

PicoLOTM
PREMIUM

NEXT GENERATION PICO

February 2022



Transforming Technology to Enrich Your Life

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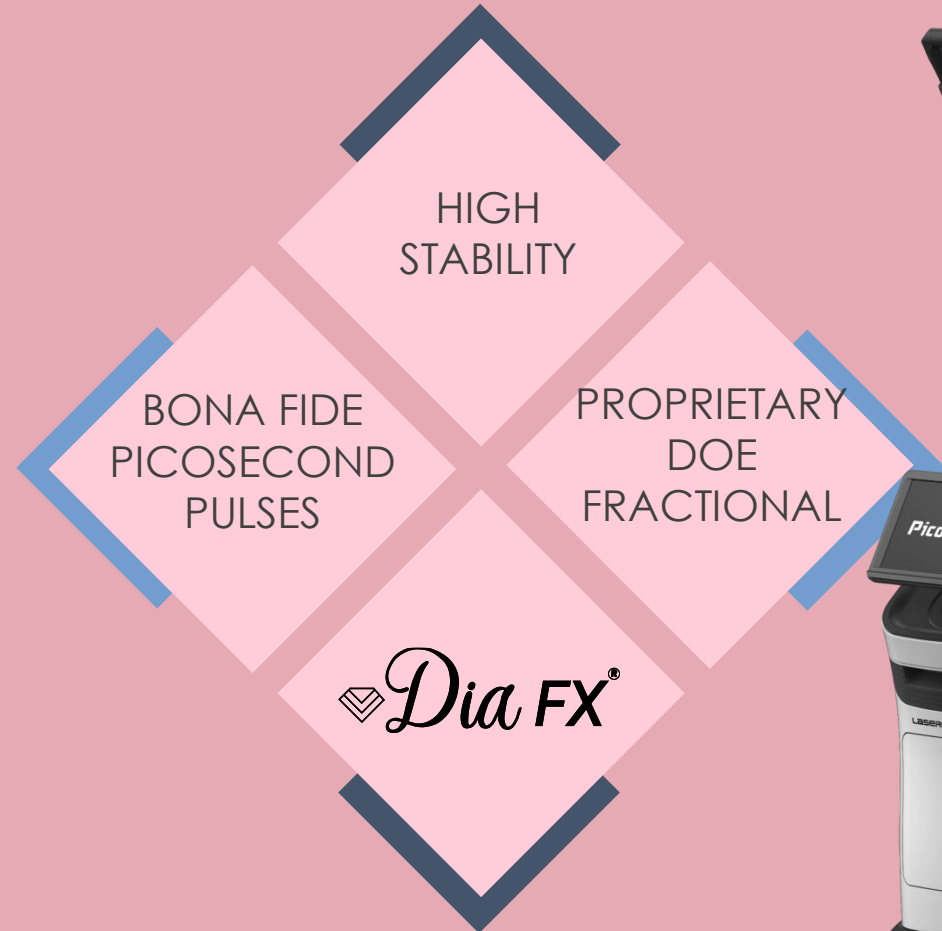


KEY BENEFITS

Introducing PicoLO Premium Evolutionary Picosecond Laser Technology

PicoLO Premium represents the new generation of picosecond lasers that brings you the powerful and stable picosecond laser that you have never experienced before.

It has 1064nm and 532nm dual wavelengths and delivers highly robust and stable ultra-short picosecond pulses of energy to tissues, provided by the LASEROPTEK's proprietary technology.





HIGH STABILITY

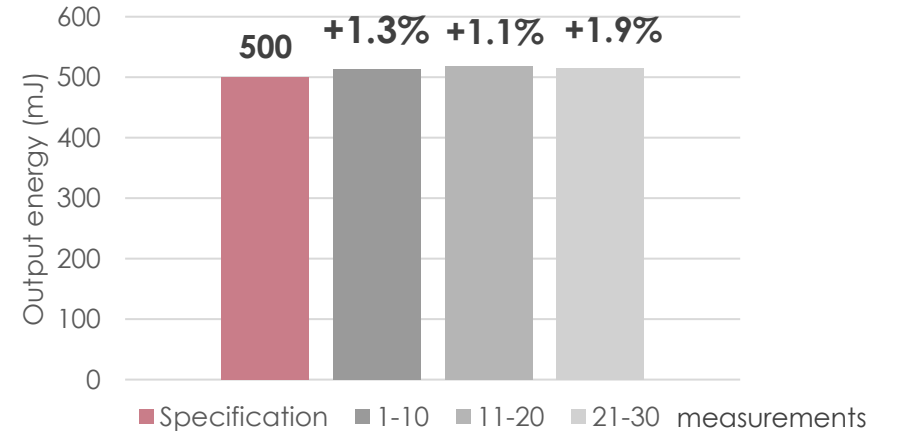
Laser Stability Enables Optimal Results

Output energy and pulse duration stability are key requirements of picosecond lasers to maintain peak power and deliver safe, consistent and optimal treatment outcomes. LASEROPTEK's PicoLO Premium consistently delivers industry-leading laser stability at both 1064nm and 532nm wavelengths, ensuring a photomechanical effect.

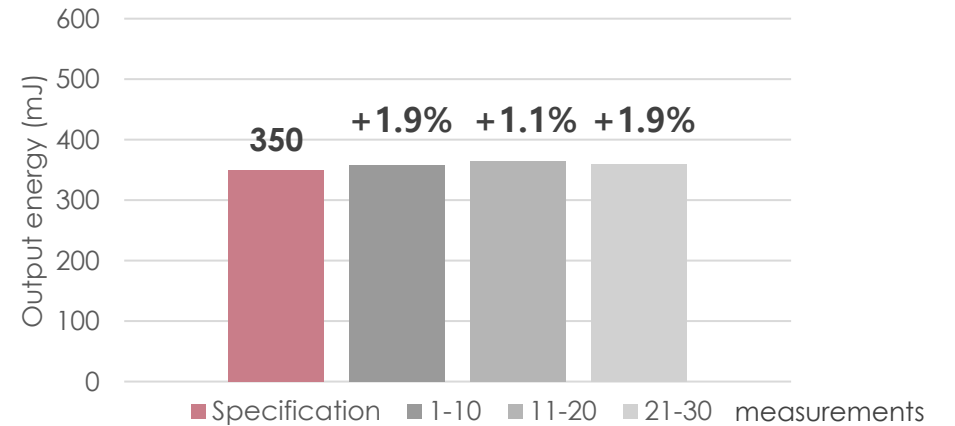
Std dev for output energy < 2%

The above two graphs were measured at 1064nm and 532nm, respectively, using the energy meter. Their standard deviations are below 2%, showing high stability.

Output Energy (1064nm)



Output Energy (532nm)





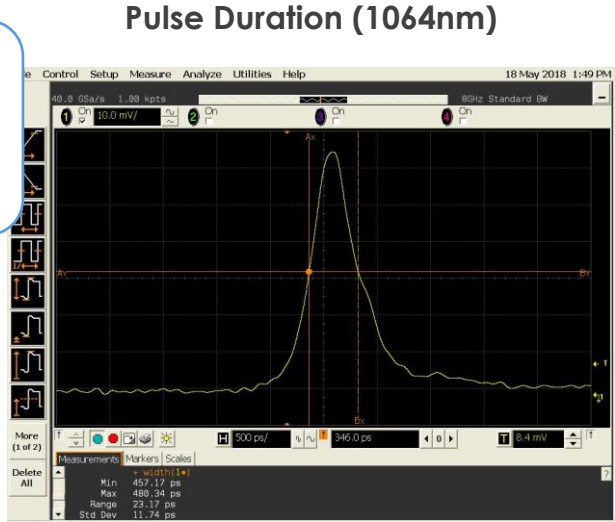
HIGH STABILITY

Consistently Stable High Energy Pulses at 1064 and 532nm

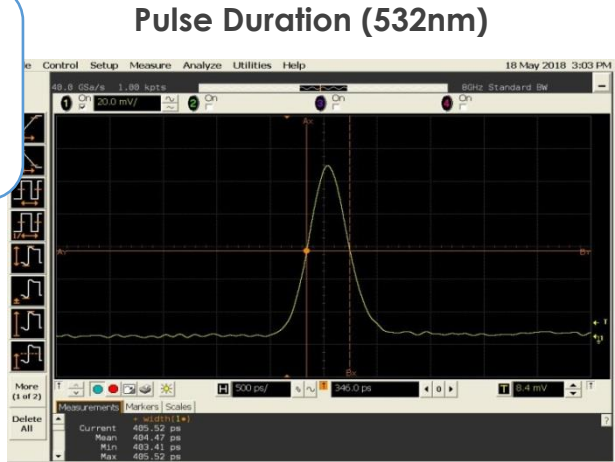
On the oscilloscope testing, the PicoLO Premium system demonstrates to deliver single-peak pulses consistently at both 1064 and 532nm. In addition, it shows consistently stable high-energy pulses both at 1064nm and 532nm by the energy meter testing. Both oscilloscope and energy meter testing data confirm that standard deviations are below 5% and below 2%, respectively.

Std dev for pulse duration < 5%

Current: 452.06ps
Mean: 477.69ps
Min: 452.06ps
Max: 492.37ps
Range: 40.31ps
Std Dev: 22.28ps
(4.7%)



Current: 371.31ps
Mean: 362.04ps
Min: 352.77ps
Max: 371.31ps
Range: 18.54ps
Std Dev: 13.11ps
(3.6%)



The above two graphs were measured at 1064nm and 532nm, respectively, using the oscilloscope. Their standard deviations are below 5%, showing high stability.



PHOTOMECHANICAL EFFECT

PicoLO Premium's ultra-short pulses trigger the strong photomechanical effect

Picosecond lasers have 10 times shorter pulse durations than Q-switched Nd:YAG lasers. Due to their short pulse durations, picosecond lasers are known to generate high peak power levels, resulting in greater photomechanical effects and less desirable photothermal effects, minimizing unwanted heat diffusion.

A predominant photomechanical effect made by PicoLO Premium's ultra-short pulses reduces epidermal injury and enhances to fragment the deeper pigment and ink particles. Faster treatment results in shorter treatment sessions.

