifying the effects of strain-hardening and water chemistry on crack growth rates of 316L SS welds in high temperature water  
 Proceedings of 14th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, 2009, 220-238  
 Zhanpeng Lu, Kazuhiko Sakaguchi, Koji Negishi, Yoichi Takeda, Yuzuru Ito, Tetsuo Shoji
  
418. Effects of loading mode and water chemistry on stress corrosion cracking of 316L stainless steel in simulated PWR environments  
 Proceedings of 14th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, 2009, 207-217  
 Tetsuo Shoji, Zhanpeng Lu, Seiya Yamazaki
  
419. Proactive Materials Degradation Management Program in Japan  
 American Nuclear Society 2009 Annual Meeting, June 14-18, 2009, Atlanta, Georgia, USA, Vol. 100, (2009), 413  
 T. Shoji, Y. Takeda, Q. Peng, J. Kuniya, F. P. Ford and P. M. Scott
  
420. WATER DISSOCIATION AND ADSORPTION ON NI-CR (111) BINARY ALLOY SURFACE AT 325°C  
 Proceedings of the 8th International Conference on Mechanical Engineering 2009 (ICME2009), December 26-28, 2009, Dhaka, Bangladesh, Paper No. AM-11, 1-5  
 N. Kumar Das and Tetsuo Shoji
  
421. Formulating stress corrosion cracking growth rates by combination of crack tip mechanics and crack tip oxidation kinetics  
 Corrosion Science, Vol. 52, Issue 3, 2010, 769-779  
 Tetsuo Shoji, Zhanpeng Lu, Hiroyoshi Murakami
  
422. Effect of hydrogen in Inconel Alloy 600 on corrosion in high temperature oxygenated water  
 Corrosion Science, Vol. 52, Issue 3, 2010, 1098-1101  
 J. Hou, Q.J. Peng, K. Sakaguchi, Y. Takeda, J. Kuniya, T. Shoji
  
423. Effects of hydrogen on the anodic behavior of Alloy 690 at 60°C  
 Corrosion Science, Vol. 52, Issue 4, 2010, 1228-1236  
 Tichun Dan, Tetsuo Shoji, Zhanpeng Lu, Kazuhiko Sakaguchi, Jianqiu Wang, En-Hoi Han, Wei Ke

424. A multiscale modelling study of Ni-Cr crack tip initial stage oxidation at different stress intensities  
Materials Chemistry and Physics, Vol. 122, Issue 2-3, 2010, 336-342  
Nishith Kumar Das, Ismail Tirtom, Tetsuo Shoji
425. A COMPUTATIONAL CHEMISTRY STUDY OF THE OXIDATION MECHANISM AT THE RANDOM GRAIN BOUNDARY OF AN Fe-Cr BINARY ALLOY  
Mission: Corrosion Control, NACE INTERNATIONAL CORROSION 2010 CONFERENCE & EXPO, March 14-18, 2010, San Antonio, Texas, USA, Paper No. 10286, 1-7  
Nishith Kumar Das, Tetsuo Shoji
426. A fundamental study of Fe-Cr binary alloy-oxide film interfaces at 288°C by computational chemistry calculations  
Corrosion Science, Vol. 52, Issue 7, 2010, 2349-2352  
Nishith Kumar Das, Tetsuo Shoji, Yoichi Takeda
427. Residual strain measurement and grain boundary characterization in the heat-affected zone of a weld joint between Alloy 690TT and Alloy 52  
Journal of Nuclear Materials, Vol. 397, Issue 1-3, 2010, 109-115  
J. Hou, T. Shoji, Z. P. Lu, Q. J. Peng, J. Q. Wang, E. H. Han, W. Ke
428. Microstructure and mechanical property of the fusion boundary region in an Alloy 182-low alloy steel dissimilar weld joint  
Journal of Materials Science, Vol. 45, Issue 19, 2010, 5332-5338  
J. Hou, Q.J. Peng, Y. Takeda, J. Kuniya, T. Shoji, J.Q. Wang, E.H. Han, W. Ke
429. Anomalous surface morphology of iron generated after anodic dissolution under magnetic fields  
Corrosion Science, Vol. 52, Issue 8, 2010, 2680-2686  
Zhanpeng Lu, Tetsuo Shoji, Wu Yang
430. The effect of roll-processing orientation on stress corrosion cracking of warm-rolled 304L stainless steel in oxygenated and deoxygenated high temperature pure water  
Corrosion Science, Vol. 52, Issue 8, 2010, 2547-2555  
Zhanpeng Lu, Tetsuo Shoji, Tichun Dan, Yubing Qiu, ToshioYonezawa

431. QUANTIFYING CRACK TIP OXIDATION KINETICS PARAMETERS AND THEIR CONTRIBUTION TO STRESS CORROSION CRACKING IN HIGH TEMPERATURE WATER  
Proceedings of the ASME 2010 Pressure Vessels & Piping Division /K-PVP Conference, July 18-22, 2010, Bellevue, Washington, USA, CD-R, PVP2010-25238, 1-18  
Tetsuo Shoji, Zhanpeng Lu, He Xue, Yubing Qiu, Kazuhiko Sakaguchi
432. CRACK BRANCHING AND ITS EFFECT ON ENVIRONMENTALLY ASSISTED CRACKING IN HIGH TEMPERATURE WATER ENVIRONMENTS  
Proceedings of the ASME 2010 Pressure Vessels & Piping Division /K-PVP Conference, July 18-22, 2010, Bellevue, Washington, USA, CD-R, PVP2010-25818, 1-11  
Zhanpeng Lu, He Xue, Tetsuo Shoji
433. CONTRIBUTORY FACTORS TO ACCURATE PREDICTION OF RATE OF STRESS CORROSION CRACKING IN BOILING WATER REACTOR UNDER UNEXPECTED CONDITION DURING OPERATION-3 -THE EFFECT OF HIGH LOADING RATE ON SCC GROWTH BEHAVIOUR-  
Proceedings of the ASME 2010 Pressure Vessels & Piping Division /K-PVP Conference, July 18-22, 2010, Bellevue, Washington, USA, CD-R, PVP2010-26136, 1-7  
Yuji Tanabe, Takeo Tamura, Kenji Suzuki, Jiro Kuniya, Tetsuo Shoji
434. FAILURE PROBABILITY ANALYSIS BY PROBABILISTIC FRACTURE MECHANICS BASED ON FRI SCC MODEL  
Proceedings of the ASME 2010 Pressure Vessels & Piping Division /K-PVP Conference, July 18-22, 2010, Bellevue, Washington, USA, CD-R, PVP2010-25917, 1-8  
Noriyoshi Maeda, Tetsuo Shoji
435. INFLUENCING FACTORS FOR IMPROVING ACCURACY IN PREDICTION OF STRESS CORROSION CRACK GROWTH RATE IN BOILING WATER REACTOR OPERATIONAL CONDITION-1 PREDICTION OF SCC GROWTH RATE IN TERMS OF VICKERS HARDNESS  
Proceedings of the ASME 2010 Pressure Vessels & Piping Division /K-PVP Conference, July 18-22, 2010, Bellevue, Washington, USA, CD-R, PVP2010-26135, 1-8  
Yoichi Takeda, Zhanpeng Lu, Takeshi Adachi, Qunjia Peng, Jiro Kuniya, Tetsuo Shoji

436. INFLUENCING FACTORS FOR IMPROVING ACCURACY IN PREDICTION OF STRESS CORROSION CRACK GROWTH RATE IN BOILING WATER REACTOR OPERATIONAL CONDITION-2  
 Proceedings of the ASME 2010 Pressure Vessels & Piping Division /K-PVP Conference, July 18-22, 2010, Bellevue, Washington, USA, CD-R, PVP2010-26121, 1-9  
 Yuzuru Ito, Masahiro Saito, Qunjia Peng, Jiro Kuniya, Tetsuo Shoji
  
437. Microstructure and stress corrosion cracking of the fusion boundary region in an alloy 182-A533B low alloy steel dissimilar weld joint  
 Corrosion Science, Vol. 52, Issue 12, 2010, 3949-3954  
 Juan Hou, Qunjia Peng, Yoichi Takeda, Jiro Kuniya, Tetsuo Shoji
  
