

■ 2020

Title	The ceramide [NP]/[NS] ratio in the stratum corneum is a potential marker for skin properties and epidermal differentiation
Author (affiliation)	Yokose U ¹ , Ishikawa J ¹ , Morokuma Y ¹ , Naoe A ¹ , Inoue Y ¹ , Yasuda Y ¹ , Tsujimura H ¹ , Fujimura T ¹ , Murase T ¹ and Hatamochi A ² (¹ Kao Corporation, ² Dokkyo Medical University)
Journal	BMC Dermatology

Title	Evaluation of the Cytotoxicity of Various Hand Disinfectants and Ozonated Water to Human Keratinocytes in a Cultured Epidermal Model
Author (affiliation)	Kashiwazaki J, Nakamura K, Hara Y, Harada R, Wada I, Kanemitsu K (Fukushima Medical University)
Journal	Advances in Skin & Wound Care (2020)

Title	A novel water-in-oil emulsion with a lecithin-modified bentonite prevents skin damage from urban dust and cedar pollen
Author (affiliation)	Iwanaga T ¹ , Nioh A ¹ , Reed N ² , Kiyokawa H ¹ , Akatsuka H ¹ (¹ POLA CHEMICAL INDUSTRIES, INC., ² Jurlique International Pty. Ltd.)
Journal	Int J Cosmet Sci.

■ 2019

Title	Predicting the results of a 24-hr human patch test for surfactants: utility of margin-setting in a reconstructed human epidermis model.
Author (affiliation)	Sugiyama M ^{1,2} , Ueki T ¹ , Ogata S ³ , Itagaki H ² . (¹ Shiseido Global Innovation Center, ² Department of Chemical and Energy Engineering, Yokohama National University, ³ Department of Environment and Information Science, Yokohama National University.)
Journal	J Toxicol Sci.

Title	A comparative study of skin irritation caused by novel bis-quaternary ammonium compounds and commonly used antiseptics by using cell culture methods.
Author (affiliation)	Yamamoto M ¹ , Matsumura R ¹ , Hirata Y ¹ , Nagamune H ² . (¹ Biochemical Laboratory, Saraya Co., Ltd., ² Tokushima University)
Journal	Toxicol In Vitro.

Title	Effects of surface charge and flexibility of liposomes on dermal drug delivery
Author (affiliation)	Ibaraki H ¹ , Kanazawa T ^{1,2} , Oogi C ¹ , Takashima Y ¹ , Seta Y ¹ (¹ Tokyo University of Pharmacy and Life Sciences, ² Nihon University)
Journal	Journal of Drug Delivery Science and Technology.

Title	Evaluation of cell viability and metabolic activity of a 3D cultured human epidermal model using a dynamic autoradiographic technique with a PET radiopharmaceutical.
Author (affiliation)	Sasaki T, Tamaki J, Nishizawa K, Kojima T, Tanaka R, Moriya R, Sasaki H & Maruyama H (Kitasato Univ.)
Journal	Scientific Report.

■ 2018

Title	Strawberry seed extract and its major component, tiliroside, promote ceramide synthesis in the stratum corneum of human epidermal equivalents
Author (affiliation)	Takeda S ¹ , Shimoda H ¹ , Takarada T ¹ , Imokawa G ^{2,3} . (¹ Research & Development Division, Oryza Oil & Fat Chemical Co., Ltd., ² Research Institute for Biological Functions, Chubu University, ³ Center for Bioscience Research and Education, Utsunomiya University)
Journal	PLoS One.