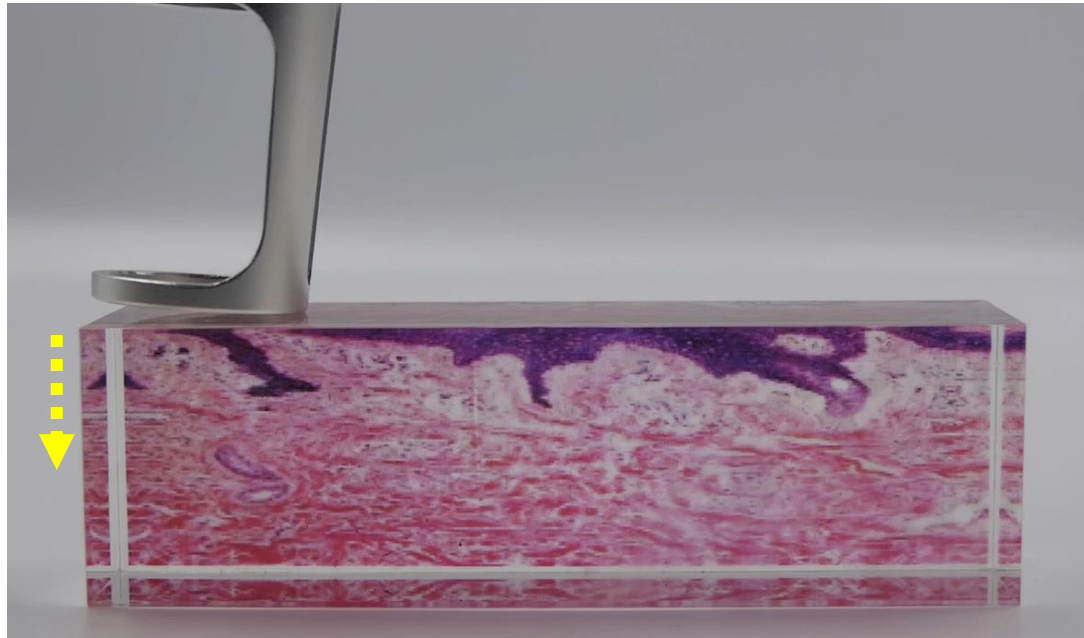


PicoLO Premium

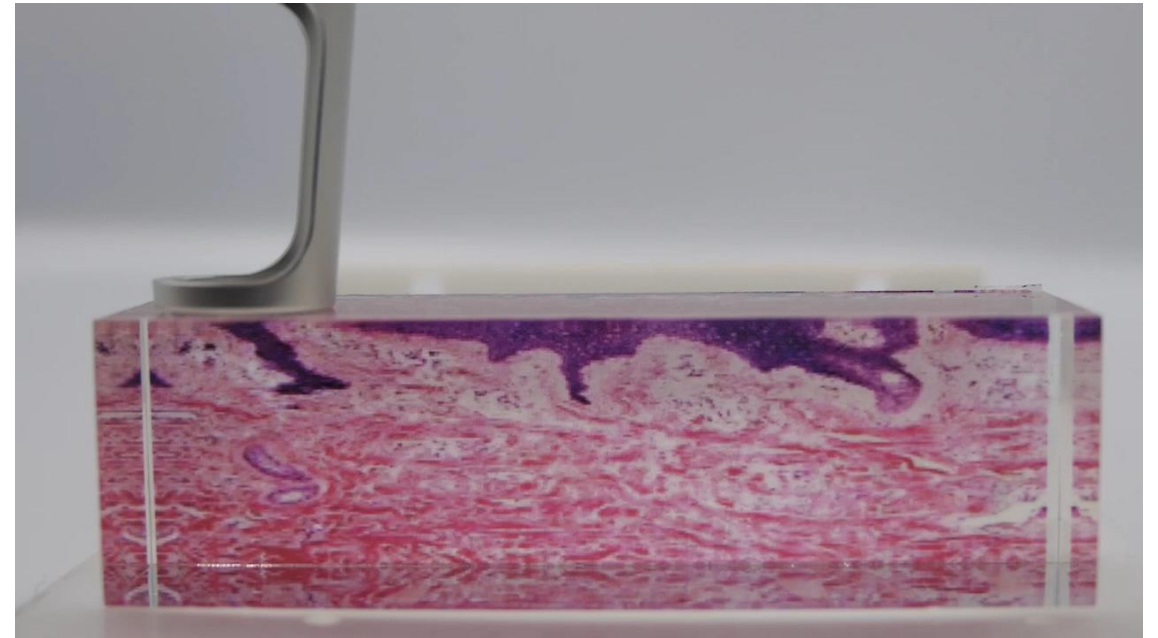
Q-switched lasers



PICO vs NANO



PicoLO Premium

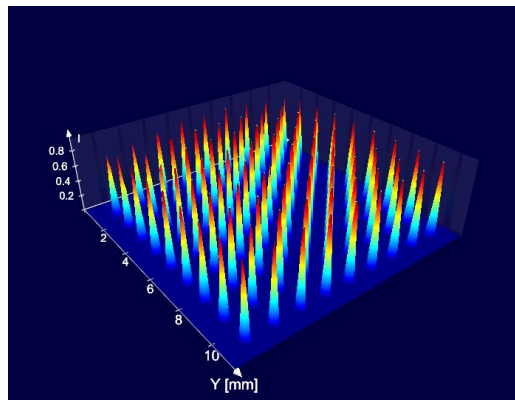


HELIOS III

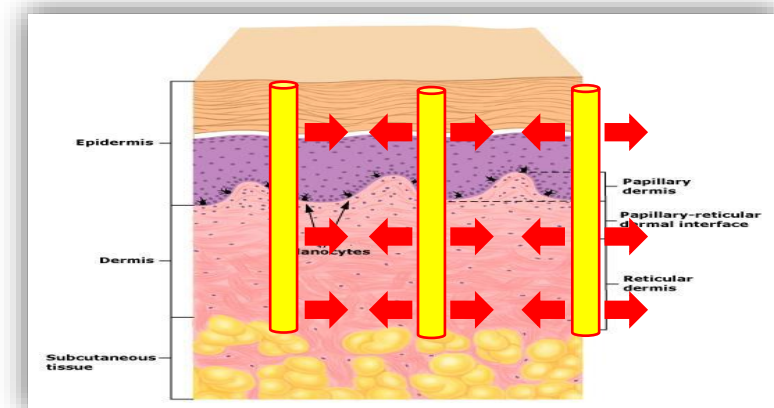
PROPRIETARY DOE TECHNOLOGY

What is the essence of technology behind the PicoLO Premium?

LASEROPTEK adopts DOE technology to its fractional handpieces. DOE (Diffractive Optical Element) is designed to split a single laser beam into a predefined number of beams. Each microbeam has uniform energy intensity and penetration depth. The characteristic of DOE is that the quality of the output laser beam is independent of that of the input beam helps the output laser beams uniform and stable all the time.



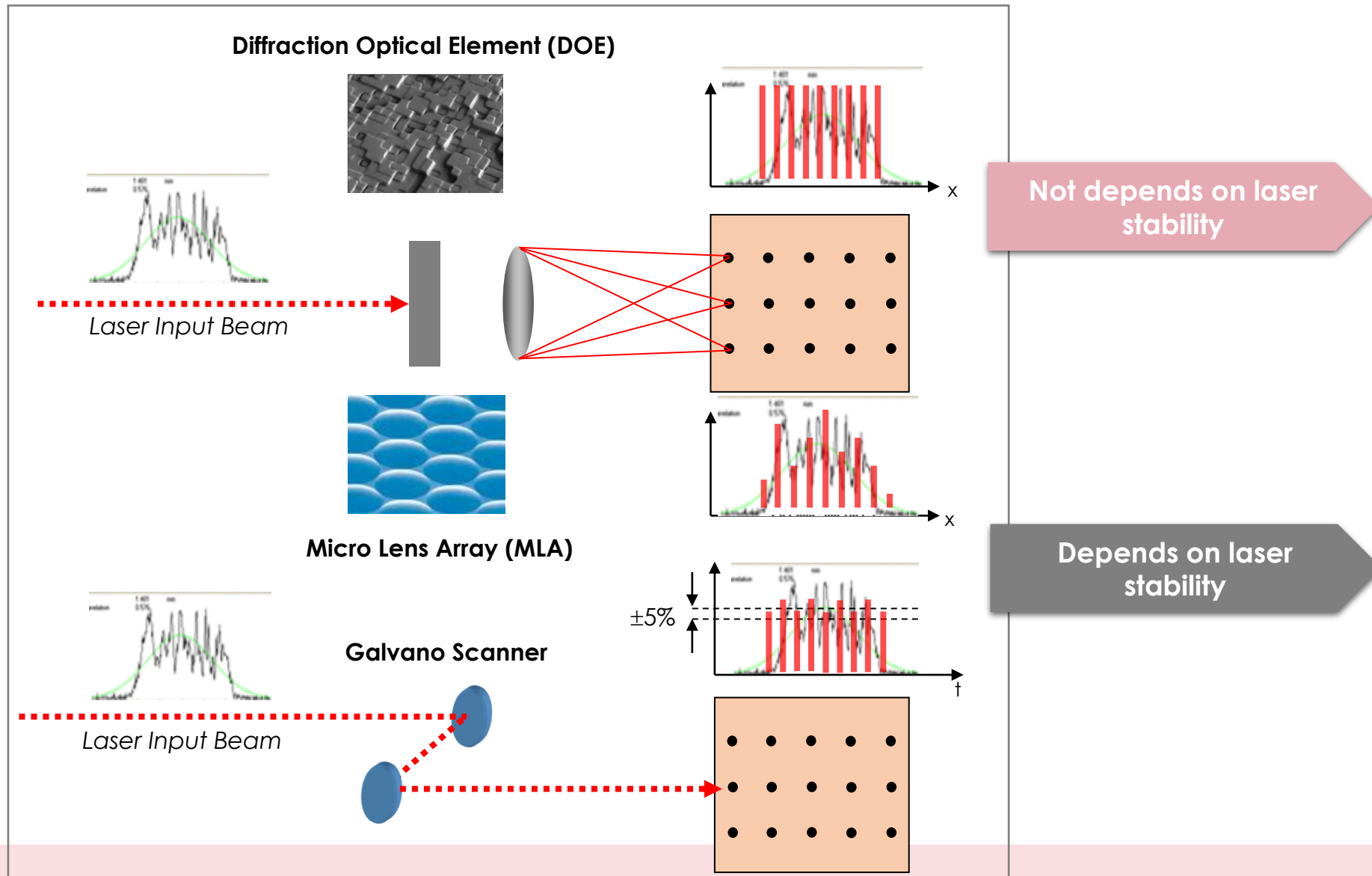
Dia FX's 81 DOE micro beams



Heat dissipates through tunnels

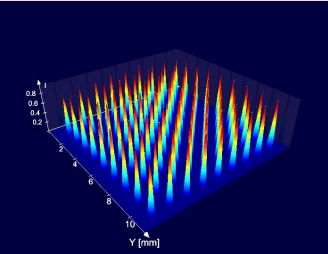
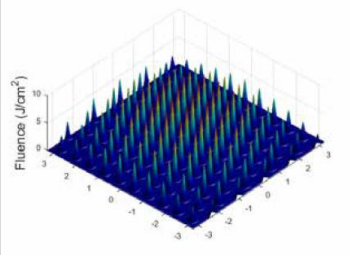