438. Stress Intensity Effect on Solid State Oxidation of Ni-Cr Alloy with Different Chromium Concentrates  
 Journal of Solid Mechanics and Materials Engineering, Vol. 4 , No. 7, 2010, Special Issue of APCMM2009 II, 931-937  
 Ismail TIRTOM, Nishith Kumar DAS and Tetsuo SHOJI
  
439. Influence of asymmetric electrode geometry on an impedance spectrum of a plasma-sprayed thermal barrier coating system  
 Surface and Coatings Technology, Vol. 204, Issue 15, 2010, 2504-2509  
 Masatoshi Tanno, Kazuhiro Ogawa, Tetsuo Shoji
  
440. Feasibility of Polycarbonate Coatings by Cold Spray Process  
 The 2010 International Thermal Spray Conference & Exposition (ITSC2010), May 3-5, 2010, Singapore, DVS-German Welding Society, No. 2048, p. 43  
 D. Seo, N. Mahiou, K. Ogawa, T. Shoji, K. Ito, and I. Tirtom
  
441. 軽水炉発電プラントの長期安定運用におけるプロアクティブ経年劣化対策と予知・予防保全  
 保全技術一般 軽水炉発電プラントの長期安定運用におけるプロアクティブ経年劣化対策と予知・予防保全, 第9巻, 第1号, 2010, 17-22  
 庄子哲雄
  
442. Crack growth behavior of stress corrosion cracking of 690 Alloy in high temperature water Acta Metallurgica Sinica, Vol. 46, No. 10, 2010, 1267-1274  
 T. C. Dan, Z. P. Lu, J. Q. Wang, E. H. Han, T. Shoji, W. Ke



443. Study on Low Temperature Sensitization in Simulated Weldments of Austenitic Stainless Steels and its IGSCC Behavior in Simulated BWR Environment  
Presented in the conference of Indian Institute Metal organized by IIM at IISA, Bangalore, Novembe 14-16, 2010  
S. C. Bali, V. S. Raja and V. Kain and T. Shoji
  
444. Effect of Low Temparature Sensitization on IGSCC behavior of austentic stainless steels in high purity oxygenated water at 228°C  
Proceedings of the CORCON 2010 East Asia Pasific Area Corrosion Conference at Goa, India, September. 23-26, 2010  
S. C. Bali, Y. Takeda, T. Shoji, V. S. Raja and V. Kain
  
445. Effects of cold working degrees on grain boundary characters and strain concentration at grain boundaries in Alloy 600  
Corrosion Science, Vol. 53, Issue 3, 2011, 1137-1142  
J. Hou, Q. J. Peng, Z. P. Lu, T. Shoji, J. Q. Wang, E.-H. Han, W. Ke
  
446. Generation of hydroxyl radicals by sonochemistry: Effects on the electrochemical behaviour of a 316L stainless steel  
Corrosion Science, Vol. 53, Issue 3, 2011, 1079-1085  
O. Lavigne, Y. Takeda, T. Shoji, K. Sakaguchi
  
447. Water irradiation by high-frequency ultrasonic wave: Effects on properties of passive film formed on stainless steel  
Ultrasonics Sonochemistry, Vol. 18, Issue 6, 2011, 1287-1294  
O. Lavigne, Y. Takeda, T. Shoji, K. Sakaguchi
  
448. Characterization of microstructure and local deformation in 316NG weld heat-affected zone and stress corrosion cracking in high temperature water  
Corrosion Science, Vol. 53, Issue 5, 2011, 1916-1932  
Zhanpeng Lu, Tetsuo Shoji, Fanjiang Meng, He Xue, Yubing Qiu, Yoichi Takeda, Koji Negishi
  
449. Stress corrosion cracking of uni-directionally cold worked 316NG stainless steel in simulated PWR primary water with various dissolved hydrogen concentrations  
Corrosion Science, Vol. 53, Issue 8, 2011, 2558-2565  
Fanjiang Meng, Zhanpeng Lu, Tetsuo Shoji, Jianqiu Wang, En-hou Han, Wei Ke
  
450. The effect of a single tensile overload on stress corrosion cracking growth of stainless steel in a light water reactor environment  
Nuclear Engineering and Design, Vol. 241, Issue 3, 2011, 731-738  
He Xue, Zhijun Li, Zhanpeng Lu, Tetsuo Shoji

451. Effect of dissolved hydrogen on the electrochemical behaviour of Alloy 600 in simulated PWR primary water at 290 °C  
Corrosion Science, Vol. 53, Issue 5, 2011, 1983-1989  
Yubing Qiu, Tetsuo Shoji, Zhanpeng Lu
452. A FUNDAMENTAL STUDY OF AN Fe-Cr(111) BINARY ALLOY-METAL OXIDE(110)-WATER INTERFACES  
NACE INTERNATIONAL CORROSION 2011 CONFERENCE & EXPO, March 13-17, 2011, Houston, Texas, USA, 1-9  
Nishith Kumar Das and Tetsuo Shoji
453. Effects of water chemistry and loading conditions on stress corrosion cracking of cold-rolled 316NG stainless steel in high temperature water  
Corrosion Science, Vol. 53, Issue 1, 2011, 247-262  
Zhanpeng Lu, Tetsuo Shoji, Fanjiang Meng, Yubing Qiu, Tichun Dan, He Xue
454. Influence of Hydrogen Content in Steel on Atmospheric Oxidation Behavior of Low Carbon Austenitic Stainless Steel  
Journal of the Japan Institute of Metals, Vol. 75, No. 4, 2011, 243-247  
Motoki Nakajima, Masayuki Hosokawa, Shin-ichi Komazaki and Tetsuo Shoji
455. FAILURE PROBABILITY ANALYSIS BASED ON FRI MODEL FOR SCC GROWTH INTRODUCING STRESS INTENSITY FACTOR DISTRIBUTION AS FUNCTION OF CRACK DEPTH  
Proceedings of the ASME 2011 Pressure Vessels & Piping Division Conference, Baltimore, Maryland, USA, PVP2011-57926  
Noriyoshi Maeda, Tetsuo Shoji
456. MECHANISTIC FORMULATION OF PWSCC GROWTH RATES OF NI-BASE ALLOYS AND WELDMENTS  
Proceedings of the ASME 2011 Pressure Vessels & Piping Division Conference, Baltimore, Maryland, USA, PVP2011-57223  
Zhanpeng Lu, Tetsuo Shoji, He Xue, Chaoyang Fu
457. FURTHER UNDERSTANDING ON DEFORMATION-OXIDATION MODEL IN STRESS CORROSION CRACKING TIP BASED ON MESO-SCALE MECHANICAL FIELD  
Proceedings of the ASME 2011 Pressure Vessels & Piping Division Conference, Baltimore, Maryland, USA, PVP2011-57244  
He Xue, Zhijun Li, Xiaofeng Xue, Zhanpeng Lu, Tetsuo Shoji

458. EFFECT OF MECHANICAL PARAMETER SELECTION IN QUANTITATIVE ESTIMATION OF THE GROWTH OF ENVIRONMENTALLY ASSISTED CRACKS AT FLAWS IN LIGHT WATER REACTOR COMPONENTS WITH COMPLEX MECHANICAL CONDITION  
 Proceedings of the ASME 2011 Pressure Vessels & Piping Division Conference, Baltimore, Maryland, USA, PVP2011-57317  
 He Xue, Xiaoyan Gong, Lingyan Zhao, Zhanpeng Lu, Tetsuo Shoji
  
459. Role of water chemistry and microstructure in stress corrosion cracking in the fusion boundary region of an Alloy 182-A533B low alloy steel dissimilar weld joint in high temperature water  
 Corrosion Science Vol. 53, No. 12, December 2011, 4309-4317  
 Qunjia Peng, He Xue, Juan Hou, Kazuhiko Sakaguchi
  
