

Overview of technologies & applications of kilowatt average power DPSSLs at HiLASE facility

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HiLASE is a new technological infrastructure in the field of application-oriented laser research and development, up and running since 2016. Our main mission is to serve as a bridge between the academic world and hi-tech industry. We develop next generation of diode-pumped solid-state lasers (DPSSL) with high pulse energy and high repetition rate. PERLA is an in-house developed thin-disk laser platform generating <2 ps pulses with an average power of up to 500 W. Bivoj is the world's first DPSSL delivering 1 kW average power in 105 J, 10 ns pulses at 10 Hz, based on cryogenic gas-cooled, multi-slab ceramic Yb:YAG amplifier technology. DPSSL systems deployed at HiLASE are available for external users for scientific experiments (Open Access) as well as for commercial research in the areas of laser induced damage, laser shock peening, laser microprocessing and functional materials.



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Semester

Colloquium

고등광기술연구소 1층 대강당
매월 3번째주 수요일 PM 16:00~17:10

일정	연사/소속	발표제목	HOST
7/18 (수)	 Dr. Tomas Mocek (Head) HiLASE Centre (Czech Republic)	Technology and applications of kilowatt average power DPSSLs at HiLASE	초강력레이저 연구실
8/22 (수)	 박재형 교수 인하대학교 정보통신공학과	AR 3D 디스플레이 및 콘텐츠 생성	레이저응용시스템 연구실
9/19 (수)	 정일석 교수 울산과학기술원 전기전자컴퓨터공학과	Nanophotonic devices on silicon platform	집적광학 연구실
10/17 (수)	 김명진 박사 한국광기술원	Introduction to Distributed Fiber-Optic Sensors	분광센서 연구실
11/21 (수)	 김영주 교수 광운대학교 의료기기 산업전공 의료기기개발지원센터	한국형 의료기기 탐색에서 사업화까지	바이오광학 연구실