CHARACTERISTICS OF FRACTIONAL BEAM





DOE vs MLA

	DOE	MLA
Type	Diffractive Optical Element	Micro (or Diffractive) Lens Array
Laser Input Beam Dependency	Independence: Uniform (stable) laser output all the time	Dependence: Poor (unstable) laser input beam quality results in poor laser output
Characteristics	Same fluence and same penetration depth on each spot	Different fluence and penetration depth on each spot
Energy Density	Very even energy on every spot	Centralized energy density; very minimal energy density for the rest
Energy Loss Rate	4-25%	4%
Raw Materials	Fused silica; quartz	Fused silica; quartz
Micro-beam profile		

LO's 81 spots/cm² DOE beam profile (3D measurement)

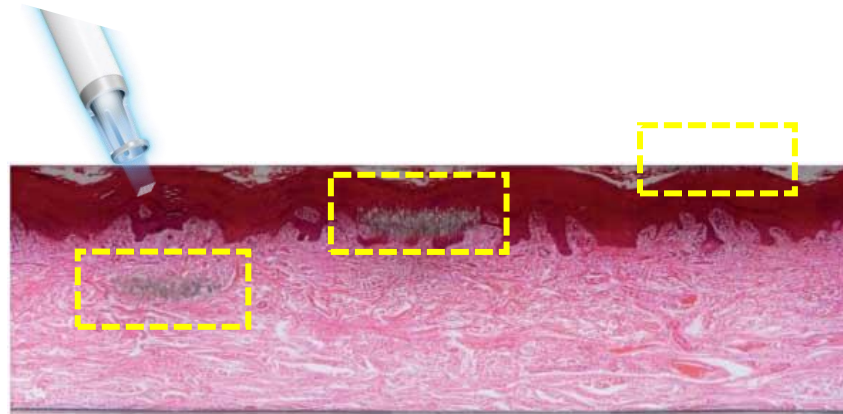
Reference for MLA: Mechanisms of Action of Fractionated 532nm and 1064nm Picosecond Laser for Pigmentation, Skin Irregularities and Signs of Aging by Kevin Schomacker, Ph.D. and Jayant D. Bha walkar, Ph.D.

A new name of PicoLO's DOE fractional handpiece

Dia FX, a new name of DOE fractional handpiece, where LASEROPTEK's patented DOE fractional technology is adopted.

Dia FX 1064nm splits the laser beam into 81 microbeam lasers evenly to penetrate into the dermal layer while protecting the epidermal layer of intact skin. It allows for safe and effective treatment.

Adjustable three distinct penetration depths are available with an all-new Dia FX 1064 handpiece.

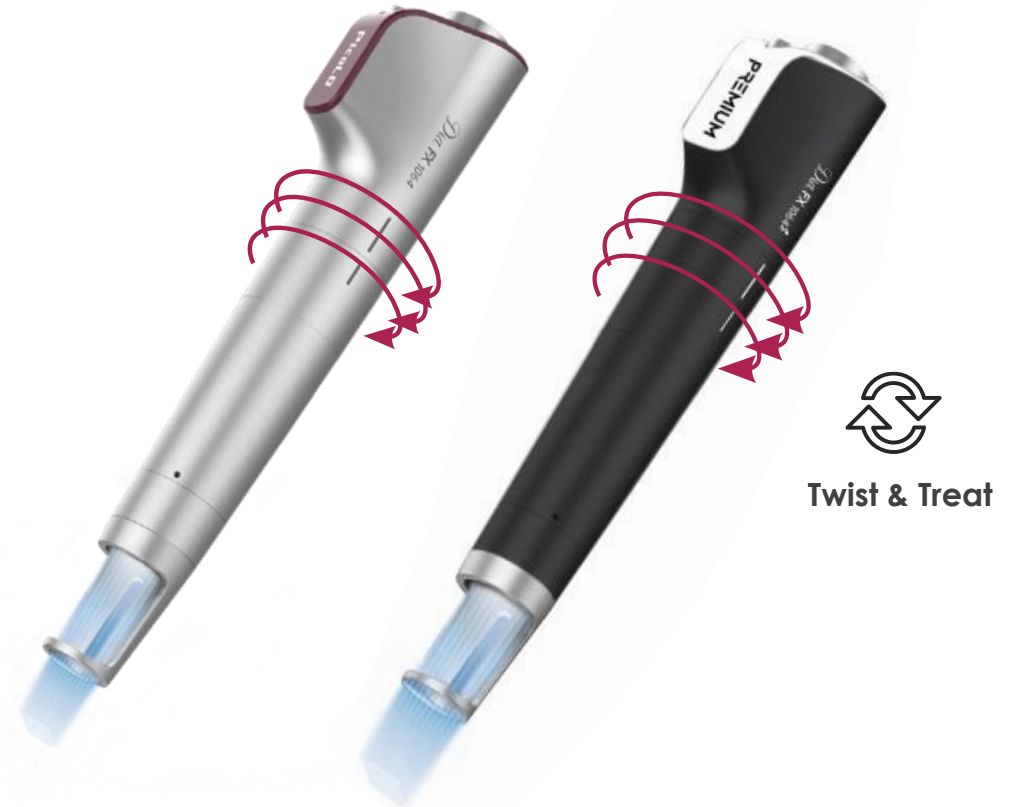


Depth Level I

Depth Level II

Depth Level III

All-new Dia FX 1064 handpieces



Dia FX 1064 handpiece
10mm x 10mm

Dia FX 1064 S handpiece
5mm x 5mm



Dia FX[®] LEVEL CONTROL

Depth Control



Level I
Dia FX 1064

Level II
Dia FX 1064

Level III
Dia FX 1064

Dia FX 532

Penetration per energy



130mJ

300mJ

500mJ

Tested on crystal



LIOB EFFECT

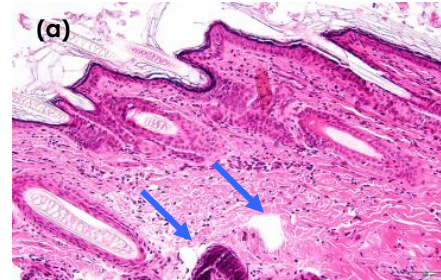
LIOB Formation by True Picopulse

A powerful Dia FX creates a laser-induced optical breakdown (LIOB). Thru the process of LIOB, Dia FX's laser beam creates micro-injury zones present as dermal vacuoles and stimulates a healing process, resulting in skin rejuvenation.

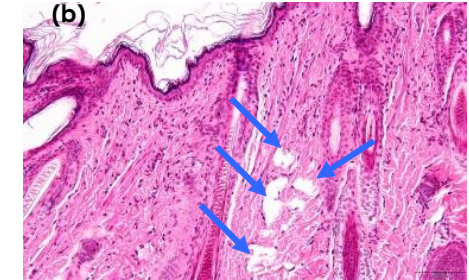
Histologic findings of skin treated with PicoLO Premium revealed the formation of intra-epidermal and dermal cavities caused by LIOB. LIOBs were created in three different layers (deep dermis, upper dermis and epidermis) using Dia FX user selectable 3-step depth handpiece.

“Collapse of cavitation bubbles generates LIOB effect in tissues.”

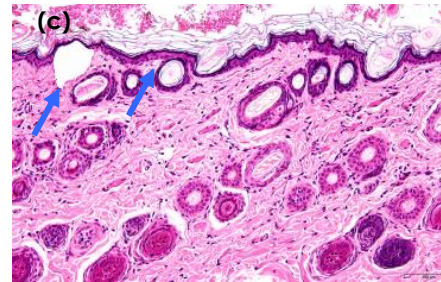
Histology from guinea pig skin specimens (H&E, 200X)



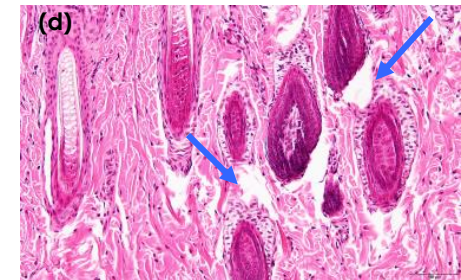
(a) Intra-deep dermal LIOBs by Dia FX 1064nm Depth Lv. I (130mJ, 3Hz)
• Penetration depth: 499.98~935.23 μm
• Average: 668.752 \pm 182.844 μm
• Cavity area: 1664.171 \pm 650.516 μm^2



(b) Intra-dermal LIOBs by Dia FX 1064nm Lv. II (130mJ, 10Hz)
• Penetration depth: 257.12~287.38 μm
• Average: 269.766 \pm 14.547 μm
• Cavity area: 1335.851 \pm 214.407 μm^2



(c) Intra-epidermal LIOBs by Dia FX 1064nm Lv. III (300mJ, 6Hz)
• Penetration depth: 36.17~53.69 μm
• Average: 52.152 \pm 20.807 μm
• Cavity area: 1312.669 \pm 1069.109 μm^2



(d) Intra-dermal LIOBs by Dia FX 532nm (70mJ, 1Hz)
• Average: 979.813 \pm 215.883 μm

