

業績リスト

※ 以下すべて自分の名前にアンダーラインが引いてあります。

①査読付論文：

(1) **Article** (学術論文の内、Scopus で検索して Article と分類されているもの)

- 1) Masahiro Minagawa, Takuma Tanabe, Eiki Kondo, Kenji Kamimura, and Munehiro Kimura, “Experimental analysis of dark frame growth mechanism in organic light-emitting diodes”, Japanese Journal of Applied Physics, 57(1), (2018) 02CA10 DOI:10.7567/JJAP.57.02CA10
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- 6) Naoto Endo, Takahiro Matsumoto, Hirotsugu Kikuchi and Munehiro Kimura, “Study of polymer-stabilised blue phase liquid crystal on a single substrate,” Liquid Crystals, 43 (2016) pp.66-76. DOI:10.1080/02678292.2015.1055602
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fabricated by slit coater,” *Liquid Crystals*, **41** (2014) pp.667-672.

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- 10) Munehiro Kimura, Yukihiro Nagataki, Keisuke Ueda, and Takuya Yamamoto, “Study on the functions of UV curable reactive mesogen in LCD Fabricated by Coating method,” *J. Photopolym. Sci. Technol.*, **27**(3) (2014) pp.291-296.
- 11) 山名達, テナインウー, 菊池裕嗣, 木村宗弘, 赤羽正志, “界面配向がブルー相液晶の安定性および電気光学特性に与える影響,” *映像情報メディア学会誌*, **68**(10) (2014) pp.J432-J436.
- 12) Munehiro Kimura, Norihiro Nagumo, Thet Naing Oo, Naoto Endo, Hirotsugu Kikuchi, and Tadashi Akahane, “Single-substrate polymer-stabilized blue phase liquid crystal display,” *Optical Materials Express*, **3**(12), (2013) pp.2086-2095.
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- 16) Kazuya Goda, Mami Nagasawa, Munehiro Kimura, and Tadashi Akahane “Evaluation technique of cell thickness, pretilt angle, and twist angle for guest-host liquid crystal displays,” *J. Opt. Soc. Am. A*. **30** (2013) pp.717-725.
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(2) **Conference paper** (学術論文の内、Scopus で検索して Conference paper と分類されているもの、招待講演の論文があればそれを明記)

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- 12) Hideaki Sato, Katsuyoshi Miyashita, Munehiro Kimura and Tadashi Akahane, "Study of Liquid Crystal Alignment Formed Using Slit Coater," Japanese Journal of Applied Physics, 50(1) (2011) 01BC16.
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④特許 (出願が古い順)

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⑤総説・解説・著書

(1) 著書 (学術書)

- 1) Munehiro Kimura, “Printed Anisotropic Molecular Alignments,” (Ed.)Li, Quan, 'Anisotropic Nanomaterials: Preparation, Properties, and Applications,' Chap.13, Springer (2015) pp.469-494. (著書,分担任筆)
- 2) 木村宗弘, “液晶パネルの製法を革新する配向印刷法,” ディスプレイ技術年鑑 2014,日経 BP 社 (2013) 第2章1節-3. 分担任筆

3) 木村宗弘, “スリットコーターを用いた液晶分子配向技術の特徴と応用”
塗布技術と乾燥トラブル対策, 技術情報協会 (2013) 第7章 11節 pp.385-391.
分担執筆

4) 石川謙、一ノ瀬秀雄、氏家誠司、太田和親、岡村維彦、北村道夫、木村宗弘、
齊藤一弥、高西陽一、廣嶋綱紀、藤掛英夫、山口留美子、山本潤, “液晶科学
実験入門” シグマ出版(2007)

5) 中村尚武、木村初男、木村宗弘、三田茂、高西陽一、齋藤伸一、楠本哲生、
氏家誠司、一ノ瀬秀男、真鍋典子、堀佳也子、加藤隆史、清水洋、青木良夫、
野平博之、金澤昭彦、池田富樹、市村国宏, “液晶材料研究の基礎と新展開” シ
グマ出版(1997)

著書(科学読み物)

- 1) 吉川敏則・末松久幸編著 “挑戦こそが成功の鍵” 近代科学社 (2010) (分担執筆)
- 2) 菅井清美 編著 “くらしのなかの科学技術” 考古堂 (2006) (分担執筆)

解説

- 1) 木村宗弘, “液晶ディスプレイの基礎,” 映像情報メディア学会誌, **67**(7)
(2013)pp.43-48.
- 2) 木村宗弘、赤羽正志, “斜め入射透過偏光解析法による液晶セルの評価,” 光学,
34 (2005) pp.244-249.
- 3) 田所利康, 木村宗弘, 赤羽正志, 鳥海弥和 “全反射エリプソメトリーによる界面
液晶ダイナミクスの観測,” 応用物理 **73** (2004) pp.759-763.
- 4) 木村宗弘, 赤羽正志, “Zenithal Bistable Display (ZBD)が拓く双安定型LCDの可
能性,” 液晶, **6** (2002) pp.199-205.