Title	Comparative assessment of 24-hr primary skin irritation test and human patch test data with in vitro skin irritation tests according to OECD Test Guideline 439 (for quasi-drugs in Japan)
Author (affiliation)	Sugiyama M ^{1,2} , Akita M ^{1,3} , Alépée N ⁴ , Fujishiro M ⁵ , Hagino S ^{1,2} , Handa Y ⁶ , Ikeda H ^{1,7} , Imai N ^{1,8} , Jitsukawa S ⁹ , Katoh M ¹⁰ , Kurihara K ¹¹ , Kyotani D ¹¹ , Nomura S ⁸ , Okamoto Y ¹ , Okumura H ^{1,12} , Omori T ^{1,13} , Sugibayashi K ^{1,14} , Todo H ^{1,14} , Toyoda A ^{1,15} , Ohno Y ^{1,16} . (¹ Working Group on Alternatives to Primary Skin Irritation Test, Japanese Society of Alternatives to Animal Experiments (JSAAE), ² Shiseido Global Innovation Center, ³ Faculty of Family and Consumer Sciences, Kamakura Women's University, ⁴ L'Oréal Research & Innovation, France, ⁵ Cosmos Technical Center Co., Ltd., ⁶ Kurabo Industries Ltd., ⁷ Mandom Corp., ⁸ KOSÉ Corp., Ltd., ⁹ L'Oréal Research & Innovation, ¹⁰ Japan Tissue Engineering Co., Ltd., ¹¹ Nikoderm Research Inc., ¹² Institute of Beauty and Health Science, ¹³ Division of Biostatistics, Department of Social/Community Medicine and Health Science, Kobe University School of Medicine, ¹⁴ Faculty of Pharmacy and Pharmaceutical Sciences, Josai University, ¹⁵ Pola Chemical Industries, Inc., ¹⁶ Kihara Memorial Yokohama Foundation)
Journal	J Toxicol Sci

■ 2017

Title	Amino Carbonylation of Epidermal Basement Membrane Inhibits Epidermal Cell Function and Is Suppressed by Methylparaben
Author (affiliation)	Morimoto H., Gu L., Zeng H. and Maeda K. (Tokyo University of Technology Graduate School)
Journal	Cosmetics

■ 2016

Title	An in vitro skin sensitization assay termed EpiSensA for broad sets of chemicals including lipophilic chemicals and pre/pro-haptens.
Author (affiliation)	Saito K, Takenouchi O, Nukada Y, Miyazawa M, Sakaguchi H (Kao Corporation, R&D, Safety Science Research)
Journal	Toxicol In Vitro.

Title	Hand hygiene using a new hand-cleansing formulation without sanitizers: Effect on Staphylococcus aureus removal and recovery of properties against skin damage
Author (affiliation)	Asaoka K ^{1,2} , Endo S ¹ , Suzuki Y ¹ , Komuro S ³ , Nemoto T ⁴ , Kaku M ¹ (¹ Tohoku University, ² Kao Corporation, ³ Geriatric Health Services Facility "Cosmos", ⁴ Izumi Orthopedic Hospital)
Journal	Am J Infect Control.

Title	Upregulation of gene expression levels of ceramide metabolic enzymes after application of sphingomyelin-based liposomes to a three-dimensional cultured human epidermis model.
Author (affiliation)	Itaya Y and Tokudome Y (Josai University)
Journal	Biochem Biophys Res Commun.

■ 2015

Title	Esterase activity and intracellular localization in reconstructed human epidermal cultured skin models.
Author (affiliation)	Tokudome Y, Katayanagi M, Hashimoto F. (Josai University)
Journal	Annals of Dermatology

■ 2014

Title	In vitro analysis of the effect of alkyl-chain length of anionic surfactants on the skin by using a reconstructed human epidermal model.
Author (affiliation)	Yamaguchi F, Watanabe S, Harada F, Miyake M, Yoshida M, Okano T. (Lion Corporation)
Journal	Journal of Oleo Science

Title	A catch-up validation study of an in vitro skin irritation test method using reconstructed human epidermis LabCyte EPI-MODEL24
Author (affiliation)	Kojima H ¹ , Katoh M ² , Shinoda S ³ , Hagiwara S ³ , Suzuki T ⁴ , Izumi R ⁴ , Yamaguchi Y ⁵ , Nakamura M ⁵ , Kasahawa T ⁶ , Shibai A ⁶ (¹ Japanese Centre for the Validation of Alternative Methods, ² Japan Tissue Engineering Co. Ltd, ³ Drug Safety Testing Centre Co. Ltd, ⁴ FANCL Corporation, ⁵ Kobayashi Pharmaceutical Co. Ltd, ⁶ Fujifilm Corporation)
Journal	J Appl Toxicol.