Photos courtesy of Prof. B.C. Park, Dankook University Hospital



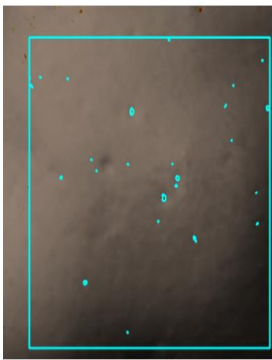
BEYOND THE LIMIT OF 532nm FRACTIONAL



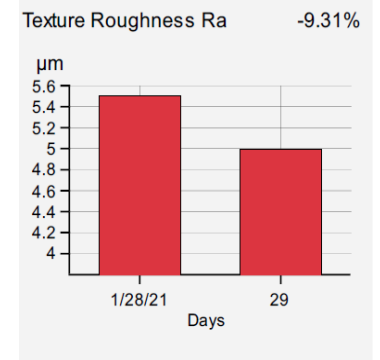
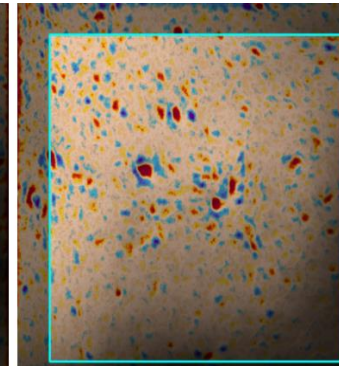
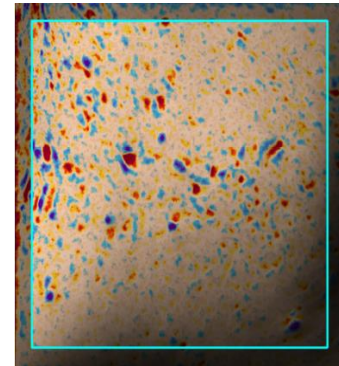
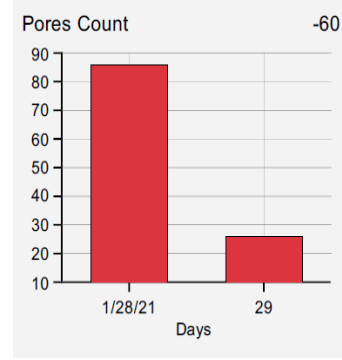
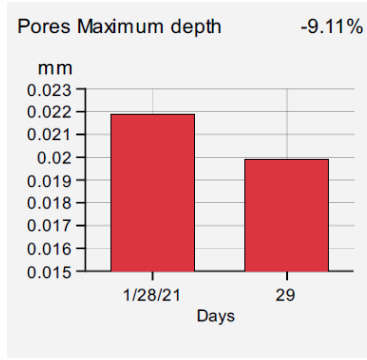
- Dia FX 532nm H/P, 3 sessions
- 7mm x 7mm, 5-10Hz, 0.09-0.11J/cm²



1M after TX 1



1M after TX 2

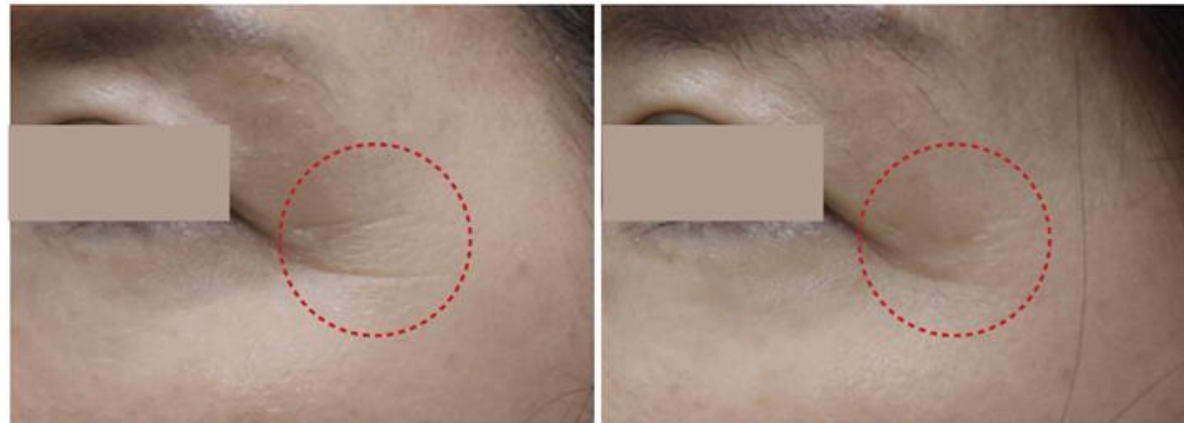


Photos courtesy of LASEROPTEK



Dia FX 1064S UNMET NEED

- **SMALL** but **STRONG**
- **5mm x 5mm** spot size
- **Designed for delicate treatment** with intensity
- Small acne scars, loosened pores, fine lines around eyes, crow's feet, smile lines
- Only available with PicoLO Premium



Photos courtesy of Seung Hwan Baik, MD
Seoul One Dermatology, Korea

TECHNICAL SPECIFICATIONS

PicoLO Premium Technical Specifications

Laser Type	Nd:YAG								
Wavelength	1064 nm					532 nm			
Pulse Duration	450 ps					380 ps			
Handpiece	Zoom	Colli- mator	S20	Dia FX 1064	Dia FX 1064 S	Zoom	Colli- mator	S20	Dia FX 532
Max Energy	500 mJ	500 mJ	500 mJ	500 mJ	500 mJ	70 - 350 mJ	350 mJ	350 mJ	350 mJ
Spot Size	2 - 7 mm	10 mm	20 x 20 mm ²	10 x 10 mm ²	5 x 5 mm ²	2 - 7 mm	10 mm	20 x 20 mm ²	7 x 7 mm ²
Repetition Rate	SIG, M3, M5, 1-10Hz								
Beam Delivery	Articulated arm with detachable handpiece								
Power Requirements	220-230VAC, 50/60Hz								
Dimensions	372mm (W) x 1034mm (D) x 903mm (H)								
Weight	110kg								





CONFIGURATION



PicoLO Premium



- Variety of handpieces available
- Newly upgraded Dia FX 1064nm handpieces providing **Twist & Treat** feature to adjust three depth levels
- The largest spot sized S20 handpiece
- Now Dia FX 1064nm handpiece in 5 x 5mm is available for targeting small area
- Intuitive user interface
- Fast-starting: ready to use in less than 30 sec
- The smallest sized picosecond system available in the market



WHAT'S NEW



- All-new Dia FX handpieces available
- One-touch 3-step depth adjustable
- Epidermis-upper dermis-dermis penetration

- Proven LIOB creation in dermal layer even with 532nm
- Skin rejuvenation with Dia FX 532nm handpiece

- Small but Strong
- For delicate treatment
- Fine lines around eyes, crow's feet, smile lines

- The largest spot size, 20 x 20mm
- Increased the energy up to **500mJ**
- Now ϕ 10mm collimated h/p is available
- S20 and Collimator h/p for two-step toning optimization