460. ROLE OF DISSOLVED HYDROGEN IN WATER IN CORROSION OF ALLOY 600 IN HIGH TEMPERATURE WATER  
 Proceedings of the 15th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Colorado Springs, Colorado, United States, August 7-11, 2011, 1879-1888  
 Qunjia Peng, Tetsuo Shoji, Juan Hou, Kazuhiko Sakaguchi
  
461. SIMULATION OF WATER RADIOLYSIS BY SONOCHEMISTRY : EFFECTS ON THE ELECTROCHEMICAL BEHAVIOR OF A STAINLESS STEEL  
 Proceedings of the 15th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Colorado Springs, Colorado, United States, August 7-11, 2011, 2091-2100  
 O. Lavigne, Y. Takeda, T. Shoji
  
462. Deformation Mode and Microstructure on Stress Corrosion Cracking Path and Kinetics in High Temperature Water Environments  
 Proceedings of the 15th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Colorado Springs, Colorado, United States, August 7-11, 2011, 533-544  
 Zhanpeng Lu, Tetsuo Shoji, Seiya Yamazaki, Fanjiang Meng, Tichun Dan, Yoichi Takeda, Koji Negishi

463. NON-LINEAR DYNAMICS OF THE MORPHOLOGY AT THE OXIDE / METAL INTERFACE OF AUSTENITIC STEELS IN SIMULATED LIGHT WATER REACTOR ENVIRONMENTS AND ITS IMPLICATIONS FOR SCC INITIATION  
Proceedings of the 15th International Conference on Environmental Degradation of Materials in Nuclear Power Systems -Water Reactors, Colorado Springs, Colorado, United States, August 7-11, 2011, 409-419  
Yoichi Takeda, Takayuki Sato, Daisuke Yamauchi, Tetsuo Shoji, Akio Ohji
464. ENVIRONMENTALLY ASSISTED CRACK GROWTH IN COLD WORKED ALLOY 690TT IN PRIMARY WATER AT LOW AND HIGH TEMPERATURES  
Proceedings of the 15th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Colorado Springs, Colorado, August 7-11, 2011, 149-158  
Qunjia Peng, Tetsuo Shoji, Juan Hou, Yoichi Takeda, Toshio Yonezawa
465. In-situ and Ex-situ Oxide Characterization by Synchrotron X-ray (SPRING-8) in Non-sensitized 316 Stainless Steel and High Temperature Water Combination  
Proceedings of the 15th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Colorado Springs, Colorado, August 7-11, 2011, 357-368  
Toshio Yonezawa, Masashi Watanabe, Takahisa Shobu and Tetsuo Shoji
466. A density functional study of atomic oxygen and water molecule adsorption on Ni (111) and chromium substituted-Ni (111) surfaces  
Applied Surface Science, Vol. 258, No. 1, 2011 October 15, 442(6)  
Nishith Kumar Das and Tetsuo Shoji
467. A theoretical study of the interaction of water with the Cr<sub>2</sub>O<sub>3</sub>(110) and Fe<sub>2</sub>O<sub>3</sub>(110) surfaces  
Proceedings of Eurocorr 2011-The European Corrosion Congress 2011, September 4-8, 2011, Stockholm Sweden, 2011, Paper No. 4724  
Nishith Kumar Das and Tetsuo Shoji
468. Effect of dissolved hydrogen on corrosion of Inconel Alloy 600 in high temperature hydrogenated water *Electrochimica Acta*, Vol. 56, Issue 24, 2011, 8375-8386  
Qunjia Peng, Juan Hou, Kazuhiko Sakaguchi, Yoichi Takeda, Tetsuo Shoji

469. An Atomistic of Oxidation Initiation on Different Kinds of fcc Fe-Cr Binary Alloy Surfaces Materials Science and Technology 2011, Columbus, Ohio, October. 16-20, 2011, 1366-1373  
N. K. Das and T. Shoji
  
470. Effect of Nitrogen addition on Low Temperature Sensitization and IGSCC Behavior of Austenitic Stainless in Simulated BWR Environment  
Proceedings of the ANM-2011 Conference, Mumbai, India, February 9-11, 2011  
S. C. Bali, Y. Takeda, V. Kain, V. S. Raja and T. Shoji
  
471. 軽水炉原子炉におけるプロアクティブ材料経年劣化研究課題保全学, Vol. 10, Numbr 4, 2012, 51-66  
庄子哲雄, 竹田陽一, 国谷治郎, ピーターフォード, ピータースコット
  
472. Synergistic effects of local strain-hardening and dissolved oxygen on stress corrosion cracking of 316NG weld heat-affected zones in simulated BWR environments Journal of Nuclear Material, Vol.423, Issues 1-3, April 2012, 28-39  
Zhanpeng Lu, Tetsuo Shoji, He Xue, Fanjiang Meng, Chaoyang Fu, Yoichi Takeda, Koji Negishi
  
473. Characterization of microstructure, local deformation and microchemistry in Alloy 600 heat-affected zone and stress corrosion cracking in high temperature water Corrosion Science  
Zhanpeng Lu, Tetsuo Shoji, Seiya Yamazaki, Kazuhiro Ogawa

### Ⅲ. 参考論文

1. 線形弾性破壊力学の環境強度設計への応用  
防食技術, 28巻, 5号, 1979, 292  
高橋英明, 庄子哲雄, 鈴木正彦
  
2. Role of Loading Variables in Environment Enhanced Crack Growth for Water Cooled  
Nuclear Reactor Pressure Vessel Steels  
Proceedings of the International Atomic Energy Agency Specialists' Meeting on Subcritical Crack Growth, NUREG/CP-0044, Ed., W. H. Cullen, Vol. 2, 1981, 143-171  
T. Shoji, H. Takahashi, H. Nakajima and T. Kondo

3. Fatigue Crack Growth Through Typical Weld HAZ Microstructures of SA533B Gr. B Steel in BWR Environment  
Proceedings of the International Atomic Energy Agency Specialists' Meeting on Subcritical Crack Growth, NUREG/CP-0044, Ed., W. H. Cullen, 1981, 147-159  
T. Kondo, H. Nakajima, T. Shoji and H. Takahashi
4. Characterization of Ductile Crack Growth Behavior Based on Energy Dissipation within Intense Strain Region at Crack Tip  
Proceedings of a CSNI Workshop on Ductile Fracture Test Methods, December 1-3, 1982, Paris, Committee on the Safety of Nuclear Installations, Nuclear Energy Agency, OECD, 1983, 428-449  
T. Shoji and H. Takahashi
5. 軽水炉圧力容器の構造健全性とサブクリティカルき裂成長  
日本機械学会誌, 89巻, 807号, 1986, 37-43  
庄子哲雄
6. MECHANISTIC UNDERSTANDING OF ENVIRONMENTALLY ASSISTED CRACKING OF RPV STEELS IN LWR PRIMARY COOLANTS  
Proceedings of the 2nd International Atomic Energy Agency Specialists' Meeting on Subcritical Crack Growth, Ed., W. H. Cullen, NUREG/CP-0067, Vol. 2, 1986, 99-118  
T. Shoji, K. Komai, S. Abe and H. Nakajima
7. 地熱材料のエロージョン・コロージョン簡易試験法  
サンシャインジャーナル, 8巻, 4号, 1987, 30-32  
高橋秀明, 庄子哲雄
8. The Evaluation of Fatigue Damage of RPV Steels by Electrochemical Method  
Proceedings of the VII International Congress on Experimental Mechanis, Vol. II, June 8-11, 1992, 1148-1153  
T. Shoji, Y. Kawamori and Y. Watanabe
9. 迷走神経幽門枝切離の胃幽門輪運動に対する影響  
－幽門輪運動の新しい測定法を用いて－  
外科治療, Vol. 72, No. 6, 1995, 1121-1122  
柴田近, 佐々木巖, 内藤広郎, 松野正紀, 渡邊豊, 庄子哲雄
10. An Electrochemical Study of Thermal Degradation in Austenitic Stainless Steels  
Proceedings of Asian Pacific Conference for Fracture and Strength '96, 1996, 837-842  
M. L. Saucedo-Munoz, Y. Watanabe, T. Shoji and H. Takahashi