Title	Keratinization induced by air exposure in the reconstructed human epidermal model: an in vitro model of a cultured epithelial autograft.
Author (affiliation)	Hanada T, Itahara Y, Katoh M, Inoie M, Hata K. (Japan Tissue Engineering Co., Ltd.)
Journal	Journal of Bioscience and Bioengineering

Title	Pseudomonas-derived ceramidase induces production of inflammatory mediators from human keratinocytes via sphingosine-1-phosphate
Author (affiliation)	Oizumi A ¹ , Nakayama H ¹ , Okino N ² , Iwahara C ¹ , Kina K ¹ , Matsumoto R ¹ , Ogawa H ¹ , Takamori K ¹ , Ito M ² , Suga Y ¹ , Iwabuchi K ¹ , (¹ Juntendo University, ² Kyushu University)
Journal	PLoS one

■ 2013

Title	Stratum corneum drying drives vertical compression and lipid organization and improves barrier function in vitro
Author (affiliation)	Iwai I ¹ , Kunizawa N ¹ , Yagi E ¹ , Hirao T ¹ , Hatta I ² (¹ Shiseido Research Center, ² Spring 8)
Journal	Acta Dermato Venereologica

Title	Photoprotective effects of inclusion complexes of fullerenes with polyvinylpyrrolidone
Author (affiliation)	Murakami M ¹ , Hyodo S ¹ , Fujikawa Y ² , Fujimoto T ^{3,4} , Maeda K ² (¹ Vitamine C60 BioResearch Co., ² Tokyo University of Technology, ³ Clinic F, ⁴ Tokai University)
Journal	Photodermatology, Photoimmunology and Photomedicine

Title	Topical surfactant-induced pruritus: involvement of histamine released from epidermal keratinocytes
Author (affiliation)	Inami Y ^{1,2} , Andoh T ¹ , Sasaki A ¹ and Kuraishi Y ¹ (¹ University of Toyama, ² Hoyu Co., Ltd.)
Journal	The Journal of Pharmacology and Experimental Therapeutics

Title	Validation Study of the In Vitro Skin Irritation Test with the LabCyte EPI-MODEL24
Author (affiliation)	Kojima H ¹ , Ando Y ² , Idehara K ³ , Katoh M ⁴ , Kosaka T ⁵ , Miyaoka E ⁶ , Shinoda S ⁷ , Suzuki T ⁸ , Yamaguchi Y ⁹ , Yoshimura I ⁶ , Yuasa A ¹⁰ , Watanabe Y ¹¹ and Takashi Omori ¹² (¹ Japanese Centre for the Validation of Alternative Methods, ² Aiken Co. Ltd, ³ Daicel Corporation, ⁴ Japan Tissue Engineering Co. Ltd, ⁵ The Institute of Environmental Toxicology, ⁶ Tokyo University of Science, ⁷ Drug Safety Testing Centre Co. Ltd, ⁸ Fancl Corporation, ⁹ Kobayashi Pharmaceutical Co. Ltd, ¹⁰ Fujifilm Corporation, ¹¹ Maruishi Pharmaceutical Co. Ltd, ¹² Doshisha University)
Journal	Alternative to Laboratory Animals

Title	Changes in ceramides and glucosylceramides in mouse skin and human epidermal equivalents by rice-derived glucosylceramide
Author (affiliation)	Shimoda H ¹ , Terazawa S ¹ , Hitoe S ¹ , Tanaka J ¹ , Nakamura A ² , Matsuda H ² and Yoshikawa M ² (¹ Oryza Oil and Fat Chemical Co. Ltd., ² Kyoto Pharmaceutical University)
Journal	Journal of medicinal food