*Dia FX*TM
1064nm

*Dia FX*TM
532nm

Dia FX 1064S

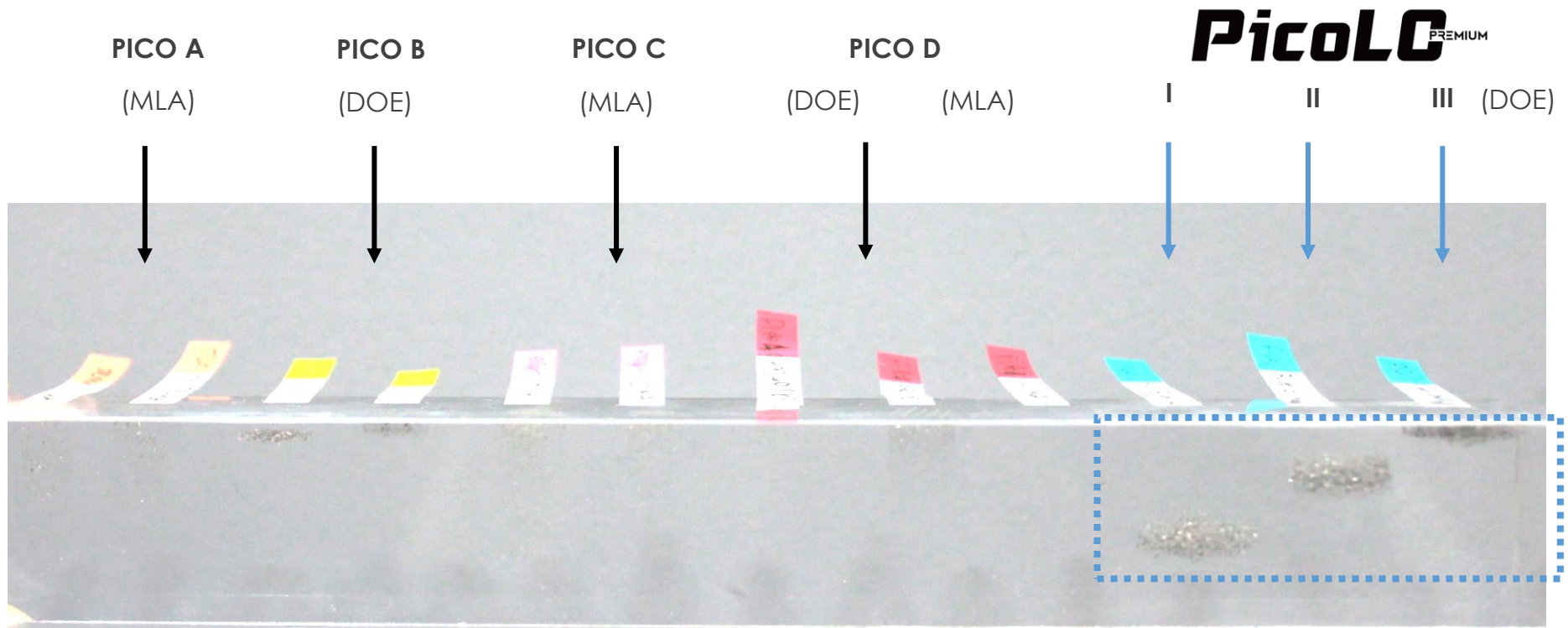
S20

Collimator



PICO COMPARISON

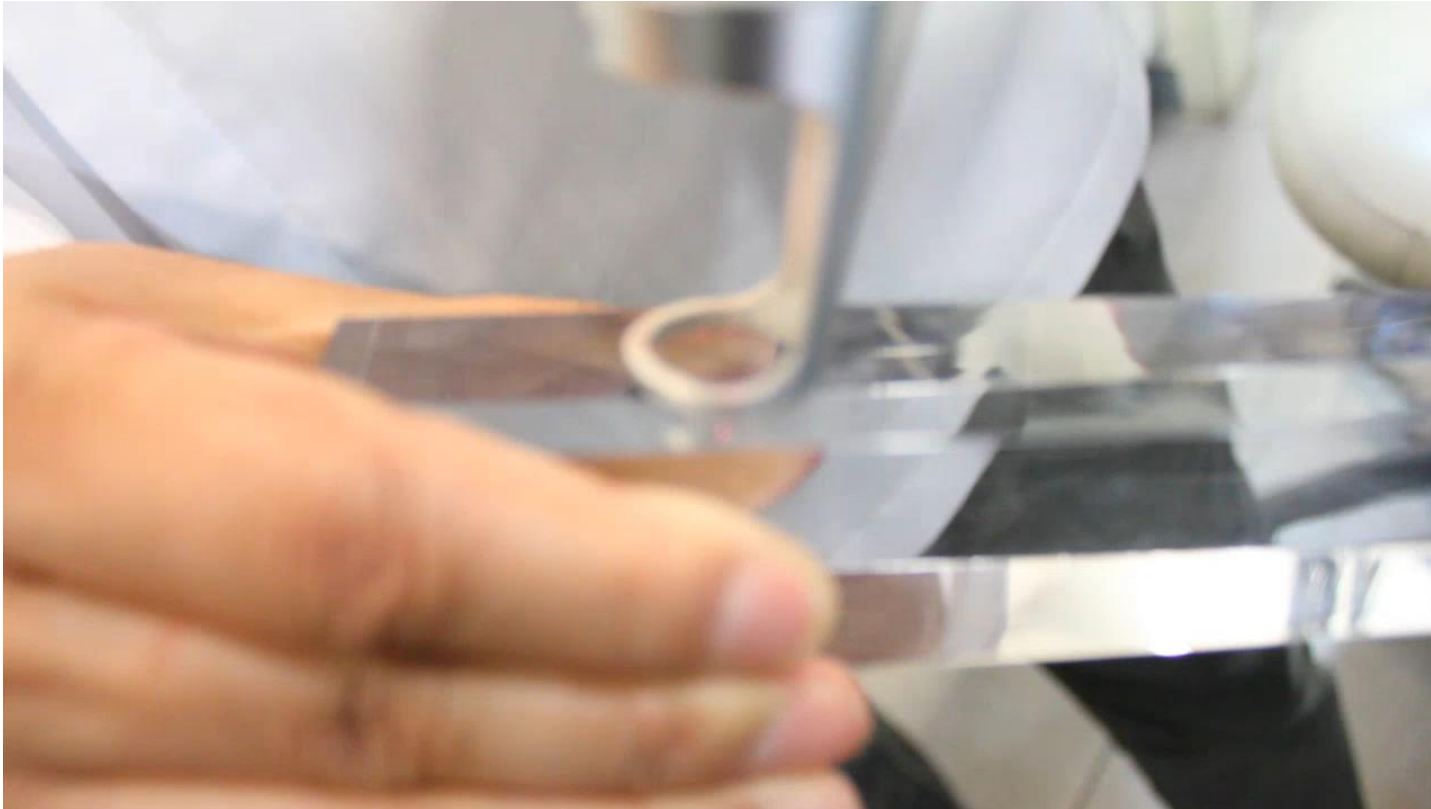
How do you differentiate a real picosecond laser among available laser systems?





PICO COMPARISON

PicoLO PREMIUM

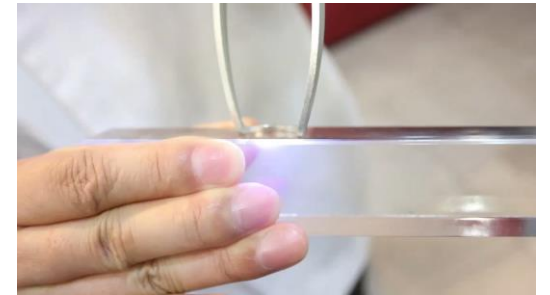


<https://www.youtube.com/watch?v=CPbZoC1qNeQ>

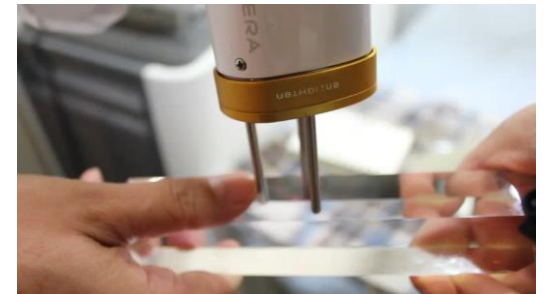
PICO A



PICO B



PICO C



PICO D



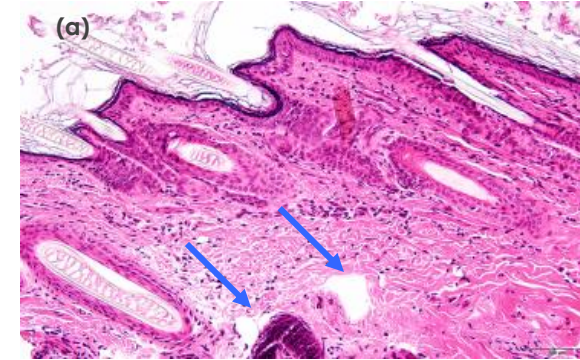


APPLICATION

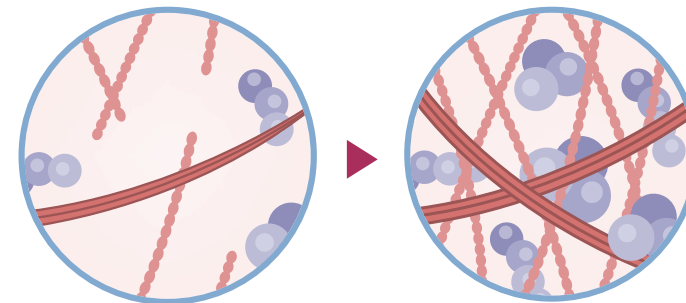
Skin rejuvenation by LIOB Formation

LASEROPTEK's true fractional beam made by a powerful Dia FX creates a laser-induced optical breakdown (LIOB). Thru the process of LIOB, Dia FX's laser beam stimulates inflammatory healing process, resulting in production of collagen and elastin.

It is very effective for skin rejuvenation, acne scar correction, wrinkle reduction but also very safe by protecting epidermal layer.



LIOB Creation



Production of collagen and elastin

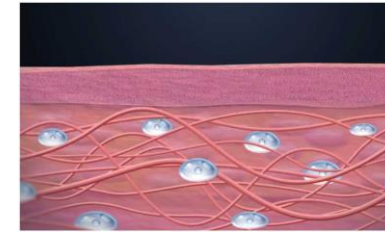
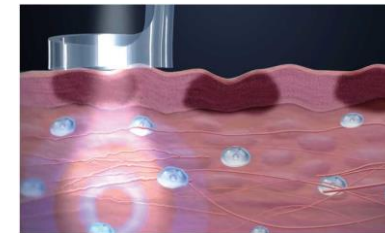


APPLICATION

Clear and Radiant Solution

A recent clinical study demonstrated that PicoLO Premium is effective and safe in the treatment of photoaging-associated facial pigmentation. The evident clearance of both the pigment and improvement of the skin tone. Most subjects experienced skin revitalization, especially in terms of skin tone and fine wrinkle improvement.

Another recent clinical study showed PicoLO Premium's successful treatment of acne scars. Superficial cystic cavitation and dramatically increased fragmentation of collagen fibers were found by punch biopsy. It provides dermal remodeling and an attractive treatment option for atrophic scars





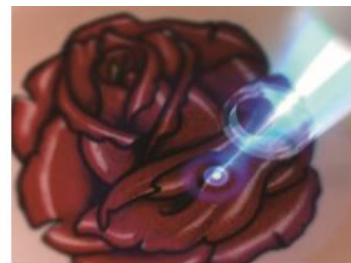
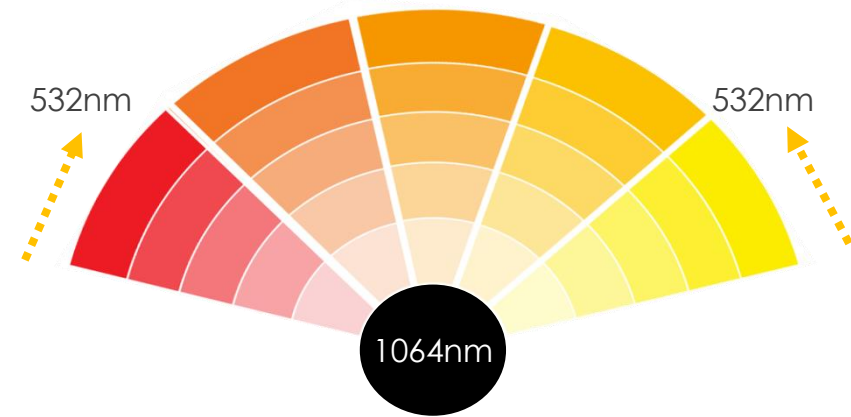
APPLICATION

Faster and Safer Clearance

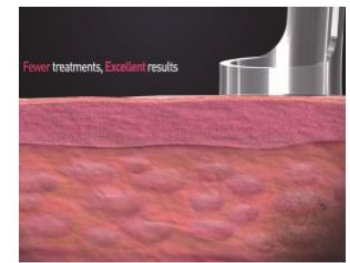
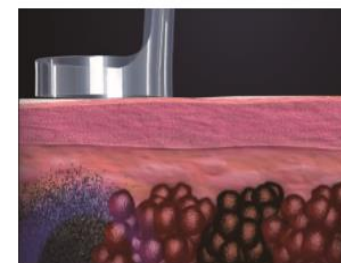
With PicoLO Premium, you can achieve faster and more complete clearance. It breaks up the pigment and tattoo ink into fine particles.

The picosecond laser light generates a photomechanical effect that selectively fragments tattoo ink into micro-sized particles.

PicoLO Premium's 1064 and 532nm wavelengths were chosen to remove the most common ink colors and pigments on the wide range of skin types.



Selectively targets ink from shallow to deep layers



Clears tattoo ink leaving clear and healthy skin



CLINICAL RESULTS

Acne Scars



Before



After 4 Sessions

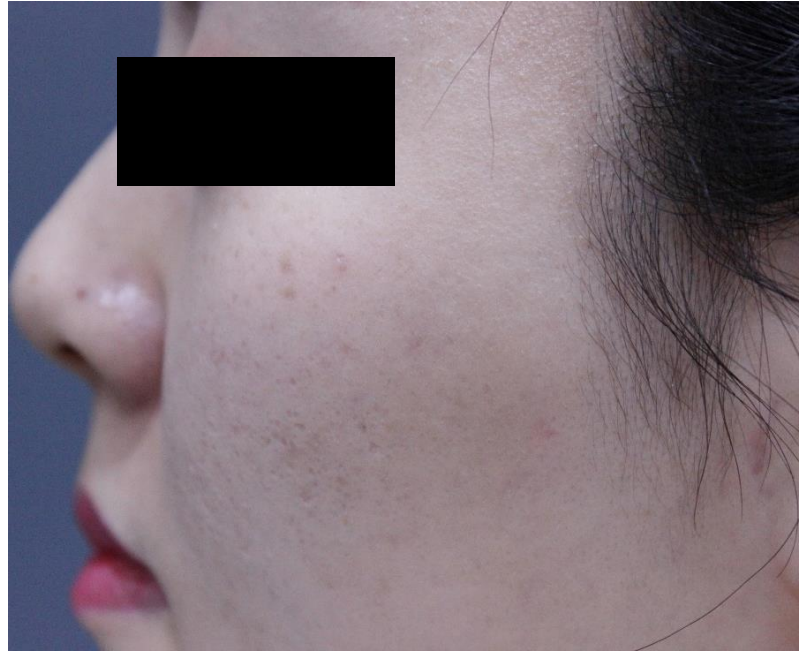
- 1064 nm Dia FX HP, 4 sessions
- Level I _ 0.5J/cm², 8-10Hz
- Level II _ 0.3J/cm², 7Hz
- Level III _ 0.2J/cm², 3Hz