11. Nondestructive Evaluation of High Temperature Low-Cycle Fatigue Damage Accumulation in Inconel 718 by Chemical Method  
 Proceedings of the 4th International Special Emphasis Symposium on Superalloys 718, 625, 706 and Various Derivatives, 1997, 617-628  
 Shin-ichi Komazaki, Yutaka Watanabe, and Tetsuo Shoji
  
12. Dynamics of Water/Oxide/Metal Interfaces and Mechanisms of Environmentally Assisted Cracking  
 Proceedings of the International Symposium on Research for Aging Management of Light Water Reactors, October 22-23, 2007, Fukui City, JAPAN, 7.1-24  
 Tetsuo Shoji, Yoichi Takeda, Zhanpeng Lu, Qunjia Peng, Krishnan Raja
  
13. Quantifying the Effects of Environmental Parameters on Crack Growth Rates of Non-sensitized Stainless Steel Materials in High Temperature Water  
 Proceedings of JSCE Materials and Environments 2008, May 14, 2008, Omiya, Japan, A-201, 53-56  
 Zhanpeng Lu, Yoichi Takeda, Hiroyoshi Murakami, Koji Negishi, Tetsuo Shoji
  
14. Characteristic Distance of the Crack Tip Strain Rate Formulation for Quantification of the Stress Corrosion Crack Growth Rate  
 Proceedings of JSCE Materials and Environments 2008, May 14, 2008, Omiya, Japan A-202, 57-60  
 Q. J. Peng, Y. Takeda, Z. P. Lu, J. Kuniya, T. Shoji
  
15. Fe(111) AND Fe-Cr(111) SURFACE H<sub>2</sub>O INTERACTION AT DIFFERENT TEMPERATURES BY QUANTUM CHEMICAL MOLECULAR DYNAMICS  
 Proceedings of JSCE Materials and Environments 2008, May 15, 2008, Omiya, Japan A-302, 105-108  
 Nishith Kumar Das, Ken Suzuki, Yoichi Takeda, Kazuhiro Ogawa and Tetsuo Shoji
  
16. Quantum chemical molecular dynamics study of strain effect on metal and oxide film interface interaction at high temperature  
 EUROCORR 2008, September 7-11, 2008, Edinburgh, United Kingdom, Paper No. 1226  
 Nishith Kumar Das, Ken Suzuki, Yoichi Takeda, Kazuhiro Ogawa and Tetsuo Shoji
  
17. 高温水中における低合金鋼及び炭素鋼の SCC 発生条件に関する一考察  
 第55回材料と環境討論会講演集, September 17-19, 2008, 長崎, JSCE, A-206  
 彭群家, 国谷治郎, 庄子哲雄

18. オーステナイト系ステンレス鋼の高温水中酸化皮膜形態に及ぼす応力と表面仕上げの影響  
日本機械学会 東北支部第44期秋季講演会, 2008, 弘前大学, 115-116  
佐藤崇之, 竹田陽一, 庄子哲雄, 大地昭生
  
19. Stress Corrosion Cracking Growth Behavior of Strain Hardened 316L SS and Weld Transition Zone in High Temperature Water  
Proceedings of JSCE Materials and Environments 2009, A-202, May 22-24, 2009, Tokyo, Japan, CD-R  
Zhanpeng Lu, Koji Negishi, Juan Hou, Yoichi Takeda, Tetsuo Shoji
  
20. Quantifying the Effects of Loading Mode and Dissolved Hydrogen Concentration on Crack Growth of Cold Worked Stainless Steels in Simulated PWR Environments  
Proceedings of JSCE Materials and Environments 2009, A-105, May 22-24, 2009, Tokyo, Japan, CD-R  
Zhanpeng Lu, Seiya Yamazaki, Tetsuo Shoji
  
21. Microstructure, Mechanical Property and Stress Corrosion Cracking of the Fusion Boundary Region in an Alloy 182-Low Alloy Steel Dissimilar Weld Joint in High Temperature Oxygenated Water  
第56回材料と環境討論会講演集, 2009, A-210  
Q. J. Peng, J. Hou, Y. Takeda, J. Kuniya, T. Shoji
  
22. SCC き裂進展挙動に及ぼす単一過大荷重負荷の影響  
第56回材料と環境討論会講演集, 2009, A-309, 査読無  
伊藤譲, 齋藤正博, 彭群家, 庄子哲雄
  
23. A Study of Microstructure in an Alloy 182/Low Alloy Steel Dissimilar Weld Joint  
日本保全学会第6回学術講演会要旨集, 2009, 13-17  
J. Hou, Q. J. Peng, J. Kuniya, T. Shoji
  
24. Investigation of the Effect of Dissolved Hydrogen on the Oxide Film on Alloy 600 in High Temperature Water by In-situ Electrochemical Techniques  
日本保全学会第6回学術講演会要旨集, 2009, 24-29  
Qunjia Peng, Yoichi Takeda, Jiro Kuniya, Tetsuo Shoji
  
25. 高Ni合金の高温水中SCC機構解明と耐SCC成分設計に関する基礎的研究  
(1) 事業概要  
日本原子力学会「2009年秋の大会」, 9月16-18日, 2009, 東北大学, 青葉山キャンパス, 705  
渡辺豊, 竹田陽一, 阿部博志, 佐藤崇之, 宮崎孝道, 庄子哲雄



26. 高 Ni 合金の高温水中 SCC 機構解明と耐 SCC 成分設計に関する基礎的研究  
(2) 高温水中 SCC 感受性評価  
日本原子力学会「2009 年秋の大会」, 9 月16-18日, 2009, 706  
佐藤崇之, 竹田陽一, 渡辺豊, 阿部博志, 宮崎孝道, 庄子哲雄
  
27. 高 Ni 合金の高温水中 SCC 機構解明と耐 SCC 成分設計に関する基礎的研究  
(3) 気相中における応力下酸化挙動評価  
日本原子力学会「2009 年秋の大会」, 9 月16-18日, 2009, 707  
阿部博志, 渡辺豊, 竹田陽一, 佐藤崇之, 宮崎孝道, 庄子哲雄
  
28. 高応力下におけるオーステナイト系合金の酸素富化高温水中酸化挙動に及ぼす合金成分の影響  
日本原子力学会「2009 年春の年会」, 3月23-25日, 2009, 東京工業大学大岡山キャンパス, 46  
佐藤崇之, 竹田陽一, 庄子哲雄, 大地昭生
  
29. Effect of Overload on SCC Growth in Stainless Steels in High Temperature Water  
日本保全学会第 6 回学術講演会要旨集, 2009, 30-34  
He XUE, Qunjia PENG and Tetsuo SHOJI
  
30. 高温水中におけるオーステナイト系合金の高応力下酸化 -1 Cr 含有量の影響評価  
日本保全学会第 6 回学術講演会, 2009, 札幌市, 342-345  
佐藤崇之, 竹田陽一, 庄子哲雄, 大地昭生
  
31. 高温水中におけるオーステナイト系合金の高応力下酸化 -2 表面硬化層の影響評価  
日本保全学会第 6 回学術講演会, 2009, 札幌市, 215-218  
竹田陽一, 佐藤崇之, 庄子哲雄, 大地昭生
  
32. Stress Corrosion Cracking of Warm-Rolled 304L SS in Different Orientations in High Temperature Water  
Proceedings of JSCE Materials and Environments, 2010, A-307, 129-132  
Zhanpeng Lu, Tetsuo Shoji, Tichun Dan, Yubing Qiu, Toshio Yonezawa
  
33. Stress Corrosion Crack Growth of Three-dimensionally Cold-rolled 316NG stainless Steel in Oxygenated, De-oxygenated and Hydrogenated High Temperature Water  
Proceedings of JSCE Materials and Environments 2010, A-308, 2010, 133-136  
Zhanpeng Lu, Tetsuo Shoji, He Xue, Yoichi Takeda, Koji Negishi