Title	Th1 cytokines accentuate but Th2 cytokines attenuate ceramide production in the stratum corneum of human epidermal equivalents: An implication for the disrupted barrier mechanism in atopic dermatitis
Author (affiliation)	Sawada E ¹ , Yoshida N ² , Sugiura A ¹ and Imokawa G ^{1,3} (¹ Tokyo University of Technology, ² Ikeda Mohando Co., Ltd., ³ Chubu University)
Journal	Journal of Dermatological Science

Title	A reconstructed human epidermal keratinization culture model to characterize ceramide metabolism in the stratum corneum
Author (affiliation)	Yoshida N ^{1,2} , Sawada E ¹ and Imokawa G ¹ (¹ Tokyo University of Technology, ² Ikeda Mohando Co., Ltd.)
Journal	Archives of Dermatological Research

Title	Lack of promoting effect of titanium dioxide particles on chemically-induced skin carcinogenesis in rats and mice
Author (affiliation)	Sagawa Y ¹ , Futakuchi M ¹ , Xu J ¹ , Fukamachi K ¹ , Sakai Y ¹ , Ikarashi Y ² , Nishimura T ² , Suzuki M ¹ , Tsuda H ¹ , Morita A ¹ . (¹ Nagoya City University, ² National Institute of Health Science)
Journal	The Journal of Toxicological Sciences.

Title	Podoplanin expression in wound and hyperproliferative psoriatic epidermis: Regulation by TGF-β and STAT-3 activating cytokines, INF-γ, IL-6, and IL-22
Author (affiliation)	Honma M, Minami-Hori M, Takahashi H, Iizuka H (Asahikawa Medical University)
Journal	Journal of Dermatological Science

Title	Eucalyptus increases ceramide levels in keratinocytes and improves stratum corneum function.
Author (affiliation)	Ishikawa J, Shimotoyodome Y, Chen S, Ohkubo K, Takagi Y, Fujimura T, Kitahara T, Takema Y. (Kao Corporation)
Journal	International Journal of Cosmetic Science

Title	Prediction of Percutaneous Absorption in Human Using Three-Dimensional Human Cultured Epidermis LabCyte EPI-MODEL
Author (affiliation)	Hikima T, Kaneda N, Matsuo K, Tojo K. (Kyushu Institute of Technology)
Journal	Biological and Pharmaceutical Bulletin

■ 2011

Title	Refinement of LabCyte EPI-MODEL24 Skin Irritation Test Method for Adaptation to the Requirements of OECD Test Guideline 439
Author (affiliation)	Katoh M., Hata K. (Japan Tissue Engineering Co., Ltd.)
Journal	Alternatives to Animal Testing and Experimentation

Title	Lack of promoting effect of titanium dioxide particles on ultraviolet B-initiated skin carcinogenesis in rats
Author (affiliation)	Xu J ^{1,5} , Sagawa Y ² , Futakuchi M ¹ , Fukamachi K ¹ , Alexander DB ^{1,5} , Furukawa F ³ , Ikarashi Y ⁴ , Uchino T ⁴ , Nishimura T ⁴ , Morita A ² , Suzui M ¹ , Tsuda H ⁵ . (¹ Department of Molecular Toxicology Nagoya City University, ² Department of Dermatology, Nagoya City University, ³ Daiyukai Institute of Medical Sciences, Inc., ⁴ National Institute of Health Sciences, ⁵ Laboratory of Nanotoxicology Project Nagoya City University)
Journal	Food and Chemical Toxicology