Photos courtesy of Hyuckhun Kwon, MD
Gangdong Oaro dermatology, Korea

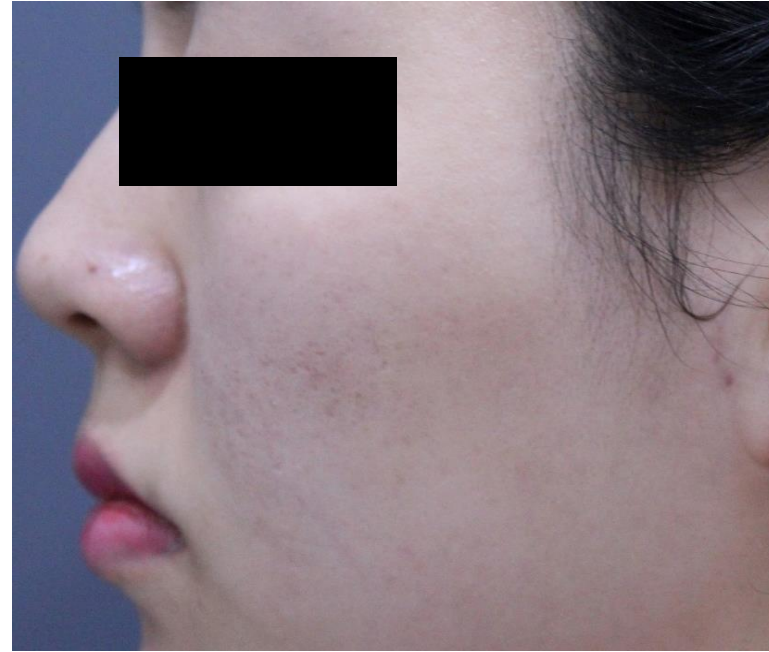


CLINICAL RESULTS

Acne Scars



Before



After

- Zoom & Dia FX 1064nm, 0.4-0.7J/cm², 10 Hz, 6 bi-weekly

Photos courtesy of Prof. Myoung Eun Choi and Seung Hwan Paik, MD, et al.



CLINICAL RESULTS

Solar Lentigo



Before



After

- Zoom HP, 532nm with attenuator, 4mm, 0.4J/cm², 1-3Hz, 1pass

Photos Courtesy of Eun Jin Doh, S&U Clinic, South Korea



CLINICAL RESULTS

Solar Lentigo



Before



After

- Zoom H/P, 532nm, 4mm, 0.4J/cm², 1Hz, 1 pass

Photos Courtesy of Eun Jin Doh, S&U Clinic, South Korea



CLINICAL RESULTS

Solar Lentigo



Before



After 1 Tx

- 532 nm Zoom HP, 1 session
- 5mm, 1Hz, 0.4 J/cm²

Photos courtesy of Seung-pil Hong,
Wonju Severance Christian Hospital, Korea



CLINICAL RESULTS

Fine Lines around Eyes



Before

After 4 Sessions

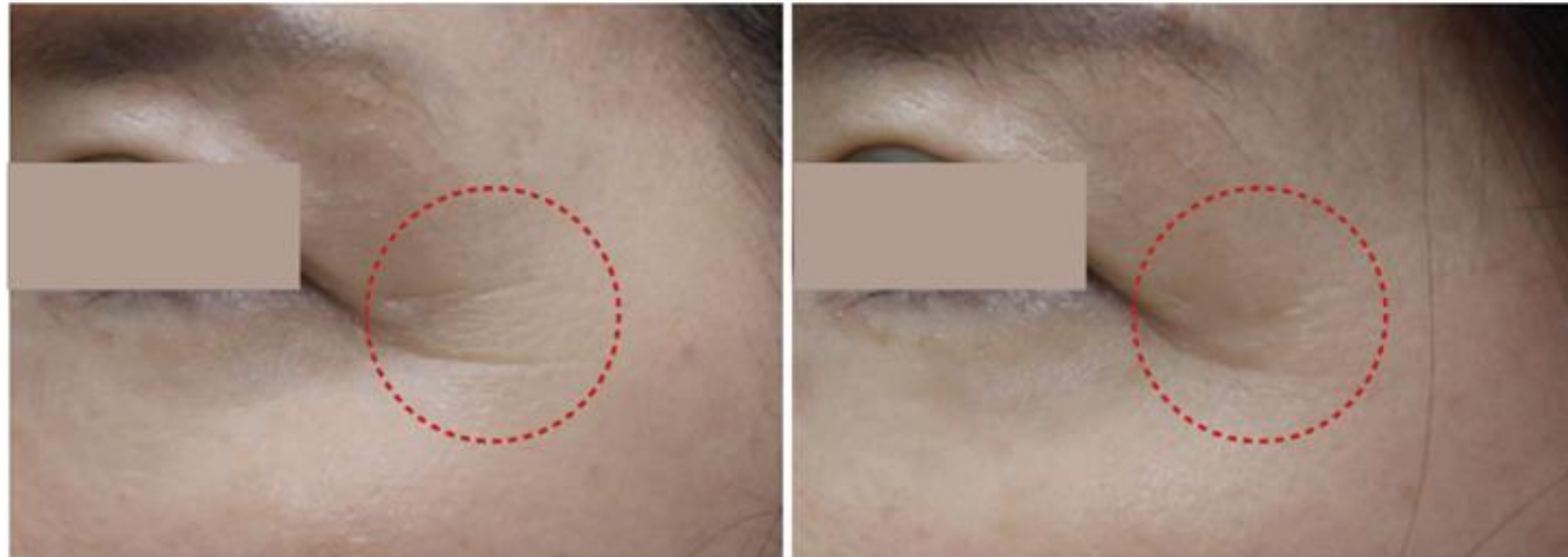
- 1st and 2nd TX, Dia FX 1064nm S H/P, 5mm x 5mm
- 0.8-1.0 J/cm², 5-10Hz, per level I, II, III
- 3rd and 4th TX, Dia FX 1064nm S H/P, 5mm x 5mm
- 1.0-1.2 J/cm², 7-10Hz, per level I, II

Photos courtesy of Seung Hwan Baik, MD
Seoul One Dermatology, Korea



CLINICAL RESULTS

Fine Lines around Eyes



Before

After

- 1st and 2nd TX, Dia FX 1064nm S H/P, 5mm x 5mm
- 0.8-1.0 J/cm², 5-10Hz, level I, II, III
- 3rd and 4th TX, Dia FX 1064nm S H/P, 5mm x 5mm
- 1.0-1.2 J/cm², 5-10Hz, level I, II, III

*Photos courtesy of Seung Hwan Baik, MD
Seoul ONE Dermatology Clinic, Korea*



CLINICAL RESULTS

Scars & Pores



Before



After 2 TX



After 3 TX

- Skin Rejuvenation, Pores and Scars
- Dia FX 532 nm and 1064 H/Ps, 3 sessions
- 7mm x 7mm, 10Hz, Attenuator, 0.22J/cm²
- 10mm x 10mm, 3Hz, 0.15J/cm²

Photos Courtesy of LASEROPTIK



CLINICAL RESULTS

Pico Toning



Before



After

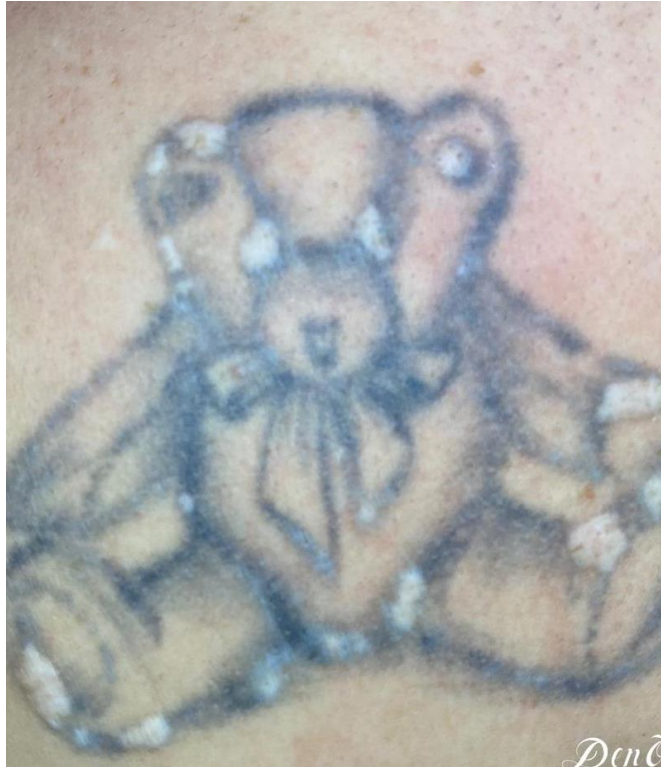
- 1064 nm, zoom H/P, 7mm 10Hz, 0.8 J/cm² · 3 passes, 2000 shots
- 532 nm, S20 H/P, 5Hz, 0.04 J/cm² , 500 shots

*Photos courtesy of Chih-kai Chu
Beautyplus Aesthetic clinic, Taiwan*



CLINICAL RESULTS

Tattoo Removal



Before



After

- Zoom HP, 1064nm, 5mm, 1.3-1.8J/cm², 1-3Hz, 1 pass

*Photos courtesy of Daniel Beijner
Salong Betong, Sweden*



CLINICAL RESULTS

Tattoo Removal



Before



After

- Zoom HP, 1064nm, 5mm, 1.3-1.8J/cm², 1-3Hz, 1 pass

*Photos courtesy of Daniel Beijner
Salong Betong, Sweden*



CLINICAL RESULTS

Tattoo Removal



Before



After

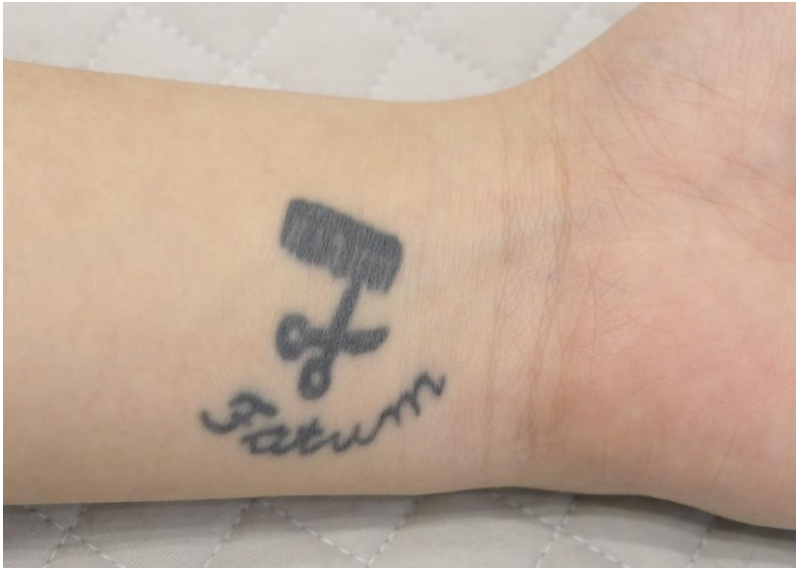
- Zoom HP, 1064nm, 5mm, 1.3-1.8J/cm², 1-3Hz, 1 pass

