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講演タイトル	発表者名	講演会名
Fast fabrication of localized porous alumina patterns with 3D printed microdroplet cell, Bilal Muhanmad,	Bilal Muhanmad, M. Sakairi	Journal of the Electrochemical Society, 081501, 167
3D printed solution flow type microdroplet cell for simultaneous area selective anodizing,	Bilal Muhanmad, M. Sakairi	Journal of Advanced Research, 26, 43-61
Kinetic Control of the Li _{0.9} Mn _{1.6} Ni _{0.4} O ₄ Spinel Structure with Enhanced Electrochemical Performance	F. A. Vásquez, N. C. Rosero-Navarro, A. Miura, R. Jalem, Y. Goto, M. Nagao, Y. Tateyama, K. Tadanaga, and J. A. Calderón	ACS Appl. Mater. Interfaces 13, 12, 14056–14067
Quasi-static 3D structure of graphene ripple measured using aberration-corrected TEM	Y. Segawa, K. Yamazaki, J. Yamasaki, and K. Gohara	Nanoscale
Single Pt Atoms on N-Doped Graphene: Atomic Structure and Local Electronic States	R. Sugimoto, Y. Segawa, A. Suzuta, Y. Kunisada, T. Uchida, K. Yamazaki, and K. Gohara	J Phys. Chem. C
Extraordinary alternating metal-insulator transitions in CaRuO ₃ ultrathin films at integer multiples of 25 Å of thickness	M. Sakoda, H. Nobukane, S. Shimoda, and S. Tanda	Phys. Rev. B 104, 195420
An investigation of surface contamination introduced during He ⁺ implantation and subsequent effects of thermal oxidation of Cu	Subing Yang, Yuki Nakagawa, Tamaki Shibayama	Applied Surface Science, 579, 152163 (2022)

Analysis for the Mechanism of Accelerated Corrosion on Low Alloy Steel in Air-solution Alternating Condition	Kyohei Otani, Takashi Tsukada, Fumiyoshi Ueno	Materials Transactions
Synergistic effects of metal cations and sodium gluconate on the inhibition of freshwater corrosion of mild steel	Kyohei Otani, Masatoshi Sakairi	Materials Transactions
気液界面模擬環境における炭素鋼の腐食メカニズム	大谷恭平、加藤千明	Zairyo-to-Kankyo
Development of Hydrogen-Permeable Metal Support Electrolysis Cells	Aoki, Y (Aoki, Yoshitaka) ; Nishimura, S (Nishimura, Shinichi) ; Jeong, S (Jeong, SeongWoo) ; Kitano, S (Kitano, Sho) ; Habazaki, H (Habazaki, Hiroki)	ACS Appl. Energy Mater. 2022, 5, 2, 1385–1389
High strength hydrogels enable dendrite-free Zn metal anodes and high-capacity Zn–MnO ₂ batteries via a modified mechanical suppression effect	Zhu, RJ (Zhu, Ruijie) ; Yang, HJ (Yang, Huijun) ; Cui, W (Cui, Wei) ; Fadillah, L (Fadillah, Laras) ; Huang, TH (Huang, Tianhong) ; Xiong, ZT (Xiong, Zetao) ; Tang, CM (Tang, Chunmei) ; Kowalski, D (Kowalski, Damian) ; Kitano, S (Kitano, Sho) ; Zhu, CY (Zhu, Chunyu) ; King, DR (King, Daniel R.) ; Kurokawa, T (Kurokawa, Takayuki) ; Aoki, Y (Aoki, Yoshitaka) ; Habazaki, H (Habazaki, Hiroki)	J. Mater. Chem. A, 2022, 10,3122
Development of Hydrogen-	Aoki, Y (Aoki, Yoshitaka) ;	ACS Appl. Energy Mater.

Permeable Metal Support Electrolysis Cells	Nishimura, S (Nishimura, Shinichi) ; Jeong, S (Jeong, SeongWoo) ; Kitano, S (Kitano, Sho) ; Habazaki, H (Habazaki, Hiroki)	2022, 5, 2, 1385–1389
High-corrosion-resistance mechanism of graphitized platelet-type carbon nanofibers in the OER in a concentrated alkaline electrolyte	Sato, Y (Sato, Yuki) ; Yamada, N (Yamada, Naohito) ; Kitano, S (Kitano, Sho) ; Kowalski, D (Kowalski, Damian) ; Aoki, Y (Aoki, Yoshitaka) ; Habazaki, H (Habazaki, Hiroki)	: J. Mater. Chem. A, 2022, 10,8208
Enhanced Performance of Protonic Solid Oxide Steam Electrolysis Cell of Zr-Rich Side BaZr _{0.6} Ce _{0.2} Y _{0.2} O _{3-δ} Electrolyte with an Anode Functional Layer	Toriumi, H (Toriumi, Hajime) ; Jeong, S (Jeong, SeongWoo) ; Kitano, S (Kitano, Sho) ; Habazaki, H (Habazaki, Hiroki) ; Aoki, Y (Aoki, Yoshitaka)	ACS Omega 2022, 7, 11, 9944–9950
Observation of currentless redox reactions on surface of water jet immersed in low-pressure plasma	Takeshi Ito <i>et al</i>	2022 <i>Plasma Sources Sci. Technol.</i> 31 06LT02
Effects of gas phase ion irradiation and vacuum annealing on the visible light photocatalytic properties of WO ₃	Yuki Nakagawa, Yuya Hayashi, Subing Yang, Tamaki Shibayama	Vacuum, 206, 111519 (2022)
Experimental investigation on the mechanical and interfacial properties of fiber-reinforced geopolymer layer on the tension zone of normal concrete.	Kazutaka Shirai, Junta Horii, Koki Nakamuta, Wee Teo	Construction and Building Materials, 360, 129568.(2022)