34. Electrochemical response of scratched Alloy 600 in simulated primary water and its influence with hydrogen entry  
日本保全学会, 第7回学術講演会, 2010, 静岡, 314-318  
Fanjiang Meng, Zhanpeng Lu, Tetsuo Shoji, Jianqiu Wang, En-Hou Han
35. Effects of Electrochemical Parameters on SCC of Stainless Steels in Simulated BWR Environments  
日本保全学会, 第7回学術講演会, 2010, 静岡, 319-322  
Zhanpeng Lu, Tetsuo Shoji, Kazuhiko Sakaguchi, Fanjiang Meng, Yubing Qiu
36. Proactive Materials Degradation Management and Development of Condition Monitoring Technolog  
日本保全学会, 第7回学術講演会, 2010, 静岡, 475-479  
Tetsuo SHOJI, Yoichi TAKEDA, Jiro KUNIYA
37. Effects of Electrochemical Parameters on SCC of Stainless Steels in Simulated BWR Environments  
日本保全学会, 第7回学術講演会, 浜岡原子力館, 2010, 319-322  
Zhanpeng Lu, Tetsuo Shoji, Kazuhiko Sakaguchi, Fanjiang Meng, Yubing Qiu
38. Role of Microstructure and Water Chemistry in Stress Corrosion Cracking in the Fusion Boundary Region of an Alloy 182- A533B Low Alloy Steel Dissimilar Weld Joint in High Temperature Water  
腐食防食協会, 第57回材料と環境討論会講演集, 沖縄県市町村自治会館, October 20-22, 2010. 47-50  
彭群家, 侯娟, 竹田陽一, 国谷治郎, 庄子哲雄
39. Stress Corrosion Cracking in the Fusion Boundary Region of an Alloy 182- A533B Low Alloy Steel Dissimilar Weld Joint in High Temperature Oxygenated Water  
Proceedings of International Symposium of Fontevraud 7, 2010, Avignon, France, September 26-30, CD-ROM  
Qunjia Peng, He Xue, Juan Hou, Yoichi Takeda, Jiro Kuniya, Tetsuo Shoji
40. SCC き裂進展挙動に及ぼす降温・除荷を伴った単一過大荷重負荷の影響  
腐食防食協会, 第57回材料と環境討論会講演集, 沖縄県市町村自治会館, October 20-22, 2010, 67-70  
伊藤譲, 齋藤正博, 浅野政之, 彭群家, 国谷治郎, 庄子哲雄

#### IV. 口頭発表（招待講演・基調講演含む）

1. Corrosion Fatigue Aspects in BWR Pipe Cracking  
TETSUO SHOJI, HIDEKI TAKAHASHI and MASAHIKO SUZUKI  
Predictive Methods for Assessing Corrosion Damage to BWR Piping and PWR  
Steam Generators, NACE, May 28-June 2, 1978
2. Role of Loading Variables in Environment Enhanced Crack Growth for Water  
Cooled  
Nuclear Reactor Pressure Vessel Steels  
T. Shoji, H. Takahashi, H. Nakajima and T. Kondo  
International Atomic Energy Agency Specialists' Meeting on Subcritical Crack  
Growth, NUREG/CP-0044, Ed., W. H. Cullen, 1981
3. Characterization of Ductile Crack Growth Behavior Based on Energy Dissipation  
within Intense Strain Region at Crack Tip  
T. Shoji and H. Takahashi  
CSNI Workshop on Ductile Fracture Test Methods, Dec. 1-3, 1982, Paris, France
4. APPLICATION OF ACOUSTIC EMISSION TO FRACTURE TOUGHNESS  
TEST OF ROCKS UNDER THE SIMULATED GEOTHERMAL RESERVOIR  
CONDITIONS  
T. SHOJI, K. TAMAKAWA, H. TAKAHASHI and T. WAKABAYASHI  
Acoustic Emission II, The 7th International Symposium, 1984, Zao
5. QUANTITATIVE PREDICTION OF ENVIRONMENTALLY ASSISTED  
CRACKING BASED ON CRACK TIP STRAIN RATE  
T. Shoji  
Predictive Capabilities in Environmentally Assisted Cracking-PVP-Vol.99, 1985
6. NON-DESTRUCTIVE EVALUATION OF MATERIALS DEGRADATION  
DURING SERVICE OPERATION BY MEANS OF ELECTRO-CHEMICAL  
METHOD  
T. Shoji and H. Takahashi  
Life Extension and Assessment of Fossil Plants, EPRI, EEI, ASME and ASM,  
Washington, June 1986
7. MECHANISTIC UNDERSTANDING OF ENVIRONMENTALLY ASSISTED  
CRACKING OF RPV STEELS IN LWR PRIMARY COOLANTS  
T. Shoji, K. Komai, S. Abe and H. Nakajima  
the 2nd International Atomic Energy Agency Specialists' Meeting on Subcritical  
Crack Growth, Ed., W. H. Cullen, NUREG/CP-0067, 1986

8. EFFECTS OF SULFATE CONTAMINATION, SULFUR IN STEEL AND STRAIN RATE ON CRITICAL CRACKING POTENTIAL FOR SCC OF PRESSURE VESSEL STEELS IN PRESSURIZED HIGH TEMPERATURE WATERS  
T. Shoji, H. Takahashi, S. Aizawa and M. Saito  
Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors
9. EFFECT OF INHIBITOR UPON SCC OF PRESSURE VESSEL STEELS IN PRESSURIZED HIGH TEMPERATURE WATERS  
T. Shoji, K. Yoshida  
Advances in Fracture and Fatigue for the 1990's Vol. I, JSME Co-Sponsorship, Honolulu, Hawaii, July 23-27, 1989
10. Materials Compatibility with High Temperature Waters and Long Term Stability in Nuclear Reactor Environments  
T. Shoji, K. Kikuchi, T. Kondo  
the Fourth International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Jekyll Island, Georgia, August 6-10, 1989
11. Computer Simulation of Environmentally Assisted Cracking of RPV Steels in LWR Environments  
Tetsuo Shoji, Shin-ichi Moriya, Makoto Tada  
the Fourth International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Jekyll Island, Georgia, August 6-10, 1989
12. Electrochemical and Mechanical Aspects of Corrosion Fatigue Crack Growth Behavior of High Strength Steels in Synthetic Sea Water  
T. SHOJI, K. YAMAKI AND H. TASHIRO  
THE IRON AND STEEL INSTITUTE OF JAPAN, INTERNATIONAL CONFERENCE on EVALUATION OF MATERIALS PERFORMANCE IN SEVERE ENVIRONMENTS, Kobe, Japan, November 20-23, 1989
13. GRAIN BOUNDARY SEGREGATION AND INTERGRANULAR STRESS CORROSION CRACKING SUSCEPTIBILITY OF AUSTENITIC STAINLESS STEELS IN HIGH TEMPERATURE WATER  
T. Shoji, K. Yamaki, R. G. Ballinger, and I. S. Hwang  
the Fifth International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, 1991

14. 機器構造部材の経年劣化と寿命予測  
庄子哲雄  
M&M'93 材料力学部門講演会, 1993年11月, 堺
  
15. Theoretical Prediction of SCC Growth Behavior-Threshold and Plateau Growth Rate-  
T. Shoji, S. Suzuki, R. G. Ballinger  
Seventh International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Breckenridge, Colorado, USA, 1995
  
16. A NOVEL NONDESTRUCTIVE INSPECTION AND MONITORING TECHNIQUE FOR PLANT LIFE MANAGEMENT - INDUCED CURRENT FOCUSING POTENTIAL DROP TECHNIQUE  
T. Shoji, H. Kim, T. Maeda, Y. Sato and Y. Watanabe  
International Symposium on Plant Aging and Life Prediction of Corrodible Structures, Sapporo, Japan, May 15-18, 1997
  
17. PREDICTION OF ENVIRONMENTALLY ASSISTED CRACKING BEHAVIOR OF STRUCTURAL MATERIAL IN LWR SYSTEMS: THEORY AND EXPERIMENTS  
Tetsuo Shoji, Yunju Lee, Takeshi Satoh and Shun-ichi Suzuki  
the 1998 ASME/JSME Joint Pressure Vessels and Piping Conference, San Diego, California, July 26-30, 1998
  