Title	In vitro genotoxicity test approaches with better predictivity: summary of an IWGT workshop.
Author (affiliation)	Pfuhler S ¹ , Fellows M ² , van Benthem J ³ , Corvi R ⁴ , Curren R ⁵ , Dearfield K ⁶ , Fowler P ⁷ , Frötschl R ⁸ , Elhajouji A ⁹ , Le Hégarat L ¹⁰ , Kasamatsu T ¹¹ , Kojima H ¹² , Ouedraogo G ¹³ , Scott A ¹⁴ , Speit G ¹⁵ . (¹ The Procter and Gamble Co., ² AstraZeneca, ³ National Institute for Public Health and Environment, ⁴ Institute for Health Consumer Protection, ⁵ Institute for In Vitro Sciences Inc., ⁶ Food Safety and Inspection Service, ⁷ Covance Laboratories Limited, ⁸ BfArm, ⁹ Novartis Institute for Biomedical Research, ¹⁰ Anses, ¹¹ Kao Corporation, ¹² JaCVAM, ¹³ L'Oreal Life Sciences Research, ¹⁴ Unilever, ¹⁵ Universitat Ulm)
Journal	Mutation Research

Title	Increase in Ceramide Level after Application of Various Sizes of Sphingomyelin Liposomes to a Cultured Human Skin Model.
Author (affiliation)	Tokudome Y ¹ , Jinno M ¹ , Todo H ¹ , Kon T ² , Sugibayashi K ¹ , Hashimoto F. ¹ (¹ Josai University, ² Shalom Ltd.)
Journal	Skin Pharmacology and Physiology

■ 2010

Title	Ionic liquid-in-oil microemulsion as a potential carrier of sparingly soluble drug: characterization and cytotoxicity evaluation.
Author (affiliation)	Moniruzzaman M. ¹ , Tamura M. ¹ , Tahara Y. ¹ , Kamiya N. ^{1,2} and Goto M. ^{1,2} (¹ Graduate School of Engineering, Kyushu University, ² Kyushu University)
Journal	International Journal of Pharmaceutics

Title	REVIEW Evaluation of Anti-inflammatory and Anti-allergic Effects of Food Components Using DNA Microarray Analysis
Author (affiliation)	Kobori M ¹ ., Nagai K ^{1,2} ., Takahashi Y ¹ ., Oike H ¹ . (¹ National Food Research Institute, ² Mitsubishi Rayon Co., Ltd.)
Journal	Japan Agricultural Research Quarterly

Title	Preferential induction of endothelin-1 in a human epidermal equivalent model by narrow-band ultraviolet B light sources
Author (affiliation)	Noborio R., Morita A. (Nagoya City University of Medical Sciences)
Journal	Photodermatology, Photoimmunology and Photomedicine

Title	Assessment of the human epidermal model LabCyte EPI-MODEL for <i>In vitro</i> skin corrosion testing according to the OECD test guideline 431
Author (affiliation)	Katoh M., Hamajima F., Ogasawara T., Hata K. (Japan Tissue Engineering Co., Ltd.)
Journal	The Journal of Toxicological Sciences

Title	Effect of topically applied sphingomyelin-based liposomes on the ceramide level in a three-dimensional cultured human skin model.
Author (affiliation)	Tokudome Y, Uchida R, Yokote T, Todo H, Hada N, Kon T, Yasuda J, Hayashi H, Hashimoto F, Sugibayashi K. (Josai University)
Journal	Journal of Liposome Research

■ 2009

Title	The Unfolded Protein Response Is Activated in Differentiating Epidermal Keratinocytes
Author (affiliation)	Sugiura K ¹ , Muro Y ¹ , Futamura K ^{1,2} , Matsumoto K ² , Hashimoto N ² , Nishizawa Y ¹ , Nagasaka T ¹ , Saito H ² , Tomita Y ¹ , Usukura J ³ . (¹ Nagoya University Graduate School of Medicine, ² National Research Institute of Child Health & Development, ³ Nagoya University)
Journal	Journal of Investigative Dermatology

Title	Morphological Characterization of a Reconstructed, Cultured Human Epidermal Model (LabCyte EPI-MODEL) As an Alternative to <i>in Vivo</i> Models
Author (affiliation)	Katoh M., Kubo K., Hamajima F., Ogasawara T., Hata K. (Japan Tissue Engineering Co., Ltd.)
Journal	Alternatives to Animal Testing and Experimentation