*Photos courtesy of Daniel Beijner
Salong Betong, Sweden*



CLINICAL RESULTS

Tattoo Removal



Before



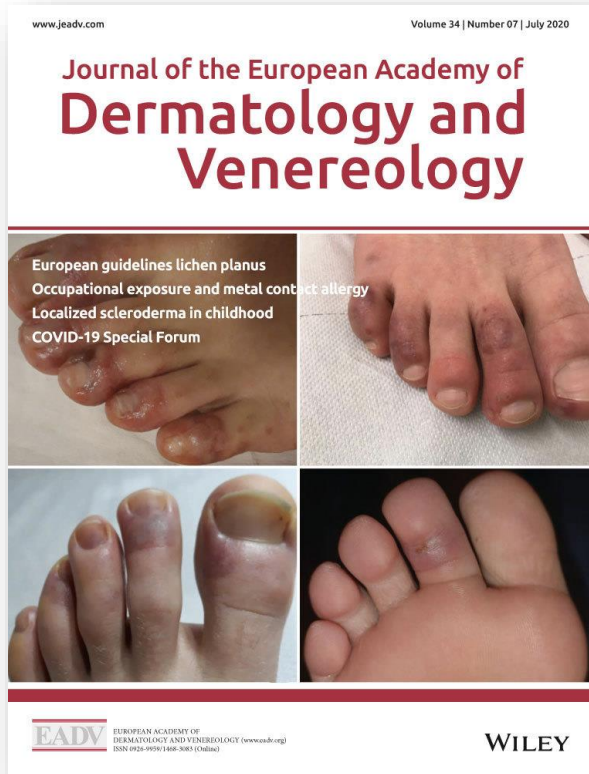
After 5 sessions

- 1064 nm Zoom HP, 5 sessions
- 5mm 3-5Hz, 1.5-1.8 J/cm² → 4mm, 1.8-2.0 J/cm²

Photos courtesy of LASEROPTIK



PUBLICATION

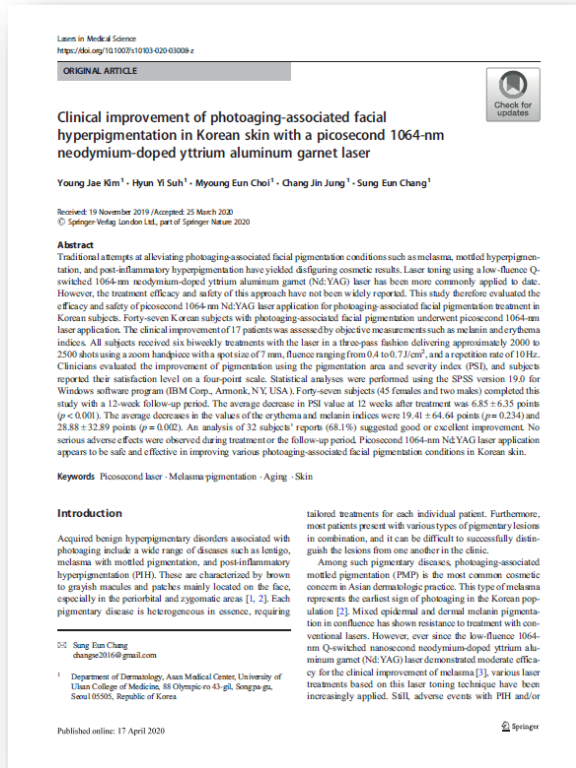


<https://onlinelibrary.wiley.com/doi/10.1111/jdv.16643>

- **Title:** Comparison of a 1064-nm neodymium-doped yttrium aluminum garnet picosecond laser using a diffractive optical element vs a nonablative 1550-nm erbium-glass laser for the treatment of facial acne scarring in Asian patients: a 17-week prospective, randomized, split-face, controlled trial
- Published on JEADV, 2020
- **Author:** H.H. Kwon, et al., Oaro Dermatology Clinic, Johns Hopkins Univ. School of Medicine, Dongtan Sacred Heart Hospital, etc.
- **Abstract:**
 - The Picosecond DOE (P-DOE)-treated side achieved a significantly better improvement in acne appearance (ECCA percent reduction: 55% vs 42%) with less severe pain (4.3 vs 5.6) ($P < .05$). The IGA score and subjective satisfaction were consistent with ECCA score results. Occurrences of treatment-related side effects were also lower in the group treated with P-DOE ($P < .05$). Histologic analysis revealed elongation and increased density of neocollagen fibers, elastic fibers, and mucin throughout the dermis from both sides.
 - Compared with NAFL, P-DOE afforded better clinical outcomes and fewer side effects in the treatment of acne scarring in Asian patients.



PUBLICATION



<https://link.springer.com/article/10.1007/s10103-020-03008-z>

- **Title:** Clinical improvement of photoaging-associated facial hyperpigmentation in Korean skin with a picosecond 1064-nm neodymium-doped yttrium aluminum garnet laser
- Published on Lasers in Medical Science, 2020
- **Authors:** Young Jae Kim, Hyun Yi Suh, Myoung Eun Choi, Chang Jin Jung, Sung Eun Chang of Seoul ASAN Medical Center
- **Abstract:**

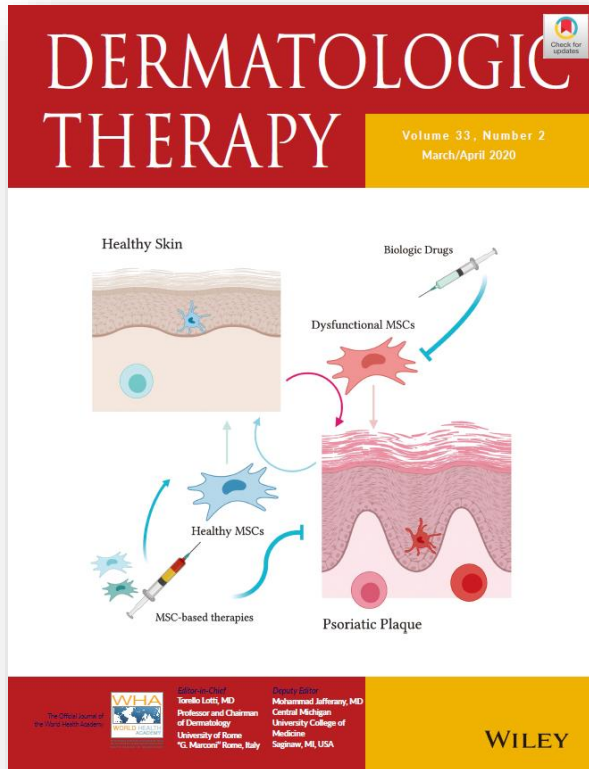
Traditional attempts at alleviating photoaging-associated facial pigmentation conditions such as melasma, mottled hyperpigmentation, and post-inflammatory hyperpigmentation have yielded disfiguring cosmetic results. Laser toning using a low-fluence Q-switched 1064-nm neodymium-doped yttrium aluminum garnet (Nd:YAG) laser has been more commonly applied to date. However, the treatment efficacy and safety of this approach have not been widely reported. This study therefore evaluated the efficacy and safety of picosecond 1064-nm Nd:YAG laser application for photoaging-associated facial pigmentation treatment in Korean subjects. Forty-seven Korean subjects with photoaging-associated facial pigmentation underwent picosecond 1064-nm laser application. The clinical improvement of 17 patients was assessed by objective measurements such as melanin and erythema indices. All subjects received six biweekly treatments with the laser in a three-pass fashion delivering approximately 2000 to 2500 shots using a zoom handpiece with a spot size of 7 mm, fluence ranging from 0.4 to 0.7 J/cm², and a repetition rate of 10 Hz. Clinicians evaluated the improvement of pigmentation area and severity index (PSI), and subjects reported their satisfaction level on a four-point scale. Statistical analyses were performed using the SPSS version 19.0 for Windows software program (IBM Corp., Armonk, NY, USA). Forty-seven subjects (45 females and two males) completed this study with a 12-week follow-up period. The average decrease in PSI value at 12 weeks after treatment was 6.85 ± 6.35 points (p < 0.001). The average decreases in the values of the erythema and melanin indices were 19.41 ± 64.64 points (p = 0.234) and 28.88 ± 32.89 points (p = 0.002). An analysis of 32 subjects' reports (68.1%) suggested good or excellent improvement. No serious adverse effects were observed during treatment or the follow-up period. Picosecond 1064-nm Nd:YAG laser application appears to be safe and effective in improving various photoaging-associated facial pigmentation conditions in Korean skin.