⑥外部資金取得状況

(1) 競争的外部資金の受け入れ状況

1. 科学研究費補助金（期間、種別、題目、金額）：

(1) 研究代表者

- 1) 2016-2017 年、萌芽、「周波数変調方式液中原子間力顕微鏡によるその場観測：鉛蓄電池の充電特性の飛躍的改善」、290 万円
- 2) 2013~2015 年、基盤研究 (C)、「スリットコート法による分子配向界面自己形成機構の徹底解明：完全制御を目指して」、390 万円
- 3) 2003~2004 年、若手研究(B)、「超省電力型液晶表示素子に用いるレーザー光誘起ナノグレーティング界面配向の研究」、380 万円
- 4) 1999~2000 年、奨励研究(A)、「新規な液晶表示素子の分子配向定量評価法に関する研究」380 万円

(2) 研究分担者

- 1) 2018～ 基盤研究 (B)、「高分子ナノ集合体の自己整合配列に基づく3次元ナノ構造の創成」河合晃
- 2) 2015~2017 年、基盤研究 (C)、「アスペクト比を制御した蛍光体ナノロッド配向膜による新規偏光制御平面発光素子の実現」加藤有行
- 3) 2004~2005 年、基盤研究 (C)、「ホログラフィック光誘起メゾスコピック界面による液晶分子配向制御と記録素子への応用」赤羽正志

2. JST、NEDO 等の公的な外部資金（期間、種別、題目、直接経費額）：

(1) 研究責任者

- 1) 2017~2018 年、JST 地域産学地域バリュープログラム「対称斜入射透過偏光解析法によるフレクソエレクトリック係数測定装置の開発」2,306 千円
- 2) 2011~2013 年、JST A-STEP ハイリスク挑戦タイプ、「印刷法による分子配向転写技術の研究開発」7,692 千円
- 3) 2009 年(1年間)、JST シーズ発掘研究(発展型)、「液晶配向印刷法によるシームレスLCD作製工程」、3,847 千円
- 4) 2008 年(1年間)、JST シーズ発掘研究(発掘型)、「液晶配向印刷法によるL

CD作製技術の確立」1,539千円

- 5) 2006年(1年間)、JST シーズ発掘研究、「携帯端末の超低消費電力化のための新規LCD作製技術の確立」、1,539千円

⑦他特記事項

2009年～現在 中級教育士(工学・技術) No.004083

研究活動に関する受賞(自身が主体に受賞したもののみを記載)

- 1) 2018年映像情報メディア学会丹羽高柳賞論文賞
- 2) 2013年度APEX/JJAP編集貢献賞(応用物理学会)
- 3) 1990年、ライフサポートテクノロジー学会奨励賞

国際交流協定窓口教員
国立忠南大学(韓国)

学会・社会活動:

2001年～03年: 日本液晶学会情報委員
2002年～03年: 日本液晶学会編集委員
2002年～2013年: 日本液晶学会サマースクール実行委員
2003年: ～08年日本液晶学会ディスプレイフォーラム委員(幹事)
2004年: International Display Workshop'04 会場副委員長
2005年～06年: Society for Information Display 日本支部会計幹事補佐
2005年～15年: Society for Information Display 日本支部サマーセミナー実行委員
2006年: 日本液晶学会 学会賞推薦委員
2007年～08年: Society for Information Display 日本支部会計幹事
2008年: International Display Workshop'08 会場副委員長
2009年～現在: Society for Information Display 日本支部評議員
2009年: International Display Workshop'09 財務副委員長
2010年～現在: International Display Workshops(IDW), Flexible Electronics(FLX)委員
2015年～17年: IDW, FLX-WS 委員長
2012年～13年: 日本液晶学会理事(研究会担当)
2014年～現在: 映像情報メディア学会編集委員
2015年～2016年: Society for Information Display 日本支部会計幹事
2017年～現在: 映像情報メディア学会ディスプレイ研究会副委員長

以上