Title	Trypsin as a novel potential absorption enhancer for improving the transdermal delivery of macromolecules
Author (affiliation)	Li YZ. ¹ , Quan YS. ^{2,3} , Zang L. ² , Jin MN. ² , Kamiyama F. ³ , Katsumi H. ² , Tsutsumi S. ¹ , Yamamoto A. ² (¹ Kyoto University, ² Kyoto Pharmaceutical University, ³ CosMED Pharmaceutical Co. Ltd)
Journal	Journal of Pharmacy and Pharmacology

Title	Assessment of human epidermal model LabCyte EPI-MODEL for in vitro skin irritation testing according to European centre for the validation of alternative methods (ECVAM)-Validated Protocol
Author (affiliation)	Katoh M., Hamajima F., Ogasawara T., Hata K. (Japan Tissue Engineering Co., Ltd.)
Journal	The Journal of Toxicological Sciences

Title	Dichotomous effect of ultraviolet B on the expression of corneodesmosomal enzymes in human epidermal keratinocytes
Author (affiliation)	Nin M., Katoh N., Kokura S., Handa O., Yoshikawa T., Kishimoto S. (Kyoto Prefectural University of Medicine)
Journal	Journal of Dermatological Science

Title	The development of a filter to enhance the efficacy and safety of excimer light (308 nm) therapy.
Author (affiliation)	Kobayashi K. ¹ , Yasuda Y. ¹ , Shintani Y. ¹ , Sumitomo T. ² , Saga T. ² , Kimura M. ² , Yamamoto A. ³ , Mori T. ³ , Maeda A. ¹ , Yamaguchi Y. ¹ , Morita A. ¹ (¹ Nagoya City University, ² Ushio Inc., ³ Nara Medical University)
Journal	Photodermatology, Photoimmunology & Photomedicine

Title	Evaluation of the skin irritation using a DNA microarray on a reconstructed human epidermal Model
Author (affiliation)	Niwa M. ¹ , Nagai K. ^{2,3} , Oike H. ² , Kobori M. ² (¹ Katakura Chikkarin Co., Ltd., ² National Food Research Institute, ³ Mitsubishi Rayon Co., Ltd.)
Journal	Biological & Pharmaceutical Bulletin

■ 2008

Title	Test Method for Skin Damage of Titania Photocatalyst Nanoparticles in vitro.
Author (affiliation)	Watanabe E., Fukaya M., Nishizawa K., Miki T., Taoda H. (National Institute of Advanced Industrial Science and Technology Chubu)
Journal	Material Science Forum

Title	Change in optical properties of stratum corneum induced by protein carbonylation in vitro.
Author (affiliation)	Iwai I. ¹ , Ikuta K. ¹ , Murayama K. ² , Hirao T. ¹ (¹ Shiseido Life Science Research Center, ² Gifu University)
Journal	International Journal of Cosmetic Science

Title	Study on the prediction of human lip irritation from cosmetics materials using HeLa-MTT assay.
Author (affiliation)	Morinaga M., Shingaki K., Mori T., Yanagihara K. (NOEVIR Co., Ltd.)
Journal	Alternatives to Animal Testing and Experimentation

■ 2007

Title	LEDGF/DFS70, a major autoantigen of atopic dermatitis, is a component of keratohyalin granules
Author (affiliation)	Sugiura K. ¹ , Muro Y. ¹ , Nishizawa Y. ¹ , Okamoto M. ¹ , Shinohara T. ² , Tomita Y. ¹ , Usukura J. ¹ (¹ Nagoya University Graduate School of Medicine, ² University of Nebraska Medical Center)
Journal	Journal of Investigative Dermatology

■ 2006

Title	Dose-response evaluation using an epidermal model, an alternative to skin irritation testing.
Author (affiliation)	Kojima H., Ishii I., Nakata S., Konishi H. (Nippon Menard Cosmetic Co., Ltd)
Journal	Alternatives to Animal Testing and Experimentation