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PUBLICATION



- **Title:** Treatment of acne scars with a fractional 1064-nm Nd:YAG picosecond laser and histopathologic findings
- Published on Dermatologic Therapy, 2020
- **Authors:** Myoung Eun Choi, Seung Hwan Paik, Woo Jin Lee, Chong Hyung Won, Mi Woo Lee, Jee Ho Choi, Sung Eun Chang of Seoul ASAN Medical Center
- **Key Points:**
 - Successful treatment of acne scars and point toward its treatment mechanism by showing histopathologic findings
 - Atrophic scars responded well.
 - Superficial cystic cavitation and dramatically increased fragmentation of collagen fibers found by Punch biopsy
 - LIOB formation was seen.
 - 1064nm picosecond laser (450ps) provides dermal remodeling and attractive treatment option for atrophic scars

<https://onlinelibrary.wiley.com/doi/10.1111/dth.13297>

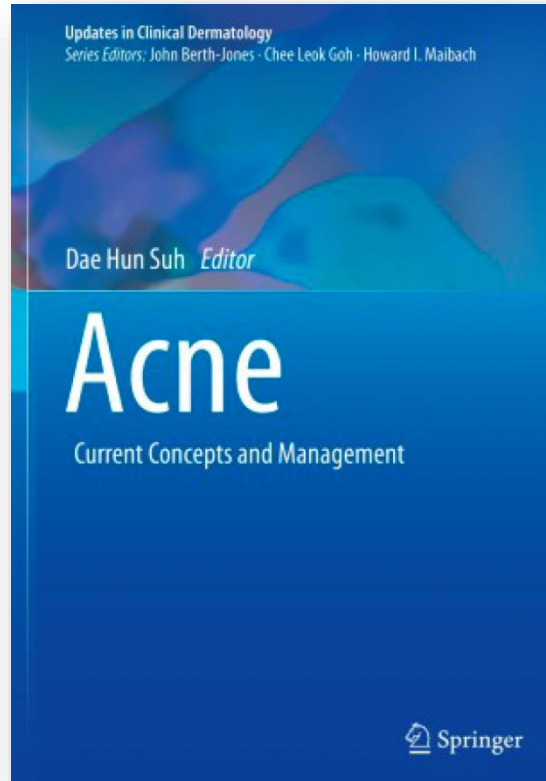


<https://anndermatol.org/DOIx.php?id=10.5021/ad.2021.33.3.254>

- **Title:** Efficacy and Safety of Treatment with Fractional 1,064-nm Picosecond Laser with Diffractive Optic Element for Wrinkles and Acne Scars: A Clinical Study
- Published on Annals of Dermatology, 2021
- **Author:** Chung Hyeok Lee, Eun Mi Jin¹, Hee Seok Seo, Tae-Ui Ryu¹, Seung Phil Hong, Department of Dermatology, Yonsei University Wonju College of Medicine, Wonju, ¹Department of Dermatology, Dankook University, College of Medicine, Cheonan, Korea
- **Abstract:**
 - **Background:** Fractional picosecond lasers is effective for the treatment of wrinkles or acne scars.
 - **Objective:** To investigate the safety and efficacy of treatment with a fractional 1,064-nm picosecond laser with a diffractive optic element for facial wrinkles and acne scars.
 - **Methods:** This prospective open-labeled trial comprised 22 subjects with facial wrinkles or acne scars. Subjects received three laser treatments with a fractional 1,064-nm picosecond laser at 3-week intervals. The efficacy and safety were evaluated at every visit and 2 months after the final treatment (14 weeks from the first treatment session). Global photographic assessments were performed by three blinded dermatologists and the subjects. Skin profilometry was performed using three-dimensional digital photographs; viscoelasticity was measured.
 - **Results:** The overall mean global improvement scores assessed by the dermatologists at weeks 3, 6, and 14, were 1.8±1.46, 2.5±1.88, and 3.5±1.84, respectively, and those assessed by the subjects were 2.7±2.08, 4.1±2.24, and 5.0±2.52, respectively. Skin profilometry showed significant improvements in the skin wrinkles, texture, depressions, and pores. The gross elasticity and skin firmness significantly improved by 10.96% and 9.04%, respectively. The major adverse reactions were erythema, pruritus, and petechiae, which disappeared within 2~3 days.
 - **Conclusion:** The fractional 1,064-nm picosecond laser is an effective and safe therapeutic modality for skin rejuvenation.



PUBLICATION



- **Title:** Acne (Current Concepts and Management) Updates in Clinical Dermatology
- Published by Springer, 2021
- **Author:** Hyuck Hoon Kwon, Gangdong Oaro Dermatology Clinic, Korea
- **Chapter 13:**
 - **Up-to-Date Therapeutic Approaches for Acne Scars in a Korean Dermatology Clinic**
 - Introduced Picosecond Lasers with a Diffractive Optic Element (P-DOE) as one of treatment modalities for treating acne scars.
 - Referred to his clinical paper published on JEADV, where he reported that picosecond lasers (PicoLO) afforded better clinical outcomes and fewer side-effects in the treatment of acne scarring in Asian patients compared with NAFL.



PUBLICATION



<https://www.tandfonline.com/doi/abs/10.1080/09546634.2022.2033674?journalCode=ijdt20>

- **Title:** A Prospective, Split-face Study Comparing 1,064-nm Picosecond Nd:YAG Laser Toning with 1,064-nm Q-switched Nd:YAG Toning in the Treatment of Melasma
- Published on Journal of Dermatological Treatment, 2022
- **Authors:** Jun Kin Hong, Sun Hye Shin, Su Jung Park, Seon Jun Seo & Kui Young Park, Dept of Dermatology, Chung-Ang Univ. College of Medicine, Korea
- **Abstract:**
 - **Background:** Recently, a low-fluence picosecond (ps) laser is an emerging option for removing pigmented lesions.
 - **Objective:** We aimed to evaluate the efficacy and safety of a 1,064-nm ps Nd:YAG laser as compared to a 1,064-nm Qs Nd:YAG laser for melasma treatment in an Asian.
 - **Methods:** Twenty Korean patients with facial melasma were enrolled and randomly treated with a 1,064-nm ps Nd:YAG laser on one side of the face and 1,064-nm Qs Nd:YAG on the other side at 2-week intervals for five sessions. At each visit, the modified Melasma Area Severity Index (mMASI), patient satisfaction scores, visual analogue scale (VAS) scores, and adverse events were assessed.
 - **Results:** Both groups showed significant clinical improvement and decreased mMASI scores compared to the baseline. No statistically significant difference was observed in the mMASI score between the two treatment techniques at any time point. The melanin index showed no statistically significant improvement in both groups, and no significant differences were observed in patient satisfaction scores and VAS scores between both modalities.
 - **Conclusion:** A 1,064nm ps Nd:YAG laser is as effective and safe as a conventional 1,064 nm Qs Nd:YAG laser in the treatment of melasma in Asian skin, but no superior outcome was observed.



MARKETING SUPPORT



· Brochure



· Patient leaflet



· Patient leaflet holder



· Consultation guide



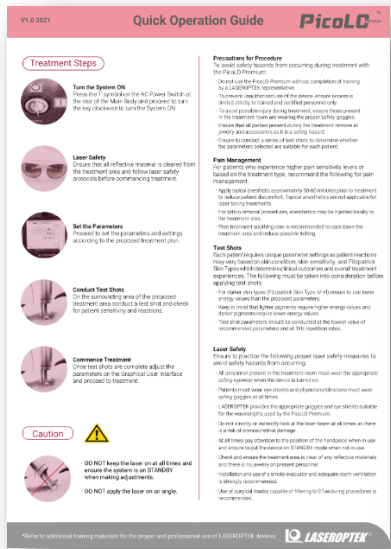
· PIP Banner & Dia FX Banner



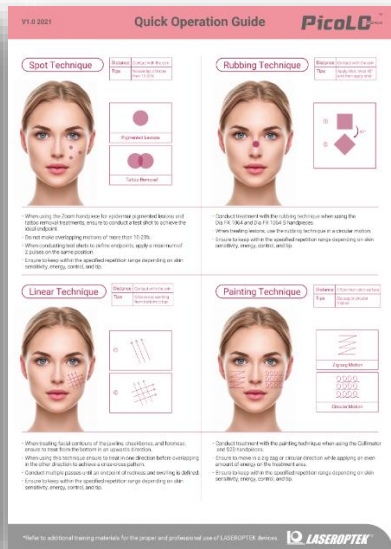
· Poster & Dia FX Banner



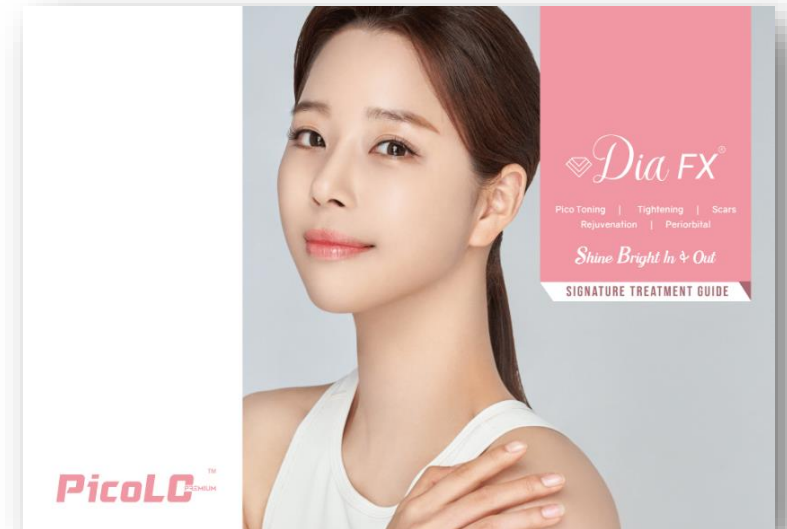
MARKETING SUPPORT



· Quick Operation guide



· Treatment Reference guide



· Dia FX Signature Treatment Guide



MARKETING SUPPORT



· PIP Promo video

<https://youtu.be/y6iT617ExL8>



· Dia FX Promo Video

https://youtu.be/6BcQXi_1lZM



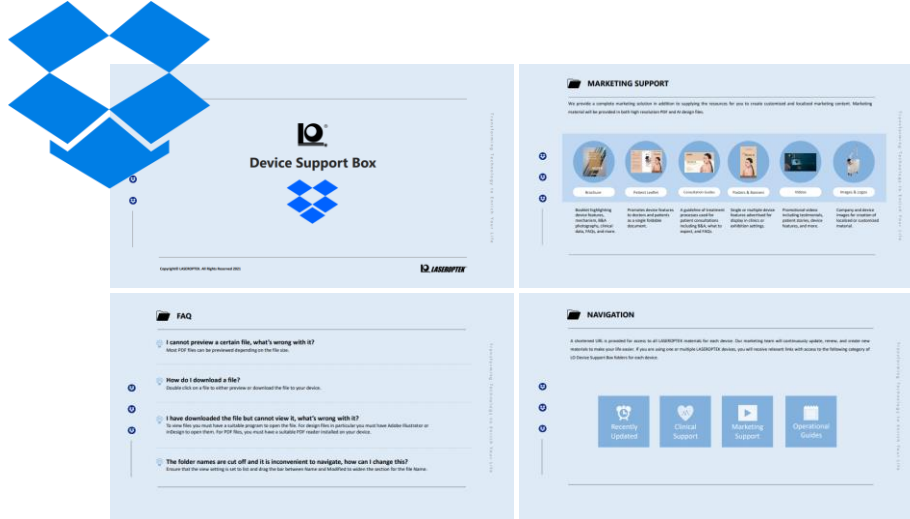
· Dia FX Signature Tx Video



· Maintenance Guide Video



MARKETING SUPPORT



· DSB Manual



· Marketing Box



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Enclosed:

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