18. 予寿命診断技術の高度化と経済性  
庄子哲雄  
日本機械学会東北支部1998年度講習会, 1999年1月, 仙台
  
19. Quantitative Evaluation of Gastric Emptying Behavior by Use of Magnetic Fluid and Perturbation Field Measurements  
T. Shoji, H. Kawakita, T. Yamada, J. Lee, K. Nakatsuka, I. Sasaki, H. Naito and S. Matsuno  
The Second Japan-US Symposium on Advances in NDT, Kahuku, Hawaii, USA, June 21-25, 1999
  
20. CRITICAL PARAMETERS OF ENVIRONMENTALLY ASSISTED CRACKING IN NUCLEAR SYSTEMS  
T. Shoji, K. S. Raja, G. F. Li and Y. J. Lee, Anna Brozova  
CORROSION 2000, March 26-31, 2000

21. 文部省中核的拠点形成プログラム「複合環境下における破壊の物理化学と制御システム」について  
庄子哲雄  
八戸工業高等専門学校産業技術振興会講演, 2000年6月, 八戸
22. 軽水炉環境における腐食割れ機構と予測法研究の現状  
庄子哲雄  
溶接学会第27回国内シンポジウム・原子力発電プラントにおける高経年劣化対応の動向と経年変化研究の現状に関する国内シンポジウム, 2000年11月, 東京
23. 複合環境下における破壊の物理化学と制御システム－ローカルアプローチ  
庄子哲雄  
日本工学アカデミー東北・北海道地区講演会, 2000年11月, 仙台
24. 創造工学教育の在り方と実施方法  
庄子哲雄  
創造工学教育研究集会, 2001年12月, 札幌
25. 創成工学教育の実施とその成果  
庄子哲雄  
工学教育シンポジウム－自主性・創造性の発現にむけて, 2002年7月, 宇都宮
26. 高経年化と寿命予測－長期信頼性の確保－  
庄子哲雄  
M&M レイクサイドサマーシンポジウム, 2002年8月, 大津
27. 「安全の科学」について  
庄子哲雄  
富士フィルム安全協定会・平成14年度研修会, 2002年10月, 仙台
28. 照射誘起応力腐食割れ機構研究  
庄子哲雄  
原子力高度技術研究会「ライフサイクルマネジメントに関する研究」,  
2002年10月, 東京
29. 中核的研究拠点「破壊の物理化学と制御システム」－安全の科学的合理性と安心  
庄子哲雄  
原子力学会東北支部総会記念講演会, 2003年4月, 仙台

30. 中核的研究拠点形成プログラム「破壊の物理化学と制御システム」－安全の科学的合理性と安心－  
庄子哲雄  
日本原子力学会「水化学標準」研究専門委員会第2回委員会，2003年7月，仙台
  
31. 3D-FEM Simulation of EAC Crack Growth Based on the Deformation / Oxidation Mechanism  
Tetsuo Shoji, Takumi Yamamoto, Kimio Watanabe and Zhanpeng Lu 11th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, August 10-14, 2003, Stevenson, Washington, USA
  
32. Progress in the mechanistic Understanding of BWR SCC and Its Implication to the Prediction of SCC Growth Behavior in Plants  
Tetsuo Shoji  
11th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, August 10-14, 2003, Stevenson, Washington, USA
  
33. Quantification of Yield Strength Effects on IGSCC of Austenitic Stainless Steels in High Temperature Water  
Tetsuo Shoji, Guangfu Li, Junhyun Kwon, Shinobu Matsushima and Zhanpeng Lu 11th International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, August 10-14, 2003, Stevenson, Washington, USA
  
34. 軽水炉長期信頼性と破壊力学の使命のオーガナイザー  
庄子哲雄  
金属学会・原子力学会合同シンポジウム，2003年10月，東京
  
35. 高温高圧水環境下における応力腐食割れのメカニズム研究最前線  
庄子哲雄  
日本機械学会北陸信越支部主催特別講演会，2003年11月，富山
  
36. 軽水炉環境下における環境助長割れ進展メカニズムと照射誘起応力腐食割れ  
庄子哲雄  
日本核燃料開発(株)講演会及び見学会，2003年12月，東海村
  
37. 環境助長割れのモデルとき裂進展予測  
庄子哲雄  
材料強度破壊シンポジウム，2004年3月，東京

38. Modeling and Quantitative Prediction of Environmentally Assisted Cracking Based Upon A Deformation-Oxidation Mechanism  
Tetsuo Shoji, Zhanpeng Lu, Qunjia Peng, Shengchun Wang, Yoichi Takeda, Akira Kai PVP-Vol. 479, Residual Stress, Fracture, and Stress Corrosion Cracking, July 25-29, 2004, San Diego, California, USA
  
39. Quantification of the effects of crack tip plasticity on environmentally-assisted crack growth rates in LWR environments  
Tetsuo Shoji, Zhanpeng Lu, He Xue, Kentaro Yoshimoto, Mikiro Itow, Jiro Kuniya, Kimio Watanabe  
the Second International Conference on Environment-induced Cracking of Metals (EICM-2), Vol. 2, September 19-23, 2004, The Banff Centre, Banff, Alberta, Canada
  
40. 応力腐食割れの機構  
庄子哲雄  
材料の微細組織と機能性133委員会, JFE スチール研究所,  
2004年10月
  
41. 応力腐食割れのモデル化と進展予測  
庄子哲雄  
JSNDI 学術セミナー 安全を支える技術, 2004年7月, 東京
  
42. SCC き裂進展メカニズムと進展性予想  
庄子哲雄  
JNES 規格基準部セミナー「応力腐食割れき裂進展評価と検出技術」,  
日本自転車会館ホール, 2005年1月, 東京
  
43. Development of a fundamental crack tip strain rate equation and its application to quantitative prediction of stress corrosion cracking  
Tetsuo Shoji  
Corrosion 2005, April 3-7, 2005, George R Brown Convention Center, Houston Texas, USA
  
44. 材料科学のフロンティアと原子力施設保守保全技術の展覧  
庄子哲雄  
NISA JNES 2005シンポジウム 「相互理解と行動力, 安全確保への絆」,  
有楽町朝日ホール, 2005年10月, 東京



45. エネルギー機器・構造物の経年劣化とその計測・評価研究の現状と将来  
庄子哲雄  
日本保全学会シンポジウム「高経年化対策に関わる劣化・損傷の評価技術の最前線」プログラム, 2006年8月, 敦賀
46. Fundamentals of Mechanics and Mechanisms of Stress Corrosion Cracking - Crack Tip Mechanics and Stress Enhanced Oxidation  
Tetsuo Shoji  
Hsun Lee Lecture Series, Oct. 2006, Shenyang, China
47. Towards Proactive Materials Degradation Management in NPP-Today and Future  
Tetsuo Shoji  
14thAsian-Pacific Corrosion Control Conference, Oct. 2006, Shanghai, China
48. Fundamental Mechanisms of Stress Corrosion Cracking and Development of Quantitative FRI SCC Model  
Tetsuo Shoji Topical Day on "10years of stress corrosion cracking research", Jan. 2007, Mol, Belgium
49. 将来に向けた国際戦略と連携  
庄子哲雄  
日仏ジョイントフォーラム2020年の科学・技術の姿, Feb. 2007, Lyon, France
50. 共同研究の推進  
庄子哲雄  
第13回 JR 東日本 R&D シンポジウム, 2007年2月, 東京
51. SCC き裂進展則の高精度化  
庄子哲雄  
平成18年度高経年化対策基盤整備事業研究成果発表会, 2007年3月, 東京
52. 東北大学の産学連携と国際戦略  
庄子哲雄  
電力エネルギー未来技術(東北電力)寄附研究部門「第一期成果報告会」, 2007年3月, 仙台
53. UNDERSTANDING THE THRESHOLD CONDITIONS FOR STRESS CORROSION CRACKING IN LIGHT WATER REACTOR ENVIRONMENTS BASED ON THE DEFORMATION/OXIDATION MECHANISM  
Tetsuo Shoji, Zhanpeng Lu, Yoichi Takeda  
PVP2007, 2007 ASME Pressure Vessels and Piping Division Conference, July 22-26, 2007, 1-12, San Antonio, Texas, USA

