

1. Record Nr.	UNINA9910458198003321
Titolo	A watershed year [[electronic resource] ] : anatomy of the Iowa floods of 2008 / / edited by Cornelia F Mutel
Pubbl/distr/stampa	Iowa City, : University of Iowa Press, c2010
ISBN	1-58729-927-5
Descrizione fisica	1 online resource (274 p.)
Collana	A bur oak book
Altri autori (Persone)	MutelCornelia Fleischer
Disciplina	363.34/9309777 363.349309777
Soggetti	Floods - Iowa - History Natural disasters - Iowa - History Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	What causes floods in Iowa? / A. Allen Bradley, Jr. -- Why were the 2008 floods so large? / Witold F. Krajewski and Ricardo Mantilla -- Iowa City and the flood / Richard A. Fosse -- The University of Iowa and the flood / Barbara Eckstein and Rodney Lehnertz -- Linn County and the flood / Linda Langston -- Forecasting a record flood / A. Allen Bradley, Jr. -- Estimating flood frequency / David Eash -- The hydrological footprint of annual crops / Michael Burkhart -- The hydrology of urban landscapes / Wayne Petersen -- The Coralville Dam and Reservoir: Design and operation / John Castle -- The dam and the flood: Cause or cure? / Robert F. Sayre -- Was climate change involved? / Eugene S. Takle -- Flood effects on archaeological sites / Joe Alan Artz and Lynn M. Alex -- Flood effects on modern communities / Cornelia F. Mutel -- Economic losses from the floods / Daniel Otto -- How did the floods affect farmland? / Richard Cruse, Hillary Olson, and John M. Laflen -- What's in your floodwaters? / Dana Kolpin, and Keri Hornbuckle -- Air quality hazards / Peter S. Thorne -- Flood effects on natural communities / John Peterson -- When (not if) the big one comes / Jack Riessen -- Watershed-based flood management / Douglas M. Johnston -- Flood barriers / Nathan C. Young and A. Jacob Odgaard -- Managing urban runoff / Wayne Petersen -- Perennial farming systems that resist flooding / Laura Jackson and Dennis

Keeney -- The great flood of 1993: Did we learn any lessons? / Gerald E. Galloway.

**Sommario/riassunto**

In June 2008, the rivers of eastern Iowa rose above their banks to create floods of epic proportions; their amazing size-flowing in places at a rate nearly double that of the previous record flood-and the rapidity of their rise ruined farmlands and displaced thousands of residents and hundreds of businesses. In Cedar Rapids, the waters inundated more than nine square miles of the downtown area; in Iowa City, where the flood was also the most destructive in history, the University of Iowa's arts campus was destroyed. By providing a solid base of scientific and technical information presented wi

2. **Record Nr.**

UNINA9910254151703321

**Titolo**

Phosphors, Up Conversion Nano Particles, Quantum Dots and Their Applications : Volume 1 / / edited by Ru-Shi Liu

**Pubbl/distr/stampa**

Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2017

**ISBN**

9783662527719

**Edizione**

[1st ed. 2017.]

**Descrizione fisica**

1 online resource (VIII, 593 p. 377 illus., 257 illus. in color.)

**Disciplina**

546

**Soggetti**

Chemistry, Inorganic  
Engineering—Materials  
Nanotechnology  
Inorganic Chemistry  
Materials Engineering

**Lingua di pubblicazione**

Inglese

**Formato**

Materiale a stampa

**Livello bibliografico**

Monografia

**Nota di bibliografia**

Includes bibliographical references at the end of each chapters.

**Nota di contenuto**

Introduction to the basic properties of luminescent materials --  
Phosphors for White-light LEDs through Principle of Energy Transfer --  
Energy Transfer Between Luminescent Centers -- Principles of  
Energetic Structure and Excitation Energy Transfer Based on High  
Pressure Measurements -- First-principles calculations of structural,

elastic, electronic and optical properties of pure and  $Tm^{2+}$ -doped alkali-earth chlorides  $MCl_2$  ( $M=Ca, Sr$  and  $Ba$ ) -- First-principles calculation of luminescent materials -- Color Tuning of Oxide Phosphors -- Oxide Phosphors -- Categories of Oxide Phosphors -- Crystal structures and Luminescence properties of oxyhalide-based phosphors -- Tuning of luminescence by varying the O/N or Al/Si ratio in some Eu-doped nitride phosphors -- Characteristics and properties of  $A(I,II)M(IV)F_6$  fluoride phosphors -- Novel Phosphors for UVLEDs -- Bismuth doped photonic materials: are they promising phosphors for WLEDs? -- Design of single-phased multicolor-emission phosphor for LED -- Crystal Structure and Luminescence Properties of Some Fluorides, (Oxy)nitrides and Oxides Phosphors.

---

#### Sommario/riassunto

This book introduces readers to fundamental information on phosphor and quantum dots. It comprehensively reviews the latest research advances in and applications of fluoride phosphors, oxide phosphors, nitridosilicate phosphors and various quantum dot materials. Phosphors and phosphor-based quantum dot materials have recently gained considerable scientific interest due to their wide range of applications in lighting, displays, medical and telecommunication technologies. This work will be of great interest to researchers and graduate students in materials sciences and chemistry who wish to learn more about the principles, synthesis and analysis of phosphors and quantum dot materials.

---