54. MECHANISTIC UNDERSTANDING OF LOW TEMPERATURE CRACK PROPAGATION FOR ALLOY 690 IN HYDROGENATED WATER  
Tetsuo Shoji, Yuzuru Ito, Zhanpeng Lu, Toshio Yonezawa  
13th International Conference on Environmental Degradation of Materials in Nuclear Power Systems, Whistler, British Columbia, August 19-23, 2007
  
55. Dynamics of Water/Oxide/Metal Interfaces and Mechanisms of Environmentally Assisted Cracking  
Tetsuo Shoji  
Research for Aging Management of Light Water Reactors and Its Future Trend (The 15th Anniversary of INSS), Oct. 2007, Fukui, Japan
  
56. Tohoku University : Today and Future  
Tetsuo Shoji  
Taiwan-Tohoku Joint International Symposium for Mechanical Science Based on Nanotechnology, Dec. 2007, Taiwan
  
57. The Role of Hydrogen in Primary Water Stress Corrosion Cracking  
Tetsuo Shoji  
5th International Conference on Mechanical Science based on Nanotechnology, Mar. 2008, Sendai
  
58. Modeling of stress corrosion crack initiation and propagation and its implication to a life time management of nuclear power plant  
Tetsuo Shoji  
PERFECT WORKSHOP , Jun. 2008, Fontainebleau, France
  
59. Investigative Committee on Stress Corrosion Cracking  
Tetsuo Shoji  
ISaG2008 International Symposium of the Ageing Management & Maintenance of Nuclear Power Plant, Jul. 2008, Tokyo
  
60. DETERMINISTIC PREDICTION OF STRESS CORROSION CRACK GROWTH RATES IN HIGH TEMPERATURE WATER BY COMBINATION OF INTERFACE OXIDATION KINETICS AND CRACK TIP ASYMPTOTIC FIELD  
Tetsuo Shoji  
2008 ASME Pressure Vessels and Piping Conference, Jul. 2008, Chicago, USA
  
61. ベンチャー教育への期待と提言～グローバル人材の育成～  
庄子哲雄  
第5回全国VBLフォーラム, 2008年8月, 山形

62. Quantification of mechano-chemical interactions at multi-scales and theoretical modeling of stress corrosion cracking initiation and short crack growth  
Tetsuo Shoji  
Detection, Avoidance, Mechanisms, Modeling, and Prediction of SCC Initiation in Water-Cooled Nuclear Plants, Sep. 2008, Beaune, France
63. Multiscale Simulation for Materials Research and FGM Future  
Tetsuo Shoji  
Multiscale, Multifunctional & Functionally Graded Materials 2008, Sep. 2008, Sendai
64. Approaches to the prediction of IGSCC - Surface Integrity and Structural Integrity-  
Tetsuo Shoji, Yoichi Takeda and Kazuhiko Sakaguchi  
International Cooperative Group on Environmentally Assisted Cracking, Le Meridien Hotel, Apr. 2009, Cambridge, USA
65. Sizing and monitoring of SCC crack by Induced Current Focusing Potential Drop Technique  
Tetsuo Shoji  
Technical Exchange Meeting on NDE between EDF & R&D and Tohoku University, May 2009, Sendai
66. Overview of the International Research Project at FRRI  
Tetsuo Shoji  
The 1st FRRI International Workshop on Evaluation of Environmental Degradation of Materials and Proactive Aging Management, Jun. 2009, Tokyo
67. Proactive Materials Degradation Management Program in Japan  
Tetsuo Shoji, Yoichi Takeda, Jiro Kuniya, Qunjia Peng  
American Nuclear Society 2009 Annual Meeting, Jun. 2009, Atlanta, USA
68. Proactive management of materials and components degradation - sensing, evaluation, mitigation and repair -  
Tetsuo Shoji  
The 2nd International Workshop on Strength and Reliability (ISR'09), Jul. 2009, Gwangju, Korea
69. 軽水炉環境下における応力腐食亀裂進展試験規格案作成の経緯  
庄子哲雄  
軽水炉水環境下における応力腐食き裂進展試験方法（（社）腐食防食協会主催）、2009年7月、東京

70. Fundamentals of Stress Corrosion Cracking of Structural Materials in LWR Environments and Role of Stress and Hydrogen  
Tetsuo Shoji  
5 th IMR Symposium on Materials Sciences and Engineering, Jul. 2009, Shenyang, China
  
71. Modelinmg stress corrosion cracking growth rates based upon the effect of stress/strain on crack tip interface degradation and oxidation reaction kinetics  
Tetsuo Shoji, Zhanpeng Lu, Nishith Kumar Das, Hiroyoshi Murakami, Yoichi Takeda, Ismail Tirtom  
2009 ASME Pressure Vessels and Piping Division Conference, Jul. 2009, prague, Crech Republic
  
72. プロアクティブ経年劣化対応と階層化保全  
庄子哲雄  
日本保全学会第 6 回学術講演会, 2009年 8 月, 札幌
  
73. The effect of strain-hardening on PWSCC of Nickel-base Alloys 600 and 690  
Tetsuo Shoji, Zhanpeng Lu, Seiya yamazaki  
14th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, 2009
  
74. Effects of loading mode and water chemistry on stress corrosion cracking of 316L stainless steel in simulated PWR environments  
Tetsuo Shoji, Zhanpeng Lu, Seiya yamazaki  
14th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, 2009
  
75. Quantification of Mechano-chemical Interactions and Multi-scales and Theoretical Modeling of Stress Corrosion Crack Initiation and Short Crack Growth  
Tetsuo Shoji  
China Steel Ltd., Aug. 2009, Kaosiung, Taiwan
  
76. Progress in the Mechanistic Understanding of SCC mechanisms and Its Implication to the Prediction of SCC Growth Behavior in Plants  
Tetsuo Shoji  
Feng Chia University, Aug. 2009, Taichung, Taiwan
  
77. Proactive management of materials degradation in energy conversion systems  
Tetsuo Shoji  
National Chung Hsing University, Aug. 2009, Taichung, Taiwan

78. Quantum chemical molecular dynamics simulation of oxidation at water/metal interface and its implication to stress corrosion crack initiation and growth  
Tetsuo Shoji  
2009 annual meeting of the Corrosion Engineers Association of the Republic of China, Aug. 2009, Freshfield, Taiwan
79. 応力腐食割れ（SCC）検討会 3 カ年成果報告及び今後の計画  
庄子哲雄  
経済産業省 NISA 事業 3 カ年成果報告会, 2009年10月, 東京
80. Proactive Materials Degradation Management Program in Japan, International Forum for LWR Aging Management  
Tetsuo Shoji, Yoichi Takeda, Jiro Kuniya  
Seoul National University, Oct. 2009, Seoul, Korea
81. Surface Integrity and Structural Integrity - Role of Maintenance  
Yoichi Takeda and Tetsuo Shoji  
MICTEC, Dec. 2009, Vadodara, India
82. Fundamentals of Stress Corrosion Cracking - Role of stress and strain in Oxidation-  
Tetsuo Shoji  
Satellite Workshop on EAC, Dec. 2009, Vadodara, India
83. Proactive materials degradation management and advanced maintenance technology in nuclear power plants,  
Tetsuo Shoji  
BARC Trombay Colloquium, Dec. 2009, India
84. Proactive Aging Management for Long Term Operation (LTO) of Nuclear Power Plants and Improved Design for Future Plants  
Tetsuo Shoji  
Institute Colloquium, IIT, Dec. 2009, Mumbai, India
85. 軽水炉発電プラントのプロアクティブ高経年化対策と保全  
庄子哲雄  
日本保全学会東北・北海道支部発電所講演会, 2010年 1 月, 福島
86. 軽水炉発電プラントのプロアクティブ高経年化対策と保全  
庄子哲雄  
日本保全学会東北・北海道支部発電所講演会, 2010年 1 月, 女川

87. Radicals and Aging Degradation in Materials Science, Water Chemistry, Tribology and Biological Systems  
Tetsuo Shoji  
ELyt Lab. Annual Workshp, Mar. 2010, Sevrier, France
88. 軽水炉発電プラントのプロアクティブ高経年化対策と保全  
庄子哲雄  
日本保全学会東北・北海道支部発電所講演会, 2010年3月, 泊
89. Localized and Accelerated Oxidation and Stress Corrosion Cracking - Role of Stress, Strain, Hydrogen and Microstructures -  
T. Shoji, Y.Takeda & K. Sakaguchi  
MAI International Workshop on Couples Mechanisms to Improve Lifetime Prediction of LWRs, Apr. 2010, France
90. Ongoing works in Japan and topics for future research  
Tetsuo Shoji  
ICG-EAC2010, Apr. 2010, Korea
91. プロアクティブ材料経年劣化評価と状態監視技術開発  
庄子哲雄  
日本保全学会東北・北海道支部発電所講演会, 2010年6月, 東通村
92. QUANTIFYING CRACK TIP OXIDATION KINETICS PARAMETERS AND THEIR CONTRIBUTION TO STRESS CORROSION CRACKING IN HIGH TEMPERATURE WATER  
Tetsuo Shoji, Zhanpeng Lu, He Xue, Yubing Qiu, Kazuhiko Sakaguchi  
the ASME 2010 Pressure Vessels & Piping Division /K-PVP Conference, July 18-22, 2010, Bellevue, Washington, USA
93. プロアクティブ材料経年劣化評価と状態監視技術開発  
庄子哲雄, 竹田陽一, 国谷治郎  
日本保全学会第7回学術講演会, 2010年7月, 浜岡
94. Effects of Cold Work and Stress on Oxidation and SCC behavior of Stainless Steels in PWR Primary Water Environments  
Tetsuo Shoji, Kazuhiko Sakaguchi, Zhanpeng Lu  
Fontevraud7, Sep. 2010, Avion, France
95. 産学連携で切り拓く自動車産業の未来  
庄子哲雄  
平成22年度宮城県企業立地セミナー in Nagoya, 2010年11月, 名古屋

96. Effects of Cold Work on SCC behavior of 316 stainless Steel in PWR Primary Water Environments  
Tetsuo Shoji and Zhanpeng Lu  
2nd International Conference on Advances in Nuclear Materials (ANM-2011), Feb. 2011, Mumbai, India
  
97. Mechanics and Mechanisms of Stress Corrosion Cracking - Role of Stress and Strain, and Hydrogen -  
Tetsuo Shoji  
Corrosion Day : From Corrosion Science to Material Design, Jan. 2011, France
  
98. International Collaborative Research at Tohoku University "International Scientific Network and Industry - University collaboration - Past and Future of Cooperative Research under University Research Initiative"  
Tetsuo Shoji  
3rd Tohoku University International Industry-University Collaboration Symposium, Mar. 2011, Tokyo
  
99. Oxide / Metal Interface analysis and SCC Initiation  
Tetsuo Shoji, Yoichi Takeda  
2nd International Symposium on Materials and Reliability in Nuclear Power Plants, Apr. 2011, Shenyang, China
  
100. 高温水環境下の応力腐食割れ－酸化の局在化と加速化の観点から  
庄子哲雄  
社団法人日本材料学会 腐食防食部門委員会 第280回例会,  
2011年5月, 大阪
  
101. Fundamentals and Mechanisms of Stress Corrosion Cracking of Structural Materials in LWR Environments - Local Approach -  
Tetsuo Shoji  
Seminar at School of Chemistry and Chemical Engineering, May 2011, China
  
102. Fundamentals and Mechanisms of Stress Corrosion Cracking of Structural Materials in LWR Environments - Life Time Evaluation -  
Tetsuo Shoji  
Seminar at Research Institute of Nuclear Power Operation, Jun. 2011, China
  
103. Fundamentals and mechanisms of stress corrosion cracking of structural materials in LWR environments  
Tetsuo Shoji  
Seminar at Shanghai University, Jun. 2011, Shanghai, China

104. Identification and Quantification of Elements of SCC initiation -  
Oxidation Localization and Acceleration  
T. Shoji, Y. Takeda, N. K. Das, K. Sakaguchi, S. Komazaki, J. Kuniya  
Quantitative Micro-Nano (QMN-2) Approach to Predicting SCC of Fe-Cr-Ni  
Alloys - Initiation of SCC, Jun. 2011, Sun Valley, USA
105. プロアクティブ材料経年劣化評価と非破壊技術への期待  
庄子哲雄  
NDE シンポジウム2011－構造健全性と非破壊評価－, 2011年11月, 東京
106. 金属／酸化物界面における酸化の局在化・加速化過程と応力腐食割れ発生  
庄子哲雄  
数学・数理科学と諸科学・産業との連携ワークショップ：広がってゆく数学  
「数学をコアとするスマートイノベーションの探索」, 2011年11月, 仙台
107. 震災からの復興に向けて－長期展望に立った東北地区の問題と産学連携  
庄子哲雄  
文部科学省先端研究施設共用促進事業「先端研究施設共用促進事業連携  
シンポジウム～復興と新生のための科学技術支援と産学官連携推進～」,  
2012年1月, 名古屋
108. 保全システムの体系化とプロアクティブ材料劣化診断  
庄子哲雄  
日本保全学会東北・北海道支部発電所講演会, 2012年2月, 女川

## V. 解説・評論

1. 線形弾性破壊力学の環境強度設計への応用（学術雑誌「防食技術」28巻5号, p292-302）  
庄子哲雄ほか, 1979年4月, 社団法人腐食防食協会
2. 軽水炉压力容器の構造健全性サブクリティカルき裂成長（学会誌「日本機械学会誌」89巻807号, p165-171）  
庄子哲雄, 1986年4月, 社団法人日本機械学会
3. 火力発電高温部材の経年劣化と非破壊診断技術（学会誌「火力原子力発電」37巻8号, p858-871）  
庄子哲雄ほか, 1986年4月, 火力原子力発電技術協会



4. 高温岩体破砕における破壊力学の応用圧力技術（学会誌「圧力技術」26巻4号, p241-248）  
庄子哲雄ほか，1988年4月，日本高圧力技術協会
5. 機器・構造物の寿命診断と長寿命化技術（学会誌「日本機械学会誌」94巻866号, p52-58）  
庄子哲雄，1991年4月，社団法人日本機械学会
6. より丈夫で長持ちする原子炉の技術開発（学会誌「日本原子力学会誌」33巻3号, p205-242）  
庄子哲雄ほか，1991年4月，日本原子力学会
7. 幽門保存胃切除術との関連  
庄子哲雄ほか，1995年10月，XXI meeting of the European Duodenal Club
8. 電位差法による欠陥評価の現状と今後の展望  
庄子哲雄ほか，1996年1月，日本工業出版
9. 非破壊探傷技術 < 原理と最近の技術 >  
庄子哲雄ほか，1998年10月，日本工業出版
10. 電位差法による探傷試験 欠陥深さを定量評価できる集中誘導型交流電位差法の開発  
庄子哲雄，1999年3月，アグネ技術センター
11. 材質型，き裂型及び表面探傷型劣化の非破壊計測・診断技術  
庄子哲雄，1999年11月，日本工業出版
12. 電位差法の最近の動向と課題  
庄子哲雄，2000年11月，社団法人日本非破壊検査協会
13. 応力腐食割れ（特集 より高い信頼性を求めた原子炉材料の最近の研究動向）  
庄子哲雄，2003年8月，アグネ技術センター
14. 大型機器・構造物の経年劣化と電気化学－材質型劣化の非破壊計測・評価と応力腐食割れ  
庄子哲雄，2005年5月，社団法人電機化学会
15. 電位差法による裏面応力腐食割れのモニタリング  
庄子哲雄ほか，2006年11月，社団法人日本非破壊検査協会